



**Amended Agenda
City Council
April 6, 2026
5:30 PM
Council Chamber, Clemson City Hall**

Work Session: Presentation by Urban 3

Call to Order

Invocation and Pledge of Allegiance: Council Member Smith

Proclamations: Fair Housing Month, National Public Safety Telecommunicators Week

Oath of Office: Police Officers

Public Session (3-minute limit per speaker)

Approval of Minutes

- a. March 16, 2026

Reports/Discussion (2-minute limit per speaker)

- a. Receive a presentation regarding Clemson University housing. - Vice President of Student Affairs Doug Hallenbeck
- b. Discuss Sponsorship Applications. - Community and Economic Development Coordinator Lindsey Newton
- c. Discuss a contract with Clemson University for Opioid Research funded by SCORF Grant. - Police Chief Jorge Campos
- d. Discuss the adoption of the Clemson Area Long Range Transportation Plan. - City Engineer Nathan Hinkle
- e. Receive a presentation regarding the adoption of the Safe Streets and Roads for All (SS4A) Safety Action Plan. - City Engineer Nathan Hinkle
- f. Discuss the abandonment of a portion of Stone Circle. - City Engineer Nathan Hinkle
- g. Staff Reports

Policy Action (2-minute limit per speaker)

- a. Consider 1st reading of an amendment to the City's FOIA policy. -City Administrator Andy Blondeau
- b. Consider a 1st Reading of 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development). - Assistant City Administrator Nathan Woods
- c. Consider a resolution appointing Council Member John Fulmer to serve as an ex-officio liaison to the Board of Directors of the Friends of the Green Crescent. - City Administrator Andy Blondeau

Other Policy Items

- a. Authorize the City Administrator to negotiate a contract with Creech and Associates for property and growth needs assessment. - City Administrator Andy Blondeau

Mayor-Council reports/comments/new business

Adjourn

Regular Council Meeting
March 16, 2026
Council Chamber-Clemson City Hall

5:30 PM Public Hearing: 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development) Started at 5:46pm due to technical issues.

Call to Order: Mayor Halfacre at 6:36 p.m.

Invocation and Pledge of Allegiance: Mayor Halfacre

Proclamations: Women's History Month Honoree Margaret Thompson

Recognitions: 10U Girls and 14U Boys Basketball SCAP State Champions

Members present: Mayor Halfacre presiding, Council Members Evans, Fulmer, Jones, Scott, Sherrill, and Smith.

Absent: None

Notification emailed: March 12, 2026 to the Greenville News, the Journal, the Independent Mail, the Post and Courier, the Pickens Sentinel, the Easley Progress, WSNW Radio, WYFF, WSPA, and Fox Carolina.

Public Session: Mayor Pro Tem Scott presiding. Michael Brown, 106 Leah Drive Pendleton, regarding noise from the pickleball courts. Stephanie Platt, 103 Mountain View Lane, regarding party noise and previous comments from Council Member Evans. MyCivic comment from Karl Von Kaenel, 108 Lewis Road, regarding loud car exhaust systems.

Approval of Minutes: Minutes from the March 2, 2026 Regular Council Meeting were approved as presented.

Reports/Discussion

Receive a report from Wreaths Across America. Mayor Halfacre introduced Melody Jones from Wreaths Across America. The City of Clemson provided \$340 dollars for the program last year and she requested the same amount for this year.

Discuss the Police Department 2025 Annual Report. Police Chief Jorge Campos highlighted the first year of a narcotics officer grant. There are currently 40 police officers on staff. The police department had 50,310 calls for service last year. There were 214 FOIA requests, 1,091 records requests, and 293 Brady motions in 2025. Chief highlighted that the department received the South Carolina Law Enforcement Accreditation through the hard work of Lt. Lily Davis and Sgt. Zach Yasin.

Discuss the 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development). Assistant City Administrator Nathan Woods answered a few previous questions to begin. First, was why Boulder, Colorado was used as an example because it has some of the most restrictive zoning in the country. Second, the change from feet to stories as a measurement allows developers to create a taller first floor to accommodate retail and restaurants. Mayor Halfacre requested Nathan explain

why this benefits the community. He emphasized this replaces negotiations with planned developments with certainty and transparency of fixed numbers. Developers would pay \$30 per square foot to increase density. This would equate to almost \$3,000,000 using an average project. City Administrator Andy Blondeau explained that zoning was set at 3 stories temporarily while the planned development option recommended by Development Strategies was implemented. After several years of planned developments, we now have the data to proceed further. Comment from Robert Lee, 113 Pressley Drive, regarding transferable development rights.

Staff Reports

CAAAM Director Morgan Robinson: Gave a presentation regarding the Black Heritage Trail. There would be 17 interpretive signs over 2 sites at Rotary Park and Dawson Park.

Policy Action

Ordinances

Consider 2nd Reading of an Ordinance confirming and ratifying the annexation of, and/or annexing, certain property contiguous to the city limits, and enlarging the city limits; and for providing other related matters. City Administrator Andy Blondeau noted there have been no changes since the first reading. Council Member Scott made a motion, seconded by Council Member Fulmer, to approve 2nd reading of an Ordinance confirming and ratifying the annexation of, and/or annexing, certain property contiguous to the city limits, and enlarging the city limits; and for providing other related matters. Vote on this motion was unanimous.

Resolutions

Consider a resolution appointing the Anderson Regional Joint Water System Voting Representatives. Interim Utilities Director Dusty Hayes explained we need to replace former Utilities Director Benjie McGill. Council Member Fulmer made a motion, seconded by Council Member Scott, to approve a resolution appointing the Anderson Regional Joint Water System Voting Representatives. Vote on this motion was unanimous.

Consider a resolution adopting the Pickens County Hazard Mitigation Plan. City Administrator Andy Blondeau presented that this is required for our FEMA reimbursement. Council Member Scott made a motion, seconded by Council Member Fulmer, to approve a resolution adopting the Pickens County Hazard Mitigation Plan. Vote on this motion was unanimous.

Other Policy Items

Consider awarding the Wyatt Avenue Stormwater and Sewer Replacement Project contract in the amount of \$99,170.00 to Gar-Con Inc, with a \$10,000.00 contingency. - Interim Utilities Director Dusty Hayes explained bidding closed on March 5th and Gar-Con was the low bidder. Council Member

Scott made a motion, seconded by Council Member Fulmer, to approve awarding the Wyatt Avenue Stormwater and Sewer Replacement Project contract in the amount of \$99,170.00 to Gar-Con Inc, with a \$10,000.00 contingency. Vote on this motion was unanimous.

Consider a Mutual Aid Agreement with the City of North Myrtle Beach. - Police Chief Jorge Campos stated no changes since the last meeting. Council Member Fulmer made a motion, seconded by Council Member Scott, to approve a Mutual Aid Agreement with the City of North Myrtle Beach. Vote on this motion was unanimous.

Mayor-Council reports/comments/new business

Mayor Halfacre: Noted the end of the year review is now available and thanked the communications staff for their hard work. The police department golf tournament is on May 5th.

Council Member Scott: Encouraged citizens to follow us on Facebook and Instagram.

Executive Session

Mayor Halfacre read that we have a potential executive session regarding case# 2024CP3900901 with potential action coming out of executive session. As this matter involves alleged violations of the Freedom of Information Act, absent any objection, he suggested that we take this matter up in open session without first going into executive session and deferred to the City Attorney. The City Attorney was invited to explain in open session and clarified this discussion will use general terms and reminded City Council that if specific legal questions come up then they would need to go into executive session. The case was formally mediated on March 2nd with the City Attorney, the City Administrator, the Mayor Pro-Tem, and the Plaintiff's but did not result in a settlement agreement. The proposed settlement had a remaining issue that would waive the ability of the city to sue the Plaintiffs for any misconduct in other pending matters. Some of the City's proposed settlement items include changing some language in the City's current FOIA policy and paying the plaintiff's attorneys fees as well as the mediation fees. It would also dismiss -with prejudice- the case among other various items. Council Member Scott made a motion, seconded by Council Member Jones, that City Council a) approve the draft settlement agreement effective March 16th, 2026 related to civil action #2024CP3900901 a copy of which has been presented to City Council and the City Clerk b) Authorize City Council and the City Administrator to execute the agreement c) Authorize the City Attorney to deliver a copy of the same to the Plaintiff's Attorney for approval, execution, and return to the City Attorney no later than March 25th, 2026 at 5pm d) Authorize the release of the settlement agreement to the public e) Give first reading of an ordinance to amend the City's FOIA policy as described in section 2 of the settlement agreement. Mayor Halfacre did a roll call vote. Council Member Fulmer

**Regular Council Meeting
March 16, 2026**

no. Council Member Sherrill yes. Council Member Evans yes. Mayor Halfacre yes. Council Member Scott yes. Council Member Smith yes. Council Member Jones yes. The motion passed 6-1.

There being no further business, a motion was made, duly seconded, and unanimously approved to adjourn the meeting at 8:44 p.m.

Respectfully submitted,

Approved

Jeremiah Jackson, MBL

By: _____

G. Robert Halfacre, Mayor

Draft



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Andy Blondeau, City Administrator

Date Submitted: 4/1/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)
Receive a presentation regarding Clemson University housing. - Vice President of Student Affairs Doug Hallenbeck

Agenda Item Detail: (expand as necessary for clarification)



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Lindsey Newton, Community Engagement

Date Submitted: 4/1/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)
Discuss Sponsorship Applications. - Community and Economic Development Coordinator
Lindsey Newton

Agenda Item Detail: (expand as necessary for clarification)



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Jorge Campos, Chief of Police

Date Submitted: 3/25/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)

The City is contracting with Clemson University to conduct research to try and identify where the need for Opioid recovery services are needed in the City of Clemson. This research is funded by a grant from the SCORF board in the amount of \$151,510.80.

Agenda Item Detail: (expand as necessary for clarification)

CITY OF CLEMSON-CLEMSON UNIVERSITY SCORF CONSORTIUM AGREEMENT

The City of Clemson-Clemson University Consortium Agreement (“Agreement”) is effective April 6, 2026, by and between the City of Clemson, South Carolina (“CITY”), a body corporate and politic organized and existing in the State of South Carolina (“State”), and Clemson University, a body corporate and politic organized and existing in the State of South Carolina (“SUB-RECIPIENT”).

WHEREAS, this Agreement relates to the receipt, acceptance, and expenditure of South Carolina Opioid Recovery Funds, which have been awarded to the CITY according approval no. CLEMCTY04012026, dated March 11, 2026, of the South Carolina Opioid Recovery Fund Board (“SCORF”), and which have been approved for sub-grant funding by the City of Clemson City Council on April 6, 2026 (“Grant Program”);

WHEREAS, the SUB-RECIPIENT is authorized to execute this Agreement and deliver the same to the CITY;

WHEREAS, the SUB-RECIPIENT specifically authorizes the CITY to rely on this Agreement with the CITY’s having no duty to investigate or confirm the information contained in this Agreement and no liability for any misstatements of the SUB-RECIPIENT contained in this Agreement; and

WHEREAS, the Grant Program is subject to all rules and regulations of the SCORF and the use of SCORF funds (collectively, “Guidelines”).

NOW, THEREFORE, in consideration of the mutual promises, covenants, and agreements stated herein, and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the CITY and the SUB-RECIPIENT do hereby covenant and agree as follows:

I. SUB-RECIPIENT ACKNOWLEDGEMENTS AND COMMITMENTS.

1. The SUB-RECIPIENT is a governmental entity organized and existing under the laws of the State of South Carolina and shall remain so through the final expenditure of any funds awarded pursuant to the Grant Program.
2. The CITY’s award of funds pursuant to the Grant Program constitutes a subaward of SCORF.
3. The SUB-RECIPIENT constitutes a “pass-through” entity.
4. The SUB-RECIPIENT shall comply with all Guidelines.
5. The SUB-RECIPIENT shall comply with, and assist the CITY in complying with, the Guidelines.
6. The SUB-RECIPIENT shall otherwise satisfy all compliance requirements for use of SCORF funds.
7. The SUB-RECIPIENT shall otherwise satisfy all reporting requirements for use of SCORF funds.
8. The SUB-RECIPIENT shall not use, directly or indirectly, or permit others to use, directly or indirectly, funds supplied by the Grant Program for any purpose that would violate any Grant Program requirements, including regarding the use of SCORF funds.
9. The SUB-RECIPIENT has never been delinquent, in any respect, in its management of state, federal, or private grant, and/or other funds.
10. The SUB-RECIPIENT has never received an audit of its financial statements that resulted in less than an unqualified opinion from its external auditor.
11. The SUB-RECIPIENT has never been subject to an audit of state, federal, or private grant and/or other funds that was not resolved in favor of the SUB-RECIPIENT.

12. The SUB-RECIPIENT maintains internal controls, policies, and procedures to ensure appropriate oversight of fiscal management and physical money handling, including, for example, for the avoidance of fraud, negligence, and mismanagement of funds.
13. The SUB-RECIPIENT's books and records are and shall remain available for inspection by any authorized agent(s) of the CITY, and/or the State of South Carolina, or any combination of the same. The foregoing requirement shall survive the expiration or termination of this Agreement.
14. The SUB-RECIPIENT's failure to comply in all respects with the requirements of the Grant Program and the use of SCORF funds may result in recoupment of any grant funds with penalties, criminal prosecution, and other sanctions.
15. The SUB-RECIPIENT shall maintain all records related to the Grant Program and the use of SCORF funds for no less than four years from the date of final expenditure of Grant Program funds.
16. The SUB-RECIPIENT shall provide whatever additional information the CITY may, from time to time, request as the CITY reasonably deems are related to this Grant Program.
17. Prior to the CITY's disbursing any funds to the SUB-RECIPIENT, the SUB-RECIPIENT must prepare, execute, and deliver a "Disbursement Request," the substantially final form of which is attached as Exhibit B, with whatever documentation is required so as to permit the CITY to comply with any and all Reporting Guidance;
18. In the event any Grant Program funds are not expended by the earlier of (i) 15 days from the date the CITY transmits funds to the SUB-RECIPIENT, and (ii) [] [], 2026, then the SUB-RECIPIENT shall immediately return the unexpended funds to the CITY.
19. The SUB-RECIPIENT shall cooperate in good faith with the CITY on all aspects of the Grant Program.

II. CITY COMMITMENTS.

- A. The CITY shall administer the Grant Program in conformity with all applicable state and local (if any) requirements.
- B. The CITY shall cooperate in good faith with the SUB-RECIPIENT on all aspects of the Grant Program.

III. TERM.

Subject to the CITY's right to terminate this Agreement as described in section IV, this Agreement is effective on the date first written above and continues thereafter until the later of (a) all funds granted to the SUB-RECIPIENT are expended and any and all of the SUB-RECIPIENT's compliance requirements under this Agreement are fully discharged, and (b) [] [], 202[]. Upon expiration or termination of this Agreement, the SUB-RECIPIENT shall return any (if any) unexpended funds to the CITY.

IV. TERMINATION.

- A. CITY may terminate performance under this Agreement at any time upon 30 days' written notice to SUB-RECIPIENT. CITY agrees to reimburse SUB-RECIPIENT for all costs incurred in the performance of the Grant Program prior to CITY's transmittal of termination notice and any non-cancelable obligations, including obligations for student stipends, graduate assistantships, and postdoctoral fellowships which shall end no sooner than the end of SUB-RECIPIENT's academic year during which termination occurs.

- B. SUB-RECIPIENT may terminate performance under this Agreement upon 30 days' written notice to CITY if circumstances beyond SUB-RECIPIENT's control preclude the continuation of the Grant Program. If SUB-RECIPIENT terminates, CITY agrees to reimburse SUB-RECIPIENT for all costs incurred in the performance of the Grant Program and any non-cancelable obligations prior to issuing the termination notice. SUB-RECIPIENT agrees to reimburse to CITY any funds that have been received but remain unexpended at the time of termination, except for those funds needed to pay non-cancelable obligations.
- C. Either Party may terminate this Agreement for material breach of the terms of this Agreement which has not been cured within 15 business days after written notice by the non-breaching Party.
- D. Termination of this Agreement by either Party for any reason does not affect the rights and obligations of the Parties that accrued prior to the effective date of termination. Any provisions intended to survive termination of this Agreement survives termination of this Agreement.

V. MONITORING.

At any time, and from time to time, the CITY is entitled to conduct a Grant Program review of the SUB-RECIPIENT to ensure compliance with the terms of this Agreement. The CITY is entitled to review all books and records of the SUB-RECIPIENT's general activities and expenditures of Grant Program funds.

VI. NOTICES.

Any notices to be given by any party hereunder shall be in writing and may be effected either by (i) personal delivery by hand (with written confirmation of receipt), (ii) delivery by a reputable express courier service (receipt requested), (iii) certified mail, postage prepaid with return receipt requested, or (iv) e-mail, provided that the recipient must acknowledge having received the e-mail by reply e-mail (an automatic "read receipt" does not constitute acknowledgment of receipt for of this Section). Notices shall be addressed to the parties at the addresses set forth below, but each party may change its address by written notice in accordance with this Section. Notices delivered personally shall be deemed communicated as of actual receipt. Notices delivered by certified mail or express courier service shall be deemed communicated as of the date of mailing or delivery to the courier. Notices delivered by e-mail shall be deemed communicated when the recipient acknowledges having received the e-mail by reply e-mail.

City: City of Clemson, South Carolina
c/o City Administrator
1250 Tiger Boulevard
Clemson, South Carolina 29631

With a copy to: Michael E. Kozlarek, Esq.
(does not constitute notice) Kozlarek Root Law LLC
Post Office Box 565
Greenville, South Carolina 29602-0565

Sub-Recipient: Clemson University
Office of Sponsored Programs
230 Kappa Street
Suite 200
Clemson, South Carolina 29634-5702

With a copy to: Jennifer Kelly, Grants Administrator
(does not constitute notice) Clemson University
Office of Sponsored Programs
cuosp@clemson.edu

VII. RIGHTS OF SUCCESSORS AND ASSIGNS.

The Agreement shall be binding and inure to the benefit of the CITY and the SUB-RECIPIENT and their respective successors and permitted assigns; provided, however, the SUB-RECIPIENT may not assign any of its rights or obligations under this Agreement without the express written consent of the CITY.

VIII. RELATIONSHIP OF THE PARTIES.

Nothing in this Agreement is intended to or shall be deemed to create a partnership, association, or joint venture. The SUB-RECIPIENT shall always be an independent contractor and not otherwise a partner, associate, joint venture, or agent of the CITY.

IX. MISCELLANEOUS.

This Agreement expresses the complete agreement and understanding of the undersigned parties, and any and all prior or contemporaneous oral agreement or prior written agreement regarding the subject matter hereof shall be merged herein and then extinguished. If any term, covenant, or condition of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and each such term, covenant or condition of this Agreement shall be valid and enforceable to the full extent permitted by law. The terms of this Agreement shall be construed in accordance with and governed by the laws of the State. Any dispute between the parties arising or related in any manner to this Agreement shall be brought exclusively in the state or federal courts having jurisdiction over the CITY. The captions and headings used in this Agreement are for convenience only and do not in any way limit, amplify, or otherwise modify the provisions of this Agreement. As used in this Agreement, the masculine, feminine, or neutral gender and the singular or plural number shall each include the others whenever the context so indicates. The Agreement may be executed in multiple counterparts, each of which shall be deemed an original but all of which, taken together, shall constitute the same instrument. A signed copy of this Agreement delivered by email in portable document format (.pdf), or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, shall be deemed to have the same legal effect as physical delivery of a signed original of this Agreement and may be used in lieu of the signed original for all purposes.

[ONE SIGNATURE PAGE AND THREE EXHIBITS FOLLOW]
[REMAINDER OF PAGE INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the parties hereto have set their hands and affixed their seals on the day and year first above written.

CITY OF CLEMSON, SOUTH CAROLINA

By: David Andrew Blondeau
Its: City Administrator

CLEMSON UNIVERSITY

By: Sheila Lischwe, PhD
Its: Director, Office of Sponsored Programs

EXHIBIT A
APPROVAL LETTER
[DATED 2026.03.11]
[SEE 2 PAGES, ATTACHED]

EXHIBIT B
LETTER OF INTENT WITH ATTACHMENTS
[DATED 2026.01.16]
[SEE 13 PAGES, ATTACHED]

CLEMSON-CLEMSON UNIVERSITY SCORE
APRIL 6, 2026
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EXHIBIT C
FORM OF DISBURSEMENT REQUEST

[ENTITY] REQUISITION NO.

REQUEST FOR DISBURSEMENT

City of Clemson, South Carolina
c/o [Deputy] City Administrator
Clemson, South Carolina

CITY OF CLEMSON-CLEMSON UNIVERSITY
SCORF CONSORTIUM AGREEMENT

Dear M[]: []:

You, as the City of Clemson [Deputy] City Administrator, or your respective designee, hold funds ("SCORF Funds") related to the referenced Consortium Agreement, effective _____, 2026, authorized by approval no. CLEMCTY04012026, dated March 11, 2026, of the South Carolina Opioid Recovery Fund Board. You are entitled to rely on this Request for Disbursement ("Request") with no duty to investigate or confirm the information contained in this Request and no liability for any misstatements contained in this Request.

I certify: you are permitted to disburse \$[total amount shown on Schedule I] from the funds proceeds, payable to the persons, in the amounts, at the addresses, and for the purposes set forth in the attached Schedule I, being the amounts due for or attributable to the items described in Schedule I, which are identical with the items described Exhibit B of the Consortium Agreement. Attached to this Request is documentation supporting each requested payment.

In this regard, I further certify to you:

A. The information contained in the Consortium Agreement remains true and correct in all respects.

B. The amounts to be paid under this Request: (i) are due and payable, (ii) are for costs of one or more purposes approved for the undersigned entity in the Consortium Agreement, (iii) have not been the subject of any previous disbursement, and (iv) do not, in the aggregate with all prior disbursements, exceed the amount authorized for the undersigned entity under the Consortium Agreement.

D. The undersigned entity is compliant with all aspects of the Consortium Agreement, and all other documents related to the same.

Dated: [Date of Request]

CLEMSON UNIVERSITY

By: _____

Name:

Its:

CLEMSON-CLEMSON UNIVERSITY SCORF
APRIL 6, 2026
PAGE 8 OF 9

SCHEDULE I

SEE ATTACHED INVOICES AND SUPPORTING DOCUMENTATION



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Nathan Hinkle, City Engineer

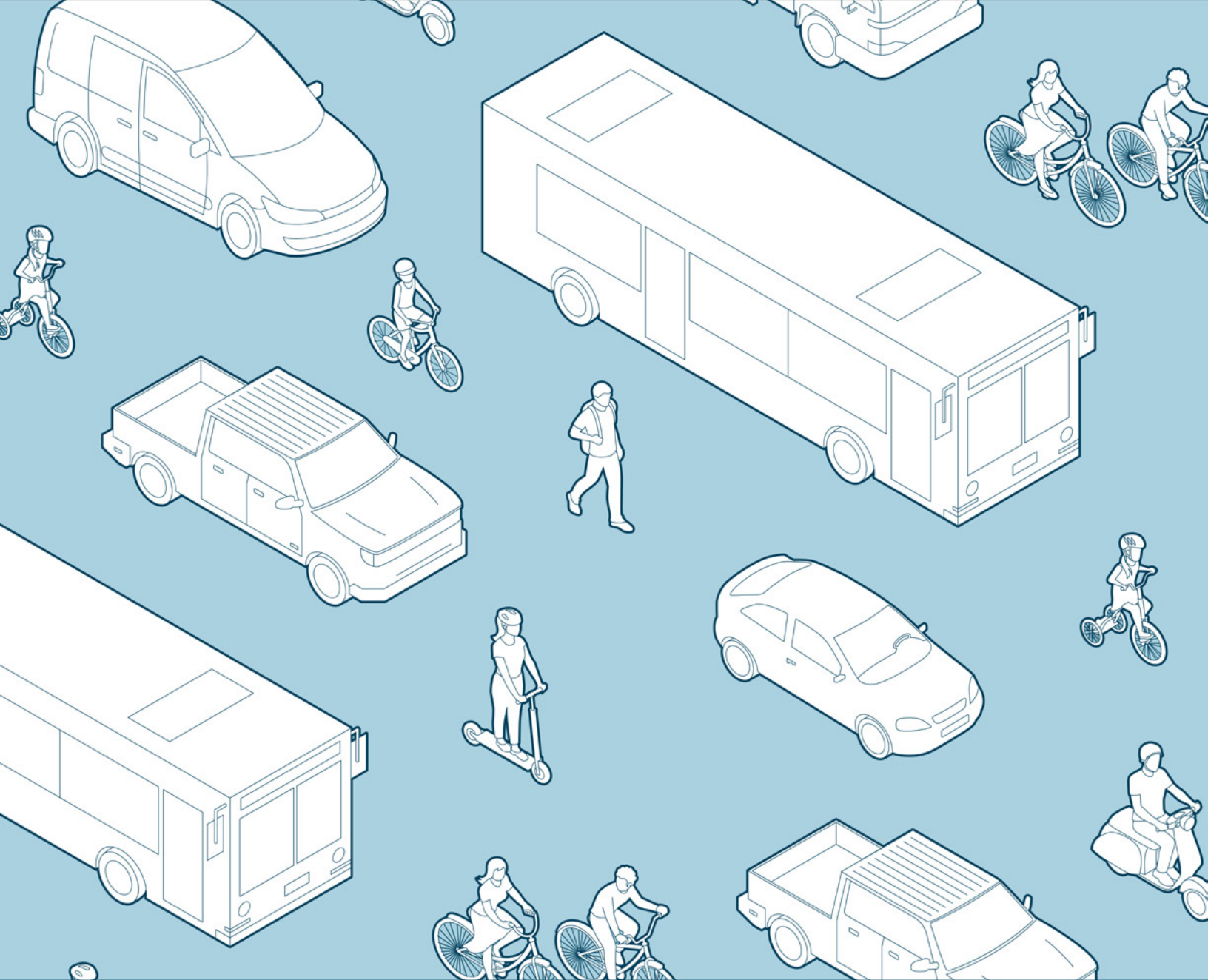
Date Submitted: 3/31/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)
Discuss the adoption of the Clemson Area Long Range Transportation Plan. - City Engineer
Nathan Hinkle

Agenda Item Detail: (expand as necessary for clarification)
This Regional Long-Range Transportation Plan (LRTP) Discussion facilitates a collaborative 25-year vision between the City of Clemson, Clemson University, and Pickens and Anderson Counties. We examined cross-jurisdictional growth trends and land-use data to prioritize multi-modal needs, focusing on regional connectivity, transit expansion, and shared safety goals. The dialogue aims to align local priorities into a unified project list, ensuring the region is strategically positioned to secure state and federal funding for long-term infrastructure through our recent joint of ACATS (Anderson/Clemson Area Transportation Study).



CLEMSON-ANDERSON-PICKENS (CAP) **LONG-RANGE TRANSPORTATION PLAN**

March 2026

CLEMSON





ACKNOWLEDGMENTS

Thank you to all the organizations and individuals who committed their time, energy, and resources to this effort. This study would not have been possible without the support of many throughout the process. On behalf of the City of Clemson, Clemson University, Anderson County, Pickens County, and GPATS, we thank the diverse group of participants whose collective efforts are reflected in the CAP Long-Range Transportation Plan. These groups and individuals include the Project Steering Committee (PSC), local staff and elected officials, South Carolina Department of Transportation, numerous stakeholders, and the dedicated residents of the Clemson area.

Please also note that elements of the **GPATS Horizon2045 Plan** have been incorporated into this Plan, and included in its entirety as an Appendix.

THANK YOU.

ABBREVIATIONS

ACOG - Appalachian Council of Governments

ACTAS - Anderson-Clemson Transportation Study Area

ADA - Americans with Disabilities Act

AID - Accelerated Innovation Deployment

ATTAIN - Advanced Transportation Technology and Innovation Program

BUILD - Better Utilizing Investments to Leverage Development Grant Program

CATbus - Clemson Area Transit

CAP - Clemson-Anderson-Pickens

CLT - Charlotte Douglas International Airport

ECT - Electric City Transit

EPA - Environmental Protection Agency

FHWA - Federal Highway Administration

FTA - Federal Transit Administration

GPATS - Greenville-Pickens Area Transportation Study

GSP - Greenville-Spartanburg International Airport

HMGP - Hazard Mitigation Grant Program

LOS - Level of Service

LRFP - Long Range Framework Plan

LRTP - Long Range Transportation Plan

LTS - Level of Traffic Stress

MPDG - INFRA - National Multimodal Freight and Highway Projects

MPDG - Mega - National Infrastructure Project Assistance Program

MPDG - RURAL - Rural Surface Transportation Grant Program

MPO - Metropolitan Planning Organization

OST - United States Department of Transportation Office of the Secretary

PROTECT Program - Promoting Resilient Operations for Transformative, Efficient, and Cost Savings Transportation

PSC - Project Steering Committee

RBDG - Rural Business Development Grants

RIA - South Carolina Rural Infrastructure Authority

RMP - Regional Mobility Program

SCDOT - South Carolina Department of Transportation

SS4A - Safe Streets & Roads for All

STIP - State Transportation Improvement Program

SCACOG - South Carolina Appalachian Council of Governments

SCOR - South Carolina Office of Resilience

SCPRT - South Carolina Department of Parks, Recreation, and Tourism

STIB - South Carolina State Transportation Infrastructure Bank

TDM - Transportation Demand Management

TDM - Travel Demand Model

TIP - Transportation Improvement Program

UGATA - Upstate Greenways and Trails Alliance

USDA - United States Department of Agriculture

USDOT - United States Department of Transportation

V/C - Volume-to-Capacity ratio

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1. INTRODUCTION

“...transportation infrastructure does more than move people. It builds communities, and it constructs our way of life. In short, it matters what kind of infrastructure we build, so we should think carefully about how we would prefer to live and make sure that the policies and projects we invest in are supporting those lifestyle goals.”

- Where We Want To Live by Ryan Gravel

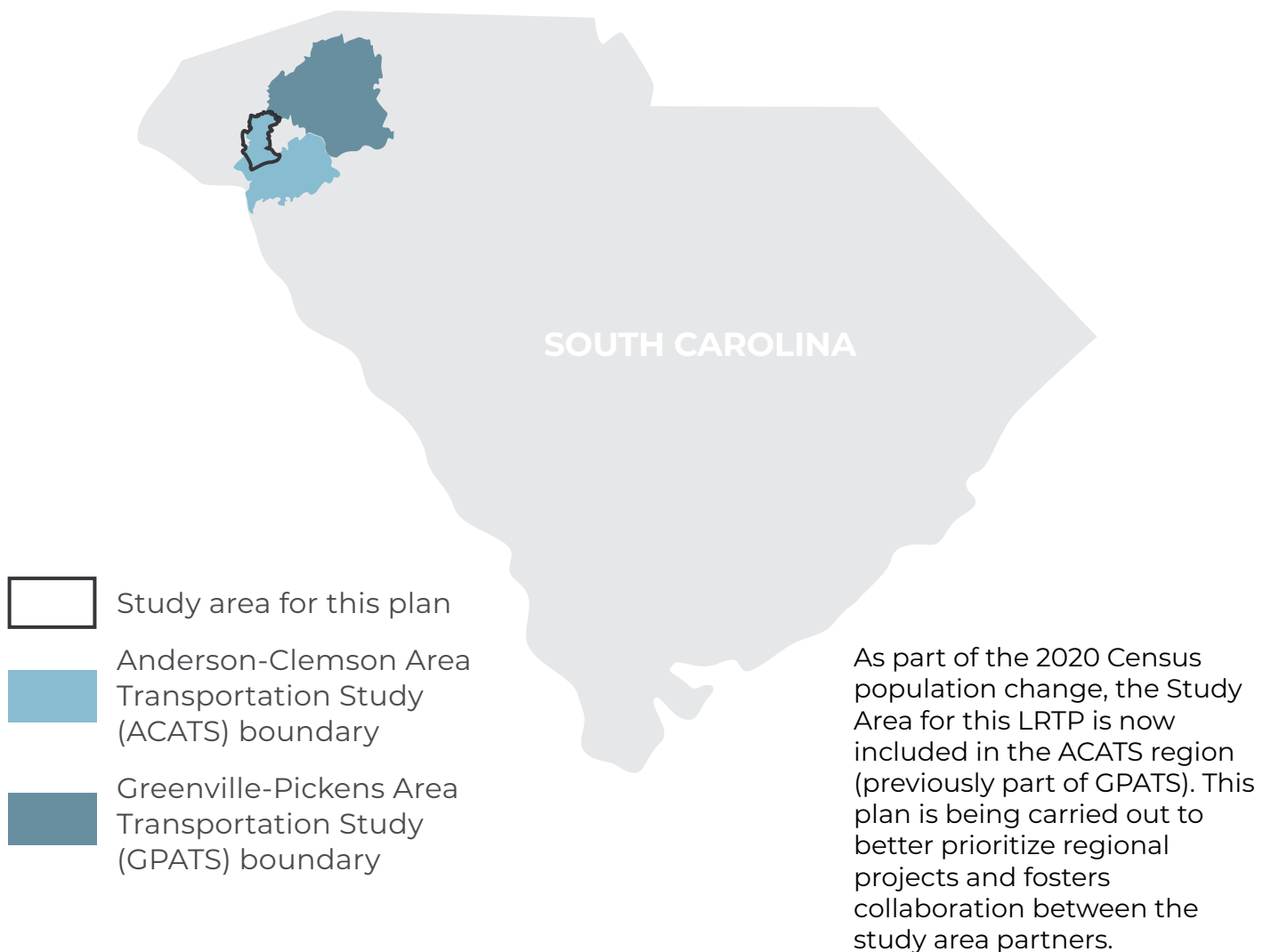
THIS CHAPTER COVERS:

- Introduction
- Statewide Transportation Planning
- Regional Planning ACATS & GPATS
- Planning Process
- The Clemson Area

INTRODUCTION

Anderson and Pickens Counties are experiencing significant population growth and economic development along with Upstate South Carolina. To examine the current and future mobility needs for the next twenty (20) years, **a partnership of Anderson and Pickens Counties, Clemson University, City of Clemson, the Anderson-Clemson Area Transportation Study (ACATS), Greenville-Pickens Area Transportation Study (GPATS) and other towns in the area** are preparing this Long-Range Transportation Plan (LRTP). This plan is a **sub-regional mobility study**, looking at population and demographic change, economic development and employment growth, land use, and our system of roads, bike and pedestrian facilities, and transit. The goal of this LRTP is to **identify needs and recommend improvements to the regional mobility network**, formalize supporting land use and policy changes, help to coordinate between towns, counties, and the State, and **to inform a future Anderson-Clemson Area Transportation Study (ACATS) Long-Range Transportation Plan update**.

Figure 1.1: Project Study Area



STATEWIDE TRANSPORTATION PLANNING

01

This plan takes place within the context of our state, regional, and local planning partners and their planning efforts. Statewide, our most important planning processes are the Statewide Transportation Improvement Program (STIP), the Multimodal Transportation Plan (Momentum 2050), and the Regional Mobility Program:

INTRODUCTION

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP):

Represents a six-year commitment to funding near-term project needs. The STIP is continually reviewed, revised, and maintained to remain accurate with priorities. Projects included in the STIP come from many sources, but all begin with a local or regional plan, like this Plan that identifies a current or future need. For more information on the current STIP, visit : <https://www.scdot.org/inside/planning-stip.html>



STATEWIDE MULTIMODAL TRANSPORTATION PLAN (MOMENTUM 2050):

Is the Long-Range Transportation Plan for the entire state of South Carolina. This plan identifies both short-term and long-term projects to improve the state's transportation system, including roadways, bike and pedestrian and transit improvements. Near-term projects in this plan are programmed for construction through the STIP. For more information on the Momentum 2050 plan, visit: <https://movingsouthcarolinaforward.com/about-the-plan/>

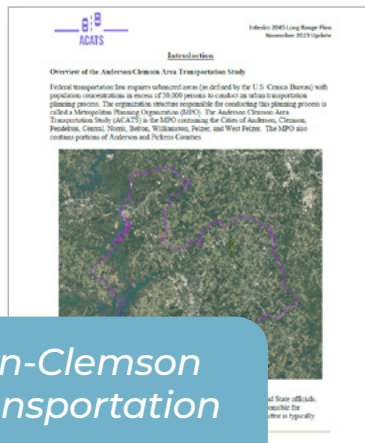
REGIONAL MOBILITY PROGRAM (RMP):

Which is a rebrand of the former SCDOT Guideshare Program to enhance transportation planning through a corridor-wide and data-informed process and is informed by the State's Complete Streets Policy (2021), and Pedestrian and Bicycle Safety Action Plan (2023).

REGIONAL PLANNING ACATS & GPATS

Regional planning organizations, like the Anderson-Clemson Area Transportation Study (**ACATS**) and Greenville-Pickens Area Transportation Study (**GPATS**), are responsible for coordinating improvements to our regional transportation network, identifying future project needs and distributing funds received from the federal and state government. ACATS and GPATS do this through the Long-Range Transportation Plan (LRTP) updates. These LRTPs are guided by federal requirements, updated every four-years and identify improvements that are **fiscally-constrained**: projects are constructed with funds that they can reasonably expect to receive in the future. Projects for these plans come from many sources, like sub-regional mobility studies such as this Plan.

ACATS



Anderson-Clemson
Area Transportation
Study

GPATS



Greenville-Pickens
Area Transportation
Study

The most recent **ACATS plan** update was completed in 2023. This plan prioritizing more than \$193 million in regional mobility funds through the year 2045, as well as \$13 million in committed projects within the current Transportation Improvement Program (TIP) for the near term. Read more about this plan by visiting: <https://www.cityofandersonsc.com/transportation>

"Visioning is the starting point to encourage more planning."

- Focus Group Attendee

The most recent **GPATS plan** is titled Horizon2045 and was updated in 2024. Included in this regional plan were 391 corridor improvement projects, 270 intersection improvement projects, and a prioritized list of projects totaling \$480 million in transportation investments. Read more about this plan by visiting: <https://gpats.org/Plans/Horizon2040.aspx>

"Growth is inevitable. We need not fall behind but rather must keep ahead of the influx."

- Focus Group Attendee

PLANNING PROCESS

The LRTP was developed in three phases over the course of a year, beginning in Fall 2024 and concluding in Winter 2025:



Figure 1.2: Project Timeline

LISTENING & DATA ANALYSIS

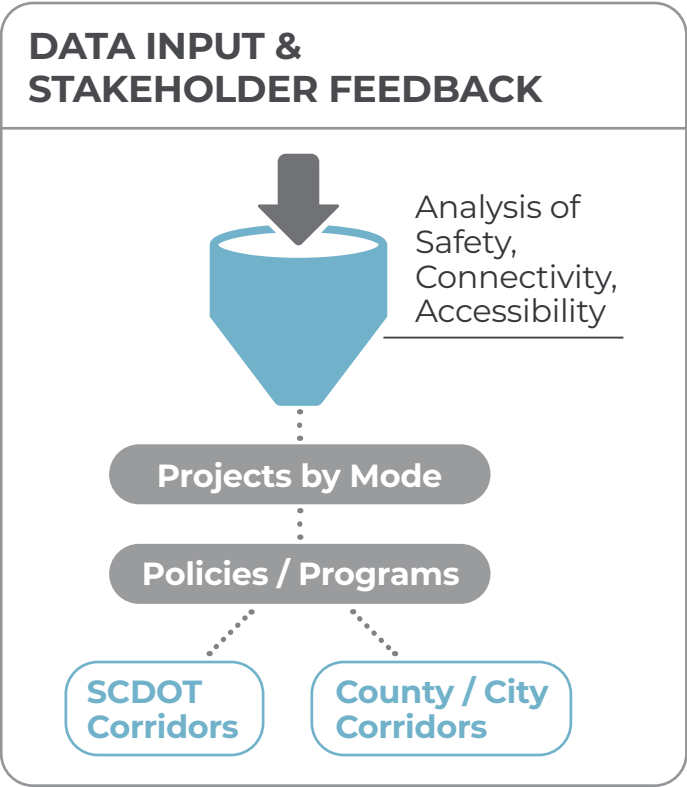
This phase centered on data assembly, synthesis, and launching the public outreach and engagement process. The team worked with steering committee members to define initial objectives for the process, and to coordinate in-person public events with online engagement. A project website, survey, and interactive map were launched to begin collecting feedback from residents and community stakeholders.

REFINING & DRAFT RECOMMENDATIONS

This phase gathered information from data resources and public outreach, using these summary takeaways to begin a general framework, or outline, for improvements to the regional mobility network. From this multimodal network of destinations and growth corridors, individual projects were identified, refined, and prioritized according to greatest benefit. Stakeholder conversations during this period provided additional feedback on specific destinations of importance, or barriers that may be preventing them from moving how and where they would like to.

DOCUMENTATION & REPORTING

The final phase culminated in the development of this report document. Draft recommendations and priorities were refined through public outreach and subsequent steering committee meetings. Materials, resources, project recommendations, and implementation strategies developed through the process were tied together in the final plan document.



THE CLEMSON AREA

Vision Statement

The Clemson-Anderson-Pickens (CAP) region envisions a safe, connected, and sustainable transportation system that supports economic opportunity, respects the region's cultural and natural heritage, and offers inclusive, multimodal mobility options for all residents and visitors of the region — today and for generations to come.



Downtown Clemson, South Carolina

Guiding Principles & Goals

1. Achieve Zero Fatalities and Serious Injuries



- Design and operate a transportation system based on the [Safe System Approach](#).
- Prioritize safety improvements along high-risk corridors and intersections.
- Promote a culture of safety through education and enforcement.

2. Expand Multimodal Travel Options



- Invest in complete streets and transit infrastructure that support walking, biking, transit, and passenger rail.
- Improve first/last-mile connections to increase accessibility for all users.
- Integrate new mobility strategies and technologies to expand travel choices.

3. Protect Cultural and Environmental Resources



- Align transportation investments with sustainability and conservation efforts.
- Improve multimodal access to parks, trails, and cultural landmarks.
- Reduce transportation-related emissions using Transportation Demand Management (TDM) strategies that encourage modal shift.



Clemson University Campus



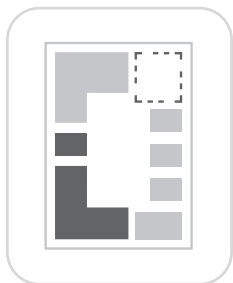
Catherine J. Smith Plaza, Downtown Clemson

4. Support Inclusive Economic Growth



- Improve connectivity to major employment centers.
- Address transportation barriers within vulnerable populations and rural communities.
- Enhance freight mobility while minimizing the potential for community and environmental impacts.

5. Coordinate Transportation and Land Use Planning



- Promote development that preserves open space while supporting compact, walkable, mixed-use centers.
- Work with local governments to align land use, zoning, and transportation policies to guide growth strategically.
- Encourage development patterns that support future transit and multimodal access.

6. Preserve and Modernize the Transportation Network



- Prioritize maintenance to extend the infrastructure lifecycle and provide for efficient travel.
- Leverage technology and data to enhance system performance and prepare for emerging vehicle technologies.
- Choose fiscally responsible investments that support long-term operational sustainability.

Public Engagement

Planning for regional growth and mobility needs involves listening to the public in a variety of ways. Data can only provide a partial picture; public involvement helps to provide additional **details and nuance to mobility challenges**, as well as to establish priorities and provide crucial **public support for future project development**.

KEY TAKEAWAYS



1. **Traffic congestion** (delay) and **safety** issues are a common response for today's mobility challenges.



2. **Efficiency** of different modes (traffic, walking, drop-off areas, greenways) is a common desire for future change / improvement.



3. Participants **value multimodal** transportation, now and in the future, and would support more funding for multimodal projects.



4. **Connectivity to natural resources**, increased access to trails / greenways / bike lanes / sidewalks are desired.



5. Transit-related improvement with **increased service times / areas** is desired.



POLL RESULTS

(% of participants)

What do you prefer more while moving around your community?

67% prefer to commute more without a car

69% maintenance of existing roads

WHERE do you want to see investment?

40% in walking / biking improvements

20% in complete streets / safety

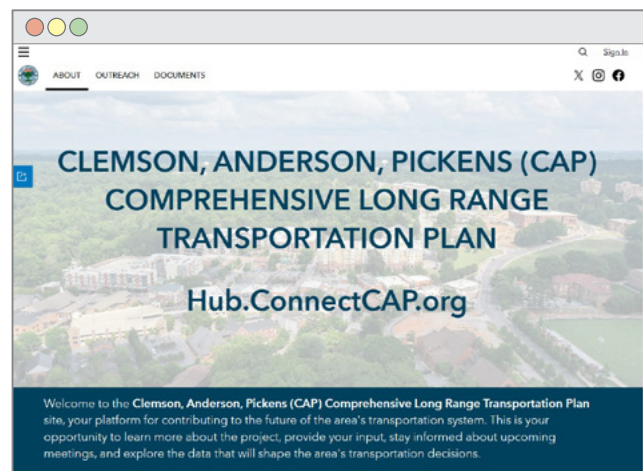
A future vision for the region includes...?

30% on average choose multimodal transportation, especially for biking infrastructure improvements

Figure 1.2: Key Takeaways from Public Engagement

HOW WE ENGAGED THE COMMUNITY

This plan utilized both virtual and in-person engagement strategies to involve residents and community members throughout the fall of 2024 and into 2025. The project website, hub.ConnectCAP.org, focused virtual outreach through the website, with an online survey and interactive web map; it also provided project context as well as upcoming in-person events.



View of the Project Website

Project website

- **574** unique visitors

Online Survey

- **195** online survey participants who identified safety, roadway congestion, and connections to jobs/services as critical issues

Interactive Mapping

- **69** location-based comments that primarily displayed the location of key safety traffic issues

We hosted two rounds of public workshops: the first, in February 2025, took place at the Pendleton Library to better understand **mobility issues, barriers, or preferences**. The second, in September 2025 at Clemson City Hall, shared the **draft projects** and asked for feedback. Between these two events we also hosted four (4) focus group “listening sessions” that allowed stakeholders to steer the conversations toward their values, goals, or objectives for improving mobility.



Public Workshop to Gain Feedback from the Community

2 Public Workshops (In-Person)

- **49** community members involved throughout

4 Focus Group Meetings (Hybrid)

- **18** attendees from numerous organizations across the region



FOCUS GROUPS: Key Takeaways

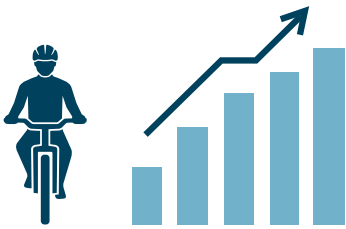
1. Transit ridership has been **INCREASING**, although regional transit options are lacking
2. More **CONNECTED** network of sidewalks, trails, and bikeways is desired
3. Residential and employment areas are far apart, reinforcing **CAR-CULTURE**
4. Strong desire to retain the region's **RURAL CHARACTER** and improve quality of life for families
5. **SAFETY** is paramount for those who choose to walk or bike

Plan & Policy Review Summary

This regional plan was not initiated without prior needs, studies, or analysis. Our team assembled, reviewed, and summarized the key takeaways from more than twenty-seven plans, documents, studies, or reports that pre-dated our work. Some of the most salient items from this review are described below.

PLAN REVIEWS: Key Takeaways

We are seeking **sustainable growth** for the region that balances quality of life, while maintaining rural character.



We must address **roadway safety** and reducing traffic bottlenecks along major corridors and intersections.



We **actively promote** alternative modes, particularly Green Crescent Trail and Doodle Trail, focusing on extending greenways and trails.



► The Clemson-Anderson-Pickens region is more than a University.

The comprehensive planning process for a region that includes a university town has some nuances to be aware of when making recommendations. For example, within the City of Clemson, the percentage of residents living in poverty is 37%. However, it must be noted that this high rate is attributed in part to the large numbers of college students living off campus who may not report income, but who may have part-time jobs and receive additional support and funding from family and student financial aid programs. This data must be interpreted with caution, separating student-related factors and long-term economic hardship for citizens when making policy decisions.

► Community plans encourage multimodal forms of transportation, quality of life, and boosting tourism.

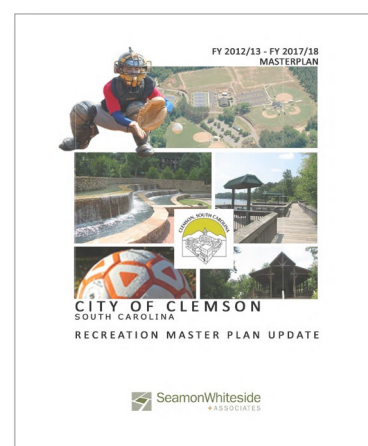
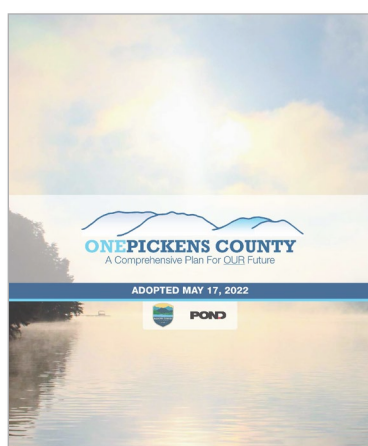
The complete streets-focused approach throughout this planning process will augment the City of Clemson and the counties' continuing efforts to provide an attractive place to live, work and visit. Due to Clemson's mild, southern climate, the area is an attractive destination for both tourism and relocation, making it an ideal location to invest in bicycle infrastructure.

▶ Regional planning efforts for the future are focused on improving quality of life.

This planning effort builds on previous plans. The Long-Range Framework Plan (LRFP) is a decision-making tool for the study area, charting an overall structure for future development over the next 10+ years, new open spaces, and mobility networks; all while allowing flexibility for Clemson University to respond to changing conditions and circumstances. Public input for the LRFP shows support for housing growth while maintaining the integrity of local and regional place and character.

▶ Regional growth must account for the importance and impact of freight movement.

As the GPATS region is anticipated to continue to grow, freight should be considered a major contributor to regional economic well-being. Freight is anticipated to grow 81% by 2045. This means **more trucks on the interstates** and freight cars on rails. Indeed, more freight traffic on roads also means increased congestion, increased commuter times, and increased difficulty in the first- and last-mile of delivery reaching local businesses.



Sample of the Previous Plans Reviewed

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2. REGIONAL CONDITIONS & TRENDS

“Transportation planning has long focused on improving system performance, often neglecting the needs of those who rely on walking, cycling, or public transit. To achieve equitable access, planners must analyze data across all modes to understand and address disparities in mobility.”

*- Transport Justice: Designing Fair Transportation Systems
by Karel Martens*

.....

THIS CHAPTER COVERS:

- Regional Transportation Trends
- Socioeconomic Context
- Environmental Context
- Pedestrian & Bicycle
- Public Transit
- Vehicles

REGIONAL TRANSPORTATION TRENDS

The prevailing development trend in the study area is centered around vehicles, with I-85 acting as the primary regional connector throughout the Upstate and linking to both North Carolina and Georgia. However, the region's priorities are changing and a new emphasis on Complete Streets, walkability, and housing is being emphasized. Notably, the City of Clemson, Clemson University, and Anderson County have received Federal funding through the [Safe Streets for All](#) (SS4A) program to develop a Safety Action Plan. This ongoing initiative aims to **eliminate roadway fatalities and serious injuries across all modes of transportation** by pinpointing high crash corridors and proposing countermeasures to enhance safety for everyone.



Patrick Square Farmers Market



Downtown Pendleton



Bicycle Pump Track



Tottie's Place Trailhead



Clemson University

TRANSPORTATION INSECURITY

Planning for equitable outcomes involves emphasis on **historically undeserved populations** and/or high concentrations of transportation insecurity. Transportation insecurity occurs when individuals are unable to travel where and when they need to go due to a lack of resources, infrastructure, or support.¹ This includes no car households, financial barriers to transportation (gas, car maintenance, etc.), or lack of access/unavailable public transportation.

The 2023 Equitable Transportation Community Explorer tool utilizes data from the Census Bureau, USDOT, the Environmental Protection Agency (EPA), and the Bureau of Labor Statistics. The tool is used to create a Transportation Insecurity Score, combining measures of **Transportation Cost Burden** (% of household income dedicated to costs associated with transportation: car ownership, transit fares, and commuting time costs), **Transportation Access** (automobile prevalence, average commute time, average walking and driving times to amenities, and access to jobs and transit), and **Transportation Safety** (high crash rates).²

Within the study area, Clemson University, Norris, parts of Pendleton, and the southwest section of the study area have a higher transportation insecurity score than other census tracts signifying the need for an improved transportation network.

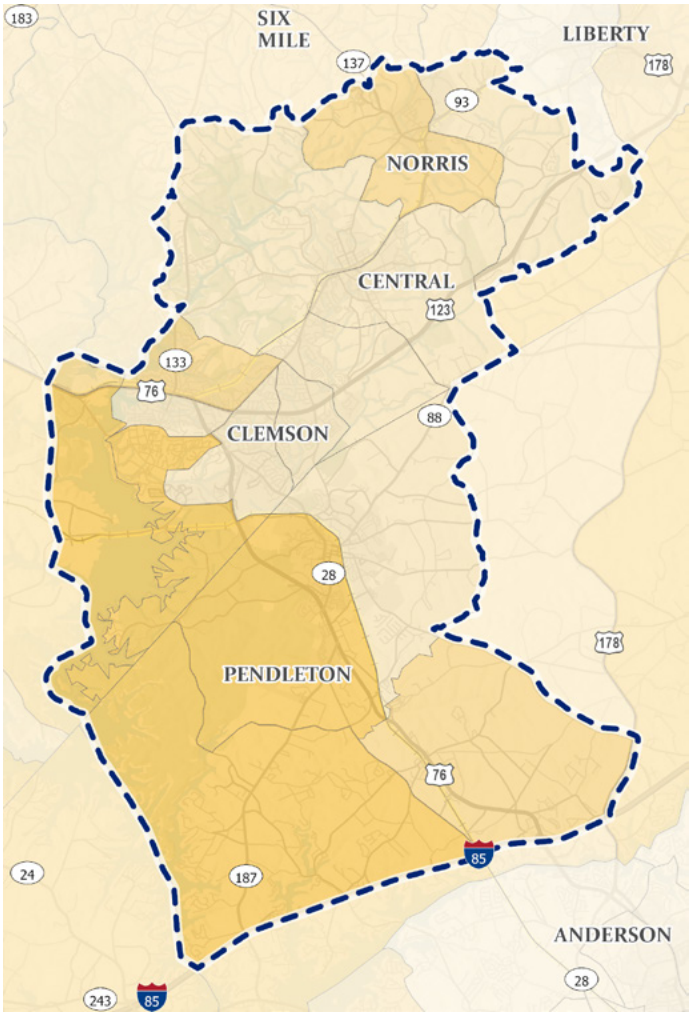
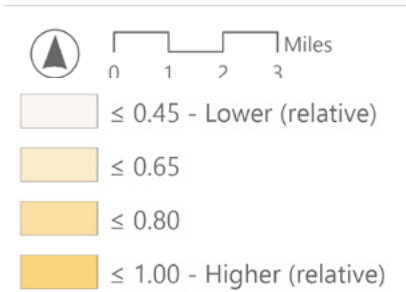


Figure 2.1: Transportation Insecurity



¹ University of Michigan. 2025. *Transportation insecurity: A common and consequential American hardship*
² USDOT. 2023. *Equitable Transportation Community Explorer*. Pg. 18-20

MODE SPLIT

Commute time plays a significant role in determining mode split—the proportion of people using different transportation modes like driving, transit, biking, or walking. People's choice of how they travel is often shaped by how long it takes, how reliable it is, and how stressful the ride feels. While most residents spend 30 minutes or less traveling to work, a significant portion of people are also spending more than 45 minutes, underscoring the need for increased multimodal options, including access to transit.

Although the personal **vehicle is the dominant mode** of travel in the study area, there also is a demographic of residents that walk, bike, or take transit. In addition, the second most prevalent category of travel behind vehicular includes residents who **work from home**, a category which grew significantly after the COVID-19 pandemic and is expected to continue to rise, especially for IT and tech related employees in the years to come.

Table 2.1: Transportation Mode Choice³

	Personal Vehicle	Public Transportation	Bicycle	Walking	Other Means	Worked from Home
Study Area	77%	1%	<1%	3%	1%	8%
Anderson County	92%	<1%	<1%	1%	1%	6%
Pickens County	86%	1%	<1%	2%	1%	9%
South Carolina	85%	<1%	<1%	2%	1%	12%

³ Steven Manson, Jonathan Schroeder, David Van Riper, Katherine Knowles, Tracy Kugler, Finn Roberts, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 19.0 Means of Transportation to Work (2019-2023 ACS 5-year). Minneapolis, MN: IPUMS. 2024.

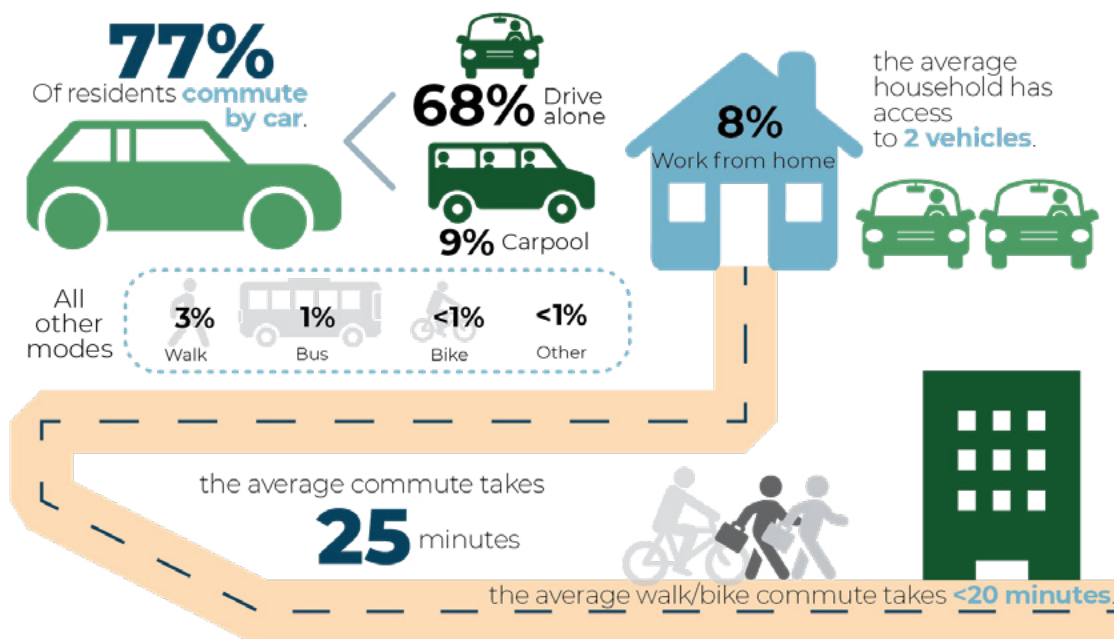


Figure 2.2: Commuting in the CAP Region

EMPLOYMENT

The region's workforce is largely concentrated in educational services, manufacturing, and food services, due to influences like Clemson University and the Upstate's manufacturing hubs. Nearly 40% of locals are employed in educational services, while both manufacturing and accommodation and food services each account for 17% of employment. The area's largest employers are consistent with these employment patterns.⁴

MAJOR EMPLOYERS

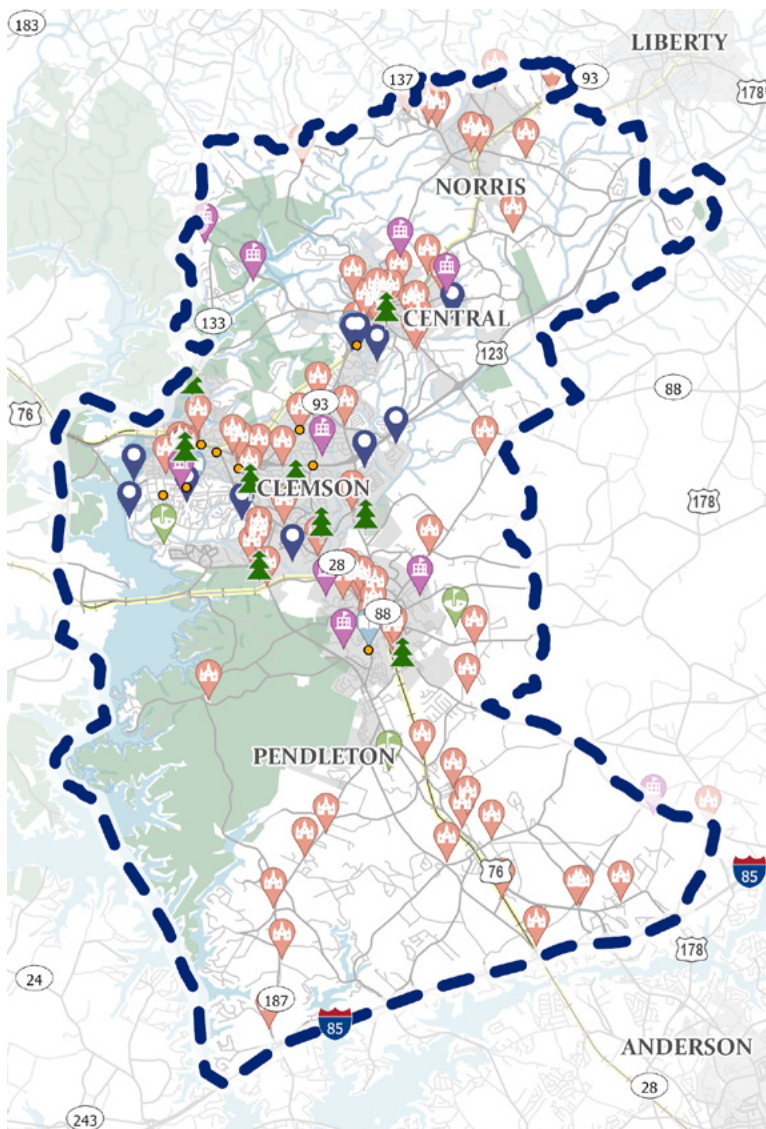
- Clemson University
- AnMed Health
- School District of Pickens County
- School District of Oconee County
- School District of Anderson County
- Oconee Memorial Hospital (Prisma)
- Duke Energy
- Robert Bosch Corporation
- Michelin North America
- BorgWarner

⁴ U.S. Census Bureau, "OnTheMap," <https://onthemap.ces.census.gov>, accessed on July 2025.

ENVIRONMENTAL CONTEXT

Quality of Life & Recreation Opportunities (Lake, Boating, Fishing, Greenways)

Located in the Upstate of South Carolina, the CAP region lies at the foothills of the Blue Ridge Mountains. The area is defined by Lake Hartwell, expansive parks and forests, and rich agricultural land, all of which create abundant opportunities for outdoor recreation such as boating, camping, fishing, and exploring both natural and paved trails. The Clemson Experimental Forest provides thousands of acres of wooded land and trails that link to Lake Hartwell, serving students, faculty, staff, residents, and visitors alike.



With a strong emphasis on outdoor lifestyles and environmental stewardship, the community recognizes the importance of thoughtfully preserving and enhancing its valuable natural resources and amenities.

Figure 2.3: Destinations

Environmental Considerations

Environmental constraints represent potential obstacles to the planning, design, and/or construction of transportation improvements in the CAP multimodal network. For example, Lake Hartwell, which sits at the western side of the study area, contributes to the flood hazards shown in **Figure 2.4**, creating higher risk for damaged roadways and transportation infrastructure during large weather events across the study area. Understanding the location of these constraints and barriers early in the planning process allows us to identify potential transportation recommendations that would require additional environmental review, and therefore more accurately prioritize these into mid-term or long-term categories for implementation.

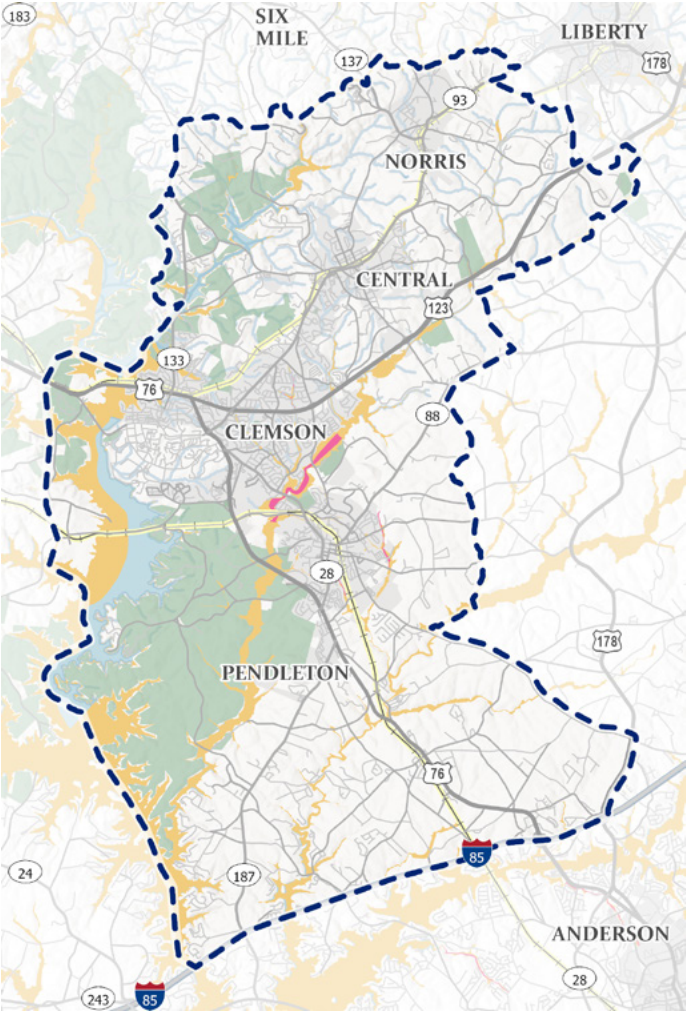


Figure 2.4: Environmental Considerations



Lake Hartwell Boating and Recreation

BICYCLE AND PEDESTRIAN

Current Conditions

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Bike and pedestrian facilities in the study area exist predominately in the urbanized areas, with few facilities outside of Clemson and Pendleton. Natural surface hiking and biking trails, used for recreation, are located in the Clemson Experimental Forest near Central and Pendleton. While the pedestrian network throughout the area is largely fragmented, Clemson boasts several shared-use paths, especially in the vicinity of Clemson University. Bicycle facilities are scarce across the study area, and sidewalks tend to be disconnected. Most amenities are located in downtown Clemson or Pendleton, as well as in newer developments around greater Clemson.

In addition, the lack of continuous bike lanes and pedestrian crossings along major corridors contributes to safety concerns and limits accessibility for non-motorized users. Connectivity between neighborhoods, schools, and commercial areas remains limited, making it challenging for residents to rely on walking or biking as primary modes of transportation.

PLANNED PEDESTRIAN AND BICYCLE FACILITIES

The CAP region is actively working to expand its network of greenways and trails. Plans such as the GPATS Horizon2040 Plan, Clemson University's 2017 Long Range Framework, and the 2024 Green Crescent Trail Implementation Plan outline a vision for a larger, more connected system. This expanded network aims to **improve regional connectivity** and link to the Doodle Trail in Easley and the Swamp Rabbit Trail in Greenville County.



Green Crescent Trail Signage and Trail Head

If I were Mayor for a day, one thing I would change would be that...

"Walkability - Identify where steps can be replaced with ramps. Update and enhance heritage trails."

- Open House Participant

"Increase safety for bike lanes on major roads and reduce overall traffic when bikes and cars are sharing the same lanes."

- Open House Participant

Planned facilities in the region will expand the network significantly. **New trails are planned along several major arterials**, including Old Greenville Highway and Issaqueena Trail, and Old Stone Church Road. A future connection on Pendleton Road will provide users **a connection from Clemson to Pendleton**. New facilities on SC 93 will connect Clemson and Central community members to each town.

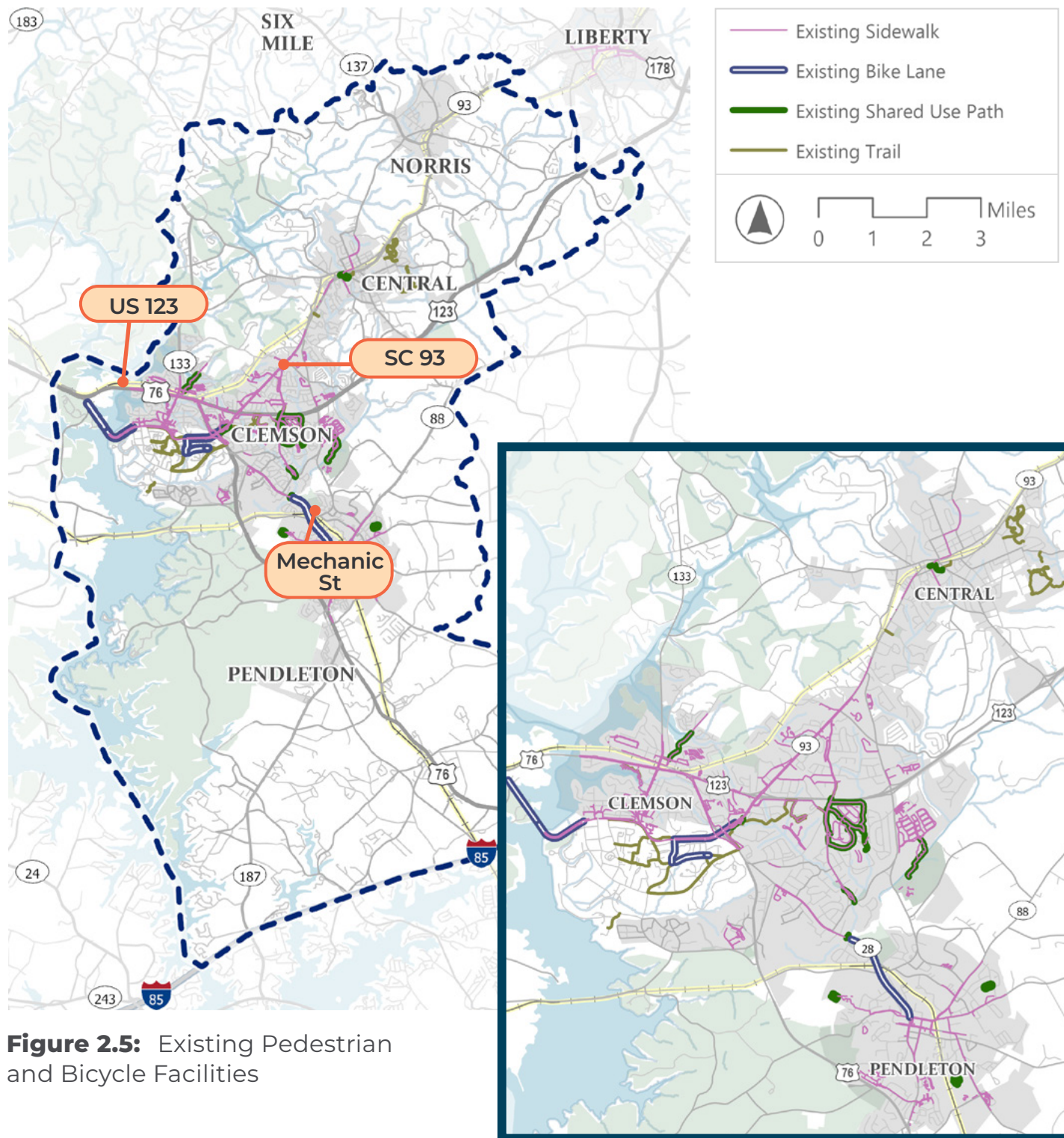


Figure 2.5: Existing Pedestrian and Bicycle Facilities

PEDESTRIAN CONDITIONS

Most rural roads within the region lack sidewalks. Coupled with high vehicle speeds, this perceived danger is likely to make all but the most confident pedestrians choose to travel a different way or not travel by foot at all. Within more urbanized areas of the region, fragmented sidewalk networks mean that people walking are likely to encounter **major safety concerns and hazards** to travel during any trip. These challenges include busy roads with high speeds and traffic right next to sidewalks, or, more commonly, having to walk against oncoming traffic in the roadway or along grassy areas above the curb.

Installing sidewalks along rural roadways and **filling gaps** in urban sidewalk networks would significantly enhance **safety, accessibility, and comfort** for residents. Additionally, implementing traffic calming measures—such as reducing vehicle speeds, adding crosswalks, and increasing signage—could further **mitigate risks and encourage more individuals to consider walking**. By addressing these barriers, communities can foster healthier lifestyles, improve public safety, and create more inclusive environments for people of all ages and abilities.



Walking and Biking Improvements are Needed Around the Region

BICYCLE CONDITIONS

People biking through the region encounter significant traffic-related challenges when navigating the study area. The Bicycle Level of Traffic Stress (LTS) system evaluates the safety and comfort of roadways for users. People biking are typically restricted to collectors and arterial roads characterized by higher speeds and greater traffic volumes. As most routes lack dedicated and continuous biking infrastructure, individuals must ride in traffic lanes next to fast-moving vehicles, discouraging adoption of bicycling as a mode of transportation. Biking for recreation, short errands, and appointments are generally unsuitable for the majority of riders, leaving only the most confident willing to bike within the study area.

To address these challenges, the **development of more connected biking infrastructure** along collectors and arterial roads, such as protected bike lanes and multi-use paths should be developed. Enhancing connectivity between **residential streets and major destinations** through safe, well-marked crossings and linking low-traffic routes would encourage more people to choose biking. Additionally, implementing traffic calming measures, reducing speed limits in key corridors, and improving signage for both drivers and cyclists can **create a safer and more comfortable environment for all levels**.



PUBLIC TRANSIT

Current Conditions

PUBLIC TRANSIT SERVICE

Public transportation is an important component of the region’s multimodal transportation system. As the region continues to grow and evolve, it is essential that investments in transit be made to provide mobility alternatives for all residents and visitors.



CATbus Moving Through Clemson

CATbus

General public transportation services in the CAP study area are provided primarily by Clemson Area Transit, known as CATbus. CATbus operates nine fixed-service routes within the study (Table 2.2). CATbus provides fare-free services, provided by Clemson University, the City of Clemson, the Town of Central, the Town of Pendleton, the City of Seneca, the South Carolina Department of Transportation, and the Federal Transit Administration. In Fiscal Year 2023, CATbus serviced 869,103 unlinked passenger trips.⁵

⁵ FTA. 2023. 2023 Annual Agency Profile - City of Clemson (NTD ID 40208). https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2023/40208.pdf

Table 2.2: CATbus Routes

Route	End-of-Line Destinations	Span	Frequency
Central	Central Recreation Center/ Library to Dollar General	M-Th: 7am - 8pm F: 7pm - 10pm Sa: 10am - 8pm Su: 12pm - 4pm	60 minutes
Gold	GrandMarc to Bojangles	M-F: 7am - 6pm	15 minutes peak & 30 minutes off-peak
HighPointe/ Pier-CU AM	HighPointe to Strom Thurmond Institute	M-F: 7am - 11am	30 minutes
HighPointe/ Pier - CU PM	HighPointe to Madren Center	M-Th: 11:30am - 10:15pm F: 11:30am - 6:15pm	30 minutes
HighPointe/ Pier - Downtown	HighPointe to Palmetto Smokehouse	M-Th: 11:30am - 10:15pm F: 11:30am - 6:15pm	30 minutes
Pendleton	Douthit Hills to Newman Rd @ McMillan Rd	M-F: 6:45am - 6:45pm	60 minutes
Red	Rec Center/Library to Dollar General	M-Th: 7am - 8pm Fri, Sat, Sun: 7am - 3am	M-Th: 15 min peak; 30 min off-peak; 60 min evenings F: 30 minutes Weekend: 60 minutes
Seneca - Clemson/ Express	Oconee Memorial Hospital to Hwy 123 @ Hasty Mart	M-F: 5:45am - 6:45pm	60 minutes

Electric City Transit (ECT)

In addition to the services operated by CATbus, the City of Anderson provides service within the study area. Electric City Transit (ECT) operates the Orange Route, connecting Walmart on Liberty Highway in Anderson to Tri-County Technical College in Pendleton, via the US-76 corridor. ECT served 200,519 unlinked passenger trips in Fiscal Year 2023 across its service area.⁶

⁶ FTA. 2023. 2023 Annual Agency Profile - City of Anderson (NTD ID 40081). https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2023/40081.pdf

Tiger Transit

Clemson University's Tiger Transit shuttle bus system serves the study area by providing convenient transportation around the campus and connecting riders to CATbus and ECT routes throughout the region. The University additionally offers shuttle service to **Greenville-Spartanburg International Airport (GSP)** and **Charlotte Douglas International Airport (CLT)** during holiday periods. While most Tiger Transit routes are accessible to the public, some highway-speed routes restrict young children due to the absence of seat belts and limited standing space. The availability and scheduling of Tiger Transit services vary according to the university's academic calendar.

PASSENGER RAIL SERVICE

The CAP region receives Amtrak passenger rail service along Hwy 123 in Clemson through **Norfolk-Southern's "Crescent Corridor."** The Amtrak station in Clemson serves the broader region. In the early 2000s, the city took the lead in preserving the historic depot in cooperation with Norfolk Southern and Amtrak; the exterior was restored to its early 20th century appearance. Amtrak service is limited to the Clemson area departing as early as 1:41 am to continue northbound and 6:09 am departing southbound.⁷

AVIATION

The region has several airports just outside the study limits. **Oconee County Regional Airport** sits just west of Clemson University, serves as the aviation gateway to Upstate South Carolina's scenic "Golden Corner" including three of South Carolina's premier educational institutions (Clemson University, Southern Wesleyan University, and Tri-County Technical College). This airport also serves as the main airport for private aircraft visiting Clemson for special events, including Clemson University football games. Along with **Pickens County Airport** and **Anderson Regional Airport** both of which are also within the region, these mostly serve private aircraft. **Greenville-Spartanburg International Airport** sits about an hour northeast of the study area along I-85 and is the region's primary commercial service airport with over 100 daily nonstop flights and hundreds of connecting flights throughout the US.



Tiger Transit



Amtrak Station in Clemson

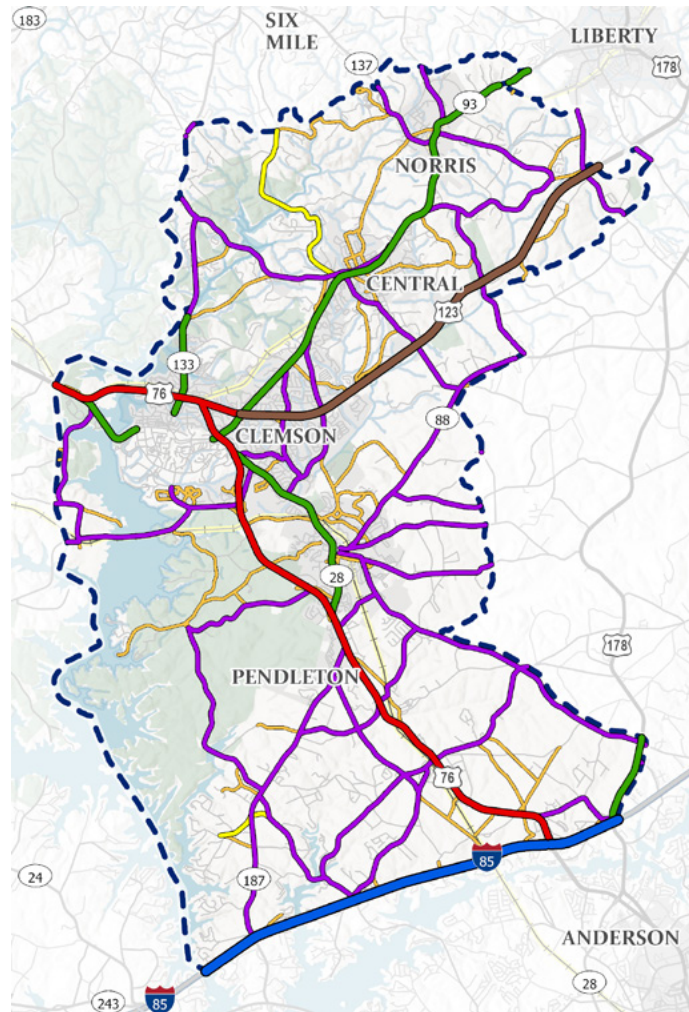
⁷ Amtrak. 2025. Home. <https://www.amtrak.com/home.html>

VEHICLES

Current Conditions

EXISTING ROADWAYS

The study area's roadway network features a small network of arterials and freeways and an expansive collector road network. Regional mobility – movement between urban areas and counties – is facilitated by arterials, while collector roads are primarily intended to support more local movement and provide greater access to destinations.



For users traveling north and south in the study area, **US 76 and SC 93 / Old Greenville Highway are the only arterials serving that movement**, with few other collector roads supporting convenient north-south travel. At the southern extent, I-85 connects the study area to the Atlanta and Greenville-Spartanburg metropolitan areas. **US 123/Calhoun Memorial Highway supports east-west travel** in the northern extent of the study area. Major collectors in the rural areas follow an east-west alignment.

Figure 2.6: Functional Classification of SCDOT Owned Roads

CRASH ANALYSIS

Crashes in the study area tend to concentrate around the urban centers and arterial roads. Higher volumes and more dense population centers can lead to higher points of conflict. Although, less frequently, in comparison, crashes along rural roadways can often result in death or more severe injury outcomes.

Key areas of concern include:

- **US 123:** located in urban Clemson and stretching east, this stretch of road provides access to and from Clemson University and carries some of the highest traffic volumes and conditions that could lead to crashes. 10 fatal crash es ocured here as well as 17 serious injuries.
- **US 76 / Anderson Highway:** this section of road connects City of Clemson to Town of Pendleton and is a regional arterial to I-85. 12 fatal and 14 serious injury crashes have occurred here.
- **SC 93:** the main arterial from City of Clemson to Town of Central and up towards Town of Norris, this corridor is a hub of commercial activity. There was 1 fatal crash and 12 serious injury crashes along SC 93 from 2021 to 2023. Crashes were clustered around two key points: the intersection with US 123, and near the apartments entering the Town of Central.

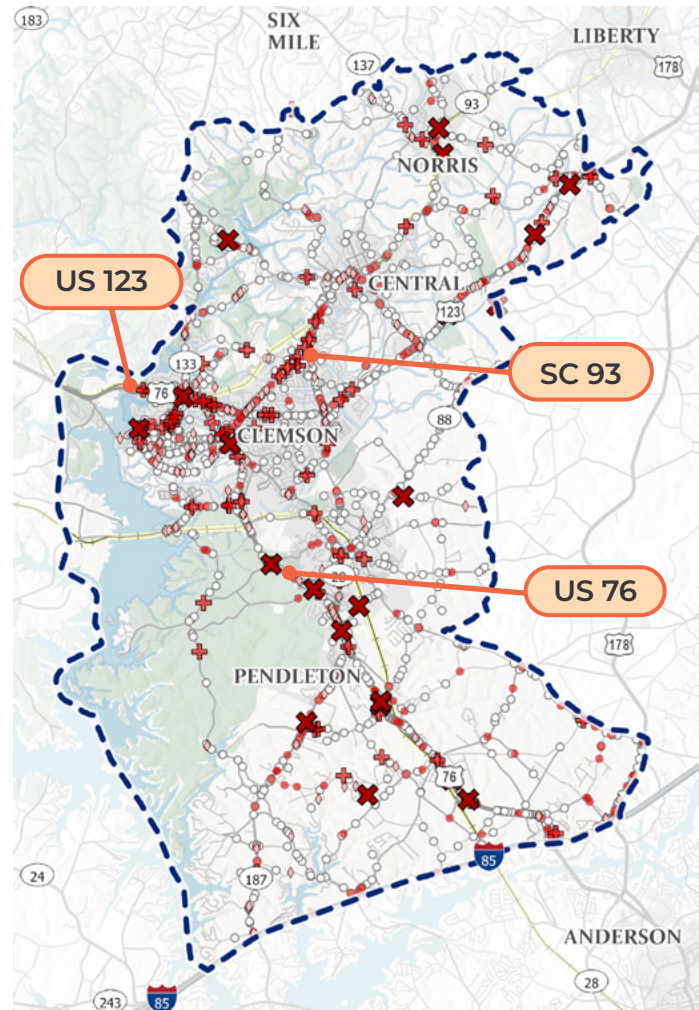
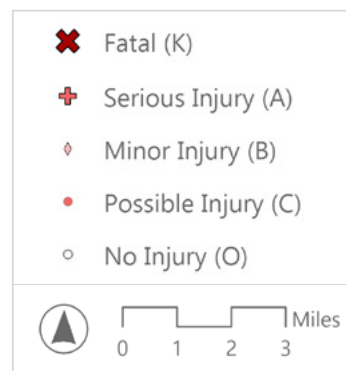


Figure 2.7: Crashes (2021 - 2023)



VOLUME-TO-CAPACITY (V/C) / LEVEL OF SERVICE

For some background, **Level of Service (LOS)** is a qualitative tool used to describe the quality of traffic flow on a roadway. The **Volume-to-Capacity Ratio (V/C)** measures how well a roadway is handling demand by comparing the number of vehicles to the road's capacity. Based on the V/C ratio, a corresponding LOS rating is assigned: LOS A means free-flowing traffic, B indicates reasonably free flow, C is stable flow, D is nearing unstable flow, E signals that the roadway is at full capacity and flow is unstable, and F represents forced or breakdown flow conditions.

The V/C ratio helps us anticipate congestion levels on a roadway at any given time, offering insight into the route's performance within the broader transportation network. Still, average traffic volumes alone don't capture the full picture of roadway conditions. To accurately assess a specific road, it's also **essential to consider time-specific factors** contributing to congestion, such as school pick-up and drop-off periods, university class schedules, shift changes for employees, or even traffic incidents that may go underreported.

Most roadways in the study area currently operate below their designed capacities. With few roadways crossing the lake, travelers are funneled onto mainly US 123 and West Cherry Road, which increases daily volume on these main arteries (Figure 2.8).

Future conditions show the **impacts of regional growth** on these major corridors (Figure 2.9). With committed roadway improvements accounted for, roadways like West Cherry Road and SC 187 are projected to be over-capacity, with congestion a daily occurrence and backups causing significant delay. Other major arterials see similar capacity challenges, either nearing or exceeding their existing capacity. By contrast, downtowns do not see the same challenges, with Clemson, Pendleton and Central all showing roadways that are designed to carry much more traffic than they do.

This concentration of traffic can result in periods of significant congestion, especially during peak travel times. As demand increases on these primary routes, even minor disruptions or fluctuations in volume can have a pronounced impact on travel speeds and overall roadway reliability. Understanding these dynamics is crucial for planning effective improvements and creating outlets for the transportation network to function efficiently as the region grows.

CONGESTION IS EXPECTED, BUT NOT INEVITABLE

For every trip along a corridor during congested conditions, the extra time spent driving is associated with a cost for the driver. The average wage rates for each county were used to determine the cost of time. **The Appalachian Council of Governments (ACOG)** developed a 2020 and 2045 Travel Demand Model which when used effectively, can be valuable for an objective, consistent, and relative comparison between corridors, bottlenecks, or subareas within the region. Model output such as volume over capacity (V/C) values help a region visualize its "good-fair-poor" road segments, approximate their change over time or between different scenarios. A regional travel demand model is less effective when used to examine individual roads, within a small portion of the region, and/or determining what "will happen" with traffic.

In the 2020 baseline scenario, there are only a few segments that have capacity issues.

- Old Cherry Rd
- 18 Mile Rd
- 6 Mile Rd
- SC 187
- US 123/Tiger Boulevard

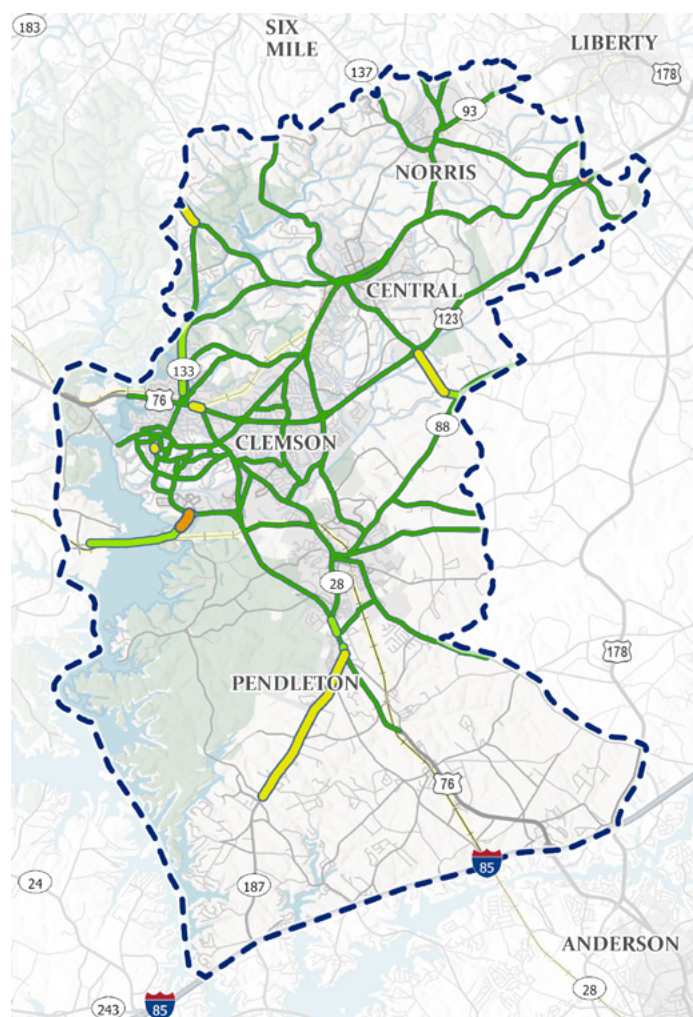


Figure 2.8: 2020 Baseline



While in the 2045 future year scenario, several more segments showed up as having capacity issues.

- Old Cherry Rd
- 18 Mile Rd
- 6 Mile Rd
- SC 187
- SC 93 (Central)
- Lebanon Rd
- SC 133 / College Ave
- US 123/Tiger Boulevard

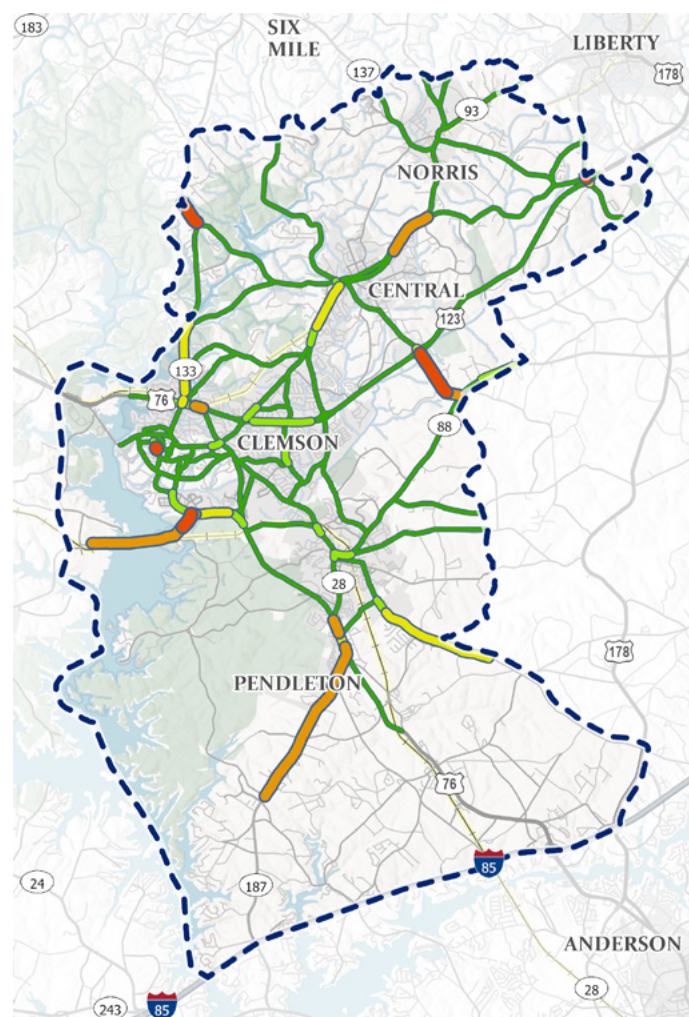


Figure 2.9: 2045 Future Year



Congestion, however, is not a problem solved just through widening roads. Some alternative strategies include:

Travel behavior changes:

- Work from home / flexible work schedules
- Mode shift to alternative modes (walk/bike/transit)

Traffic operations / management changes :

- Signal / ITS upgrades
- Turn lanes / storage capacity
- Access management (medians, driveways)

Housing & development pattern changes:

- Infill housing / missing middle
- Density of development

EXISTING STIP PROJECTS

A number of improvement projects are programmed for the coming decade. Most projects are for rehabilitation and resurfacing, such as SC-187, Lebanon Road, and Madden Ridge Road. Operations & safety improvements include intersection projects as well as roadways such as Old Greenville Highway and intersections near West Cherry Road and Martin Creek Road.

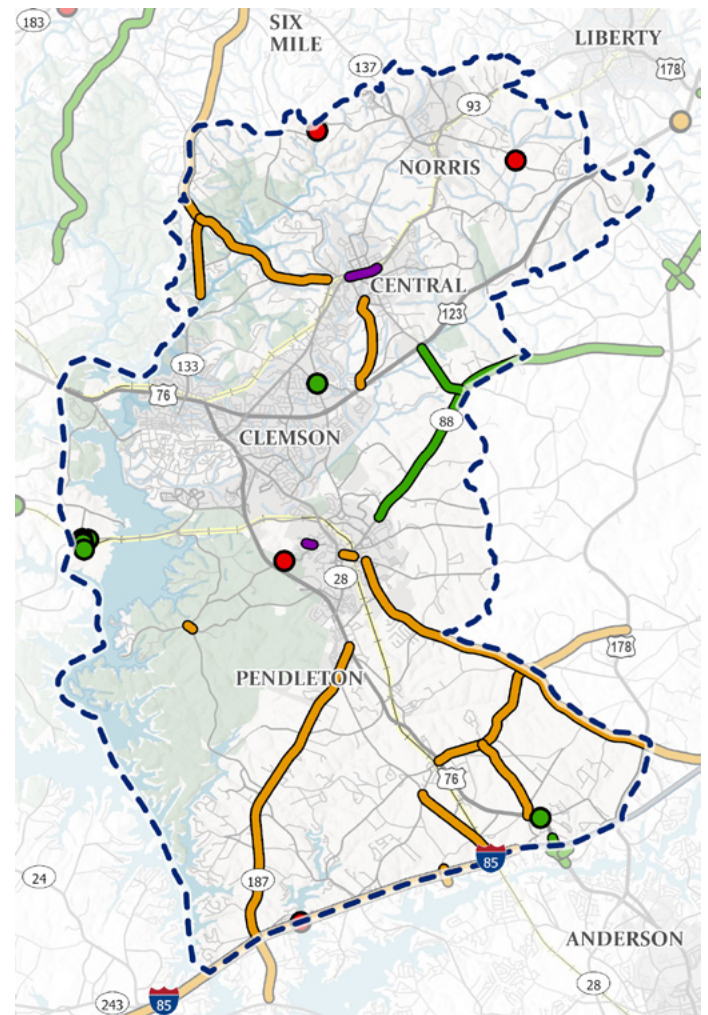


Figure 2.10: STIP Projects

3. LAND USE FRAMEWORK

"We were born to move-not merely be transported."

- Happy City: Transforming Our Lives Through Urban Design by Charles Montgomery

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THIS CHAPTER COVERS:

- Existing Land Use Patterns
- Regional Vision
- Regional Growth Framework

EXISTING LAND USE PATTERNS

Growth is reshaping the CAP region land use and mobility needs, sparking both opportunity and challenge.

While growth of the urban and suburban areas in the region are signs of economic value, continued growth into the more rural areas threatens the bucolic charm. The region aspires to seamlessly integrate land use and mobility planning, take steps toward more efficient infrastructure and preserve the region's character.

Translating these ideals into actionable strategies that work for everyone is not simple, but the risk of proceeding without a cohesive regional land use framework increases the risk of fragmented development that increases infrastructure costs and degrades regional character.

The CAP study area spans parts of Anderson and Pickens Counties and includes the municipalities of Clemson, Pendleton, Central, and Norris, along with major institutions like Clemson University, its Experimental Forest, and Tri-County Technical College.

This region encompasses multiple jurisdictions with varying levels of land use planning. The counties offer broad, rural land use typologies, the cities and towns offer a finer detailed strategy, and the institutions have another growth and development strategy. Currently, land use is specific to each jurisdiction and conflicting edge conditions become apparent.

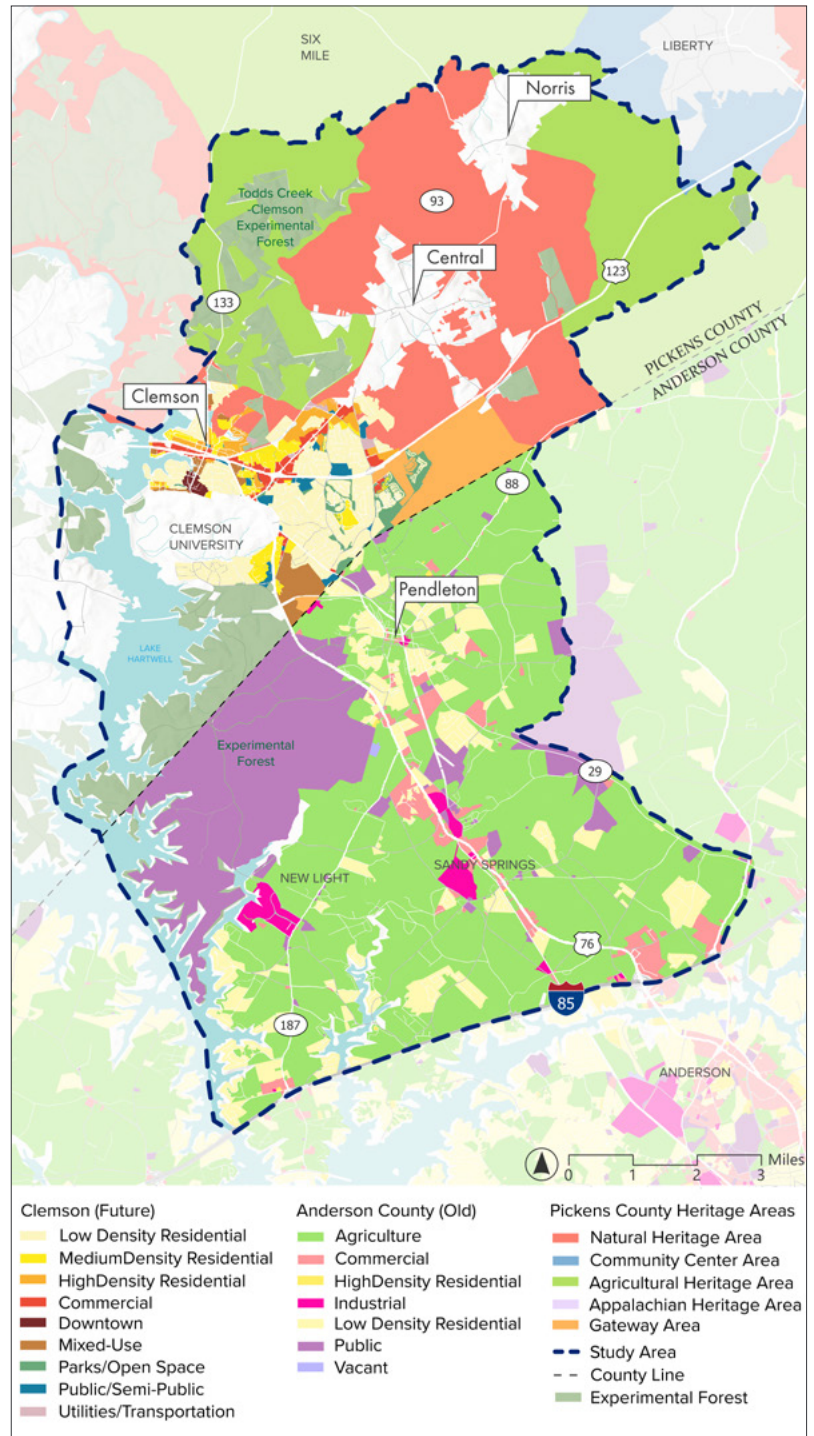


Figure 3.2: Planned Land Use Map

ACHIEVING A REGIONAL VISION THROUGH BEST PRACTICES

By aligning best practices in regional land use and transportation planning, the region can create a process to preserve natural resources, honor its heritage, and foster sustainable, connected growth. Regional land use strategies provide a framework that balances growth with conservation, prioritizes smart infrastructure investments, and protects the character of the Greater CAP region for generations to come.

Regional Land Use Planning

Organized planning is critical to shaping communities. A regional land use approach can begin by building on historic patterns and thoughtfully expanding growth in appropriate areas. This approach can **reduce the effects of sprawl, promote walkability, and support the long-term viability of planned transit systems**. Given the regional development pressures, a regional framework can also play a strategic role in guiding concentrated growth while protecting character conservation.

Regional Collaboration

Jurisdictional differences in land use priorities underscores the need to take a strategic approach to land use across the region, and coordination among multiple land use jurisdictions is key. Regional cooperation is essential to crafting a truly unified strategy. Disconnected planning efforts can lead to incompatible development typologies. **Strengthening collaboration across boundaries is essential to address these challenges effectively**. Including representatives from all jurisdictions provides an oversight mechanism to formalize regular communications, identify shared goals, and foster coordinated decision-making.

This study area is part of the South Carolina Appalachian Council of Governments (ACOG). Focused on economic development, planning, governance, grant funding, and senior advocacy, ACOG could support regional land use planning with:

- Shared Data
- Intergovernmental Agreements
- Funding Partnerships
- Community Engagement

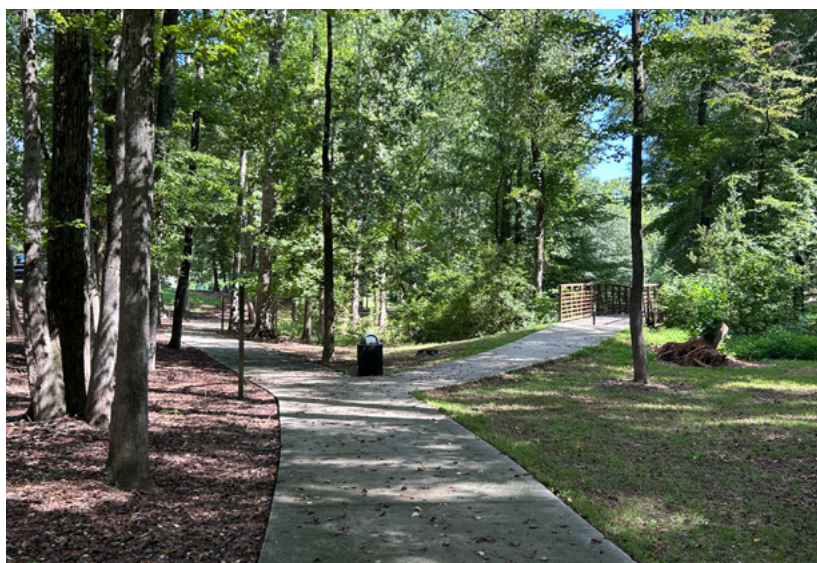
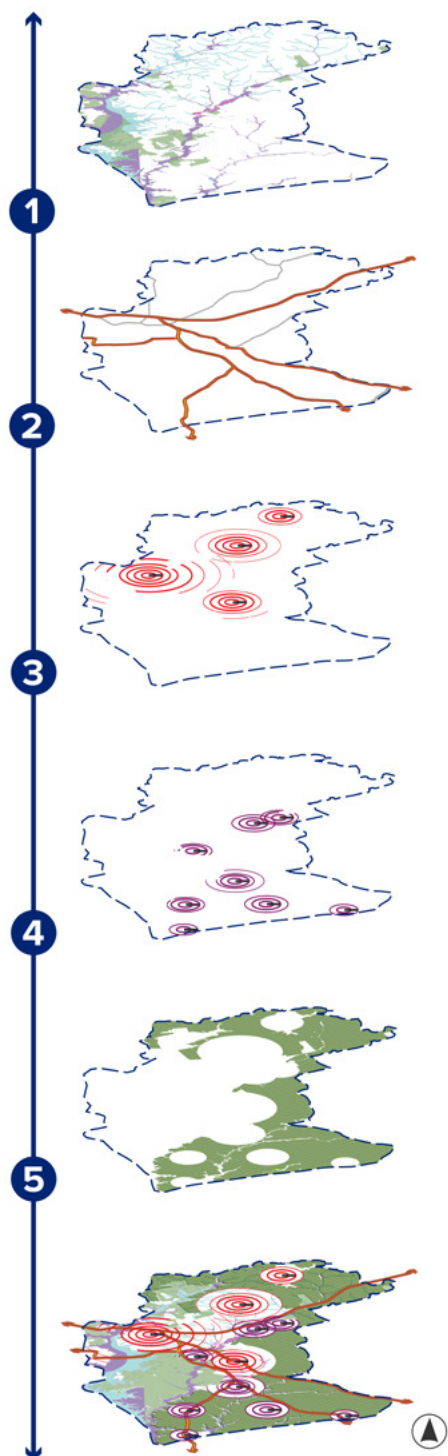
While opposition to growth can be common, acknowledging the impending situation early and bringing the conversation into public awareness is essential. The next level of engagement must occur at the small area and/or corridor level to fine-tune the land use vision within and between potential growth areas.

Regional Mobility & Roadway Character

A regional growth strategy should provide ways to supplant existing road networks with parallel and interconnected streets and alternative mobility pathways, such as greenways, trails, and bike paths. This holistic structure can work to provide the area with alternative routes that enhance the overall efficiency of the network.

THE ELEMENTS OF A REGIONAL GROWTH FRAMEWORK

Drafting a regional growth framework is a multi-layer process that includes steps to define the current condition and projected growth goals for the future. Each of these elements is described in greater detail below:



Tottie's Place Trail

1-Environmental Features:

Environmental features help to define the local character and regional identity. The local lakes, rivers, forests, and streams are protected by regulations. Significant environmental features, such as steep slopes and drainage ways are either protected by land use regulations or simply costly to alter or develop. These elements across the region define and shape the Regional Growth Framework.

2-Mobility Infrastructure:

The mobility network is an essential component to the regional growth framework. Existing roadways are mapped, studied, and considered for future projects. The interaction of these improvements with development potential will set up the overall framework and inform the growth strategy. Overlaying the regional approach with the existing environmental features map will inform the patterns and strategies needed to advance regional growth that aligns transportation projects with development.

Figure 3.3: Multi-Layer Regional Growth Framework

3-Existing Activity Centers:

The ACATS region includes several core centers today — including Clemson, Pendleton, Central, Norris, and Clemson University. These existing activity nodes vary in size and concentration of uses. A Regional Growth Framework first identifies the existing development nodes, such as these mentioned areas, and then locates future nodes based on several factors.

4-Future Development Nodes:

Locating future development nodes is key to establishing a regional growth strategy. The location, size, and target typology should all be considered. Development nodes should be located where access (transportation infrastructure) and capacity (available and developable land) are in place to support new development. Nodes may also be categorized to attract specific types of development where needed – such as a business or industrial park, but increasingly the goal of the nodes is to offer a mix of land uses, where shops and workplaces are integrated with or within easy distance of residential offerings. Available property adjacent to an interstate interchange may trigger an industrial or manufacturing node, while a smaller area between two waterways may inspire a neighborhood development node.

Directing concentrated growth and activity in mixed use areas increases the sense of community, enhances local accessibility, and offers more efficient use of resources. This future development will also be dependent on market demand.

5-Regional Character:

Once existing and future development nodes are identified, the process will yield areas between nodes which offer an opportunity for a different approach to development. These areas may be alternatively defined, perhaps as preserved agricultural, naturalized or significantly reduced density development areas – as they may exist today. Strategies to consider in the spaces between the nodes range from light handed options such as infill incentives for the development nodes to full-scale preservation strategies such as conservation easements and overlays.



Mural in Downtown Clemson



Transit on Campus



Growth and Development around the Region

The CAP Regional Growth Framework is based on a series of overlays that respect existing conditions and then concentrate growth into targeted areas or development nodes.

Figure 1 consists of six maps of the Clemson University area, arranged in a 3x2 grid. Each map shows the study area, county lines, roads, and various land use types. The maps illustrate the development of a regional network, starting from the initial study area and corridors, and adding nodes and buffers to create a more integrated system. The maps are labeled as follows:

- Top Left: Initial Study Area and Corridors
- Top Middle: Initial Study Area and Corridors (with additional features)
- Top Right: Initial Study Area and Corridors (with additional features)
- Bottom Left: Initial Study Area and Corridors (with additional features)
- Bottom Middle: Initial Study Area and Corridors (with additional features)
- Bottom Right: Initial Study Area and Corridors (with additional features)

Each map includes a legend and a scale bar (0 to 3 miles). The legend for each map is as follows:

- Study Area (dashed blue line)
- County Line (dashed grey line)
- Roads (solid grey line)
- Experimental Forest (green area)
- Waterbodies (blue area)
- Flood Hazard (pink area)
- Municipal Boundaries (yellow area)
- Corridors (orange line)
- Flood Hazard (pink area)
- Half-Mile Radius (grey circle)
- Future Nodes (red circle)
- Half-Mile Radius (grey circle)
- Future Nodes (red circle)
- Spaces In-Between (green area)

36

Table 3.1: Land Use Framework

Framework Layer	Acres (rounded/ approximate)	Percent of Study Area	Notes
Environmental	16,000 acres	22%	Includes Experimental Forest, Waterbodies and Parks
Existing Centers	22,700 acres	31%	Within and around municipal boundaries—Clemson, Central, Pendleton, Norris + Clemson University & Tri-County TC
Future Development Nodes	6,300 acres	9%	Eight future nodes
The Spaces of Between	28,000 acres	38%	—
Total Acres of Study Area	73,000 acres	100%	—

CONCLUSION

The creation of a cohesive regional growth framework can align development efforts, optimize infrastructure investments, and protect open spaces, agricultural lands, and natural resources that are integral to the CAP region’s appeal. Central to this strategy is the establishment of development nodes, preservation of spaces between them, and the integration of alternative mobility networks to create a connected and sustainable future. Collaboration across jurisdictions, strengthened governance oversight, and community engagement are essential to ensure that all stakeholders share a role in shaping a vision that reflects the region’s values and aspirations.

Figure 3.5 on the following page gives a more in-depth view of the Overall Growth Framework for the region.

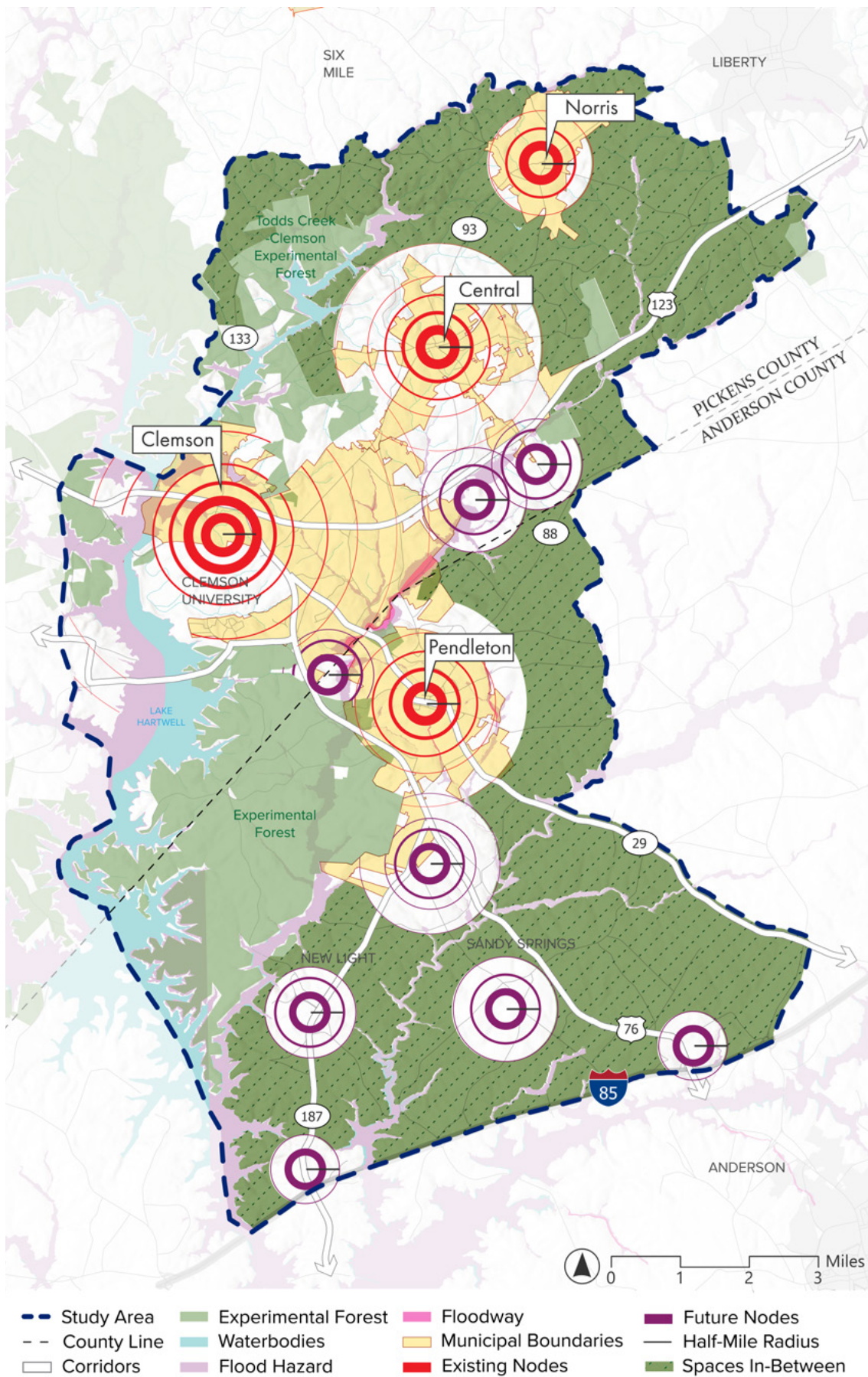


Figure 3.5: Overall Growth Framework

RECOMMENDATIONS

“It is important to think strategically about implementation. Getting your plan implemented doesn’t just depend on choosing the right tools; it requires a successful strategy to build public support and create momentum.”

- *The Citizens Guide to Planning (Fourth Edition)*
Christopher J. Duerksen, C. Gregory Dale, FAICP,
and Donald L. Elliot, FACIP

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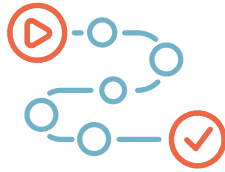
- Where Are We Heading?
- Prioritizing Projects

WHERE ARE WE HEADING?

Identification of Projects

The transportation projects selected in this Plan are based on multiple sources of input.

GPATS projects within the study area



Coordination with cities, towns, and counties



Previous projects audit by the Project Steering Committee



Green Crescent Trail and Upstate Greenways and Trails Alliance (UGATA) planned trails and projects



Public engagement



Public Open House to gain feedback on Community Priorities for Transportation Investments throughout the Region.

Identification of Projects

To get a better sense of where to focus funding efforts, the project team used a data-driven process to evaluate all projects against the project goals. Weights for each goal were discussed with the Project Steering Committee and Project Management Team.

Evaluation criteria provided a measurable way to determine the score. Once projects went through the evaluation criteria and weighting, each project was ranked. Then the top 20 projects were fed through an impact versus feasibility assessment to determine which projects to focus immediate efforts on in the next 5 years.

Goal	Weighting	Evaluation Criteria Datasets
Achieve Zero Fatalities and Serious Injuries	35%	Proximity of project to reported crashes
		Improves safe crossings or intersections
		Addresses location with documented safety concern
Expand Multimodal Travel Options	20%	Includes a transit improvement
		Includes pedestrian or bicycle facilities
Protect Cultural and Environmental Resources	10%	Project avoids potential impacts to environmental resources
		Project helps connect cultural and recreational resources
Support Inclusive Economic Growth	12%	Improves access to job centers, education, downtowns
		Project may have an adverse effect on a community designated as an area of persistent poverty
Coordinate Transportation and Land Use Planning	15%	Project fits the context of the land use
		Improves access management
Preserve and Modernize the Transportation Network	8%	Improves state of good repair
		Does the public express maintenance concerns at this location?
		Improves travel efficiency

Table 4.11: Evaluation Criteria for Project Prioritization

By integrating feedback from stakeholders, the public, the Project Steering Committee, and the Project Management Team aimed to create a balanced framework to guide prioritization.

PRIORITIZING PROJECTS

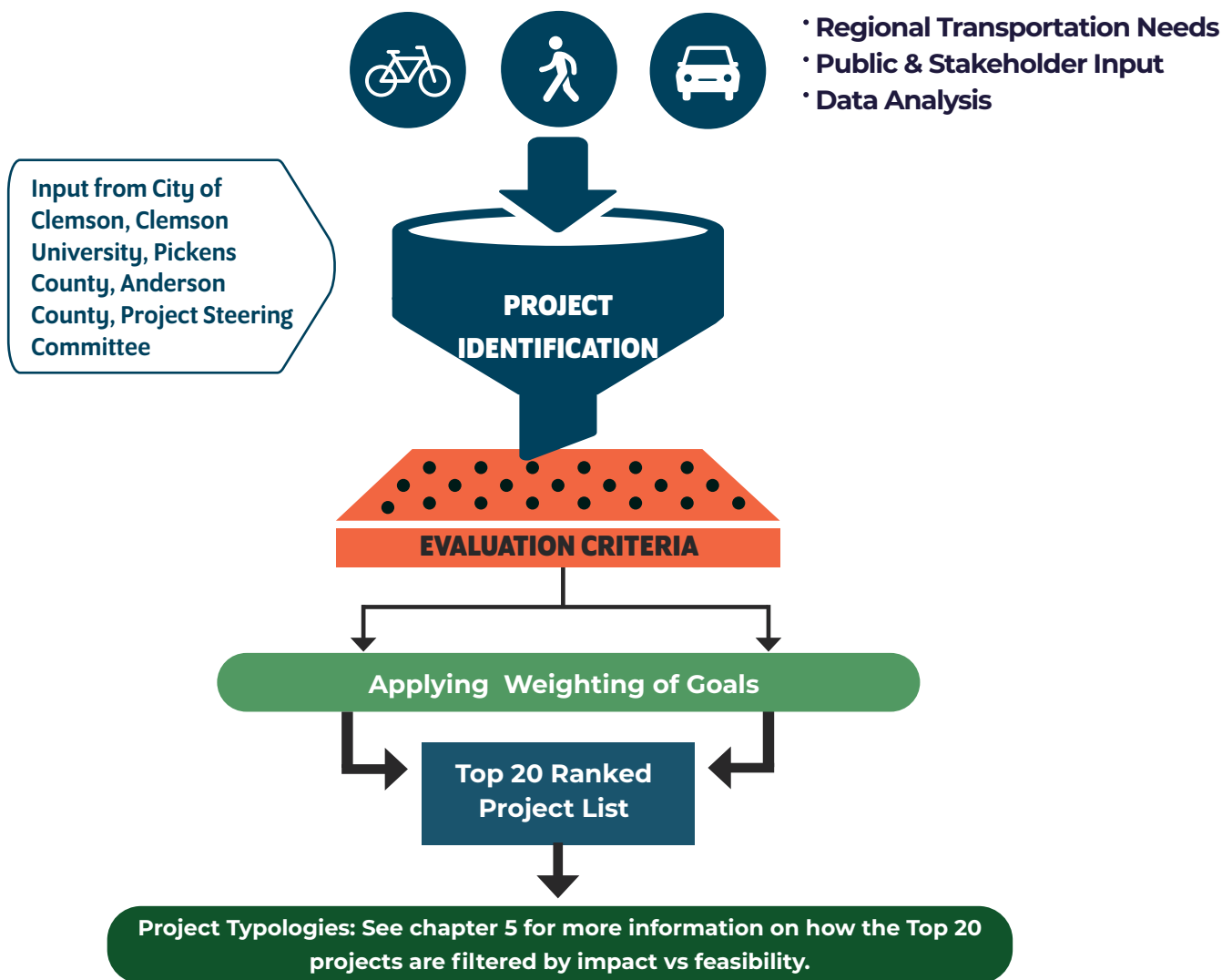


Figure 4.12: General Process for Project Prioritization and Funding

PROJECT COSTS & PRIORITIES

With the regional move from the GPATS to ACATS, the jurisdictions have an opportunity to identify project priorities that align with regional goals and future land use. Since this plan is not fiscally or financially constrained, planning level costs were identified. The prioritized projects are broken out by project category, listed below and included on the following pages.



Bicycle Facilities



Complete Street



Modernize Project



New Construction

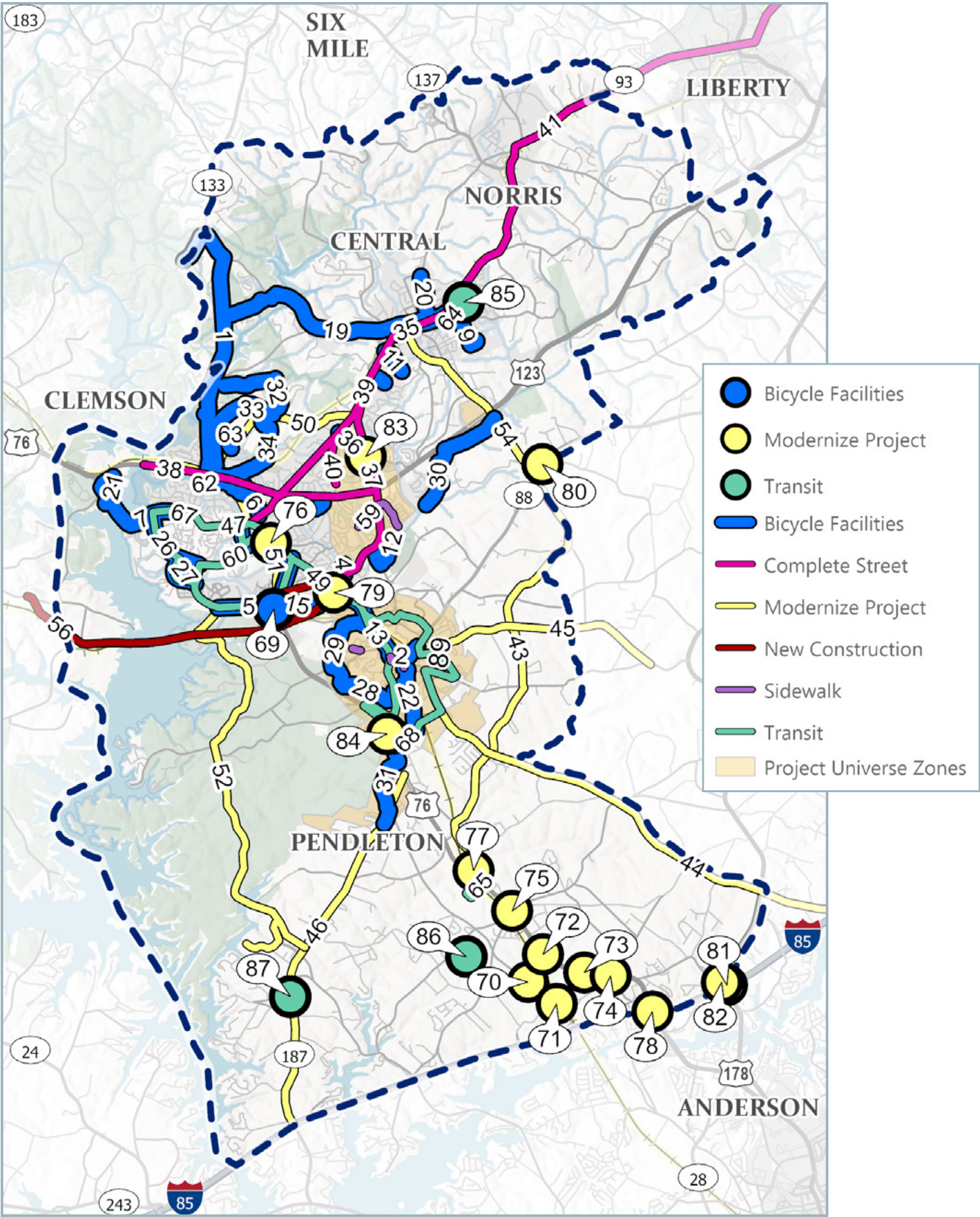


Sidewalk



Transit

Map of all Recommended Projects



RECOMMENDED PROJECTS BY RANKING

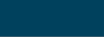
04

RECOMMENDATIONS

Project Rank	Jurisdiction	Project Name	Description	Cost	Project ID
1		Tiger Blvd	Corridor safety project; shared use path ending at SC 93; reconstruction and rehab; access management ending at SC 93	\$19,760,000	38
2		Town of Central Connector	Shared use path along the corridor. Safety improvements along the corridor. Resurfacing from US 76 to US 123. Road Diet from 5-lanes to 3-lanes from US 123 to Cross Creek Road (reallocating pavement width to shared use path).	\$26,480,000	39
3		Queen St / Danehower Rd / Cherry St Ext	Corridor and intersection improvements	\$8,990,000	45
4		Issaqueena Trl	Safety improvements at intersections along the corridor; add turn lanes; shared use path along entire corridor	\$10,850,000	37
5		SC 187	Corridor plan focused on thoughtful growth management through access management and planted median	\$34,170,000	46
6		Berkeley Drive North	(phase 1) Paint lanes, crosswalks, and install signage. (phase 2) install 10-12' shared use path	\$1,400,000	40
7		US 76	Safety improvements along corridor; Signage and wayfinding along existing sidewalks on both sides from Old Greenville Hwy to Tiger Blvd to foster pedestrian and bicycle connections	\$50,000	51
7		Clemson University Trail - Campus to South Exp. Forest	Shared use path; Reconstruction and rehabilitation from Twin Lakes Rd to SC 183	\$21,540,000	52
9		Woody Rd / S Mechanic St at US 76	Evaluate and reconstruct the intersection	\$3,770,000	84
10		SC-88 – Mechanic St to N Elm Street	Reconstruction; Shared use path	\$2,570,000	2
11		Hwy 178 at I-85 Interchange	Evaluate for interchange modification to bring up to current interchange standards and capacity projections	\$165,000,000	81
12		Easley to Central Connector	Trail connection along entire corridor; Corridor project with repaving and multimodal elements from Fernway Dr to Norris Hwy	\$28,400,000	41
12		Walter T Cox Blvd	Corridor project - Road diet and multiuse path	\$2,510,000	47
14		Old Stone Church Connector	Shared use path	\$1,830,000	5

Table 4.13: Project List by Ranking, Cost, Jurisdiction

Project Jurisdictions

	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

Note: duplicate rankings are assigned to projects that earned the same scoring during the prioritization process.

Project Rank	Jurisdiction	Project Name	Description	Cost	Project ID
14		West Campus Connector to Snow Rec Complex	Trail connection with pedestrian bridge	\$26,650,000	7
14		Edwards Middle School Connection	Shared use path	\$11,440,000	19
14		Clemson Bypass	Create a new bypass with multimodal elements (BRT and wide sidepath) to relieve congestion from US 123; Include land use considerations to manage growth along the corridor	\$114,760,000	56
18		Church St / Refuge Rd / Williams St	Intersection improvements along the corridor; add shoulders and make a regional connection	\$20,060,000	43
18		Denver Rd at Hwy 76	Add signal and turn lanes	\$1,110,000	74
18		I-85 at US Hwy 76	Exit ramp improvements	\$165,000,000	78
21		Lebanon Rd / Harris Bridge Rd / Concord Rd	Roundabout corridor	\$22,280,000	44
21		Hwy 76 at Sandy Springs Rd/Milwee Creek Rd	Add turn lanes on Sandy Springs Rd/Milwee Creek Rd	\$760,000	75
23		Six Mile Hwy	Separated bike lanes and side path combination, perhaps partly on a boardwalk along water	\$34,070,000	1
24		Perimeter Rd	Shared use path	\$3,450,000	26
24		Hwy 76 at Williams St	Safety improvements; Change road alignment to a T intersection	\$1,900,000	77
26		Town of Central Pedestrian/Bike Connections Along Werner St and Main St	Complete pedestrian and bicycle connection through wayfinding, filling in sidewalk gaps, and an ADA compliant multiuse path (Green Crescent Trail) that connects the areas surrounding Central Downtown District	\$580,000	35
26		Riverside Middle School Sidewalk Project in Pendleton	Repair existing & add new sidewalk & ped crossings & improve drainage along Riverside St from Thompson St to Riverside Middle School (FPA 3-17) (MOA 40-20)	\$160,000	57
28		Tri-County Tech Trail	Trail connection	\$3,700,000	28
28		Highway 76 - Dalton Dr - Highway 187 Greenway	Trail connection	\$2,790,000	31
28		CAAM to Tiger Blvd Pedestrian Bridge	Connect historic neighborhoods split by Tiger Blvd	\$100,000	53
28		Chapman Rd at Hwy 76	Add signal and turn lanes	\$730,000	72

Table 4.13: Project List by Ranking, Cost, Jurisdiction (Continued)

Project Jurisdictions

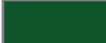
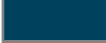
	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

Note: duplicate rankings are assigned to projects that earned the same scoring during the prioritization process.

Project Rank	Jurisdiction	Project Name	Description	Cost	Project ID
28		Hwy 76 at Lake Side Dr	Add signal and turn lanes	\$730,000	73
33		Eighteen Mile Rd at Old Greenville Rd and Central Rd	Peanut Roundabout or Relocate Central Rd	\$9,280,000	80
34		Sidewalk connector to downtown	Mark/use existing sidewalks to get to downtown and other trail connection to Clemson	\$450,000	61
35		Central Academy Connector	Connect downtown to elementary school via a shared use path or separated on street facilities	\$2,330,000	20
36		Camelot to Patrick Square	Sidewalk with signage	\$650,000	59
37		Connection to SWU campus	Connect Town of Central to core of SWU campus via a paved or unpaved trail	\$720,000	3
37		Spur connection to CAAAM/Art Center	Add bike lanes	\$100,000	6
37		Cambridge Trail	Shared use path	\$1,070,000	36
37		Pedestrian & Bike Blvd behind retail of Tiger Blvd	Pedestrian/bike zone that adds value to the retail private property and creates a unique connection	\$870,000	42
37		Church St / Eighteen Mile Rd	Shared use path with connection to Walmart; Capacity improvements from Old Greenville Hwy to US 123	\$10,510,000	54
37		Safe Route to Patrick Square village	Bike lanes with markings/signage and sidewalks	\$150,000	58
37		Entrance to SC Botanical Gardens	Pedestrian facilities at the entrance of SC Botanical Gardens	\$40,000	60
37		Hwy 76 at Pendleton Rd	Realignment desired	\$760,000	76
37		Isaqueena Trail at Cambridge Dr and Old Shirley Rd	Roundabout	\$3,710,000	83
46		Pendleton Rd	Widen to 3 lanes	\$13,360,000	49
46		Isaqueena Trail at Pendleton	Roundabout	\$3,710,000	79
48		Downtown to Hwy 76 Connection	10-12' spine trail connecting two parts of Pendleton - old town and new construction/ Hwy 76 commercial corridor	\$2,420,000	22
48		Newman Rd North	Add bike lanes	\$50,000	25
48		Clemson Bypass	Corridor Project Bypass around Clemson; new road 3 lanes with center turn lane	\$5,690,000	55

Table 4.13: Project List by Ranking, Cost, Jurisdiction (Continued)

Project Jurisdictions

	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

Note: duplicate rankings are assigned to projects that earned the same scoring during the prioritization process.

Project Rank	Jurisdiction	Project Name	Description	Cost	Project ID
51		Pendleton Green to Clemson	Shared use path from downtown Pendleton to Pickens County/Clemson line at 18-mile Creek. Connect to Sleepy Hollow spur trail and/or Pendleton Rd corridor and/or Pacolet-Milliken trails	\$3,660,000	13
51		Connection to Development in Oconee	Trail connection to Oconee County retail development, apartments, and perhaps other future connections like residential neighborhoods or student apartments in Oconee County	\$1,470,000	21
51		Clayton St	Widen 2 through lanes to 2 through lanes add TWCTL and shared use path	\$2,080,000	48
51		Lawrence Rd	Sidewalk	\$320,000	63
51		Watkins Rd at Denver Rd	Add signal and turn lanes	\$1,860,000	71
56		Spur to Clemson Park 2	(phase 1) Add signage and road markings. Low traffic/speed road. (phase 2) Coordinate with developer to build shared use path	\$20,000	17
56		Watkins Rd at Chapman Rd	Add signal and turn lanes	\$1,810,000	70
58		On-road connection to SWU bike trails	On-road markings and signage for directions and to alert people of bikes on road	\$80,000	9
58		Rec Center to Spring Forest 2	Trail connection	\$140,000	10
58		Spring Forest to Hwy 93	Bike lane connection with signage and road markings to create a loop when connected to Hwy 93 sidewalks/trails back to the Rec Center.	\$60,000	11
58		Welpine Rd	Road relocation	\$4,130,000	82
62		Central Rd Connector - Nettles to Totties Place	Separated bicycle facilities	\$640,000	18
62		Old Stadium Rd to Cherry Rd	Bike lanes	\$1,280,000	27
64		Alternative or Secondary Connection to Botanical Gardens	Trail connection	\$140,000	8
64		Nettles Park Interior GCT	Trail connection	\$230,000	12
64		Greenlee Ln and Reid St Connection	Street signage and wayfinding	\$30,000	24

Table 4.13: Project List by Ranking, Cost, Jurisdiction (Continued)

Project Jurisdictions

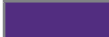
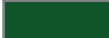
	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

Note: duplicate rankings are assigned to projects that earned the same scoring during the prioritization process.

Project Rank	Jurisdiction	Project Name	Description	Cost	Project ID
64		Silver Spring Trail	Trail connection	\$2,770,000	29
64		Eighteen Mile Rd to Nettles Park	Trail connection	\$3,950,000	30
64		Dawson Park	Rail trail	\$80,000	69
70		Tant St On-Street Segment	Sharrows connect from Tottie's Place to Issaqueena Trail	\$10,000	4
70		Stoney Creek Lane Connection	Bike lanes to get from Hwy 77/28 to Downtown (bypassing Hwy 123)	\$60,000	23
72		Connection to Student Development	Add bicycle facilities - coordinate with developer	\$120,000	14
72		Pacolet Milliken Future Development	Shared use path - Coordinate with developer	\$2,270,000	15
72		City build Old Stone Church connection to Pendleton Rd	Add a side path to pick up where Pacolet Milliken developer stops and continue to connect with side path on Pendleton Rd	\$1,470,000	16
72		Old Central Rd	Widen 2 through lanes to 2 through lanes add TWCTL and shared use path	\$20,630,000	50
76		Clemson \ Central to Experimental Forest	Trail connection	\$2,810,000	32
76		Knox Lane Connector	From City property next to city hall across Village Green Townhomes HOA property to Knox Lane by Riggs Dr	\$410,000	62
78		Clemson Class I Bikeway Plan	Trail connection	\$6,090,000	33
79		Clemson \ Central to Experimental Forest	Trail connection	\$3,350,000	34

Table 4.13: Project List by Ranking, Cost, Jurisdiction (Continued)

Project Jurisdictions

	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

Note: duplicate rankings are assigned to projects that earned the same scoring during the prioritization process.

RECOMMENDED TRANSIT PROJECTS

The Recommended Transit Projects are shown separately, below. Transit projects have separate mechanisms for funding and implementation, therefore justifying a separate table for review.

04

RECOMMENDATIONS

Jursidiction	Project Name	Description	Project ID
	SWU Extension	An evaluation of the suitability of the driveway connecting Clayton Street and Thomas Lane, north of Wesleyan Drive, for supporting bus service is recommended.	64
	Michelin Extension	As one of the largest employers in the region, the Michelin Plant in Sandy Springs has the potential to be a significant transit ridership generator if service to the facility is improved, including more direct access to the plant via the access road	65
	ECT Orange Line Extension	To provide one-seat ride service between Clemson and the Michelin plant, CATbus and BCT could consider a jointly funded route between Anderson and Clemson that eliminates a transfer for many riders.	66
	CATbus Pendleton Route Alt 1	If a direct route between Anderson and Clemson were to operate along Mechanic Street in Pendleton, the CATbus Pendleton Route could operate bi-directionally along its eastern leg, improving the utility of transit service within Pendleton.	67
	CATbus Pendleton Route Alt 2	Alternatively, a microtransit zone following the municipal boundaries of Pendleton could allow for improved local circulation within Pendleton and better connections to regional services such as the ECT Orange Route.	68
	BASF Vanpools	Given the relatively remote location of the BASF plant, it is not well-suited for either fixed-route or microtransit service. However, industrial sites located in otherwise low-density environments are good candidates for vanpool.	85
	Michelin Vanpools	The Michelin Plant is a good candidate for vanpool service, given its large workforce, relatively remote location, and diversity of commuting patterns among its workforce.	86
	Research Park Vanpools	Vanpools are also recommended to complement the Tiger Transit route serving Clemson's Research Park campus, and to facilitate a greater diversity of commuting patterns to the research campus.	87
	Clemson Microtransit Zone	A microtransit zone serving Clemson Downs and Patrick Square could extend to Berkley Drive to the west and Old Greenville Highway to the north in order to include Ingles Markets and Walmart Neighborhood Market as key anchors and fixed-route connection	88
	Pendleton Microtransit Zone	A microtransit zone following the municipal boundaries of Pendleton could allow for improved local circulation within Pendleton and better connections to regional services such as the ECT Orange Route	89

Table 4.14: Transit Project List

Project Jurisdictions

	Anderson County		Clemson University
	Town of Central		Pickens County
	Town of Pendleton		Town of Norris
	City of Clemson		City of Liberty

For more details regarding the above transit recommendations, see **Appendix B, Transit Analysis**

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IMPLEMENTATION & FUNDING

“First we shape the cities — then they shape us.”

- [Jan Gehl]

THIS CHAPTER COVERS:

- Policy Actions (Immediate Strategies)
- Prioritizing Projects

POLICY ACTIONS (Immediate Strategies)

This chapter focuses on discretionary funding opportunities that can advance regional priorities and prepare projects for future implementation. To support implementation, each of the top 20 priority projects was evaluated for both potential impact and feasibility to help guide strategic decisions about where to focus staff capacity, funding, and political energy over time. Each project was assessed subjectively based on two dimensions—impact and feasibility—reflecting current conditions.

As conditions change (new funding programs, partnerships, development activity, or policy updates), a project's position can, and should, change as well. Rather than treating all projects the same, the framework intentionally groups them into these four categories, **Best Bets**, **Moonshots**, **Low Priority**, and **Quick Wins**, recognizing that each category requires a different implementation approach.

Project Typologies Matrix		
↑ Potential Impact (Low to High)	Moonshots Projects with high potential impact but low feasibility. These often require major funding, interagency coordination, or policy shifts.	Best Bets Projects that scored high in both impact and feasibility. These are strong candidates for near-term implementation due to their ability to deliver meaningful improvements with relatively low barriers.
	Low Priority Projects with lower impact and lower feasibility. These may still be beneficial but are less competitive and should be revisited if circumstances change.	Low-Hanging Fruit Projects with high feasibility but lower relative impact. These can be implemented quickly to show progress or meet localized needs.
	Potential Feasibility (Low to High) →	
<i>Note: No projects were categorized as Low-Hanging Fruit in this assessment. This reflects the fact that the top 20 projects were already pre-filtered for high priority. Projects that are relatively feasible also tended to offer strong community benefits and scored well in the impact evaluation.</i>		

Figure 5.1: General Process for Project Prioritization and Funding

Project Typologies Results

BEST BETS

These projects combine **high potential impact with strong feasibility**. They are the most realistic opportunities for near- to mid-term advancement and should be the focus of **active project development**, including preliminary engineering, grant readiness, interagency coordination, and inclusion in capital planning. Projects are listed in no particular order.

Project No.	Project Name	Project Type	Cost	Recommended Funding Pathway
38	Tiger Blvd	Complete Street	\$19,760,000	Primary Pathway: BUILD for multimodal corridor transformation and economic context. Secondary Pathway(s): Transportation Alternatives Program for sidewalks, crossings, bike facilities, and ADA upgrades. SS4A (Implementation) for safety elements such as quick-build treatments, pedestrian crossings, and traffic calming. Community Development Block Grants where low- and moderate-income benefit can be demonstrated.
45	Queen St / Danehower Rd / Cherry St Ext*	Modernization	\$8,990,000	Primary Pathway: Transportation Alternatives Program for multimodal safety, pedestrian, bicycle, and ADA improvements. Secondary Pathway(s): South Carolina Rural Infrastructure Authority – <i>Community Infrastructure Grant Program</i> for supporting stormwater, drainage, or utility improvements coordinated with resurfacing.
52	Clemson University Trail - Campus to South Exp. Forest	Modernization	\$21,540,000	Primary Pathway: BUILD for a multimodal trail connection providing regional, recreational, and economic benefits. Secondary Pathway(s): Transportation Alternatives Program for trail connections, crossings, ADA upgrades, and Recreational Trails Program for trail construction, rehabilitation, and trailhead facilities.
84	Woody Rd / S Mechanic St at US 76	Modernization	\$3,770,000	Primary Pathway: SS4A (Implementation) for targeted safety improvements at a known conflict location. Secondary Pathway: Transportation Alternatives Program for pedestrian crossings, sidewalks, and ADA upgrades.

Table 5.1: Project Typologies Results, Best Bets

Project No.	Project Name	Project Type	Cost	Recommended Funding Pathway
37	Issaqueena Trail	Modernization	\$10,850,000	Primary Pathway: MPDG – RURAL due to project scale, rural or small-community context, and economic connectivity benefits. Secondary Pathway(s): Recreational Trails Program and Transportation Alternatives Program for trail construction, safety, and accessibility improvements. Undiscovered South Carolina Grant Program for signage, wayfinding, and visitor amenities.
39	Town of Central Connector	Complete Street	\$26,480,000	Primary Pathway: MPDG – RURAL due to scale, rural/small-community context, and economic connectivity. Secondary Pathway(s): South Carolina State Transportation Infrastructure Bank – Rural Project Program for gap financing or credit assistance. South Carolina Rural Infrastructure Authority – Community or Economic Infrastructure Grant Programs for utility extensions and site readiness.
43	Church St/ Refuge Rd/ Williams St.	Complete Street	\$20,060,000	Primary Pathway: BUILD for corridor modernization supporting safety, access, and redevelopment. Secondary Pathway(s): Transportation Alternatives Program for active transportation elements such as sidewalks, crossings, and ADA upgrades. South Carolina Rural Infrastructure Authority – Community or Economic Infrastructure Grant Program for utility improvements and site readiness. Community Development Block Grants where low- and moderate-income benefit can be demonstrated.
<i>* Traditional maintenance (i.e., resurfacing) is generally not competitive for discretionary programs, unless paired with eligible roadway enhancements.</i>				

Table 5.1, Continued: Project Typologies Results, Best Bets

PRIORITIZING PROJECTS

MOONSHOTS

Moonshots (show in Table 5.2, next page) offer **transformational impact**, but face major constraints such as cost, jurisdictional complexity, or funding uncertainty. These projects are not shelved—they require a long-term strategy, including corridor protection, policy alignment, advocacy, and opportunistic funding when conditions align. Projects are listed in no particular order.

Project No.	Project Name	Project Type	Cost	Recommended Funding Pathway
46	SC 187	Modernization	\$34,170,000	Primary Pathway: MPDG – RURAL for a major state route modernization project improving safety, reliability, and regional connectivity in a rural or small-community context. Secondary Pathway(s): South Carolina State Transportation Infrastructure Bank – Rural Project Program for gap financing or credit assistance. Federal Highway Administration PROTECT Program if modernization includes resilience, drainage, or climate adaptation improvements.
78	I-85 at US Hwy 76	Modernization	\$165,000,000	Primary Pathway: MPDG – INFRA for a large-scale interstate interchange modernization supporting freight mobility, safety, and national highway system performance. Secondary Pathway: Federal Highway Administration Bridge Investment Program or PROTECT Program if structural rehabilitation or resilience upgrades are included. South Carolina State Transportation Infrastructure Bank for financing support.
56	Clemson Bypass	New Construction	\$114,760,000	Primary Pathway: The Clemson Bypass will require a collaborative, multi-source funding approach. Due to its scale and scope, the project does not currently align with a single discretionary funding program and would likely require phased implementation and coordination across state, federal, and local funding sources.
41	Easley to Central Connector	Complete Street	\$28,400,000	Primary Pathway: MPDG – RURAL for a transformative complete streets corridor connecting communities, improving safety, and supporting economic opportunity in a rural or small-urban context. Secondary Pathway(s): BUILD for multimodal corridor design and placemaking. Transportation Alternatives Program for sidewalks, crossings, bike facilities, and ADA upgrades.
81	Hwy 178 at I-85 Interchange	Modernization	\$165,000,000	Primary Pathway: MPDG – INFRA for interchange modernization enhancing freight efficiency, interstate access, and regional economic competitiveness. Secondary Pathway(s): Federal Highway Administration PROTECT Program for resilience, drainage, or climate adaptation elements. South Carolina State Transportation Infrastructure Bank for financing and delivery support.

Table 5.2: Prioritizing Projects, Moonshots

LOW PRIORITY

Projects in this category currently show **limited impact or feasibility relative to others**. This does not mean they lack merit—only that, given constrained resources, they are not the most strategic investments at this time. These projects should be **periodically revisited** as conditions change. Projects are listed in no particular order.

Project No.	Project Name	Project Type	Cost	Recommended Funding Pathway
19	Edwards Middle School Connector	Bicycle Facilities	\$11,440,000	Primary Pathway: Transportation Alternatives Program (Safe Routes to Schools) for bicycle and pedestrian facilities improving safety, access, and connectivity, particularly for school-related travel. Secondary Pathway(s): Recreational Trails Program if shared-use path segments or trail connections are included. Safe Streets and Roads for All (Implementation) for safety countermeasures such as protected crossings, traffic calming, and intersection treatments.
7	West Campus Connector to Snow Rec Complex	Bicycle Facilities	\$26,650,000	Primary Pathway: BUILD for a multimodal bicycle corridor connecting major community destinations, recreation assets, and campus facilities. Secondary Pathway(s): Transportation Alternatives Program for bikeways, crossings, and ADA-compliant facilities. Recreational Trails Program for shared-use path construction, trailheads, and supporting amenities.
2	SC-88 – MECHANIC ST TO N ELM ST	Bicycle Facilities	\$2,570,000	Primary Pathway: Transportation Alternatives Program for on-street bicycle facilities, sidewalks, and ADA upgrades along an existing roadway corridor. Secondary Pathway(s): Safe Streets and Roads for All (Implementation) for targeted safety improvements such as striping, signage, curb extensions, and intersection treatments.

Table 5.3: Prioritizing Projects, Low Priorities

QUICK WINS

Quick Wins are **lower cost, more immediately achievable projects** that can often move forward through targeted design fixes, maintenance coordination, or modest funding. While their individual impact may be smaller, they are valuable for **building momentum, demonstrating progress, and delivering visible benefits** in the near term. Projects are listed in no particular order.

Project No.	Project Name	Project Type	Cost	Recommended Funding Pathway
40	Berkley Drive North	Complete Street	\$1,400,000	Primary Pathway: Transportation Alternatives Program for sidewalks, crossings, bicycle facilities, and ADA upgrades supporting neighborhood connectivity and safety. Secondary Pathway(s): Community Development Block Grants where improvements benefit low- and moderate-income residents or address neighborhood revitalization needs.
74	Denver Rd at Hwy 76	Modernization	\$1,110,000	Primary Pathway: State and local roadway maintenance and modernization programs for resurfacing, pavement rehabilitation, and associated curb, gutter, and drainage improvements. Secondary Pathway(s): Transportation Alternatives Program if limited pedestrian, crossing, or ADA enhancements are incorporated into the modernization scope.
51	US 76	Bicycle Facilities	\$50,000	Primary Pathway: Local or state maintenance funding for minor resurfacing, striping, or spot safety improvements. Secondary Pathway(s): None anticipated due to limited project scale.
5	Old Stone Church Connector	Bicycle Facilities	\$1,830,000	Primary Pathway: Transportation Alternatives Program for shared-use paths, bicycle facilities, and pedestrian connections. Secondary Pathway(s): Recreational Trails Program if the connector functions as a trail segment or links to a broader trail network.
47	Walter T Cox Blvd.	Modernization	2,510,000	Primary Pathway: Safe Streets and Roads for All (Implementation) for targeted safety improvements such as striping, signage, curb extensions, and intersection treatments. Secondary Pathway(s): State and local roadway modernization programs for pavement rehabilitation and operational improvements. Community Development Block Grants where modernization includes curb ramps, ADA compliance, or neighborhood-serving infrastructure improvements benefiting low- and moderate-income areas.

Table 5.4: Prioritizing Projects, Quick Wins

Funding Strategies

This section outlines key funding programs and financing tools that provide additional detail to the high-level opportunities identified for the Top 20 priority projects. While these programs are referenced in the priority project summaries, the funding tables are intended to serve as a broader resource that can be applied when evaluating, advancing, and sequencing projects across the full project list.

The funding landscape for transportation is dynamic and continuously evolving. Federal and state programs adjust in response to new legislative priorities, policy directives, and infrastructure initiatives, while local and regional decisions influence project eligibility, scoring criteria, and matching requirements. The resources listed in this chapter are relevant as of the time of this Plan’s adoption.

Although this Plan is not fiscally constrained, it serves as a proactive tool to position the region for future funding opportunities. New programs and resources frequently emerge through federal infrastructure legislation, state budget allocations, and local initiatives. By aligning regional priorities with these evolving opportunities and by maintaining coordination among local governments, Clemson University, transit providers, and the South Carolina Department of Transportation (SCDOT), the region can strengthen its competitiveness for discretionary and formula-based funding.

Federal Discretionary Programs

A range of federal discretionary programs were reviewed to inform a funding strategy that is both practical and resilient for the CAP Region. Competitive programs administered by the U.S. Department of Transportation and related federal agencies offer opportunities to advance transformative projects that align with national priorities such as safety, efficiency, and economic vitality. These programs often require strong regional coordination, data-driven justification, and demonstrated local financial commitment. The following table (Table 5.5) illustrates the agencies, grant, purpose and eligible projects currently available through Federal discretionary programs.

FORMULA VS. DISCRETIONARY FUNDING

Formula Funding

Formula funding is allocated automatically to states and regions based on set criteria such as population or roadway mileage, providing steady, predictable resources for ongoing improvements.

Discretionary Funding

Discretionary funding is awarded through competitive grant applications that demonstrate project readiness and alignment with federal or state priorities. The CAP LRTP focuses on projects best positioned for future discretionary funding opportunities.

Agency	Program	Purpose	Eligible Projects
Federal Highway Administration (FHWA)	Accelerated Innovation Deployment (AID) Demonstration	To encourage the rapid implementation and adoption of proven, innovative practices and technologies that improve the safety, efficiency, and performance of the transportation system.	Highway, bridge, and multimodal transportation projects that incorporate innovative materials, construction methods, project delivery approaches, or operational technologies; projects demonstrating measurable improvements in project delivery time, cost savings, safety, or environmental outcomes.
Federal Highway Administration (FHWA)	Advanced Transportation Technology and Innovation (ATTAIN) Program	To deploy, demonstrate, and evaluate advanced transportation technologies that improve safety, mobility, efficiency, and system performance.	Intelligent transportation systems (ITS), real-time traffic management, connected vehicle technologies, smart infrastructure, data integration platforms, and advanced safety systems.
Federal Highway Administration (FHWA)	Promoting Resilient Operations for Transformative, Efficient, and Cost-Savings Transportation (PROTECT)	To improve the resilience of transportation infrastructure against natural hazards, climate change, and extreme weather events.	Resilient roadway design, elevation or relocation of flood-prone infrastructure, stormwater improvements, culvert replacements, and coastal adaptation measures.
Federal Transit Administration (FTA)	Buses and Bus Facilities Competitive Grant Program	To replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities.	Purchase of low- or no-emission buses, bus maintenance and storage facilities, transit centers, bus stop improvements, fleet electrification infrastructure.
Federal Transit Administration (FTA)	Low or No Emission Grant Program	To support the transition to low- and zero-emission public transportation vehicles and related facilities.	Purchase or lease of battery-electric or hydrogen fuel cell buses, charging/refueling infrastructure, workforce training, and facility retrofits for zero-emission operations.
United States Department of Transportation Office of the Secretary (OST)	Better Utilizing Investments to Leverage Development (BUILD) Grant Program	To support surface transportation projects with local or regional significance.	Multi-modal transportation projects, transit stations, complete streets, port and freight improvements, corridor revitalization.
United States Department of Transportation Office of the Secretary (OST)	Safe Streets and Roads for All (SS4A) Grant Program	To support Vision Zero planning and implementation to reduce roadway deaths and serious injuries.	Comprehensive Safety Action Plans, quick-build safety projects, protected bike lanes, pedestrian crossings, traffic calming measures.
Federal Highway Administration (FHWA)	National Culvert Removal, Replacement, and Restoration Grant Program (Culvert AOP Program)	To improve or restore fish passage by removing or upgrading culverts that create barriers to aquatic organism passage.	Replacement or removal of culverts that block fish passage, design and construction of fish-friendly stream crossings, hydrologic restoration, and environmental mitigation.
United States Department of Transportation Office of the Secretary (OST)	Innovative Finance and Asset Concession Grant Program	To support technical, financial, and legal capacity for jurisdictions exploring public-private partnerships (P3s) or innovative financing for transportation projects.	Feasibility studies, value-for-money analyses, P3 contract development, asset concession agreements, and financial structuring for major transportation assets.
United States Department of Transportation Office of the Secretary (OST)	MPDG: National Infrastructure Project Assistance Program (Mega)	To fund large, complex projects of regional or national significance that generate substantial economic, mobility, and safety benefits.	Highway and bridge projects, intermodal freight facilities, passenger rail and public transit expansions, and large-scale multimodal corridors.
United States Department of Transportation Office of the Secretary (OST)	MPDG: National Multimodal Freight and Highway Projects (INFRA)	To improve the safety, efficiency, and reliability of freight and highway mobility on the National Highway Freight Network and other key corridors.	Highway and bridge improvements, intermodal connectors, grade separations, ITS and freight technology upgrades, and critical rural freight corridors.
United States Department of Transportation Office of the Secretary (OST)	MPDG: Rural Surface Transportation Grant Program (RURAL)	To support major transportation investments in rural and small communities to improve safety, connectivity, and economic opportunity.	Rural highway reconstruction, main street revitalization, bridge repair, transit and multimodal facilities, and access improvements to freight, energy, or agricultural hubs.

Table 5.5: Federal Discretionary Programs

Agency	Program	Purpose	Eligible Projects
Economic Development Administration	Public Works and Economic Adjustment Assistance	To help communities build resilient infrastructure and strengthen regional economies through strategic investments in public facilities and economic recovery initiatives.	Construction or modernization of roads, utilities, and site infrastructure in industrial parks or innovation districts; planning and technical assistance to support economic diversification, disaster recovery, and workforce development.
Appalachian Regional Commission	Local Access Road Programs	To promote economic growth and improved access in the Appalachian region through infrastructure, workforce, and community investments.	Construction or improvement of access roads to industrial parks, educational institutions, and tourism areas; broadband deployment; water and sewer extensions; and workforce or entrepreneurship development projects.
Appalachian Regional Commission	Area Development Program	To strengthen and diversify the economy of the Appalachian region by supporting projects that create jobs, enhance infrastructure, build workforce capacity, and improve quality of life.	Planning, design, and construction of public infrastructure (such as water, sewer, broadband, and transportation improvements); industrial site development; workforce training facilities; business assistance; and regional planning initiatives that promote sustainable economic growth.
United State Department of Agriculture (USDA)	Community Facilities Direct Loan and Grant Program	To develop essential community facilities that support quality of life and economic opportunity in rural areas.	Construction or renovation of community centers, public safety buildings, transportation facilities, and other civic infrastructure in rural communities.
United State Department of Agriculture (USDA)	Rural Business Development Grants (RBDG)	To support small and emerging businesses in rural areas through targeted technical assistance, infrastructure, and capacity-building.	Construction or improvement of business incubators, multi-use facilities, or transportation access that supports local job creation and rural innovation.
Federal Emergency Management Agency	Hazard Mitigation Grant Program (HMGP)	To help communities implement long-term hazard mitigation measures following a presidentially declared disaster, reducing risk to life and property from future hazards.	Floodplain restoration, drainage and stormwater improvements, culvert and bridge upgrades, property buyouts, elevation or relocation of critical facilities, and resilience planning.

Table 5.5, Continued: Federal Discretionary Programs

State and Local Discretionary Programs

In South Carolina, competitive funding through State Departments of Transportation, Parks, and Commerce, among others, supports multimodal, safety, and economic development projects aligned with statewide goals. The following table (Table 5.6) illustrates the agencies, grant, purpose, and eligible projects currently available through State and local discretionary programs.

Agency	Program	Purpose	Eligible Projects
South Carolina Department of Commerce	Community Development Block Grants	To provide funding to local governments for community and economic development projects that benefit low- and moderate-income residents, eliminate slum and blight, or address urgent community needs.	Infrastructure improvements such as water, sewer, and drainage systems; neighborhood revitalization; public facilities; and community infrastructure supporting housing, workforce, and economic development.
South Carolina Department of Transportation (SCDOT)	Transportation Alternatives Program	To expand travel choices and improve the cultural, historical, and environmental quality of communities by supporting projects that enhance non-motorized mobility and strengthen connections for pedestrians, bicyclists, and other active transportation users.	Sidewalks, crosswalks, shared-use paths, bike lanes, trail connections, Safe Routes to School projects, ADA compliance upgrades, streetscape enhancements, and other community-based transportation improvements that improve safety and multimodal access.

Table 5.6: State and Local Discretionary Programs

Agency	Program	Purpose	Eligible Projects
South Carolina Rural Infrastructure Authority (RIA)	Community Infrastructure Grant Program	To assist local governments in financing qualified infrastructure projects that directly support public health, environmental protection, and economic sustainability.	Construction and improvement of water, sewer, and stormwater systems; replacement of failing infrastructure; upgrades to support industrial, residential, or commercial development.
South Carolina Rural Infrastructure Authority (RIA)	Economic Infrastructure Program	To support infrastructure that directly promotes economic development, job creation, or business expansion in rural and distressed communities.	Purchase of low- or no-emission buses, bus maintenance and storage facilities, transit centers, bus stop improvements, fleet electrification infrastructure.
South Carolina Department of Parks, Recreation, and Tourism (SCPRT)	Land and Water Conservation Fund	Federally funded program that provides matching grants to state and local governments for the acquisition and development of public outdoor recreation areas and facilities.	Extension of water, sewer, and road infrastructure to serve industrial sites, business parks, or redevelopment areas; support for site readiness and utility access.
South Carolina Department of Parks, Recreation, and Tourism (SCPRT)	Recreation Land Trust Fund	State-funded program to acquire land for public recreation and conservation purposes.	Acquisition of land for recreation, open space, and natural area preservation.
South Carolina Department of Parks, Recreation, and Tourism (SCPRT)	Undiscovered South Carolina Grant Program	State tourism grant to help rural and small communities attract visitors and grow local tourism economies.	Development of tourism infrastructure, signage, marketing, and improvements to local attractions.
South Carolina Department of Parks, Recreation, and Tourism (SCPRT)	Recreational Trails Program	Pass-through of FHWA funds for motorized and non-motorized trail projects.	Trail construction, rehabilitation, maintenance, trailhead facilities, and accessibility improvements.
South Carolina State Transportation Infrastructure Bank (STIB)	Rural Project Program	To provide financial assistance for major transportation projects that enhance mobility, safety, and economic competitiveness across the state.	Large-scale highway, interchange, bridge, and corridor projects; funding typically through low-interest loans or credit assistance to local or regional sponsors.
South Carolina Office of Resilience (SCOR)	Hazard Mitigation Program	Floodplain restoration, voluntary property buyouts, drainage system improvements, green infrastructure, and community-based adaptation planning.	Floodplain restoration, voluntary property buyouts, drainage system improvements, green infrastructure, and community-based adaptation planning.

Table 5.6, Continued: State and Local Discretionary Programs

Together, these discretionary grant programs provide a critical pathway to advance transformative projects that may exceed the resources available through traditional formula funding, such as the Regional Mobility Program (formerly known as Guideshare). By strategically positioning competitive projects for discretionary funding, the region can maximize limited local resources, attract significant external investment, and accelerate the delivery of complex or high-impact improvements. This approach not only broadens the scope of what can be achieved within existing financial constraints but also strengthens regional coordination, enhances readiness for future funding opportunities, and supports long-term mobility, safety, and economic vitality goals.



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Nathan Hinkle, City Engineer

Date Submitted: 3/31/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)
Receive a presentation regarding the adoption of the Safe Streets and Roads for All (SS4A)
Safety Action Plan.- City Engineer Nathan Hinkle

Agenda Item Detail: (expand as necessary for clarification)
This presentation outlines the Clemson SS4A Action Plan, a data-driven strategy aimed at eliminating traffic fatalities and serious injuries through the federally recognized Safe System Approach. We will review the city's High-Injury Network to identify priority safety corridors and share key takeaways from recent community engagement efforts. The session concludes with a roadmap for leveraging this plan to secure significant federal implementation grants for high-priority infrastructure improvements across the city.



Clemson Safety Action Plan

Monday 06 April 2026



Stantec



KITTELSON
& ASSOCIATES



CLEMSON



MEMORIAM

In Clemson, eight lives were cut short on our streets between 2019 and 2023. They were friends, neighbors, classmates, and family members.

Each loss left a space that cannot be filled.
We remember them.

One life lost is one too many.
This *Safety Action Plan* is part of our commitment
to protect the people who call Clemson home.

What Is a Ghost Bike?: Ghost bikes are white-painted bicycles placed at locations where a cyclist was killed or severely injured in a traffic crash. These memorials serve as somber reminders of lives lost and call attention to the need for safer streets for everyone.



A black and white photograph of a person walking away from the camera on a wide, tree-lined sidewalk. The person is wearing a dark t-shirt and pants. The sidewalk is flanked by large trees and streetlights. In the background, a street with parked cars and other pedestrians is visible.

1

Safe Streets for All

The Safe Streets for All Program (SS4A)

The **Infrastructure Investment and Jobs Act (IIJA)** established the **Safe Streets and Roads for All (SS4A)** competitive grant program with \$5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to **prevent roadway fatalities and serious injuries**.

Safety Action Plans (SAPs) are funded through SS4A.

The goals of SAPs include:

- Understanding community safety issues
- Improve safety by reducing and eliminating fatal and serious injury crashes
- Applying the **Safe System Approach** to developing systemic and location-specific priorities and recommendations to improve roadway safety for all users

Safety Action Plans seek to improve safety by...

- Formalizing a **leadership commitment** to reach **zero traffic fatalities** by a specific year
 - o e.g., resolution, adoption of policy or ordinance
- Establishing a **committee or task force** to oversee the SAP
- Reviewing crash data trends & **risk factors**
- **Reviewing policies, plans, and guidelines**
- Engaging with the **community** in a robust way
- Identifying a comprehensive set of **projects and strategies**
- Monitoring and **evaluating** progress over time



U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY
Proven Safety Countermeasures



Safety Benefits:
Agencies have experienced the following benefits after LRSP implementation:

- 25%**
reduction in county road fatalities in Minnesota.
- 17%**
reduction in fatal and serious injury crashes on county-owned roads in Washington State.
- 35%**
reduction in severe curve crashes in Thurston County, WA.

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://safety.fhwa.dot.gov/provencountermeasures/> and <https://safety.fhwa.dot.gov/LRSPDIY/>.

Local Road Safety Plans

A local road safety plan (LRSP) provides a framework for identifying, analyzing, and prioritizing roadway safety improvements on local roads. The LRSP development process and content are tailored to local issues and needs. The process results in a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on local roads. FHWA has developed several resources including an LRSP Do-It-Yourself website which further explains the process and includes resources local agencies and their partners need to create and implement an LRSP.¹

Approximately 75 percent of rural roads are owned by local agencies.² While local roads are less traveled than State highways, they have a much higher rate of fatal and serious injury crashes.³ Developing an LRSP is an effective strategy to improve local road safety for all road users and support the goals of a State's overall Strategic Highway Safety Plan (SHSP).

Although the development process and resulting plan can vary depending on the local agency's needs, available resources, and targeted crash types, aspects common to LRSPs include:

- Stakeholder engagement representing the 4E's: engineering, enforcement, education, and emergency medical services.
- Collaboration among municipal, county, Tribal, State, and/or Federal entities to leverage expertise and resources.

Identification of target crash types and crash risk with corresponding recommended proven safety countermeasures.

Timeline and goals for implementation and evaluation.

Local road agencies should consider developing an LRSP to be used as a tool for reducing roadway fatalities, injuries, and crashes.³ LRSPs can help agencies create a prioritized list of improvements. LRSPs are also a proactive risk management technique to demonstrate an agency's responsiveness. The plan should be viewed as a living document that can be updated to reflect changing local needs and priorities.



Infographic showing the LRSP process. Source: FHWA

¹ <https://safety.fhwa.dot.gov/LRSPDIY/>

² Anderson et al. Noteworthy Practices: Addressing Safety on Locally-Owned and Maintained Roads A Domestic Scan, FHWA-SA-09-019, (2010).

³ Developing Safety Plans: A Manual for Local Road Owners, FHWA-SA-12-017, provides guidance on developing an LRSP.

FHWA-SA-21-033

ZERO IS OUR GOAL
ENDING TRAFFIC FATALITIES AND SERIOUS INJURIES

The Safe System Approach

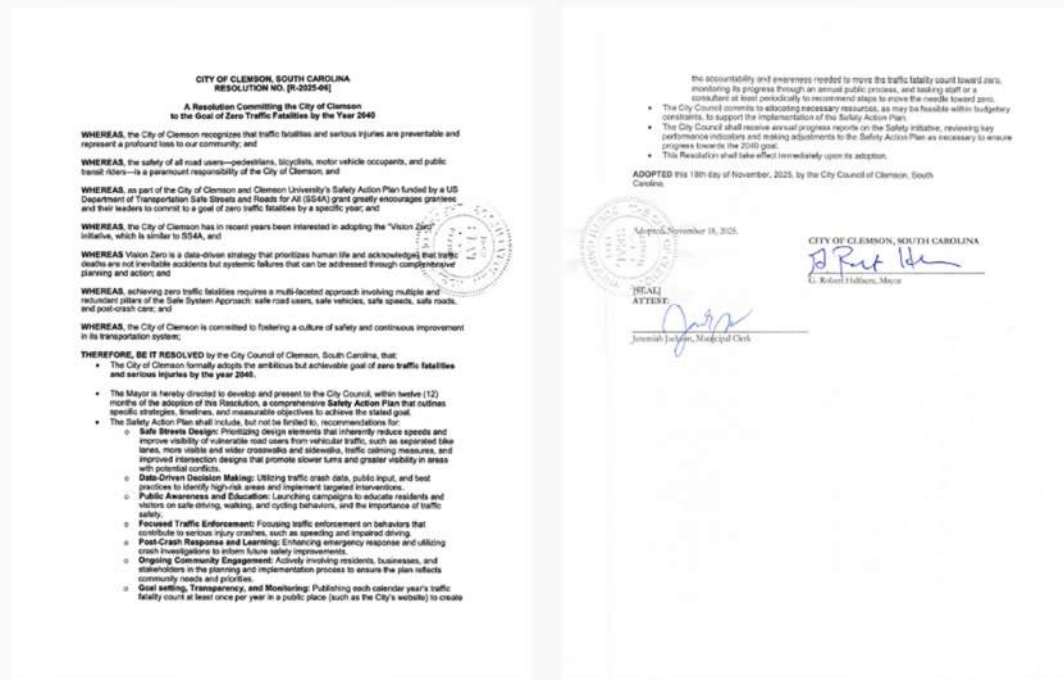
Broad **framework** for viewing roadway safety as **everyone's business**.

Related with the leadership commitment to reach **zero traffic fatalities** by a specific year.



The City of Clemson committed to a goal of zero traffic fatalities by the year 2040

A Resolution Committing the City of Clemson to the Goal of **Zero Traffic Fatalities** by the **Year 2040**

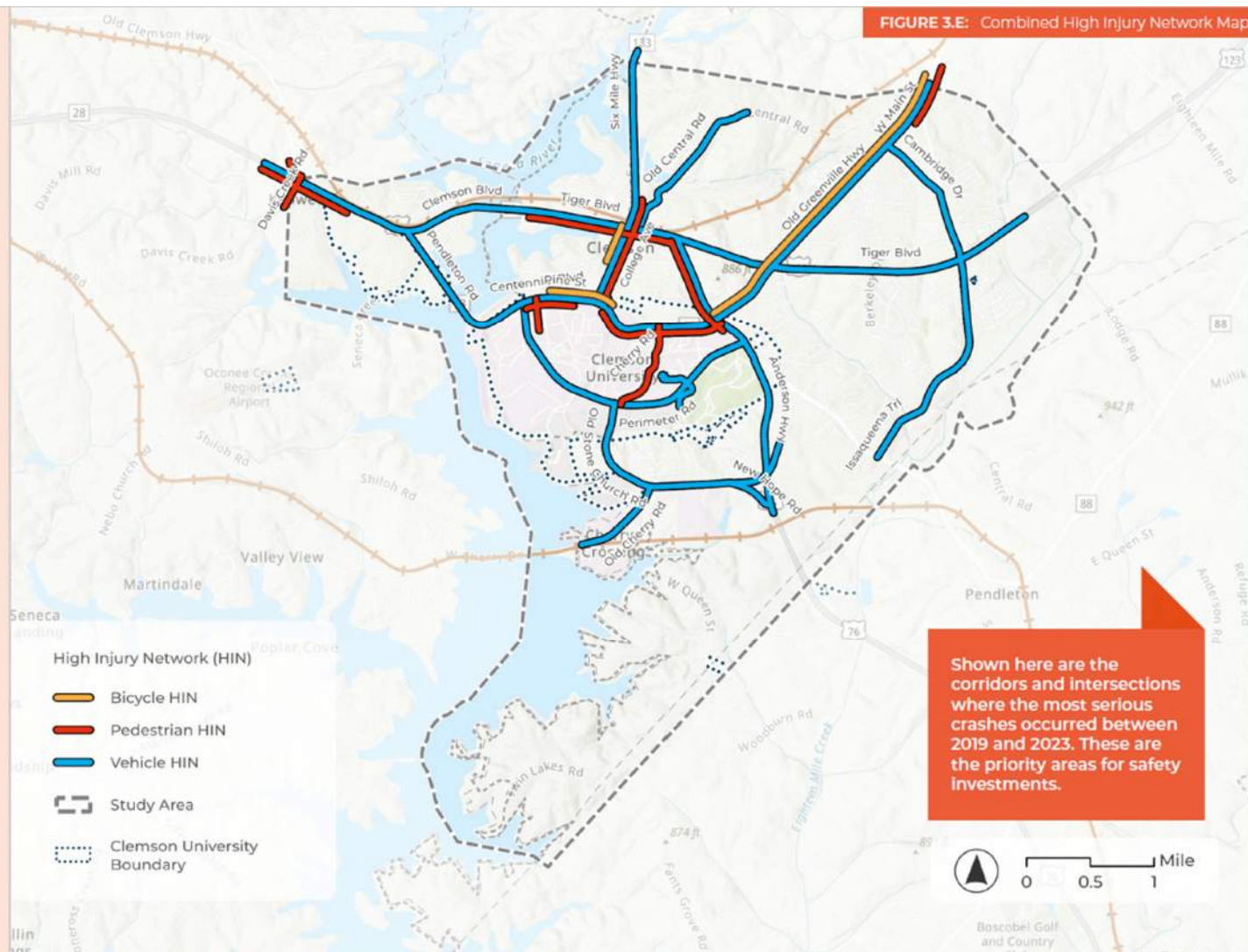


High Injury Network

Clemson's Top High-Injury Corridors across all modes include:

- 1 SC-93 (W Main Street;
Old Greenville Highway)
– Pedestrian, Bicyclist, Vehicle HIN
- 2 US-123 (Tiger Boulevard;
Clemson Boulevard)
– Pedestrian, Vehicle HIN
- 3 SC-133 (College Avenue)
– Pedestrian, Bicyclist, Vehicle HIN
- 4 SC-93 (Old Greenville Highway)
– Bicyclist, Pedestrian HIN
- 5 L-1460 (Centennial Boulevard)
– Pedestrian HIN
- 6 L-24 (Cherry Road)
– Pedestrian HIN
- 7 SR-37-439 (Davis Creek Road)
– Pedestrian HIN
- 8 US-76 (Anderson Highway)
– Vehicle HIN
- 9 Old Central Boulevard
– Vehicle HIN
- 10 Perimeter Road*
– Vehicle HIN

*Perimeter Road recently had a safety project completed (2025)





2 Plan Recommendations



Components of the Action Plan



Policy Context &
Alignment



Priority Site
Applications



Crash Reduction
Strategy



Performance
Monitoring &
Evaluation Strategy



Policy Context & Alignment

#	Strategy	Relative Funding	Time	Safety Priority	Responsible Parties	Safe Roads Engineering	Safe Speeds Engineering	Safe Road Users Education & Enforcement	Safe Vehicles Emerging Technology	Post-Crash Care Emergency Response	Metric
1	Commitment to annual safety program reporting and evaluation of effectiveness of safety initiatives, including a sidewalk and bicycle network gap prioritization report	Moderate	Annually	Higher	City/University of Clemson Transportation; GIS; Chief Data Officer; Communications	●		●			Annual issuance of Vision Zero report or newsletter to be publicly displayed on Clemson's website
2	Publicly commit to a culture of safety by establishing a Vision Zero Task Force with dedicated staff responsible for overseeing and guiding long term Vision Zero strategy	Moderate	Ongoing	Moderate	City of Clemson Transportation; Mayor; Human Resources; Clemson University (in partnership)	●	●	●	●	●	A Vision Zero Task Force is operational
3	Engage community organizations and university groups to organize and construct temporary demonstration (quick build) projects and promotional events	Moderate	Annually	Lower	City of Clemson Transportation; Community Development; Neighborhood Associations; Student Groups	●	●	●			Implementation of 2 quick build projects of demonstration with promotion on city social media
4	Implement Vision Zero safety engineering improvements annually at priority corridors and intersections, informed by community input at project locations	Moderate to High	Annually	Higher	City/University of Clemson Transportation; Public Works	●	●			●	Implement 5 safety engineering improvements annually
5	Consider proactive efforts to reduce the posted speed limits along certain corridors or districts	Moderate	As Needed	Moderate	City of Clemson Transportation; Police; SCDOT	●	●	●	●		Successfully reduce at least 1 speed limit
6	Include a community awareness event and education component for each traffic calming project before construction begins and after funding is secured	Moderate	Once (per project)	Lower	City of Clemson Transportation; Community Development; Neighborhood Associations	●	●	●	●	●	Successfully complete at least one community education event
7	Amend Clemson's Code and Zoning Ordinance to encourage transit-supported development incentives	Low	Once	Moderate	City of Clemson Planning; Transportation; Code Enforcement; Economic Development	●		●			Amendment adopted in Ordinance that details Transit-Oriented Development incentives

Note: policy initiatives have been initially drafted with input from City staff based on current policies or plans in place.



Crash Reduction Strategy

Countermeasure Toolkit & Quick Win Safety Strategies

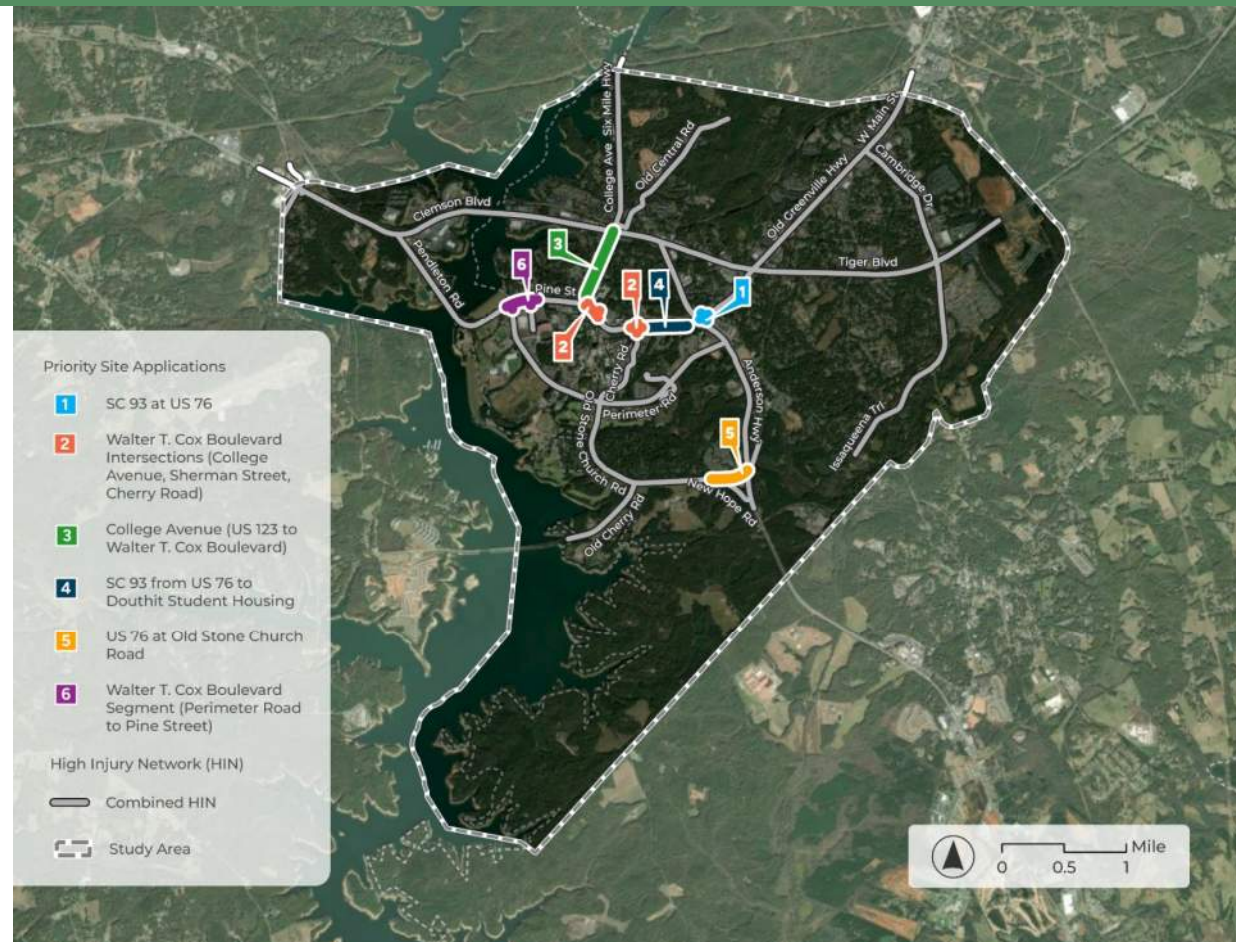




Priority Site Applications

Recommended Countermeasures such as:

- **Move stop bars forward on SC 93 approaches** to tighten the intersection
- **Install raised intersections** at 3 locations along Walter T. Cox Blvd
- **Improve lighting at crossings and along sidewalks** to support nighttime visibility on College Ave





Performance Monitoring & Evaluation Strategy

Metric	Description	Goal (Purpose)	Reporting Frequency
KSI crashes on Clemson roads	Summary and trend analysis of all fatal and serious injury crashes since the previous reporting period	Track progress and trend direction toward eliminating traffic fatalities and serious injuries	Every 2 years
KSI crashes on the High Injury Network (HIN)	Summary and trend analysis of fatal and serious injury crashes occurring on HIN segments since the previous reporting period	Track progress and trend direction measuring effectiveness of targeted corridor improvements	Every 2 years
Total injury crashes on Clemson roads	Summary and trend analysis of all injury crashes since the previous reporting period	Track progress and trend direction to monitor broader safety conditions	Every 2 years
Safety project evaluation: Before/After	Comparison analysis of crash data collected before and after implementation of selected safety projects, with emphasis on fatal and serious injury crashes	Evaluate countermeasure effectiveness at reducing fatal and serious injury crashes to inform design refinements	At least 1 year after project construction is completed
Implementation of safety countermeasures	Number and type of countermeasures installed, suitability to with crash and injury types at project location, and expected crash reduction factors	Track delivery of the Safety Action Plan and progress toward eliminating traffic fatalities and serious injuries	Every 2 years
Investment in road safety projects	Total funding invested in safety improvements	Monitor commitment to safety implementation toward eliminating traffic fatalities and serious injuries	Every 2 years

SS4A Self-Certification Eligibility Worksheet

SS4A Self-Certification Eligibility Worksheet

All applicants should follow the instructions in the NOFO to correctly apply for a grant. See the [SS4A website](#) for more information.

Table 1 of the [SS4A NOFO](#) describes [seven components of an Action Plan](#), which correspond to the questions in this worksheet. Applicants should use this worksheet to determine whether their existing plan(s) contains the required components to be considered an eligible Action Plan for SS4A.

This worksheet is required for all SS4A **Implementation Grant** applications and any **Planning and Demonstration Grant** applications to conduct Supplemental Planning/Demonstration Activities only. Please complete the form in its entirety, do not adjust the formatting or headings of the worksheet, and upload the completed PDF with your application.

Eligibility

An Action Plan is considered eligible for an SS4A application for an Implementation Grant or a Planning and Demonstration Grant to conduct Supplemental Planning/Demonstration Activities if the following two conditions are met:

- You can answer "YES" to Questions 3, 6, and 8 in this worksheet; and
- You can answer "YES" to at least three of the five remaining Questions, 1, 2, 4, 5, and 7.

If both conditions are not met, an applicant is still eligible to apply for a Planning and Demonstration Grant to fund the creation of a new Action Plan or updates to an existing Action Plan to meet SS4A requirements.

Applicant Information

Lead Applicant: UE:

Action Plan Documents

In the table below, list the relevant Action Plan and any additional plans or documents that you reference in this form. **Up to three plans or documents may be included.** Please provide a hyperlink to any documents available online or indicate that the Action Plan or other documents will be uploaded in Valid Eval as part of your application. Note that, to be considered an eligible Action Plan for SS4A, the plan(s) coverage must be broader than just a corridor, neighborhood, or specific location.

Document Title	Link	Date of Most Recent Update
Clemson Safety Action Plan		March 2026
Appendix		March 2026

Action Plan Components

For each question below, answer "YES" or "NO." If "YES," list the relevant plan(s) or supporting documentation that address the condition and the specific page number(s) in each document that corroborates your response. This form provides space to reference multiple plans, but please list only the most relevant document(s).

1. Leadership Commitment and Goal Setting

Are **BOTH** of the following true?

- A high-ranking official and/or governing body in the jurisdiction publicly committed to an eventual goal of zero roadway fatalities and serious injuries; and
- The commitment includes either setting a target date to reach zero OR setting one or more targets to achieve a reduction in roadway fatalities and serious injuries by a specific date.

☒ YES

☐ NO

Note: This may include a resolution, policy, ordinance, executive order, or other official announcement from a high-ranking official and the official adoption of a plan that includes the commitment by a legislative body.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Clemson Safety Action Plan	3, 5

2. Planning Structure

To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?

☒ YES

☐ NO

Note: This should include a description of the membership of the group and what role they play in the development, implementation, and monitoring of the Action Plan.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Clemson Safety Action Plan	18-19, 102, 103

3. Safety Analysis

Does the Action Plan include **ALL** of the following?

- Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- Analysis of the location(s) of crashes, the severity, contributing factors, and crash types;
- Analysis of systemic and specific safety needs, as needed (e.g., high-risk road features or specific safety needs of relevant road users); and,
- A geospatial identification (geographic or locational data using maps) of higher risk locations.

☒ YES

☐ NO

Note: Availability and level of detail of safety data may vary greatly by location. The [Fatality and Injury Reporting System Tool \(FIRST\)](#) provides county- and city-level data. When available, local data should be used to supplement nationally available data sets.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Clemson Safety Action Plan	22-55
Appendix	5-102

4. Engagement and Collaboration

Did development of the Action Plan include **ALL** of the following activities?

- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

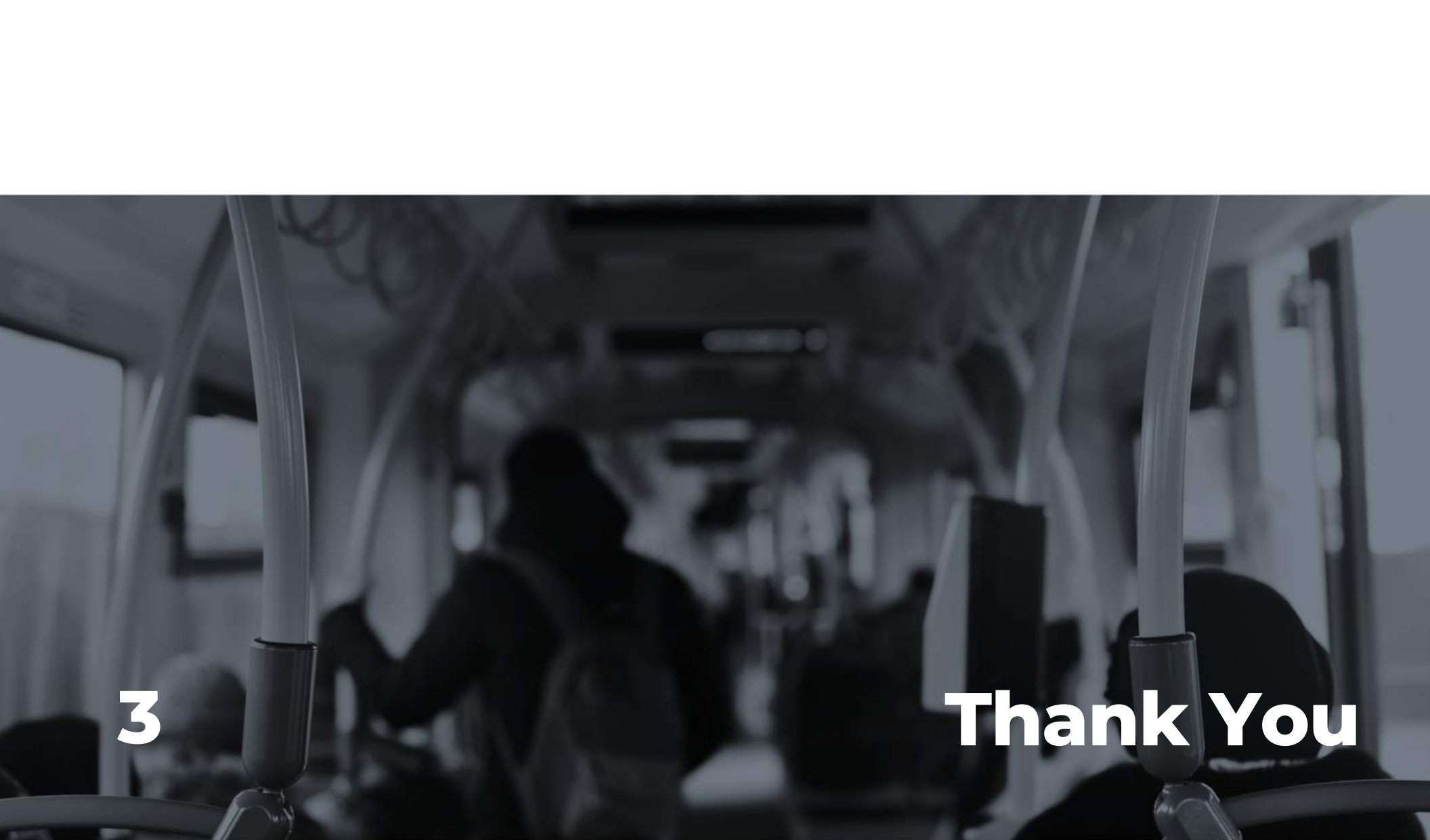
☒ YES

☐ NO

Note: This should include a description of public meetings, participation in public and private events, and proactive meetings with stakeholders.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Clemson Safety Action Plan	56-68
Appendix	103-298



3

Thank You



CLEMSON

SAFETY ACTION PLAN

MARCH 2026

MEMORIAM

In Clemson, eight lives were cut short on our streets between 2019 and 2023. They were friends, neighbors, classmates, and family members.

Each loss left a space that cannot be filled.
We remember them.

One life lost is one too many.
This *Safety Action Plan* is part of our commitment to protect the people who call Clemson home.

What Is a Ghost Bike?: Ghost bikes are white-painted bicycles placed at locations where a cyclist was killed or severely injured in a traffic crash. These memorials serve as somber reminders of lives lost and call attention to the need for safer streets for everyone.



A LETTER FROM THE MAYOR



"As a unique blend of small-town charm and big-city amenities, Clemson provides a picturesque backdrop for its consistent national recognition as a top place to live and visit. We take immense pride in where we live, work and raise our families. These strengths are what keep us dedicated to making Clemson a safe and welcoming place for everyone, no matter how they choose to travel or where they are going. It's more important than ever to address traffic safety with our continued growth and tourism. One death on a City street is one too many.

Between 2019 and 2023, Clemson experienced 3,309 reported crashes, of which 6 crashes led to 8 deaths. Of the fatal and serious injury crashes, 59.26% involved speeding, 9.26% were pedestrians, 16.67% were motorcyclists, and 46.27% were college-aged drivers. Additionally, 4 of the 6 fatal crashes occurred at night. These events are tragedies for the victims, their families and all of the Clemson community. Deaths and serious injuries due to traffic crashes are unacceptable and often preventable through enforcement, education, and engineering, and the City of Clemson and Clemson University together are committed to significantly reducing and ultimately eliminating these incidents. The Safety Action Plan is the first step toward making this commitment a reality. As a data-driven document, this plan lays the groundwork for projects and strategies that can make a real difference on our roads.

The work has only just begun, but having a foundation is what helps us achieve our goals. I am thankful for the City Council and its leadership, as well as the hard work of City staff and every resident's participation in the planning process to make our community even stronger, and above all, a safer Clemson."

Mayor Robert Halfacre

ACKNOWLEDGEMENTS

We would like to thank the many individuals and partners who contributed their time, insight, and dedication to the development of Clemson's Safety Action Plan. Your commitment to creating a safer community for everyone who travels on Clemson's streets made this work possible.

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A Resolution Committing the City of Clemson to the Goal of **Zero Traffic Fatalities** by the **Year 2040**

CLEMSON SAFETY ACTION PLAN

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GLOSSARY OF TERMS

KABC Crash: A crash that results in a fatality or any level of injury (fatal, serious, non-incapacitating, or possible injury).

KA Crash: A crash that results in a fatality or a serious (incapacitating) injury.

High Injury Network (HIN): The set of streets in Clemson with the highest concentration of fatal and serious injury crashes. These locations help identify where safety improvements are most needed.

Safe System Approach: A safety framework that recognizes people make mistakes and designs roads so that those mistakes do not result in fatal or serious injuries.

Systemic Safety Approach: A method that focuses on correcting high-risk roadway features across the transportation network, rather than only treating individual crash locations.

Crash Modification Factor (CMF): A numerical value estimating how much a specific safety countermeasure can reduce crashes.

Vulnerable Road Users (VRU): People walking, biking, or using other forms of active transportation who face greater risk of severe injury in a crash.

Functional Classification: A system that categorizes roads based on their role in the network, such as arterial, collector, or local street.

Lane Departure Crash: A crash where a vehicle leaves its travel lane, often due to speeding, curves, distraction, or nighttime conditions.

Failure-to-Yield Crash: A crash caused when one road user does not yield the right-of-way, commonly at intersections or driveways.

Traffic Calming: Street design strategies—such as speed humps, curb extensions, or narrower lanes—that help reduce vehicle speeds.

Vision Zero: A commitment to eliminate traffic fatalities and severe injuries by treating them as preventable and designing streets to protect human life.

Stakeholder Engagement: A collaborative process that brings together residents, students, City and University staff, transportation professionals, and community partners to contribute input and shape the Safety Action Plan.

1. INTRODUCTION

Clemson, South Carolina, is a City shaped by movement. Residents, students, faculty, staff, and visitors travel daily across a landscape that blends a lively university campus with growing neighborhoods, regional attractions, and rural roadways. This constant flow of activity brings energy and opportunity to Clemson—but it also brings challenges.

In recent years, Clemson has seen a rise in crashes that result in people being seriously hurt or killed. These events affect everyone, but they fall most heavily on people walking, biking, and driving along the City's major corridors, where higher speeds and roadway design play a major role. The area's unique mix of student life, suburban growth, and regional travel patterns has created mobility needs that require a new, more proactive approach to safety.

The **Clemson Safety Action Plan (SAP)**, funded through the **U.S. Department of Transportation's Safe Streets and Roads for All (SS4A) program**, is Clemson's first **comprehensive strategy focused specifically on preventing fatal and serious injury crashes**. More than a technical document, this plan is an investment in the well-being of everyone who lives, learns, works, and travels here—a commitment to creating safer streets for our community.

The chapters that follow provide the foundation for that commitment: a clear understanding of crash trends, a data-driven look at where the greatest risks occur, and a roadmap for the strategies and projects that can save lives.

This Plan will:



Analyze crash trends.



Engage the community.



Identify high-injury locations.



Provide a data-driven framework for systemic safety improvements.





28,358
PEOPLE IN THE
STUDY AREA

3,309
TOTAL CRASHES
(2019-2023) OF WHICH:

- 565 TOTAL INJURY CRASHES (KABC)
- 54 TOTAL FATAL & SERIOUS INJURY CRASHES (KA)

MEDIAN AGE:
22.9



565
CRASHES RESULTING
IN INJURY OR DEATH



29,077
CLEMSON
UNIVERSITY
STUDENTS

8
LIVES LOST ON
CLEMSON'S STREETS
(2019-2023)



WHAT IS VISION ZERO? AND WHAT IS SS4A?

Vision Zero is a commitment to creating a transportation system where no one is killed or seriously injured on our streets. Rather than viewing crashes as unavoidable, Vision Zero recognizes that people will make mistakes, and that those mistakes should not cost lives.

Originally developed in Sweden in the 1990s, Vision Zero shifts the focus from individual blame to shared responsibility. It emphasizes designing streets that reduce the likelihood and severity of crashes through safer speeds, clearer visibility, and stronger protection for people walking, biking, or driving.

For Clemson, Vision Zero means placing people at the center of transportation decisions. Whether someone is walking to class, biking to work, or driving across town, every trip should be a safe one. The City's **Vision Zero Resolution** sets this intention and provides the policy foundation for the Safety Action Plan.



Learn more about Vision Zero by visiting the Federal Highway Administration (FHWA) Vision Zero Community of Practice page.

VISION ZERO MEANS...

“ I’d bike downtown if I didn’t have to ride in traffic ”

Online Survey Response

Lowering speeds where people walk and bike...



...improving intersections, enhancing visibility...



“ Please prioritize pedestrian safety over traffic flow ”

Local resident (Open House #1)

“ Flashing signals and raised crossings could save lives ”

Local resident (Open House #1)



...and prioritizing safety over speed and convenience.

WHAT IS SS4A?

Safe Streets and Roads for All (SS4A) is the federal grant program created by the **U.S. Department of Transportation** to help communities turn Vision Zero principles into action. SS4A provides funding for local governments to develop **Safety Action Plans** and implement projects that reduce fatal and serious injury crashes.

This program is rooted in the same belief as Vision Zero. **Traffic deaths and life-changing injuries are preventable.** SS4A encourages communities to look beyond individual crashes and instead understand the system-wide factors that contribute to severe harm, including roadway design, speed, visibility, and human vulnerability.

For Clemson, **SS4A made this Safety Action Plan possible.** The program provides the structure for identifying risk, prioritizing investments, and building a foundation for future federal funding.

Vision Zero and SS4A create the foundation for Clemson’s safety strategy. The **Safe System Approach** in the following section provides the framework for putting these principles into practice.

WHAT IS THE SAFE SYSTEM APPROACH?

The Safe System Approach is a nationally recognized framework for improving traffic safety. It is based on the understanding that people make mistakes, and that those mistakes should not lead to someone being killed or seriously injured.

Guided by these **six core principles**, which align around the *outside* of the diagram:

1. Death and serious injury **are unacceptable**
2. Humans **make mistakes**
3. Humans **are vulnerable**
4. Responsibility **is shared**
5. Safety **is proactive**
6. Redundancy **is crucial**

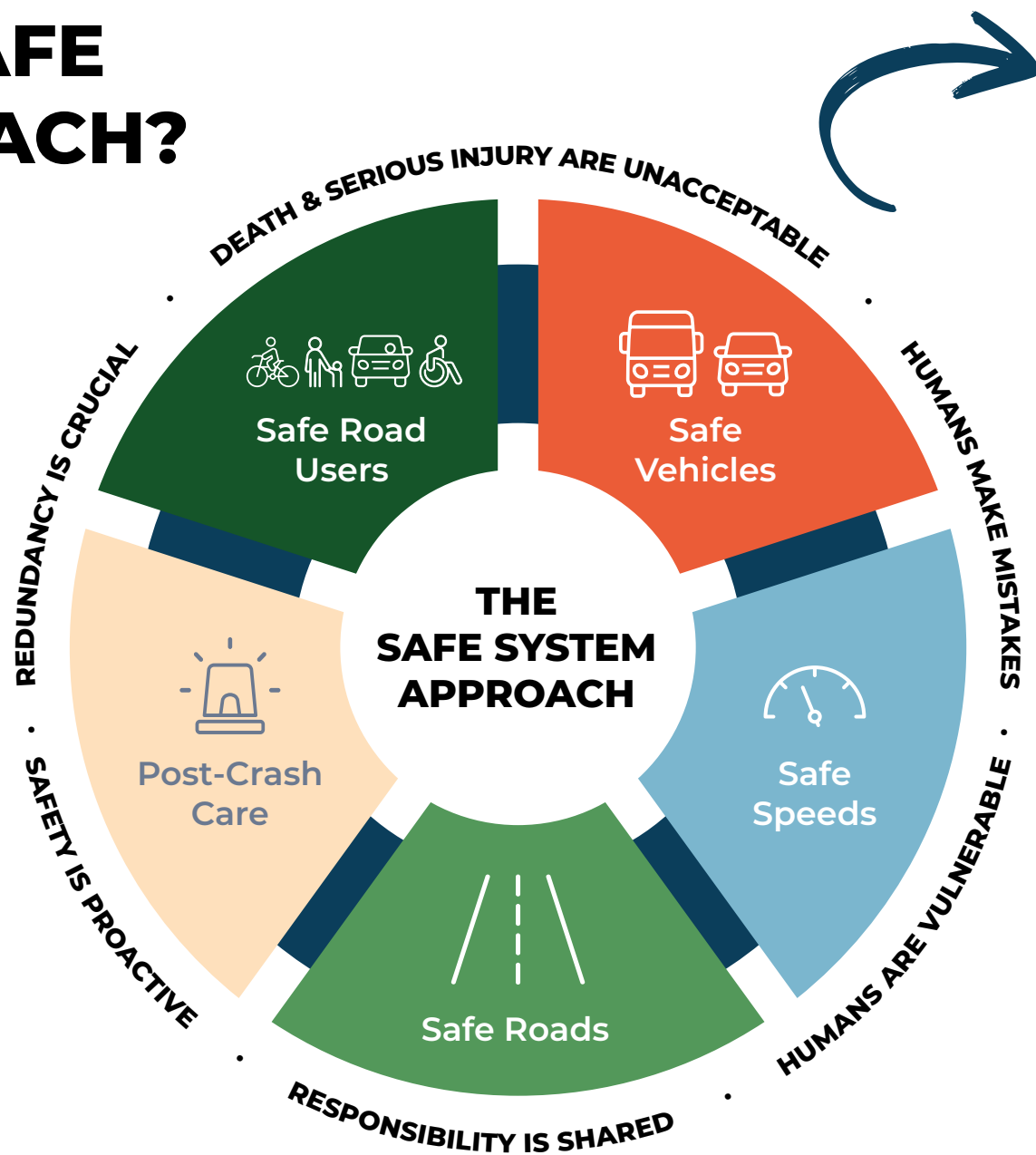


FIGURE 1.A: Safe System Approach Diagram

These principles are put into practice through *five key elements* that work together to reduce the likelihood and severity of crashes:



Safe Roads

Streets should be designed to lower crash severity with features that improve visibility, reduce conflict points, and support walking, biking, and driving.



Safe Speeds

Managing vehicle speeds is critical, since higher speeds increase both the likelihood of a crash and the severity of injuries.



Safe Road Users

Education, partnerships, and community programs help people make safer decisions whether they are walking, biking, or driving.



Safe Vehicles

Vehicle technologies such as automatic braking, airbags, and collision-avoidance systems play a growing role in preventing crashes or reducing their impact.



Post-Crash Care

Quick, coordinated emergency response can prevent injuries from becoming fatal and is a core part of a safe transportation system.



These five elements create **multiple layers of protection**. If one layer does not prevent a crash, another can reduce its severity. The SS4A program uses this structure to help communities organize their strategies and build long-term progress toward zero deaths.

For Clemson, the Safe System Approach provides the foundation for understanding risk and guiding the strategies in this Safety Action Plan.

EXISTING SAFETY MEASURES IN CLEMSON

TRAFFIC SAFETY IN CLEMSON: WHERE WE STAND TODAY

The Clemson area is a vibrant and growing community where university life, local neighborhoods, and regional travel come together. This blend creates busy streets and a wide range of transportation needs. The **City of Clemson**, **Clemson University** and the **South Carolina Department of Transportation (SCDOT)** have taken many steps over the years to support safer travel, including sidewalk upgrades, enhanced crosswalks, traffic signal improvements, transit investments, and projects that strengthen pedestrian access around campus. These efforts reflect a shared understanding that safety is an essential part of the community's quality of life.

As the Clemson area continues to evolve, these measures provide the foundation on which the **Safety Action Plan** builds. They demonstrate a long-standing commitment to improving transportation safety and create momentum for the next phase of work.

The timeline in the following section highlights key initiatives, studies, and investments that have shaped Clemson's approach to safety in recent years.



FIGURE 1.B: Students crossing Walter T. Cox Boulevard near Calhoun Drive



FIGURE 1.C: Cyclist traveling on a street near campus without a dedicated bike lane



FIGURE 1.D: Bike lane along Edgewood Avenue with limited separation from vehicle traffic



TIMELINE OF CLEMSON'S SAFETY INITIATIVES



2019

A study titled "Pedestrian and Bicycle Safety on a College Campus: Crash and Conflict Analysis" was conducted, focusing on Clemson University's campus. This research provided insights into safety challenges and offered recommendations for improvements.



Click on the thumbnails for additional information.

2014

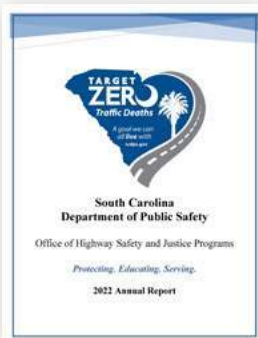
The City of Clemson adopted the Comprehensive Plan 2024, which included strategies to enhance transportation safety. Notable initiatives involved collaborating with Clemson University to improve intersections, establish pedestrian zones, and support transit infrastructure enhancements.



2020

The South Carolina Department of Transportation (SCDOT) reported a decline in bicyclist fatalities statewide, reflecting a combination of fewer drivers (lower exposure), and ongoing efforts to enhance safety for bicyclists.





2022

The South Carolina Department of Public Safety's Office of Highway Safety and Justice Programs (OHSJP) collaborated with local entities to disseminate traffic safety information through various campaigns, including those targeting impaired driving and occupant protection.



2021

Clemson University continued its commitment to sustainability and safety by promoting the use of the Clemson Area Transit (CAT) system, a fare-free service for university affiliates operating throughout the region. This initiative aimed to reduce greenhouse gas emissions and improve overall transportation safety.



2023

The City of Clemson applies for and is awarded grant funds under the Safe Streets and Roads for All (SS4A) program.

As this **Safety Action Plan** began, the **City of Clemson** convened a **Study Review Team (SRT)** to provide local insight and help guide the development of the plan. This group reflects the same spirit of collaboration shown in the preceding timeline and brings together the partners who play a direct role in advancing transportation safety today.

The SRT includes representatives from the **City of Clemson, Clemson University, police and fire departments, Anderson County, regional planning organizations** such as **GPATS** and **ACATS, Friends of the Green Crescent Trail**, and the **Federal Highway Administration (FHWA)**. Members met four times throughout the planning process to review analysis findings, discuss challenges and opportunities, explore potential countermeasures, and provide input on policy and design strategies. The group also supported outreach and worked collaboratively through interactive polls and a shared project mural board.

Several members of the SRT **will continue meeting on a bi-monthly basis** to help move the **recommendations of this plan into practice**. Their ongoing involvement creates a strong planning structure for implementation and reinforces Clemson's **long-term commitment to improving safety** for everyone who travels in the community.





STUDY REVIEW TEAM MEMBERS

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Steven Kennedy Clemson University	Cortney Wright Clemson University	Chad Carson Friends of the Green Crescent Trail	Heidi Williams Friends of the Green Crescent Trail
Keith Brockington GPATS	Asangwua Ikein GPATS	Michael Gay ACATS	Rickele Gennie FHWA
Edward Hunt SCDOT	Andrew Stokes SCDOT	Ben Olson SCDOT	

SAFETY PLAN GOALS & OBJECTIVES

With guidance from the Study Review Team and informed by years of ongoing safety efforts in Clemson, this Safety Action Plan outlines a clear direction for the future. The following goals **express the community's shared commitment to reducing serious injuries and fatalities and creating streets that support safe and comfortable travel for people walking, biking, driving, and taking transit.** These goals form the foundation for the strategies and recommendations presented throughout the plan.

1

Prevent Crashes

Reduce serious injuries and fatalities along Clemson's roadways.



2

Improve Access

Make walking, biking, and transit safer and more convenient.



3

Design Safely

Build streets that accommodate all users, even when mistakes happen.



4

Support Communities

Invest in local safety strategies that reflect community needs.



5

Use Data

Identify risks and prioritize safety improvements with real insights.



6

Fund Projects

Secure resources to implement lasting transportation safety upgrades.



WINTER 2024-2025



OUTREACH + DATA ANALYSIS

- ✓ Kickoff & Initiation
- ✓ Website & Social Media
 - ✓ Online Survey
 - ✓ Interactive Map
- ✓ Public Workshop #1
- ✓ Stakeholder "Listening Sessions"

SPRING / SUMMER 2025



REFINEMENT + DRAFT RECOMMENDATIONS

- ✓ Data Analysis & Identifying Risk Factors
 - ✓ High Injury Network (HIN)
- ✓ Countermeasures
- ✓ Policy & Program Recommendations
- ✓ Public Workshop #2

FALL / WINTER 2025-2026



DOCUMENTATION + REPORTING

- ✓ Prioritization of Projects
- ✓ Implementation Strategy
- ✓ Report Development
- ✓ Adoption

2. CRASH ANALYSIS & SAFETY ASSESSMENT

Understanding why crashes happen is the first step toward preventing them. Every day, people in Clemson travel by car, bike, and foot, but not every trip is safe. Some roads see more crashes than others, and certain types of crashes happen more frequently – whether influenced by high speeds, roadway design, driver behavior, or other risk factors.

This chapter takes a closer look at crash trends in Clemson, using data to uncover patterns in where, when, and how crashes occur. By analyzing these details, we can begin to answer important questions: Which areas have the most serious crashes? Who is most at risk? What common factors contribute to collisions?

This Chapter covers:



Understanding
Clemson's Crash Trends



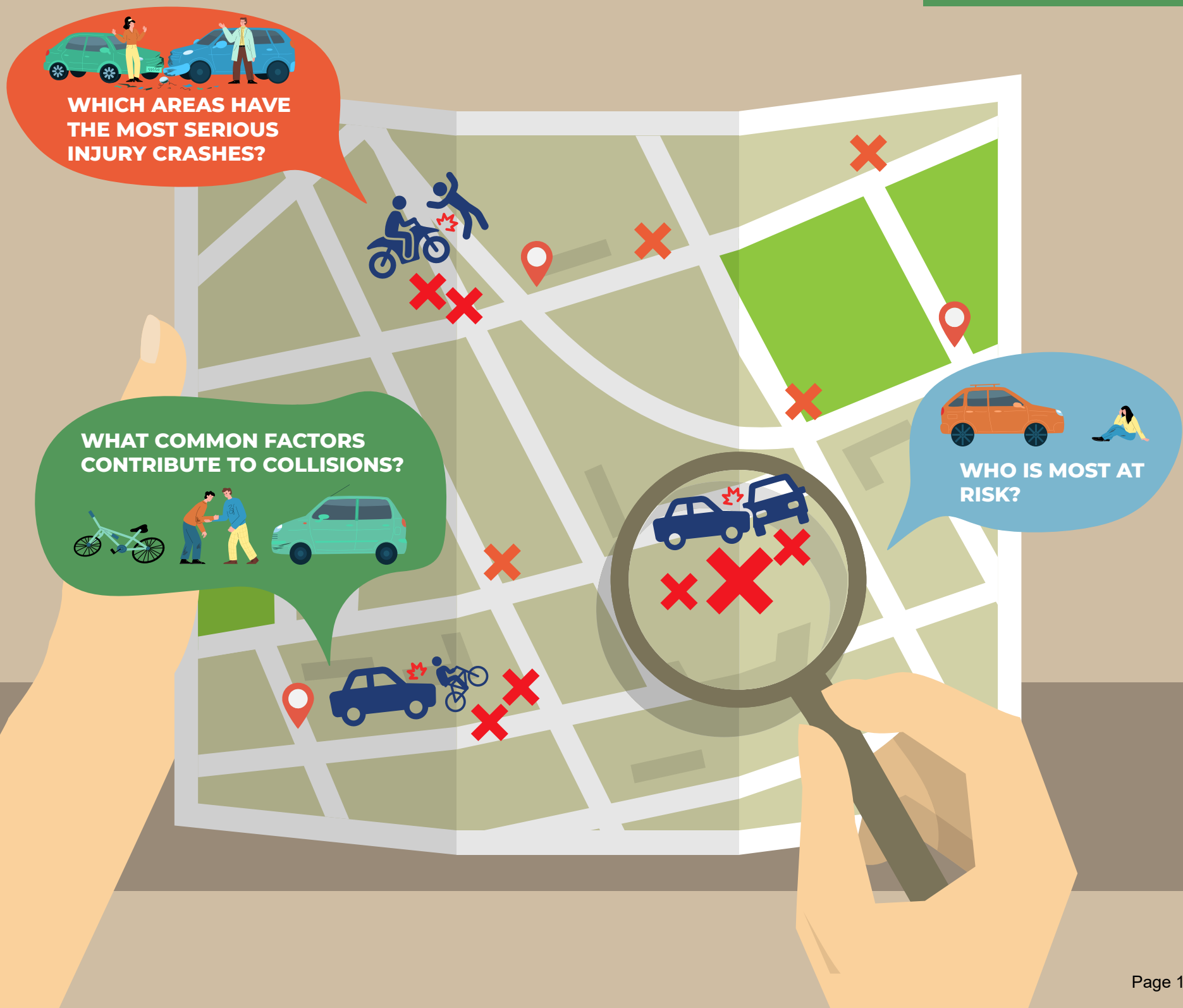
Who is Most at Risk?



Where Are Crashes
Occurring?



Connecting Crash
Data to Safety



UNDERSTANDING CLEMSON'S CRASH TRENDS

When examining recent crash data, a clear pattern emerges.

Each year, hundreds of traffic crashes occur across Clemson. Most result in minor injuries, but a smaller share lead to serious injuries or fatalities. These severe crashes, while less frequent, have lasting impacts on individuals, families, and the broader community and are central to understanding traffic safety risk in Clemson.

To capture both recent conditions and longer-term patterns, crash data were analyzed using two timeframes:

- **Vehicle crashes** involving cars, trucks, and motorcycles were evaluated over the most recent five-year period (2019-2023) to reflect current travel behavior and roadway conditions.
- **Pedestrian and bicycle crashes**, which occur less frequently but **often result in more severe outcomes**, were reviewed over a ten-year period (2014-2023) to provide sufficient data for identifying trends.

CRASH SEVERITY EXPLAINED

Understanding crash severity is central to this **Safety Action Plan**. While Clemson experiences hundreds of crashes each year, only a small portion result in the most serious outcomes. These severe crashes are defined as those that cause a fatality or a serious, incapacitating injury and are the primary focus of **Safe Streets for All (SS4A)** planning. SS4A prioritizes reducing the most harmful outcomes rather than simply lowering the total number of crashes.

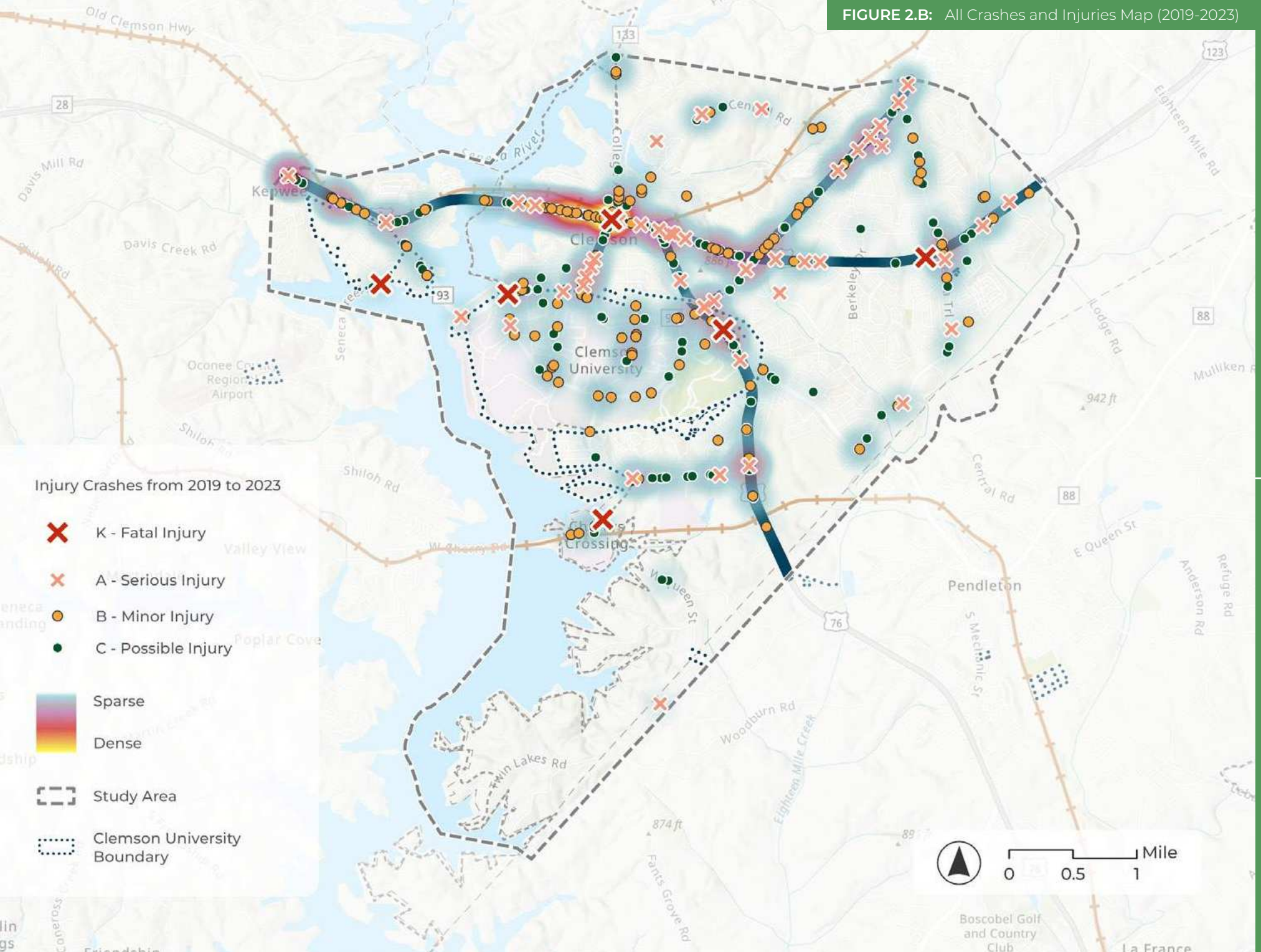
Crash reports in South Carolina follow a standard injury severity scale, commonly referred to as **KABC**:

- **K** – Fatal injury (Killed)
- **A** – Serious injury (Type A)
- **B** – Minor injury (Type B)
- **C** – Possible injury (Type C)
- **O** – No injury (property damage only)



For more information on KABC injury classification scale in different states, visit: <https://highways.dot.gov/media/20141>

FIGURE 2.B: All Crashes and Injuries Map (2019-2023)



CRASH TRENDS OVER TIME

From 2019 through 2023, Clemson experienced **3,309 total crashes**, including **565 crashes resulting in injury or death (KABC)**. Of these, **54 crashes resulted in a fatality or a serious injury (KA)**. Fatal crashes occurred every year, typically at a rate of one per year, with a brief increase in 2021. Serious injury crashes show greater variation over time.

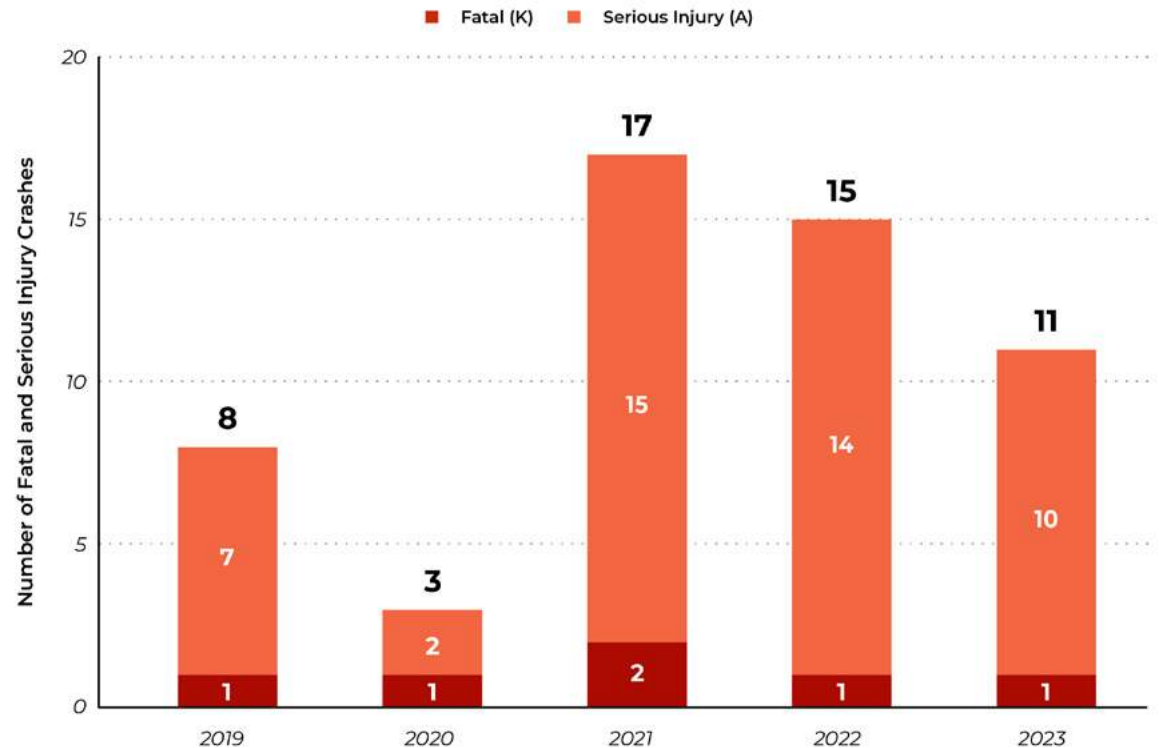
In 2020, both overall injury crashes and severe crashes declined sharply, reflecting reduced travel during the COVID-19 pandemic. As travel activity returned in 2021 and 2022, serious injury crashes increased substantially, reaching their highest levels in the five-year period. In 2023, the number of serious injury crashes declined from this peak but remained higher than in earlier years, indicating that elevated risk persists on portions of Clemson's roadway network.

From 2019 to 2023, Clemson recorded **565 crashes resulting in injury or death**, including:

- **6 fatal crashes (K)** resulting in **8 deaths**
- **48 serious injury crashes (A)**
- **178 minor injury crashes (B)**
- **333 possible injury crashes (C)**

FIGURE 2.C: All Fatal and Serious Injury Crashes by Year (2019-2023)

in Clemson, SC (Total = 54)



FATAL AND SERIOUS INJURY CRASH PATTERNS

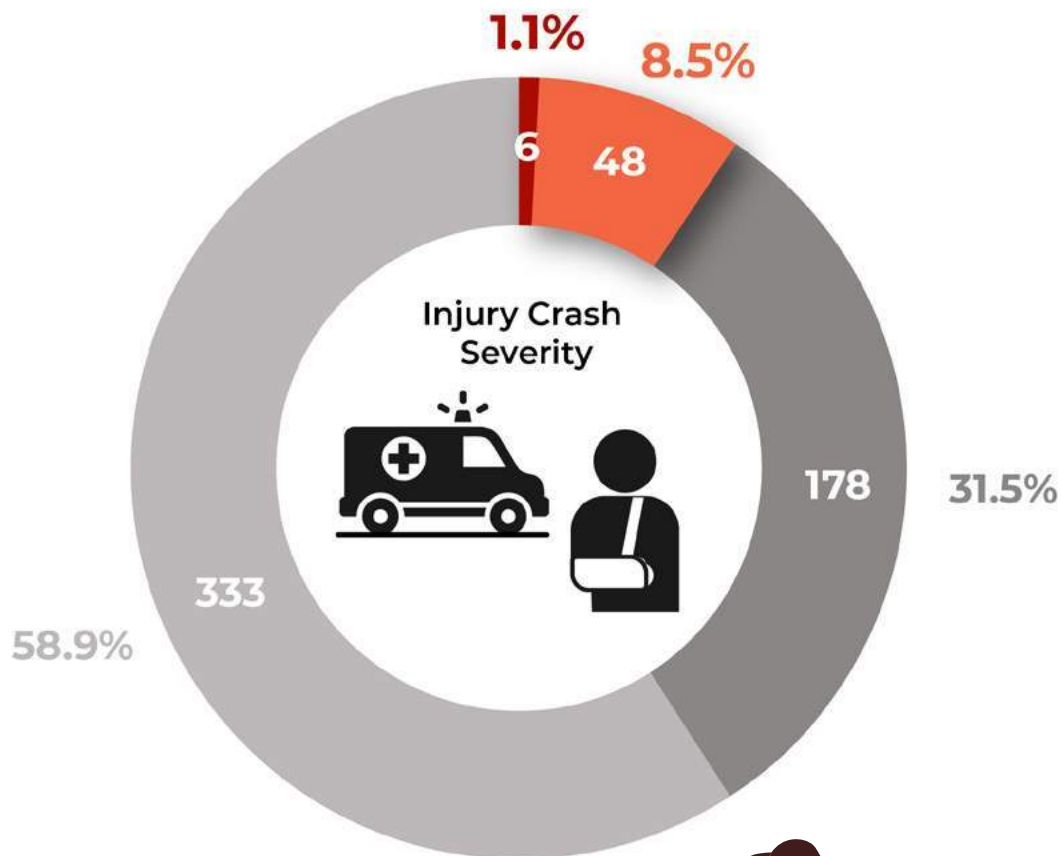
Serious injury crashes reveal the clearest safety concern. Although **fatal and serious injury crashes together account for only about 10% of all injury crashes, they represent the most severe and life-altering harm.** This pattern is consistent over time: fatalities remain relatively rare but persistent, while serious injuries fluctuate in response to changes in travel patterns, speeds, roadway conditions, and exposure.

Together, these trends show that while recent years suggest some improvement, severe crashes have not been eliminated and continue to pose a meaningful risk.

These patterns reinforce a critical point: preventing even a small number of fatal and serious injury crashes produces the greatest benefit to public safety.

FIGURE 2.D: All Injury Crashes by Severity (2019-2023)

in Clemson, SC (Total = 565)



- Fatal (K)
- Serious Injury (A)
- Minor Injury (B)
- Possible Injury (C)



WHO IS MOST AT RISK?

Not everyone faces the same level of risk on Clemson's streets.

Crash data shows that certain groups are far more likely to experience the most serious outcomes when crashes occur. This section focuses on **who is most affected**, helping explain why the **Safety Action Plan** prioritizes specific users and conditions.



VULNERABLE ROAD USERS (VRUS)

People walking, bicycling, and riding motorcycles are often referred to as **vulnerable road users** because they lack the physical protection of a vehicle. Unlike drivers and passengers, they are exposed to direct impact in a crash, which greatly increases the likelihood of serious or life-altering injury. In Clemson, vulnerable road users are involved in a relatively small number of crashes, but those crashes are far more likely to result in severe outcomes.

Between 2019 to 2023, Clemson recorded **565 crashes that resulted in an injury or death**. During this period:

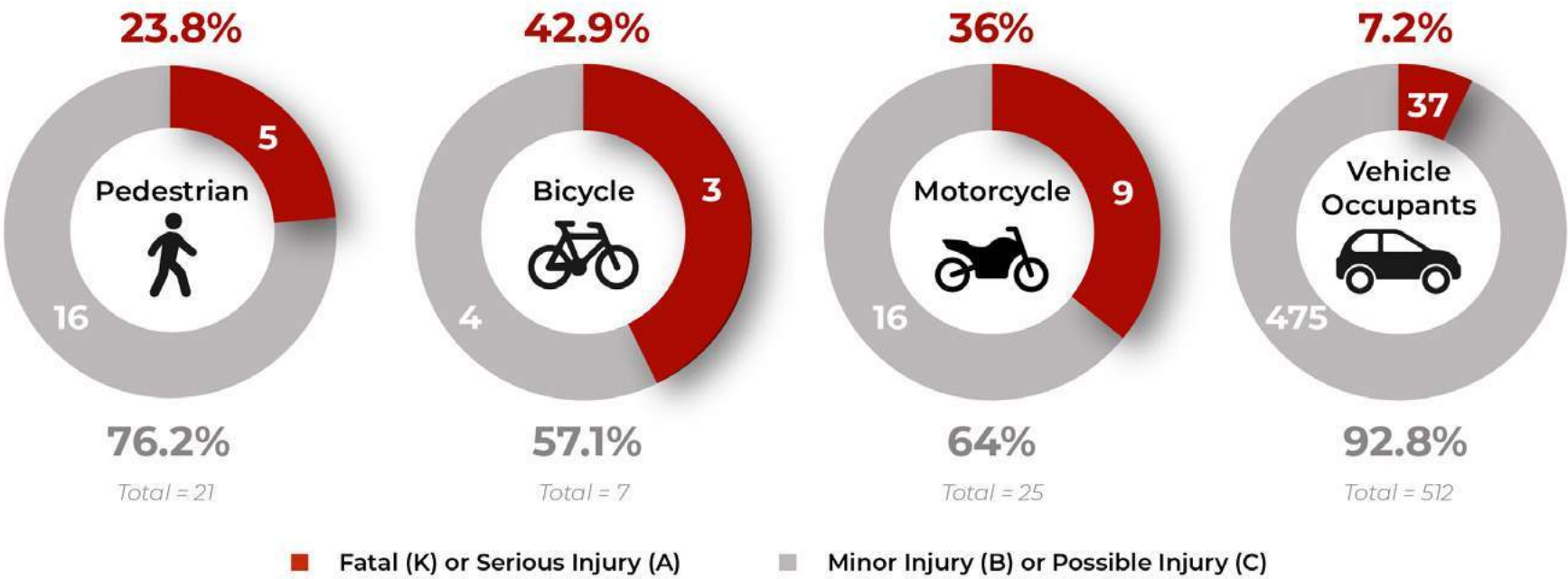
- **Pedestrians** were involved in **21 injury or fatal crashes**, and **5 of those resulted in a death or serious injury**.
- **Bicyclists** were involved in **7 injury or fatal crashes**, and **3 resulted in a death or serious injury**.
- **Motorcyclists** were involved in **25 injury or fatal crashes**, and **9 resulted in a death or serious injury**.
- **Vehicle occupants** were involved in **512 injury or fatal crashes**, and **37 resulted in a death or serious injury**.

Although crashes involving pedestrians, bicyclists, and motorcyclists occur less frequently, they are **much more likely to result in the most severe harm**.

This reflects a simple reality: when a crash involves someone outside a vehicle, even a single mistake or moment of inattention can have devastating consequences.

In other words, **crashes involving people outside a vehicle are much more dangerous**, even though they happen less often.

FIGURE 2.E: Share of Fatal and Serious Injury Crashes by Travel Mode (2019-2023)
in Clemson, SC (Total = 565)



“Pedestrians and bicyclists are especially vulnerable because they are the most exposed to injury and death in the case of a crash and present the least risk to other road users.”

Source: USDOT



AGE-BASED VULNERABILITY

Clemson's data reveals another critical layer of risk: **age amplifies vulnerability**. In Clemson, **college-age travelers (ages 19-25)** experience a disproportionate share of fatal and serious injuries, while **older adults (ages 65 and older)** are slightly more likely to suffer severe outcomes when crashes occur.

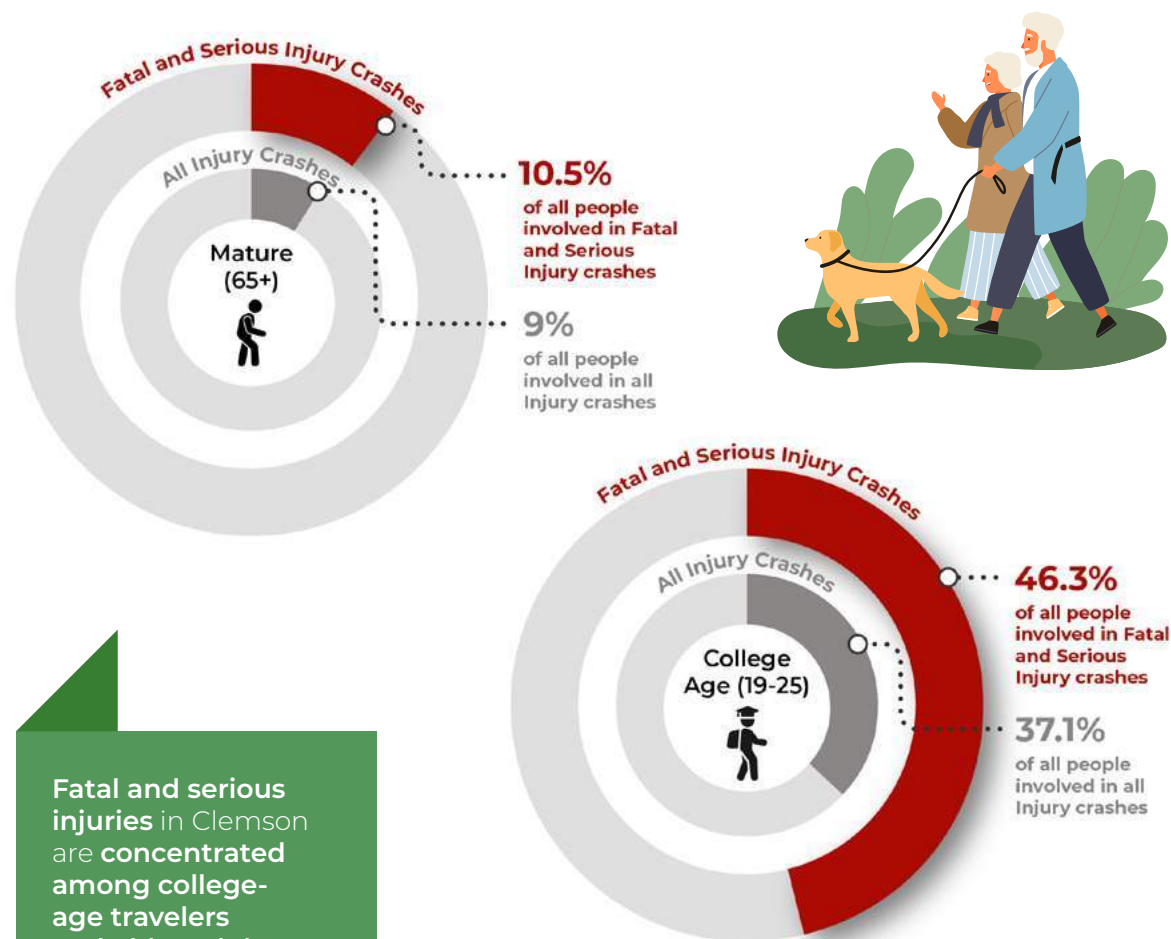
From 2019 to 2023:

- **College-age individuals (19-25)** accounted for about **37% of all people involved in injury or fatal crashes**, but nearly **46% of deaths and serious injuries**.
- **Older adults (65+)** accounted for about **9% of all people involved**, yet made up **just over 10% of deaths and serious injuries**.

Driver-age data shows a similar pattern. **College-age drivers appear more frequently in fatal and serious injury crashes than would be expected based on their overall involvement**, while older drivers, though involved in fewer crashes overall, remain vulnerable to severe injury, particularly in fast-moving or complex roadway environments.

FIGURE 2.F: Share of Fatal and Serious Injury Crashes by Age Group (2019-2023)

in Clemson, SC



Fatal and serious injuries in Clemson are **concentrated among college-age travelers and older adults**, reflecting **higher exposure** during peak activity periods and **increased vulnerability** to injury when crashes occur.

Note: These proportions reflect involvement in reported crashes and fatal or serious injury outcomes during the study period. The values are not normalized by population, travel exposure, or vehicle miles traveled (VMT). The purpose of this comparison is to identify groups disproportionately represented in severe crashes, consistent with the Safe System emphasis on preventing fatal and serious injuries.

WHEN CRASHES OCCUR

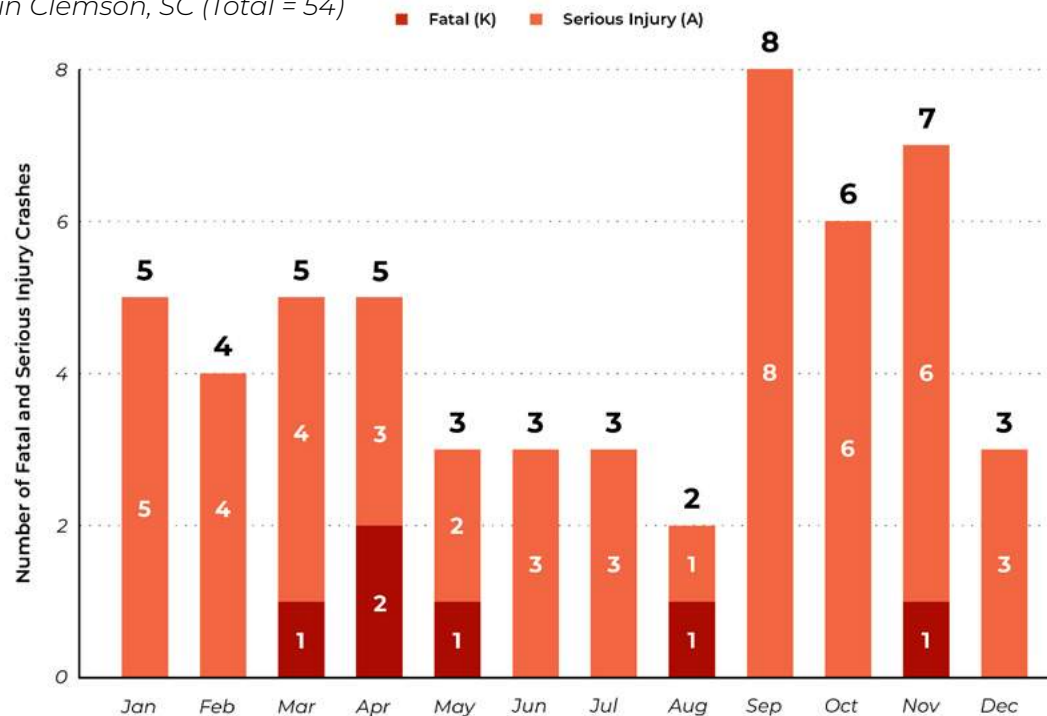
Crashes are not evenly distributed across the calendar or the clock.

Instead, both crash frequency and severity increase during specific **months, days of the week, and times of day**. Recognizing these patterns is critical, because safety strategies that align with *when* risk is highest can prevent the most severe outcomes.



FIGURE 2.G: Fatal and Serious Injury Crashes by Month (2019-2023)

in Clemson, SC (Total = 54)



SEASONAL PATTERNS

Fatal and serious injury crashes in Clemson show clear seasonal variation. The highest concentration of these severe crashes occurs during the **fall semester**, particularly in **September, October, and November**, which together represent the peak period for fatal and serious injuries.

A secondary increase in severe crashes is also observed during **spring months, including March and April**. In contrast, **summer months (June and July)** and **December** consistently experience fewer fatal and serious injury crashes. This seasonal pattern reflects Clemson's identity as a college town. Periods when campus activity is highest correspond with increased exposure across all travel modes, while lower-activity months see fewer severe outcomes.

Fatal and serious injury crashes in Clemson **peak during the fall semester**, making this the most critical time of year to focus safety efforts.

DAY OF WEEK

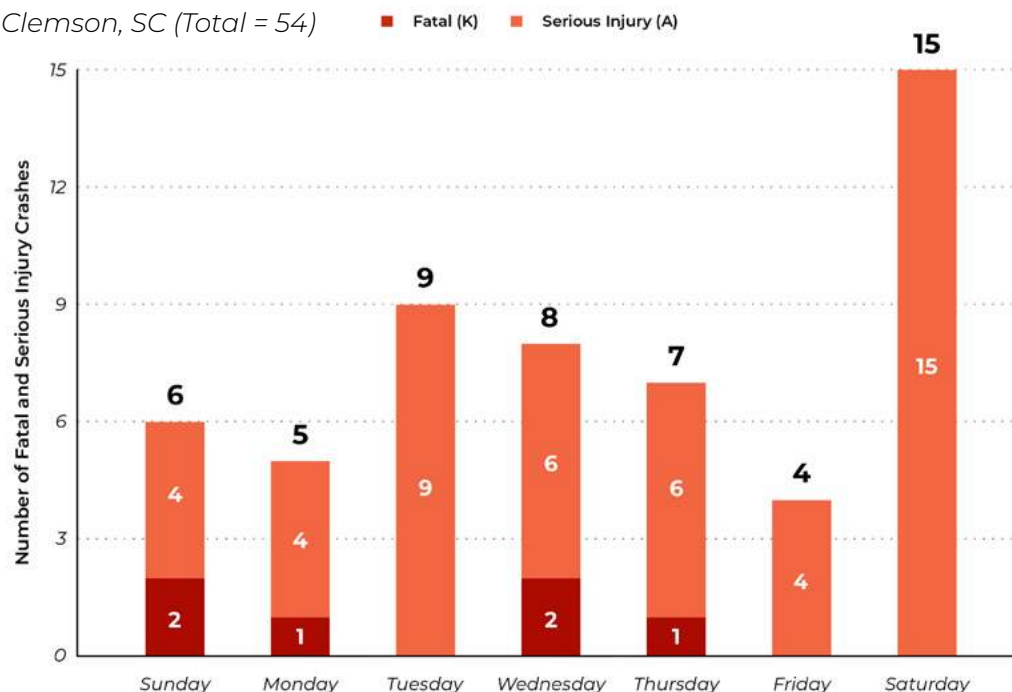
Crash risk in Clemson varies across the week in ways that reflect changes in travel behavior, activity levels, and exposure—particularly in a college-town context. While **fatal and serious injury crashes occur on every day of the week**, their **severity and affected users shift as the week progresses**.

Across all modes, **Saturday stands out as the highest-risk day for fatal and serious injury crashes**, driven largely by a spike in serious (incapacitating) injuries. Midweek days, especially **Tuesday through Thursday**, also show elevated severe crash counts, while **Sunday and Friday generally experience fewer fatal and serious injuries**. This pattern indicates that risk builds through the week rather than remaining evenly distributed.

Risk shifts by mode across the week: **Vehicle occupants face their greatest risk toward the end of the week**, while **people walking and biking are most vulnerable during routine weekday travel**.

FIGURE 2.H: Fatal and Serious Injury Crashes by Day of Week (2019-2023)

in Clemson, SC (Total = 54)



While this overall pattern is clear, **day-of-week risk looks different depending on who is traveling:**

- **Vehicle crashes:** Severe vehicle crashes are most concentrated on **Saturdays**, which record the highest number of serious injuries. This aligns with increased discretionary travel and changing travel behavior later in the week, making Saturdays a critical focus for strategies that reduce crash severity.
- **Pedestrian crashes:** Fatal and serious pedestrian crashes occur primarily on **weekdays**, with higher counts on **Tuesday and Thursday**. These crashes reflect everyday campus and community travel, reinforcing that pedestrian risk in Clemson is a daily condition rather than a weekend-specific issue.
- **Bicycle crashes:** Severe bicycle crashes are relatively infrequent but **cluster midweek**, particularly on **Tuesdays**, consistent with weekday commuting and campus travel patterns. Weekends show very few serious bicycle injuries.

TIME OF DAY

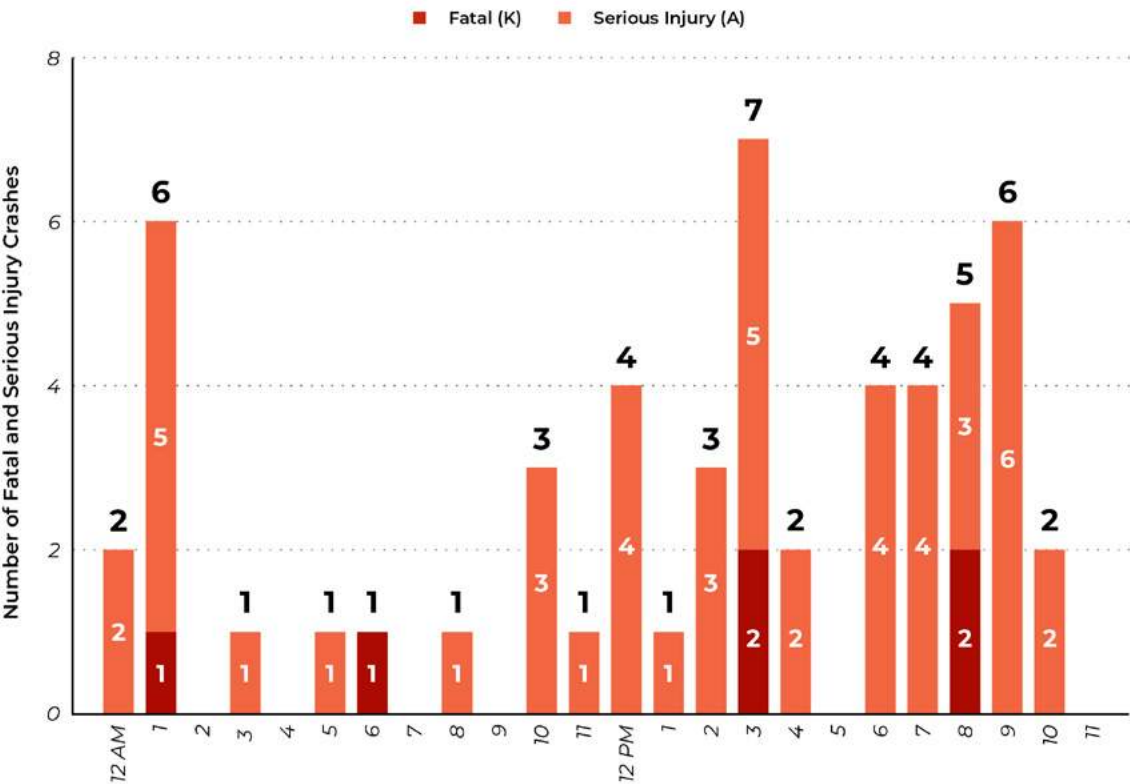
Crashes in Clemson follow two distinct daily patterns shaped by traffic volume and activity levels. The first occurs during the daytime and early evening, when the City experiences its highest concentration of injury crashes. Between **midday and early evening (approximately 12:00 PM – 6:00 PM)**, Clemson records **more than half of all injury crashes** during the five-year analysis period. This time window reflects peak campus activity, commuting, and routine travel, and it also accounts for a substantial share of serious injury crashes.

A second pattern emerges **during late evening and early morning hours**, when overall crash volumes are lower but **fatal and serious injury crashes continue to occur consistently**. Across the 24-hour period, severe crashes are not confined to peak traffic hours; they appear during overnight and early-morning intervals as well, including periods shortly after midnight and in the early evening. This indicates that while fewer vehicles may be on the road at night, crashes that do occur during these hours can still result in severe outcomes.

Serious crashes in Clemson happen most often during busy daytime and early evening hours, but crashes that occur late at night are more likely to result in life-threatening injuries.

FIGURE 2.I: Fatal and Serious Injury Crashes by Day of Week (2019-2023)

in Clemson, SC (Total = 54)



WHERE ARE CRASHES OCCURRING?

Crashes in Clemson are not evenly distributed across the street network.

Instead, fatal and injury crashes consistently **cluster along a limited number of corridors** where **higher vehicle speeds, daily campus activity, and frequent turning and crossing movements overlap**. These patterns appear repeatedly across crash maps, regardless of mode or age group, indicating that severe crashes are concentrated in predictable locations rather than occurring at random.

HIGH-CRASH CORRIDORS AND INTERSECTIONS

Citywide crash mapping shows that injury crashes are concentrated along Clemson's major arterial corridors, particularly those that function as both regional traffic routes and everyday community streets.

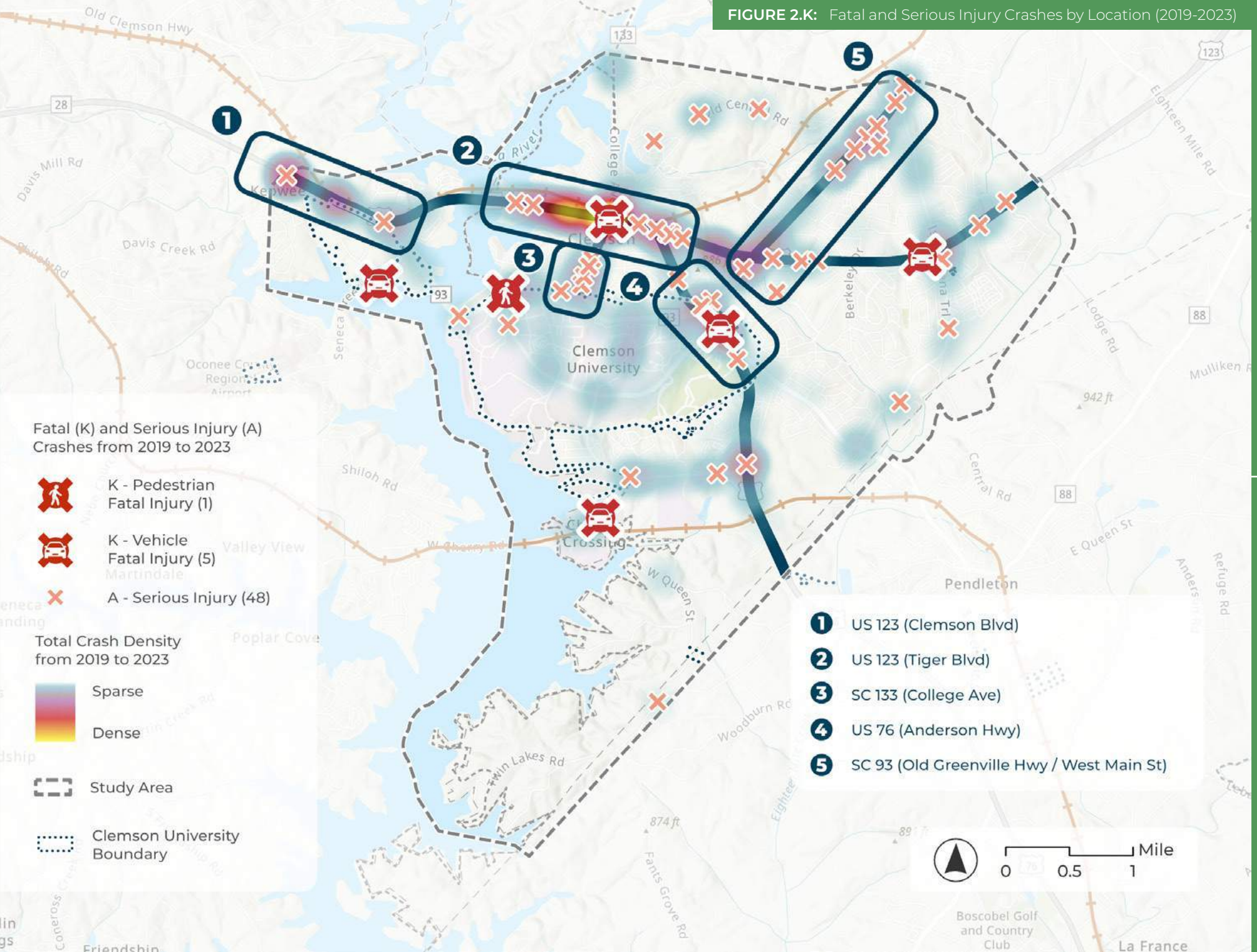
The most prominent crash corridors include:

- **US 123** (Clemson Boulevard)
- **US 123** (Tiger Boulevard)
- **SC 133** (College Avenue)
- **US 76** (Anderson Highway)
- **SC 93** (Old Greenville Highway/ West Main Street)

These corridors carry high traffic volumes at higher operating speeds while also serving as primary access routes to campus, downtown, retail centers, and nearby neighborhoods. Their repeated appearance across crash maps confirms that a relatively small share of the roadway network accounts for a disproportionate share of crash-related injuries.



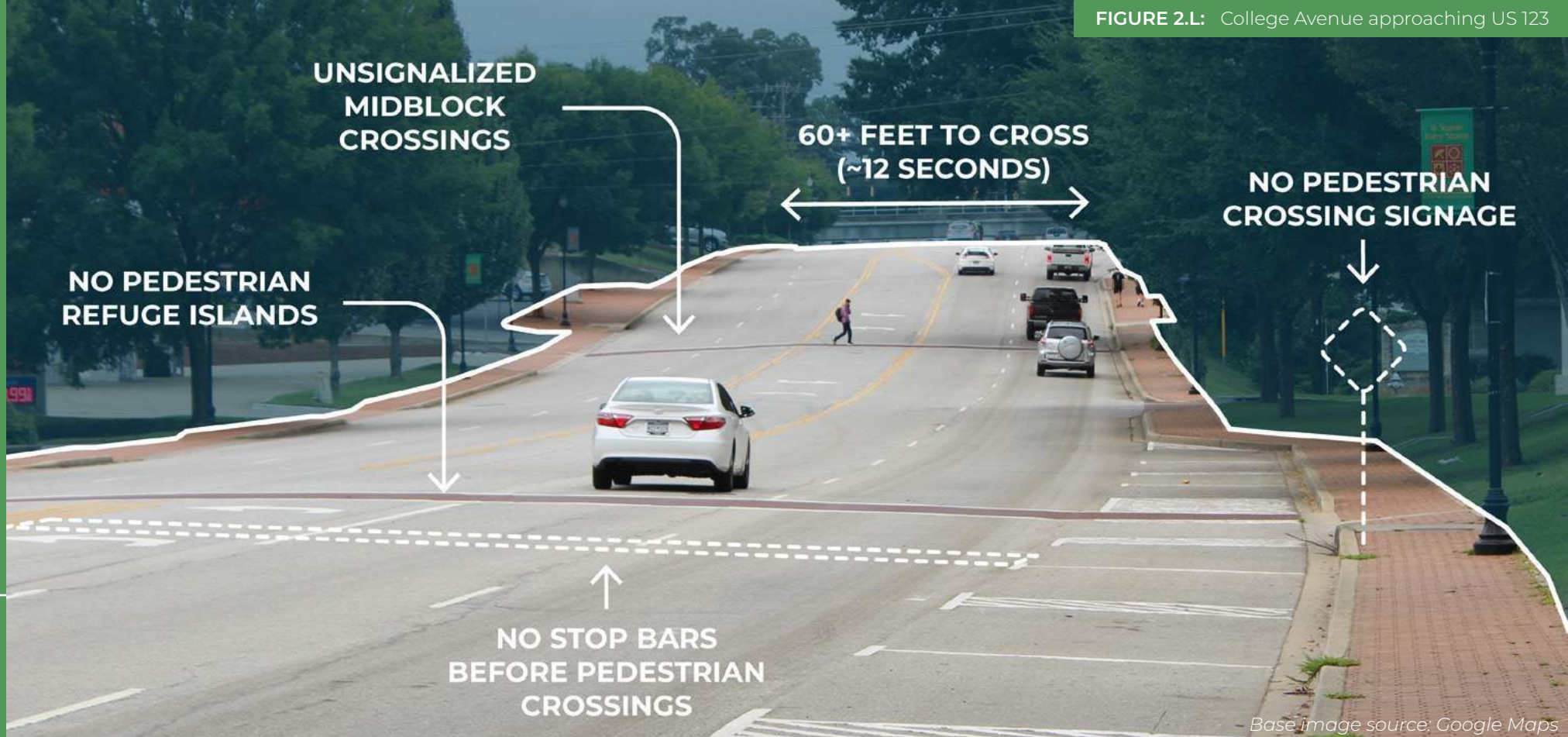
FIGURE 2.K: Fatal and Serious Injury Crashes by Location (2019-2023)



WHERE ARE CRASHES OCCURRING?

CHAPTER 2: CRASH ANALYSIS & SAFETY ASSESSMENT

FIGURE 2.L: College Avenue approaching US 123



PEDESTRIAN AND BICYCLE CRASH HOTSPOTS

When focusing specifically on people walking and bicycling, crash locations become even more concentrated. Pedestrian and bicycle crashes cluster along campus-edge arterials where high foot and bike activity intersects with fast-moving traffic.

The most consistent hotspot corridors include:

- **SC 93** (Old Greenville Highway/ West Main Street)
- **SC 133** (College Avenue)
- **US 123** (Tiger Boulevard)

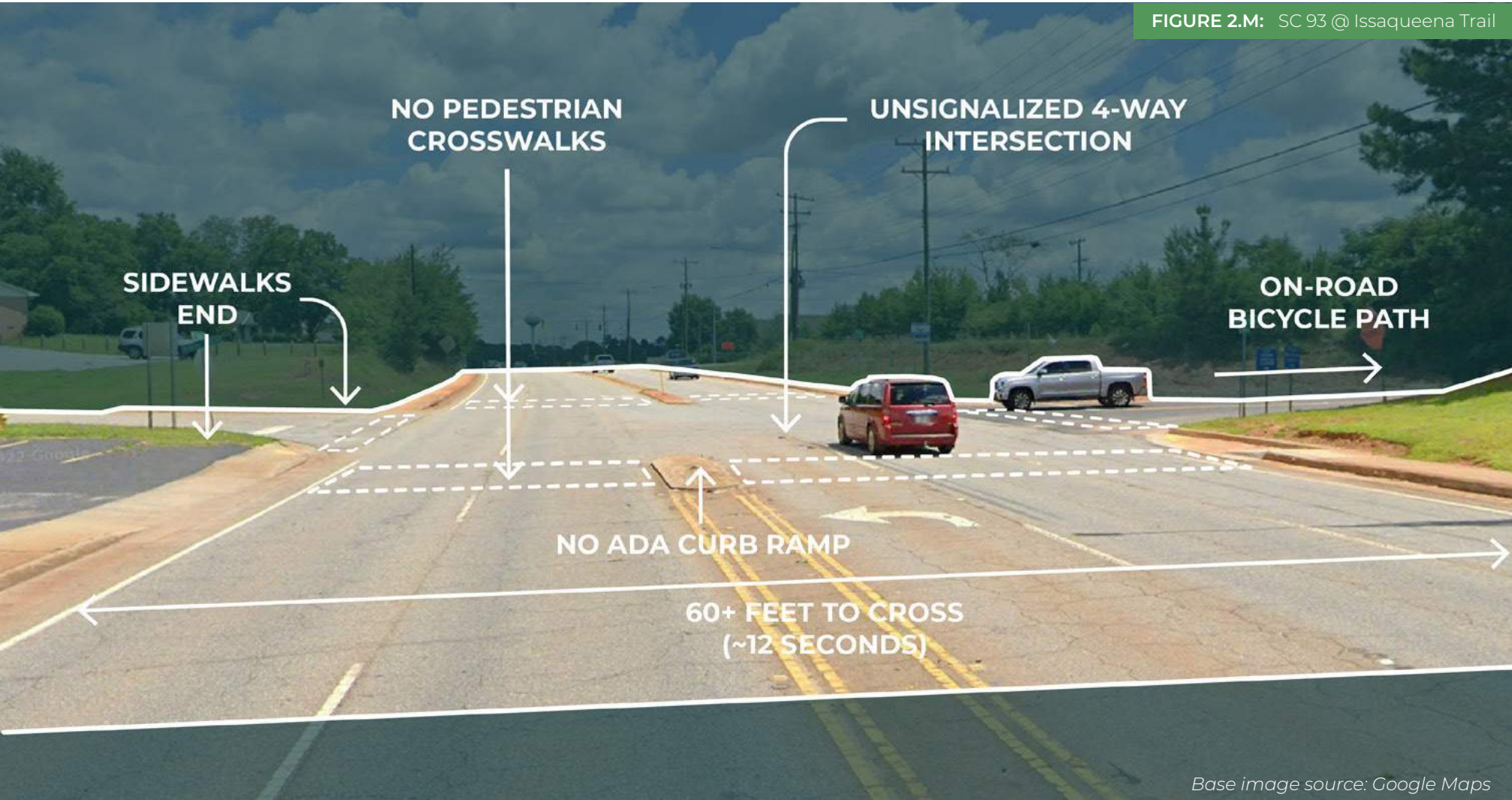
Pedestrian crashes occur both at intersections and midblock locations, indicating challenges related to crossing distance, driver yielding, and access to controlled crossings. Although bicycle crashes are relatively rare, all serious bicycle injury crashes occurred on arterial roadways, not on local neighborhood streets.

CRASH LOCATIONS BY AGE GROUP

Mapping crashes by age group adds another layer to the location story. Crashes involving **college-aged individuals (19-25)** cluster heavily along campus-edge arterials such as US 123 and SC 93, reflecting the overlap between student

travel patterns and high-speed roadways. Crashes involving **older adults (65+)** also appear more frequently **at complex arterial intersections**, where **higher speeds and turning movements increase the likelihood of severe outcomes**.

Across all age groups, the same corridors emerge repeatedly, reinforcing that crash risk in Clemson is strongly influenced by roadway context and location rather than by isolated behaviors.



Base image source: Google Maps

CONNECTING CRASH DATA TO SAFETY

The patterns in Clemson's crash data point to a clear underlying "why?".

Severe crashes concentrate on a small set of high-speed arterial corridors that carry the most traffic and the most complex movements. In these environments, everyday human mistakes like speeding, drifting out of a lane, or misjudging a left turn are more likely to result in a fatal or serious injury.



High-Speed Arterials Are Where the Most Severe Crashes Happen

Nearly **3 out of every 4 crashes that kill or seriously injure someone happen on arterial roads** (approximately 76% of fatal and serious injury crashes), even though these roads make up **less than one-fifth of Clemson's street network** (about 18% of total roadway mileage). **All recent fatal crashes occurred on arterials.**

Arterials like **US 123, SC 93, and US 76** carry fast-moving traffic through areas with heavy pedestrian, bicycle, and turning activity. When crashes happen on these roads, higher speeds make severe injuries much more likely.



Speed Is the Most Common Factor in Serious Crashes

Speed is involved in **about two-thirds of all injury crashes** (217 of 565 crashes; or 66.7%) and **more than half of fatal and serious crashes** (32 of 54 crashes; or 59.3%).

Even small increases in speed sharply raise the chance that a crash becomes life-changing. On Clemson's major roads, speed turns routine mistakes into severe injuries or deaths.



Failure to Yield and Turning Conflicts Drive Severe Injuries

Failure to yield is a factor in **about one in four injury crashes** (141 of 565 crashes; or 25%) and appears repeatedly **in fatal crashes involving left turns, motorcycles, and pedestrians.**

High-speed intersections and driveways create dangerous turning conflicts. When a driver misjudges a gap on a fast road, people walking, biking, or riding motorcycles are especially vulnerable.



Lane Departures Lead to the Most Severe Outcomes

Nearly **half of fatal and serious injury crashes involve a vehicle leaving its lane or the roadway** (25 of 54 crashes; or 46.3%).

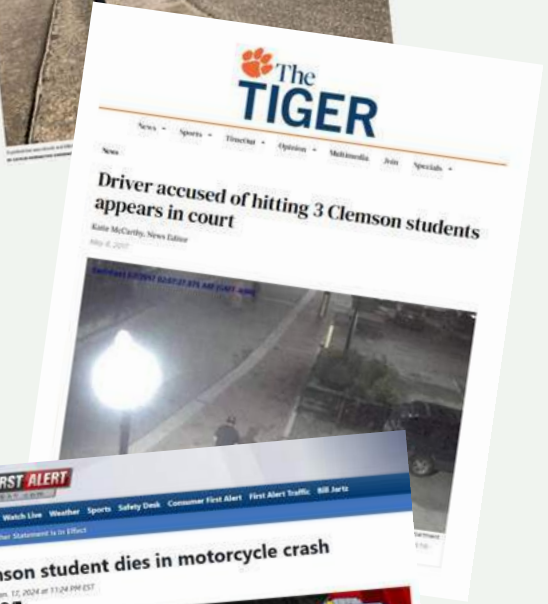
Lane departure at higher speeds often result in rollovers or collisions with fixed objects. These crashes are especially deadly on roads with curves, narrow shoulders, or limited recovery space.



Nighttime Conditions Make Crashes More Dangerous

Most recent **fatal crashes occurred after dark** (4 of 6 total crashes from 2019-2023), even though nighttime travel represents a smaller share of total trips.

Lower visibility, higher speeds, and fatigue increase the severity of crashes at night—particularly on arterials and near campus-edge corridors where people are still walking and biking.



Click on the thumbnails for additional information.

3. HIGH INJURY NETWORK & RISK FACTORS

Some roads in Clemson pose a much higher risk of fatal and serious injury than others. These are not random locations. They are typically high-speed corridors, complex intersections, or campus-edge streets where traffic volumes, turning movements, and pedestrian activity converge. Together, these locations form Clemson's High Injury Network (HIN)—the small portion of the roadway system where targeted safety improvements can prevent the greatest harm.

Building on the crash trends explored in Chapter 2, this chapter identifies where fatal and serious injury crashes are most concentrated and why those patterns exist. Rather than treating all streets equally, the High Injury Network provides a focused, data-driven framework for prioritizing safety investments where they will have the greatest impact.

This Chapter covers:



Identifying Clemson's High Injury Network



Key Risk Factors Contributing to Crashes



Using Data to **Prioritize** Safety Investments

Not all roads are equally dangerous – some are much deadlier than others.

A small number of streets account for most serious crashes.





High Injury Network = streets with the highest risk of death or serious injury.

People walking and biking are most at risk on the High Injury Network.

Targeting high-injury streets helps cities focus safety efforts where it matters most.

IDENTIFYING CLEMSON'S HIGH INJURY NETWORK



Want to understand how cities are saving lives by focusing on their most dangerous streets? Learn more at: <https://visionzeronetwork.org/hin-for-the-win/>

The *High Injury Network (HIN)* is a data-driven tool used in transportation safety planning to identify the road segments responsible for a disproportionate share of fatal and serious injury crashes. It allows communities to focus resources on locations where improvements can save the most lives.

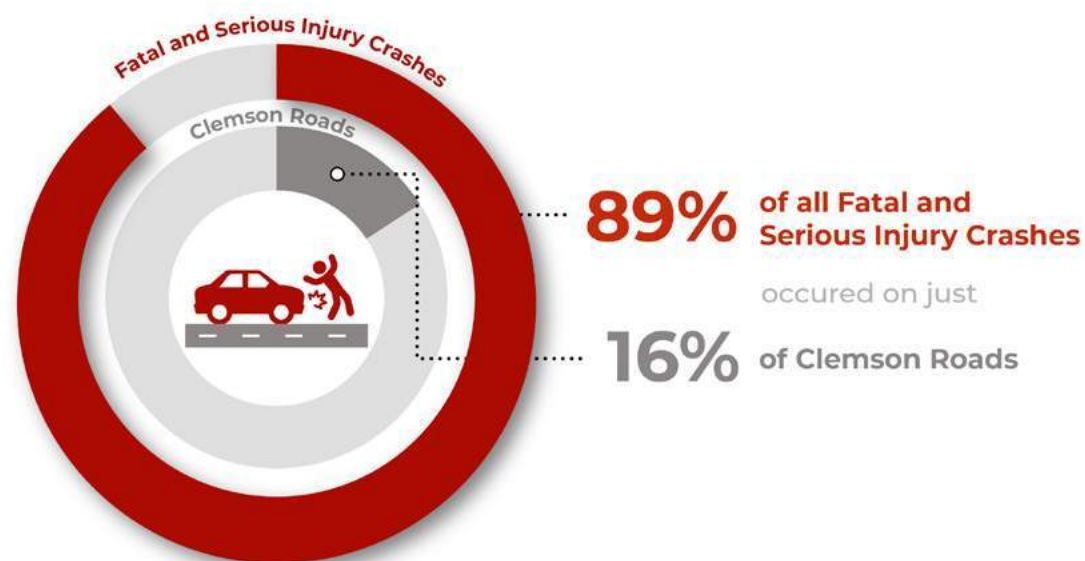
WHAT IS A HIGH INJURY NETWORK?

A High Injury Network represents **the smallest portion of the roadway system where the most severe crashes occur**. In Clemson, as in many communities, a relatively small share of streets accounts for the majority of fatal and serious injuries.

Unlike general crash maps that display every reported incident, the HIN prioritizes **crash severity**, emphasizing locations where people are most likely to be killed or seriously injured. This focus is especially important for SS4A planning, which centers on eliminating deaths and serious injuries rather than reducing minor collisions alone.

In Clemson, the concentration of severe crashes is striking: **nearly 90% of fatal and serious injury crashes occur on just over 16% of the study area's roadways**. This pattern confirms that severe crashes are not evenly distributed across the network—they are concentrated on a limited number of corridors where risk is consistently higher.

FIGURE 3.A: Fatal (K) and Serious Injury (A) Crashes on Clemson Roadways

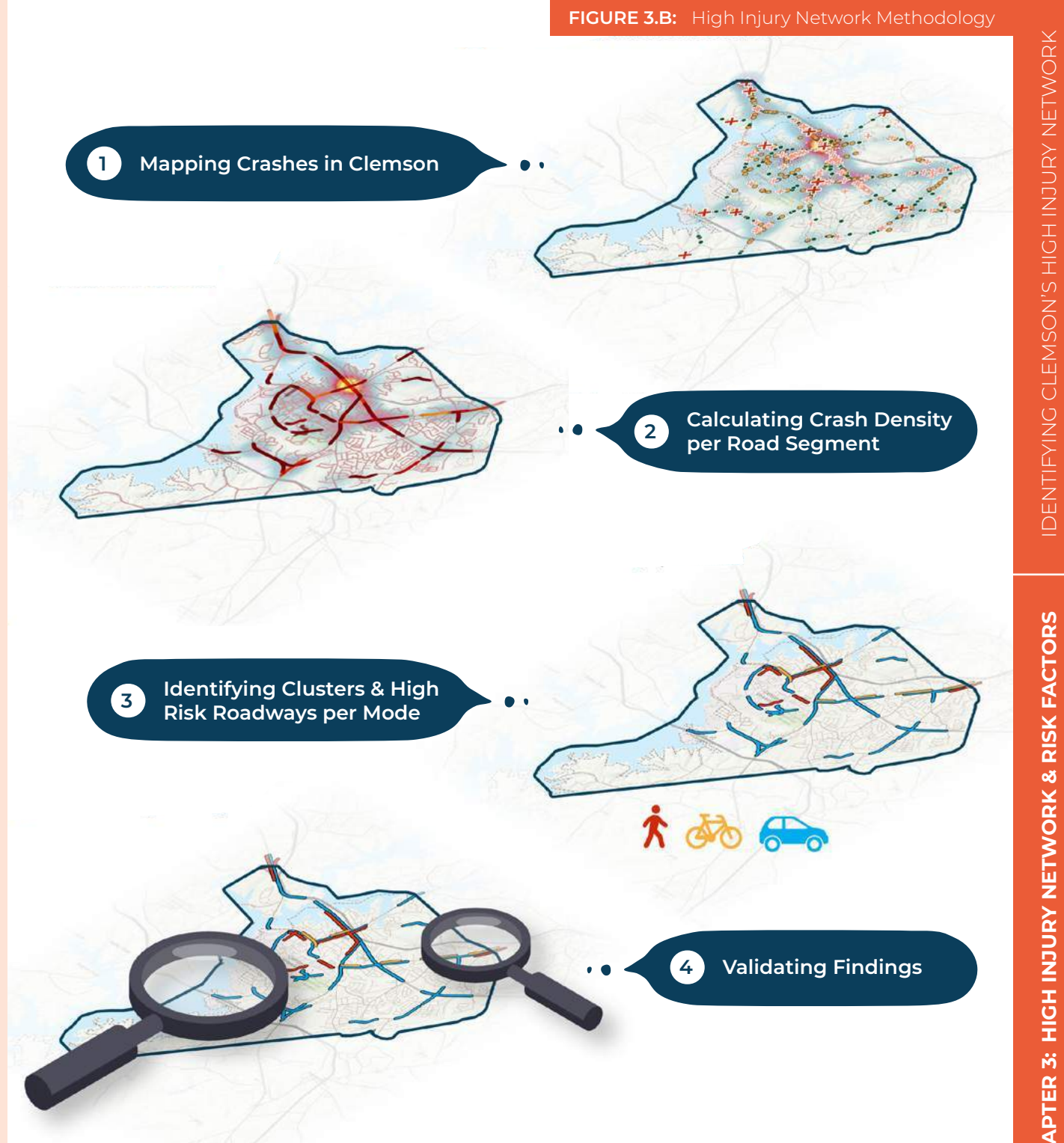


HOW WAS CLEMSON'S HIGH INJURY NETWORK CREATED?

To build Clemson's HIN, we analyzed five years of crash data from 2019 to 2023, focusing only on crashes that resulted in fatalities or serious injuries. The process involved several steps:

- 1 **Mapping each severe crash** across the City's street network
- 2 **Calculating crash density** using standardized roadway segment lengths
- 3 **Identifying clusters** of severe crashes along corridors and at intersections
- 4 **Validating findings** through a review of context (roadway type, speed limits, land use)

This multi-step analysis filtered out lower-severity crashes to focus solely on the areas where serious harm is occurring most frequently. For Clemson, three types of HIN were developed: a Bicycle HIN, a Pedestrian HIN, and a Vehicle HIN. These final High Injury Networks, shown on **Figure 3.E**, reflect both the location and intensity of risk by mode, not just where crashes happen, but where they have the greatest consequences.



WHAT THE HIGH INJURY NETWORK REVEALS

Clemson's High Injury Network shows that fatal and serious injury crashes are not spread evenly across the City. Instead, they are concentrated on a small number of roadway segments where speed, volume, and exposure converge. Across all modes, **nearly 90 percent of fatal and serious injury crashes occur on just over 16 percent of the roadway network**, making these corridors the most effective focus for targeted safety investment.

The HIN analysis also shows that risk patterns differ by mode. While vehicle crashes dominate overall totals, pedestrian and bicycle crashes are even more tightly clustered, revealing a small number of corridors where people walking and biking face disproportionately high risk. Many of these corridors overlap, meaning that **improvements on the same streets can simultaneously reduce risk for drivers, pedestrians and bicyclists.**

FIGURE 3.C: Intersection of US 123 (Tiger Blvd) and SC 133 (College Ave) is a high-speed, high-conflict intersection due to its combination of fast-moving traffic with frequent turning movements, wide crossing distances, and limited pedestrian protections



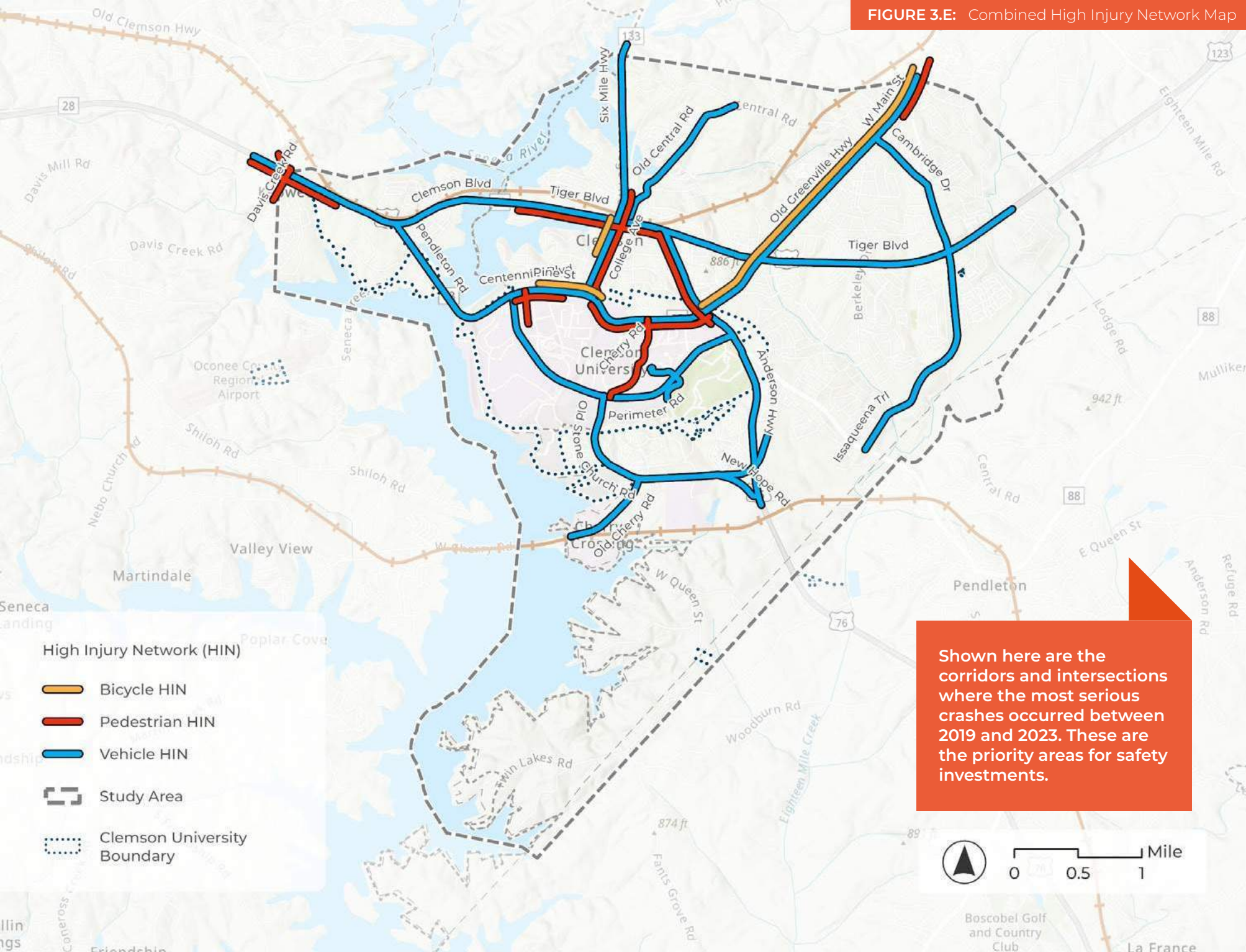
FIGURE 3.D: At SC 93 (Old Greenville Hwy) and Centennial Blvd, drivers turning right use this slip lane with only a yield sign to guide their speed and behavior. Tire marks suggest frequent fast turns through a pedestrian crosswalk, just steps away from student housing and university campus.

Clemson's Top High-Injury Corridors across all modes include:

- 1 **SC-93 (W Main Street; Old Greenville Highway)**
– Pedestrian, Bicyclist, Vehicle HIN
- 2 **US-123 (Tiger Boulevard; Clemson Boulevard)**
– Pedestrian, Vehicle HIN
- 3 **SC-133 (College Avenue)**
– Pedestrian, Bicyclist, Vehicle HIN
- 4 **SC-93 (Old Greenville Highway)**
– Bicyclist, Pedestrian HIN
- 5 **L-1460 (Centennial Boulevard)**
– Pedestrian HIN
- 6 **L-24 (Cherry Road)**
– Pedestrian HIN
- 7 **SR-37-439 (Davis Creek Road)**
– Pedestrian HIN
- 8 **US-76 (Anderson Highway)**
– Vehicle HIN
- 9 **Old Central Boulevard**
– Vehicle HIN
- 10 **Perimeter Road***
– Vehicle HIN

*Perimeter Road recently had a safety project completed (2025)

FIGURE 3.E: Combined High Injury Network Map



VEHICLE HIGH INJURY NETWORK

Severe vehicle crashes in Clemson are highly concentrated on a limited set of arterial corridors. **Almost 9 out of 10 fatal and serious injury vehicle crashes occurred on HIN segments**, even though those segments represent a small share of total roadway mileage.

The highest-risk vehicle corridors include:

- **US 123** (Tiger Boulevard/Clemson Boulevard)
- **SC 93** (West Main Street/Old Greenville Highway)
- **SC 133** (College Avenue)
- **US 76** (Anderson Highway)
- **Cherry Road** and **Centennial Boulevard**

These corridors account for 4 out of 5 fatal crashes and more than 80% of serious injury crashes over the five-year study period (2019-2023). They are characterized by higher operating speeds, frequent access points, and complex turning movements—conditions that increase the likelihood that a crash will result in severe injury or death.

PEDESTRIAN HIGH INJURY NETWORK

Pedestrian crashes resulting in fatal or serious injury are even more concentrated than vehicle crashes. Over the ten-year analysis period (2014-2023), **100% of fatal and serious pedestrian crashes occurred on just 5.7% of the roadway network.**

Pedestrian high-injury segments are primarily located along campus-edge arterials and downtown corridors including:

- **US 123** (Tiger Boulevard)
- **SC 93** (West Main Street/Old Greenville Highway)
- **SC 133** (College Avenue)
- **Cherry Road** and **Centennial Boulevard**

These locations combine higher vehicle speeds with frequent pedestrian crossings tied to campus life, housing, retail, and transit access. While pedestrian crashes are less frequent overall, the severity of outcomes at these locations highlights the urgent need for safer crossings, speed management, and improved nighttime visibility.

BICYCLE HIGH INJURY NETWORK

Bicycle crashes are less common than pedestrian or vehicle crashes, but their severity is highly concentrated. Similar to pedestrians, **all fatal and serious injury bicycle crashes occurred on a very small portion of the roadway network**, overlapping closely with the pedestrian HIN.

Key bicycle high-injury corridors include:

- **US 123** (Tiger Boulevard)
- **SC 93** (West Main Street/Old Greenville Highway)
- **SC 133** (College Avenue)

These corridors serve as primary bicycle routes for commuting and campus travel, yet often lack dedicated bicycle facilities or safe separation from higher-speed traffic. The concentration of severe bicycle crashes on these segments indicates that when crashes do occur, they are more likely to result in serious injury due to speed and roadway design.



KEY RISK FACTORS CONTRIBUTING TO CRASHES

Crash data shows that fatal and serious injury crashes in Clemson are not random events. They occur under a consistent set of roadway, behavioral, and environmental conditions that increase the likelihood of severe outcomes when crashes happen. These conditions—referred to as *risk factors*—help explain why certain locations and situations repeatedly produce the most serious harm.

Unlike a single “probable cause,” many severe crashes involve multiple overlapping risk factors. Understanding these patterns allows the City to move beyond individual fault and focus on systemic changes that reduce the chance that everyday mistakes result in life-changing injuries or fatalities.





This midblock crossing on College Avenue has paint, signage, and lighting - but its wide, fast-moving design puts pedestrians at serious risk. A pedestrian was seriously injured here at night while crossing five lanes of traffic with no refuge. Speeding was listed as a contributing factor. Even small increases in speed can mean the difference between a close call and a life-changing injury.

1 UNSAFE SPEED DRIVES THE MAJORITY OF SEVERE CRASHES

Unsafe speed is the most pervasive risk factor in Clemson's crash history. Nearly **2 out of every 3 injury crashes** involved speeding or driving too fast for conditions (217 of 565 crashes), and **almost 60% of fatal and serious injury crashes** included speed as a contributing factor (32 of 54 crashes).

Unsafe speed increases both the likelihood of a crash and the severity of its outcome. Higher speeds reduce reaction time, lengthen stopping distances, and dramatically increase the force involved in a collision. In Clemson, speeding is most prevalent on **principal and minor arterials**, particularly campus-edge corridors such as **US-123, SC-93, and SC-133**—roads that carry high volumes of both vehicle traffic and pedestrian activity.

Speed doesn't cause crashes, but it turns ordinary mistakes into fatal outcomes.



FIGURE 3.G: Issaqueena Trail near Lake Circle

On roads like Issaqueena Trail, a single mistake can mean disaster, especially for young drivers. A serious injury crash occurred here when a speeding driver ran off the road on a curve. With no shoulder, guardrail, or buffer, there's nothing to stop a car from leaving the road or protect a person biking nearby.



2 LANE DEPARTURE IS OVERREPRESENTED IN FATAL AND SERIOUS INJURY CRASHES

Lane departure is one of the most overrepresented risk factors in fatal and serious injury crashes. While lane departures account for about **1 in 5 injury crashes overall**, they are involved in **nearly half of all fatal and serious injury crashes** (25 of 54).

These crashes often occur on higher-speed segments, curves, or roadways with limited shoulders, fixed objects close to the roadway, or inadequate nighttime visibility. When vehicles leave their lane at speed, the combination of roadway geometry and roadside conditions significantly increases the likelihood of fatal outcomes. This pattern is especially evident on arterial corridors such as **US-123**, **US-76**, and **SC-93**.

Lane departure becomes deadly when high speeds and unforgiving roadside conditions leave no room for recovery.





Left turns at intersections like SC 93 and US 76 are among the most dangerous maneuvers in Clemson. Despite the wide layout and dedicated turn lanes, this intersection has no protected signal for left turns; and a driver was killed here while turning across multiple lanes. The complex geometry, high speeds, and lack of turn phasing create serious risk for everyone on the road.

3 FAILURE TO YIELD DRIVES SEVERE CRASHES AT INTERSECTIONS

Failure to yield right-of-way is another major contributor to severe crashes, present in **about one quarter of all injury crashes** and **one quarter of fatal and serious injury crashes**. These crashes most often occur at intersections where turning movements, through traffic, and vulnerable road users interact.

Although failure-to-yield crashes are not disproportionately more severe than other crash types overall, they pose a heightened risk for **pedestrians, bicyclists, and motorcyclists**, particularly at high-speed intersections and left-turn conflict points along campus-edge arterials and downtown corridors.

Crashes increase when intersections rely on driver judgment instead of clear, protected movements.



FIGURE 3.1: SC 93 at Sloan Tennis Center



Crashes at night are far more likely to result in death or serious injury, especially when there's no sidewalk or bike lane, people have no choice but to share space with fast-moving traffic. On roads like SC 93, serious crashes involving pedestrians and cyclists often happen where no safe alternative exists.

4 LIMITED NIGHTTIME VISIBILITY INCREASES CRASH SEVERITY

Crashes occurring during dark conditions represent a smaller share of total crashes but a much larger share of severe outcomes. About **one third of all injury crashes** occurred at night, yet **more than half of fatal and serious injury crashes** took place under dark conditions.

Reduced visibility, glare, fatigue, and higher operating speeds at night combine to increase crash severity—especially for pedestrians and bicyclists crossing wide arterials or traveling along corridors with limited lighting and long crossing distances.

Darkness doesn't cause crashes, but poor visibility at night makes mistakes far more likely to result in serious injury or death.





Complex multilane intersections like the one shown here, require drivers to make multiple judgement-based decisions about turning movements, lane positioning, and yielding. At night, reduced visibility and impaired driving significantly increase the risk of errors in these environments, where high speeds and complex movements already elevate crash severity.

5 IMPAIRMENT, WHILE LESS FREQUENT, IS DISPROPORTIONATELY DEADLY

Alcohol and drug involvement appears in a relatively small percentage of crashes overall, but when present, the consequences are often severe. Impairment was identified in about **2% of all injury crashes (11 of 565)**, yet it appears in nearly **1 in 6 fatal crashes (1 of 6)** and is present in some of the most catastrophic events, including multi-fatal lane-departure crashes.

Impairment most often overlaps with other high-risk conditions already identified in this analysis: **nighttime travel, higher speeds, and high-speed arterial corridors**. On these roads, reduced reaction time and impaired judgment dramatically increase the likelihood that a mistake becomes fatal. While impairment is not widespread across the system, its presence sharply increases crash severity, particularly late at night.

Impairment doesn't cause most crashes, but when it is present, the risk of death rises sharply.



USING CRASH DATA TO PRIORITIZE SAFETY INVESTMENTS

Crash data does more than describe what has happened in the past.

When analyzed carefully, it helps identify which **risk factors are most strongly associated with fatal and serious injuries**, and where targeted interventions can deliver the greatest safety benefits. To support data-driven decision-making under the Safe Streets for All (SS4A) program, Clemson translated its crash analysis into a **Crash Data Matrix** that compares the prevalence of key risk factors across all injury crashes versus fatal and serious injury crashes.

This matrix highlights **overrepresented risk factors**, defined as those that appear disproportionately more often in fatal and serious injury crashes than in injury crashes overall. These overrepresented factors point to conditions where crashes are more likely to result in life-changing or fatal outcomes and therefore warrant priority attention in safety investments.

Risk Factor	How Common Is It? (% of All Crashes)	How Dangerous Is It? (% of Fatal & Serious Injury Crashes)	Overrep. Ratio
Unsafe Speed <i>(including driving too fast for conditions or aggressive operation)</i>	≡ 66.67% (High)	≡ 59.26% (High)	0.89x
Lane Departure	≡ 19.12% (Medium)	≡ 46.30% (High)	2.42x
Failure to Yield <i>(Right-of-Way)</i>	≡ 24.96% (Medium)	≡ 25.93% (Medium)	1.04x
Alcohol / Drug Impairment	— 1.95% (Low)	— 3.70% (Low)	1.90x
Driver Distraction or Inattention	— 8.32% (Low)	— 3.70% (Low)	0.44x

Note: Percentages may exceed 100% because crashes can involve multiple contributing factors.

High: One of the dominant contributors in this dataset; **Medium:** Present in a substantial share of crashes, but not dominant; **Low:** Less frequent overall, but still important due to severity or context.

FIGURE 3.K: Crash Data Matrix

Where It Happens Most Often

Systemic across arterials (US-123, SC-93, SC-133, US-76); strongly linked to nighttime severity

High-speed segments and curves on US-123, US-76, SC-93; multiple fatal run-off-road crashes

Signalized and unsignalized intersections on SC-93, US-123, SC-133; left-turn conflicts

Nighttime crashes on arterials; appears in multi-fatal lane-departure cases

Campus-edge intersections and retail corridors; more associated with lower-severity outcomes

How to read this table:

- An overrepresentation ratio **greater than 1.0** indicates a risk factor that is more concentrated in fatal and serious injury crashes than in injury crashes overall.
- Ratios **below 1.0** do not mean the factor is unimportant; rather, they indicate that the factor is systemic or more evenly distributed across crash severities.



KEY TAKEAWAYS FROM THE CRASH DATA MATRIX

- **Lane departure is the most overrepresented risk factor in Clemson's most severe crashes.**
Although fewer than 1 in 5 injury crashes involve lane departure, nearly half of all fatal and serious injury crashes do. This pattern points to speed, roadway geometry, and roadside conditions as critical contributors to crash severity.
- **Alcohol and drug impairment, while infrequent overall, is disproportionately associated with severe outcomes,** particularly during nighttime crashes on high-speed corridors.
- **Failure to yield right-of-way remains a major contributor to severe crashes,** especially at intersections with high turning volumes and mixed traffic, including motorcycles.
- **Speeding is a dominant underlying condition across nearly all fatal and serious injury crashes,** even if it is not overrepresented when compared to injury crashes overall. Speed consistently amplifies the severity of other errors.
- **Driver distraction appears more often in lower-severity injury crashes,** suggesting that while it is an important safety concern, it is less strongly associated with the most severe outcomes than other factors.

4. ENGAGEMENT

Improving roadway safety isn't just about numbers and data – it's about *people*. The experiences of Clemson's residents, students, commuters, and business owners provide valuable insights that crash reports and traffic models can't always capture. Understanding how people move through the City, where they feel unsafe, and what challenges or barriers they may face is critical to developing engineering strategies that work in real life, not just on paper.

This chapter outlines our public engagement process, highlighting how community voices have shaped the Safety Action Plan. Through public meetings, online surveys, interactive mapping tools, and stakeholder discussions, we have gathered direct input from those who know the streets best – the people who use them every day.

This Chapter covers:



How Clemson **Engaged** the Community



What We **Heard** from the Community



How **Public Input** Will Shape the Plan

“Cars don't yield to pedestrians.”

Source: Online Survey Response







HOW CLEMSON ENGAGED THE COMMUNITY

To build a strong Safety Action Plan, the City of Clemson asked a simple question: *what does safety mean to you?*

Between February and September 2025, we invited residents, students, business owners, and other stakeholders to share their experiences through in-person workshops, an online survey, an interactive map, and small-group discussions. This section gives a quick look at the different ways people shared their voices.

OPEN HOUSE #1: IN-PERSON MEETING



February 6, 2025



Pendleton Library



45+ attendees

Participants visited several hands-on stations to share where they feel unsafe and what they want to see changed. The event helped identify problem areas and gather ideas for improving walking, biking, and driving safety.

Key Stats:

9 intersections flagged as dangerous or unsafe

31% mentioned aggressive or distracted driving as a necessary behavior change

19% mentioned vehicle speeding as a top safety concern

“Flashing signals and raised crossings could save lives.”

“Drivers treat SC93 like a highway – it needs traffic calming.”

“We need more shade trees along the routes people actually walk.”

FIGURE 4.A: Open House #1 Event Photos



OPEN HOUSE #2: IN-PERSON WORKSHOP



September 22, 2025



Clemson City Hall



~14 attendees

Participants explored interactive stations, reviewed crash data, and used stickers and comment cards to share their safety concerns and ideas for improving walking, biking, and driving in Clemson. The event focused on identifying priority locations and gathering community input on specific safety improvements.

Key Stats:

Top safety concerns: unsafe intersections/crossings, missing sidewalks/bike lanes, poor lighting, drivers not yielding, speeding/aggressive driving

Most requested improvements: raised/signalized intersections, traffic enforcement & education, lighting & maintenance, sidewalk/bike lane extensions, speed-calming measures

Crash data presented: 2014–2023, highlighting high-risk areas and trends



FIGURE 4.B: Open House #2 Event Photos

ONLINE SURVEY



Open Winter 2024 - Spring 2025



177 Responses

The survey asked about barriers to walking, biking, and using transit. Respondents also ranked the importance of sidewalk maintenance, lighting, and traffic calming. Most participants had lived in Clemson for more than 10 years and spoke from long-term experience.

Key Stats:

64% have lived in the area 10+ years

Most common barrier to walking more frequently: traffic safety

Top transit barrier: “no safe way to get to the bus stop”

“There’s no sidewalk in front of my house.”

“I’d bike downtown if I didn’t have to ride in [vehicular] traffic.”

What modes of transportation do you use on a typical day?

98%
Personal Vehicle



50%
Walk



18%
Bicycle / Scooter



Which transportation goals are most important to you?



1 Improving Walkability



2 Improving Quality of Life



3 Access to Destinations by All Modes of Travel & Expanded Bike Network

Top 5 Safety Priorities



1 Addressing Distracted Driving / Pedestrians



2 Roadway / Intersection Improvements



3 Shifting Driver Behavior / Expectations



4 Reducing Vehicle Speeds



5 Addressing Red Light Running / Failing to Stop at Stop Signs

How would you rate the following within or around the Clemson Area?

Bicycle / Micromobility



Pedestrian Access / Walkability



ADA Accommodations



Driver Behavior



Roadway Design



How likely would the following improvements would encourage you to use alternative transportation modes?



77% More Sidewalks



75% Safer Road Crossings



66% Sidewalk Maintenance



64% More Lighting at Night



55% More Bicycle Facilities

INTERACTIVE ONLINE MAP



Open Winter 2024 - Spring 2025



165 location-based comments

This tool allowed people drop pins on a map to flag unsafe intersections, or corridors. Most comments identified missing sidewalks (gaps), dangerous intersection crossings, poor lighting or visibility, or areas with regular vehicular speeding.

Key Stats:

100 safety-related comments

13 speeding concerns

6 flagged lighting issues

“Feels unsafe walking from downtown to Abernathy Park at night.”

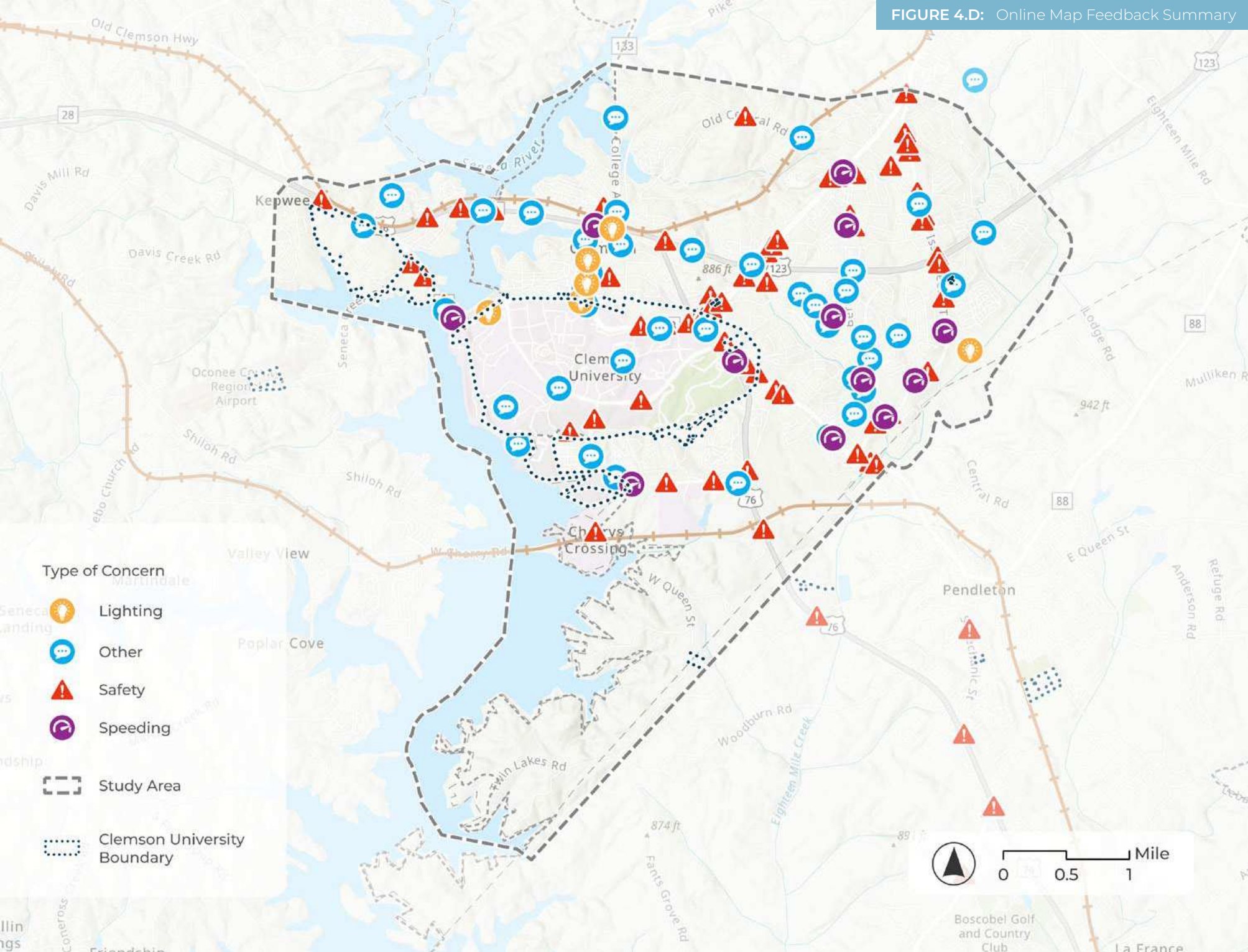
“Need better walk and biking connections.”

“Regular speeding by cars on Issaqueena Trail.”

“The bike path runs out right past the school.”



FIGURE 4.D: Online Map Feedback Summary



STAKEHOLDER FOCUS GROUPS



February 25-26, 2025



12 professionals from transit agencies, the university, greenway/trail groups, and local government



Virtual meetings (4 sessions)

Stakeholders talked about transportation safety across different parts of the City and region. Topics included sidewalk and ADA gaps, dangerous corridors, vehicle speeding, and the strain of population growth on existing infrastructure.

Key Stats:

4 listening sessions with different topics

Participants included CATBus, Clemson University, Friends of Green Crescent Trail, and others

Multiple corridors identified:
SC 93, US 123, College Ave

“ Drivers don’t see bikers and pedestrians. ”



“ We’re throwing money at corridors that can’t be fixed. ”



WHAT WE HEARD FROM THE COMMUNITY

Across every event, survey, and map comment, one thing came through loud and clear: *people in Clemson care about safety* – and they have specific ideas for how to improve it.

Whether walking to class, commuting to work, biking with family, or crossing the street to catch a bus, residents told us what makes them **feel unsafe**, where those issues are happening, and what they believe would help.

TOP SAFETY CONCERNS

Residents consistently raised the following issues as the most urgent:

Speeding and aggressive driving, especially along SC 93, US 123, Issaqueena Trail, and Old Stone Church Road

Unsafe pedestrian crossings – places with no crosswalks, faded markings, or no pedestrian crossing signals at all

Driver behaviors such as failing to yield to people walking or biking, even when crossing legally

Poor visibility at night, especially along roads without lighting, or with overgrown vegetation that obscures visibility

Missing sidewalks or bike lanes, including gaps between neighborhoods, campus, and downtown

“ I avoid walking at night – drivers don't see you, and there's nowhere safe to go. ”

Source: Online Interactive Map Comment



PLACES PEOPLE FEEL UNSAFE

Participants repeatedly identified specific intersections and corridors as places they avoid or worry about:

**US 123 @ SC 93
and College
Avenue** – heavy
vehicular traffic,
no pedestrian
protection

**Old Stone Church
Rd and Issaqueena
Trail** – narrow roads,
fast-moving traffic,
no shoulders

**SC 93 corridor
near downtown
and campus** –
feels more like a
highway than a
college street

**Downtown to
Abernathy Park**
– unsafe walking
conditions,
especially at night

**S Mechanical
Street and
Pendleton Rd** – poor
lighting, limited
crossing locations

“ **Bridge crossings are
NOT for pedestrians.** ”

Source: Focus Group
Participant



WHAT PEOPLE WANT TO SEE CHANGED

Community members didn't just flag problems – they offered thoughtful solutions. Some of the most common suggestions included:

Sidewalk and bike lane extensions to fill in network gaps

Dedicated bike paths and safer trail crossings

Speed reduction (traffic calming measures) – speed humps, roundabouts, narrower lanes

Raised crosswalks and better lighting at key pedestrian areas

More visible enforcement of speed limits and hands-free (device) laws

Education for drivers and bicyclists about how to share the road safely

“Flashing signals and raised crossings could save lives.”
Source: Open House #1 Response

“I'd bike downtown if I didn't have to ride in traffic.”
Source: Online Survey Response

WHAT THIS MEANS FOR CLEMSON

This community feedback is the foundation of this plan. Crash data shows where incidents have occurred, but public input reveals why those places feel unsafe and what kind of solutions people trust. The comments and suggestions gathered help us prioritize investments, rethink our streets, and build a plan that respond to what people actually need – not just what the data says.



TOP 5 SAFETY CONCERNS

1



Speeding and Aggressive Driving

- Common along SC 93, Issaqueena Trail, and US 123
- Residents feel drivers go too fast near homes, parks, and campus

2



Unsafe Intersections and Crossings

- Frequent complaints about lacking crosswalks, faded markings, or short signal times
- Major intersections like College Ave @ US 123 were repeatedly flagged

3



Missing or Incomplete Sidewalks and Bike Lanes

Gaps in the pedestrian and bicycle network make it hard to travel safely without a car

4



Poor Lighting and Visibility

Especially at night or along rural stretches with no streetlights or overgrown vegetation

5



Drivers Not Yielding to Pedestrians and Cyclists

Even where crosswalks exist, many said they don't feel seen or respected by drivers

MOST REQUESTED SAFETY IMPROVEMENTS



Speed-Calming Measures

Speed humps, roundabouts, narrower roads, and visual cues to slow down traffic



Raised and Signalized Crosswalks

Better crossings with lighting, signals, and more visibility for pedestrians

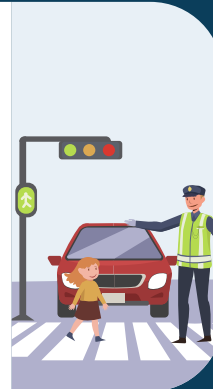


Lighting and Maintenance

Brighter street lighting, trimmed vegetation, and upkeep of walking/biking paths

Traffic Enforcement and Education

More visibility from police, hands-free law awareness, driver education

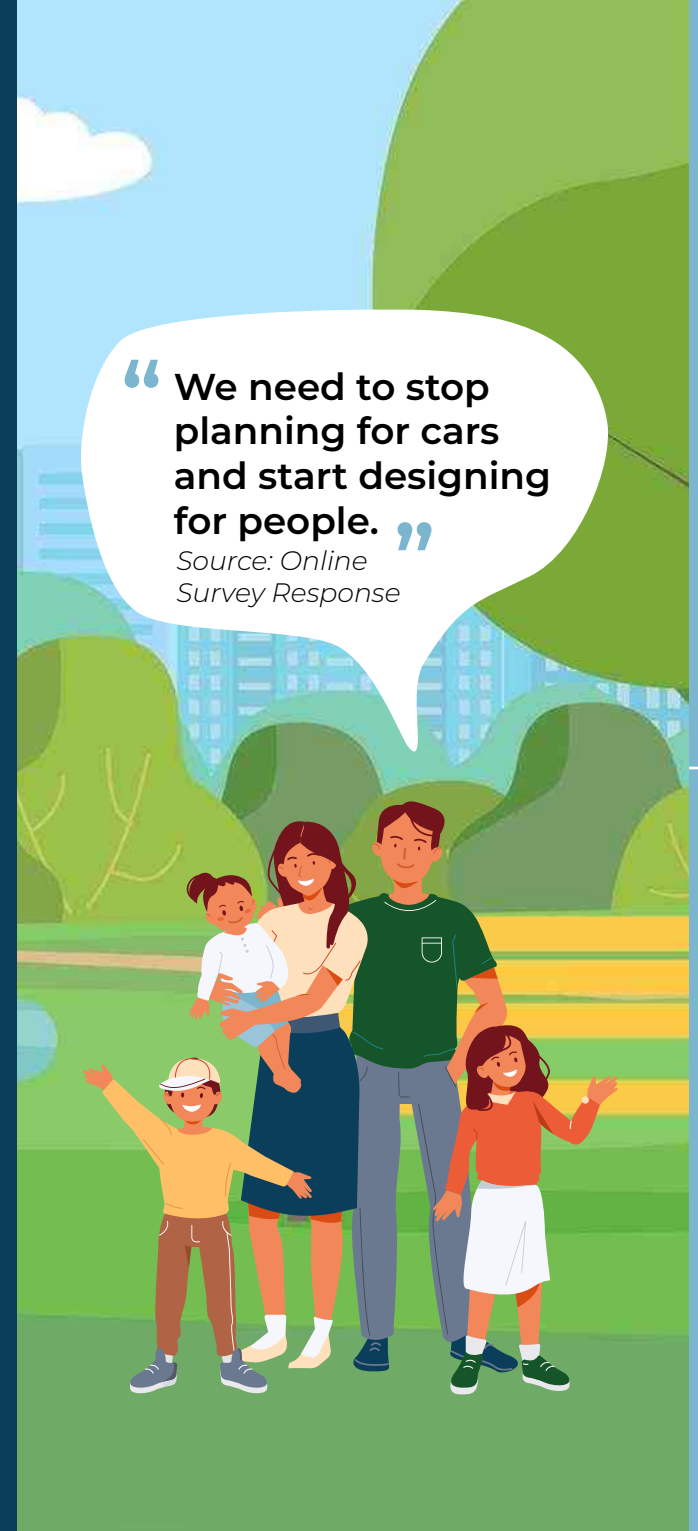


Sidewalk and Bike Lane Extensions

Filling in sidewalk gaps, adding protected bike lanes, and creating safer trail connections

“We need to stop planning for cars and start designing for people.”

Source: Online Survey Response



5. ACTION PLAN

Identifying safety challenges is only the first step; meaningful change happens when analysis, policy, and community priorities are translated into action. The preceding chapters document where and why serious crashes occur in Clemson, who is most affected, and how residents experience safety on their streets. Together, this work establishes a clear mandate to move from understanding risk to reducing it through targeted, system-level interventions.

This chapter presents Clemson's Safety Action Plan—laying out the strategies, countermeasures, and policy actions needed to address the identified risks. It focuses on proven, context-sensitive solutions that range from near-term, low-cost improvements to

longer-term infrastructure and programmatic investments. Grounded in the Safe System approach, these recommendations are designed to reduce fatal and serious injuries while supporting safer travel for all road users across the City and university setting.

This Chapter covers:



Policy Context & Alignment



Priority Site Applications



Crash Reduction Strategy



Performance Monitoring
& Evaluation Strategy







POLICY CONTEXT & ALIGNMENT

Traffic safety improvements are most effective when supported by clear policies, plans, and institutional practices. This section reviews Clemson's existing policy framework to highlight where it already supports *Safe System principles*, and **where targeted updates can strengthen implementation of this Safety Action Plan.**

EXISTING POLICIES, PLANS, & GUIDELINES

The goals established in **Chapter 1**—to **prevent crashes, improve access, design safely, support communities, use data, and fund projects**—are intended to guide how Clemson plans, designs, operates, and manages its transportation system over time. The policy review conducted for this plan confirms that Clemson is not starting from scratch; rather, it has an existing foundation of plans and regulations that already support many of these goals.

This section presents a review of existing City, University, and regional policies that directly influence roadway safety, land development, and mobility decision-making. The documents reviewed are summarized in **Figure 5.A.**



FIGURE 5.A: Policies, Plans, and Guidelines Reviewed

Policy/Plan	Jurisdiction	Primary Relevance to Safety	Key Takeaway for this Plan
City of Clemson Comprehensive Plan <i>(2024; 2025 update in progress)</i>	City of Clemson	Multimodal transportation, land use, community vitality	Establishes clear goals for pedestrian, bicycle, and transit safety that this plan operationalizes
City of Clemson Code of Ordinances <i>(Land Development Regulations)</i>	City of Clemson	Street design, sidewalks, bikeways, development standards	Provides regulatory tools to support safer streets, especially through sidewalk and bikeway requirements
Clemson University Long Range Framework Plan <i>(2017; update in progress)</i>	Clemson University	Campus mobility and infrastructure	Reinforces shared responsibility for safety on campus-edge and connector streets
Clemson University Bikeways Master Plan <i>(2012)</i>	Clemson University	Bicycle network planning	Establishes expectations for bicycle facilities referenced in City policies
Clemson-Anderson-Pickens Long Range Transportation Plan <i>(in progress)</i>	Regional	Regional mobility and safety needs	Identified safety as a regional priority and supports future funding alignment
Regional Transit and Coordination Plan: Appalachian Region <i>(2014)</i>	Regional	Access, safety, emergency response	Highlights safety and access needs for vulnerable populations
Interim 2045 Long Range Plan: Transportation Study <i>(2017)</i>	Regional	Connectivity, safety, visibility	Supports safety-focused improvements such as lighting and shoulder enhancements
2024-2033 Rural Transportation Improvement Program	Regional	Project prioritization	Confirms safety as the top regional investment priority

Note: Detailed policy summaries and excerpts are provided in the **Appendix**.

POLICY IMPLEMENTATION STRATEGY

This **Safety Action Plan** builds on the existing policy foundation by translating intent into actionable strategies that support crash reduction and long-term safety outcomes. The implementation strategy focuses on three core needs identified through the policy review: **improving coordination across agencies and jurisdictions, aligning planning and project delivery with safety priorities, and embedding safety considerations consistently into routine processes.**

Key policy alignment opportunities identified include:

- **Clarifying roles and responsibilities across the City, Clemson University, and state and regional partners,** particularly given that many high-injury corridors fall under state jurisdiction.
- **Strengthening the connection between adopted plans and implementation,** so that safety goals meaningfully influence project prioritization, design decisions, and funding allocation.
- **Supporting a shift from reactive, project-by-project safety improvements toward a more proactive, systemic approach** that prioritizes high-risk locations and conditions identified through data and community input.

To support these objectives, this plan recommends a set of policy-focused actions that reinforce **Safe System principles** across engineering, education, enforcement, and post-crash response. The following tables summarize **near-term (Figure 5.B)** and **mid-term (Figure 5.C)** policy initiatives presented as a practical menu of strategies that can be advanced over time to strengthen institutional support for safer streets.

#	Strategy	Relative Funding	Time	Safety Priority
1	Incorporate access management strategies into Complete Streets Guidelines	Low	As Needed	Moderate
2	Leverage regional partnerships with GPATS & ACATS to promote education / encouragement programs, and travel demand management programs	Low	As Needed	Higher
3	Enhance traffic safety education by integrating bicycle training in schools, requiring defensive driving courses for municipal/university employees, and expanding community-led safety programs	Low	Ongoing	Lower
4	Develop a safety-driven maintenance prioritization framework that considers where vulnerable road users travel	Moderate	Annual	Moderate
5	Set aside a dedicated funding pool for Traffic Calming projects shared between the City and the University	Low	As Needed	Higher
6	Inform the public/university community about existing and proposed bicycle/pedestrian projects and encourage citizen participation in identifying problem areas via an online Vision Zero Public Input Map	Moderate	As Needed	Lower
7	Shift traffic measurement standard for Level of Service (LOS) to Vehicle Miles Traveled (VMT)	Low	Once	Moderate

FIGURE 5.B: Near-Term Policy Strategies



Responsible Parties	Safe Roads Engineering	Safe Speeds Engineering	Safe Road Users Education & Enforcement	Safe Vehicles Emerging Technology	Post-Crash Care Emergency Response	Metric
City of Clemson Planning; Transportation	●		●			Strategies are successfully adopted in City guidelines
City of Clemson Transportation; School Boards	●		●		●	Seek talks with at least 3 regional employers within the district
City/University of Clemson Education; Community Development; Law Enforcement			●			Safe driving curriculum is adopted by the school boards
City/University of Clemson Transportation; Public Works	●	●	●		●	Framework is used to implement projects by relative priority
City of Clemson Transportation; Clemson University; Grants Division	●	●				A resource document created that outlines the grant funding strategy
City of Clemson Transportation; GIS; Chief Data Officer; Communications; Clemson University			●			Creation of an online tool to track public comment that informs the priority framework
City of Clemson Transportation	●	●		●		Traffic is measured by VMT instead of LOS



#	Strategy	Relative Funding	Time	Safety Priority
1	Commitment to annual safety program reporting and evaluation of effectiveness of safety initiatives, including a sidewalk and bicycle network gap prioritization report	Moderate	Annually	Higher
2	Publicly commit to a culture of safety by establishing a Vision Zero Task Force with dedicated staff responsible for overseeing and guiding long term Vision Zero strategy	Moderate	Ongoing	Moderate
3	Engage community organizations and university groups to organize and construct temporary demonstration (quick build) projects and promotional events	Moderate	Annually	Lower
4	Implement Vision Zero safety engineering improvements annually at priority corridors and intersections, informed by community input at project locations	Moderate to High	Annually	Higher
5	Consider proactive efforts to reduce the posted speed limits along certain corridors or districts	Moderate	As Needed	Moderate
6	Include a community awareness event and education component for each traffic calming project before construction begins and after funding is secured	Moderate	Once (per project)	Lower
7	Amend Clemson's Code and Zoning Ordinance to encourage transit-supported development incentives	Low	Once	Moderate

FIGURE 5.C: Mid-Term Policy Strategies

Responsible Parties	Safe Roads Engineering	Safe Speeds Engineering	Safe Road Users Education & Enforcement	Safe Vehicles Emerging Technology	Post-Crash Care Emergency Response	Metric
City/University of Clemson Transportation; GIS; Chief Data Officer; Communications	●		●			Annual issuance of Vision Zero report or newsletter to be publicly displayed on Clemson's website
City of Clemson Transportation; Mayor; Human Resources; Clemson University (in partnership)	●	●	●	●	●	A Vision Zero Task Force is operational
City of Clemson Transportation; Community Development; Neighborhood Associations; Student Groups	●	●	●			Implementation of 2 quick build projects of demonstration with promotion on city social media
City/University of Clemson Transportation; Public Works	●	●			●	Implement 5 safety engineering improvements annually
City of Clemson Transportation; Police; SCDOT	●	●	●	●		Successfully reduce at least 1 speed limit
City of Clemson Transportation; Community Development; Neighborhood Associations	●	●	●	●	●	Successfully complete at least one community education event
City of Clemson Planning; Transportation; Code Enforcement; Economic Development	●		●			Amendment adopted in Ordinance that details Transit-Oriented Development incentives

Note: policy initiatives have been initially drafted with input from City staff based on current policies or plans in place.



CRASH REDUCTION STRATEGY

This Crash Reduction Strategy is implemented through **Clemson's Countermeasure Toolkit**.

Building on the **High Injury Network (HIN)**, identified **risk factors**, and **community input**, the toolkit translates analysis into action by identifying **proven safety treatments** that can be applied systemically and at specific locations.

These countermeasures range from near-term, low-cost improvements to longer-term investments, and are intended to meaningfully reduce crash risk and the severity of outcomes where serious injuries are most likely to occur.

COUNTERMEASURE TOOLKIT OVERVIEW

Clemson's **Countermeasure Toolkit** draws from nationally recognized best practices (FHWA, NHTSA, Vision Zero) and tailored to Clemson's specific roadway contexts, crash history, and HIN, converting crash data and risk analysis into **practical safety actions**.

Rather than prescribing one-size-fits-all solutions, the toolkit links specific countermeasures to the risk factors identified in **Chapter 3**, including **unsafe speeds**, **lane departures**, **failure to yield**, limited **nighttime visibility**, and exposure of **vulnerable road users**. Treatments are designed for both **systemically** (across multiple locations with shared risk characteristics) and **site-specifically** (at high-priority corridors and intersections).

To streamline implementation, countermeasures are organized into functional categories aligned with the **Safe System Approach**. This structure allows the City and University to advance near-term, low-cost improvements while planning for more complex capital investments over time. A summary of representative countermeasures is provided in **Figure 5.D**, with the full inventory included in the **Appendix**.

HOW THIS TOOLKIT IS USED

This toolkit empowers Clemson to select and deploy the most effective safety treatments for each location and risk profile. Planners and engineers use the toolkit to:

- **Match countermeasures** to specific site needs, prioritizing quick-win, low-cost improvements where they will have the greatest impact.
- **Bundle treatments** for systemic application along HIN corridors, while addressing unique challenges at high-priority sites.
- **Support phased implementation**, enabling immediate action on urgent issues and planning for mid- and long-term investments.
- **Track progress** toward measurable reductions in fatal and serious injury crashes.

FIGURE 5.D: Countermeasure Toolkit Summary

Primary Risk Factor Addressed	Countermeasure Category	Representative Treatments (from Toolkit)	Typical Cost Range	Implementation Horizon	Example Application
Failure to Yield	Intersection Safety & Geometry	Curb extensions; protected left-turn phasing; reduced conflict intersections; splitter islands; roundabouts	Medium-High	Mid- to Long-Term	Complex intersections with turning conflict; HIN nodes
Nighttime Visibility	Lighting & Visibility Enhancements	Intersection and crossing lighting upgrades; wider edge lines; enhanced pavement markings; fluorescent signing	Low-Medium	Near-Term	Corridors with dark-condition crashes; campus connectors; pedestrian crossings
Vulnerable Road User Exposure	Pedestrian & Bicycle Safety	High-visibility crosswalks; raised medians; RRFBs/PHBs; protected bike lanes; two-stage bike turn boxes	Low-Medium	Near- to Mid-Term	Campus corridors; midblock crossings; areas with pedestrian and bicycle crash history
Systemic Safety Gaps	Signalization & Traffic Control	Leading pedestrian intervals; pedestrian countdown signals; backplates; no-turn-on-red restrictions	Low	Near-Term	Signalized intersections citywide; downtown and campus-adjacent areas

Note: This table highlights representative countermeasures selected from Clemson’s full toolkit. The complete inventory, including technical specifications, effectiveness ranges, and implementation considerations, is provided in the **Appendix**.

QUICK-WIN SAFETY STRATEGIES

To help Clemson act quickly where risk is highest, this plan identifies a focused set of **short-term quick-win safety strategies**. These are grouped packages of **proven countermeasures** that can be **deployed rapidly** on **streets and intersections with the most severe crash outcomes**.

These quick-win strategies differ from the broader **Countermeasure Toolkit** in one key way: rather than listing individual treatments, they **bundle complementary improvements** into **three priority categories** that reflect Clemson's most urgent safety needs and highest-risk conditions. Each category is designed to be applied repeatedly **across multiple locations**, allowing the City and University to **make short-term safety improvements while building momentum** toward mid- and longer-term investments.

The following pages present three Quick-Win Safety priority categories:

QUICK-WIN CATEGORY 1:

Safety Treatments for High Injury Network (HIN) Corridors

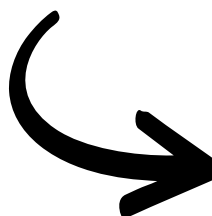
QUICK-WIN CATEGORY 2:

Uncontrolled and Midblock Crossing Improvements

QUICK-WIN CATEGORY 3:

Intersection Safety Enhancements

Each category outlines the safety problem it addresses, the types of treatments that can be implemented quickly, and examples of where these strategies are most applicable.



Together, they provide a practical starting point for **immediate action** on Clemson's **most dangerous streets**.





QUICK-WIN CATEGORY 1: SAFETY TREATMENTS FOR HIGH INJURY NETWORK (HIN) CORRIDORS

PURPOSE

This quick-win category focuses on street segments within Clemson's HIN where fatal and serious injury crashes are most concentrated. These treatments are intended to improve the visibility and predictability of pedestrian and bicycle crossings at intersections and controlled locations along HIN corridors.

WHY THIS MATTERS

A small number of arterial corridors account for a disproportionate share of Clemson's most severe crashes. Many of these locations already have basic traffic control in place but lack clear, highly visible crossing treatments for pedestrians and bicyclists.

POTENTIAL LOCATIONS (EXAMPLES)

- **SC 93** at **Vickery Drive**
- **SC 93** from **US 76** to **Issaqueena Trail**
- Other signalized, all-way stop, or two-way stop intersections along HIN corridors

RECOMMENDED COUNTERMEASURES

A

Upgrade existing pedestrian crossings using enhanced signage and high-visibility pavement markings



B

Install pedestrian crossings with enhanced safety features (minimum 10-foot crossing width)



C

Add pedestrian countdown signal heads at signalized intersections



D

Implement Leading Pedestrian Intervals (LPIs)



E

Install advanced stop bars (10-foot setback)



F

Add bus stop pavement markings to clarify transit activity



G

Add bicycle signage and/or solid green pavement markings through intersection conflict zones





SAMPLE APPLICATION

Example of recommended countermeasures applied (Charlotte, NC)

QUICK-WIN CATEGORY 2: UNCONTROLLED AND MIDBLOCK CROSSING IMPROVEMENTS

PURPOSE

This quick-win category focuses on locations where pedestrians cross outside of signalized intersections, including uncontrolled intersections and midblock crossings. These treatments are intended to improve visibility, clarify crossing priority, and reduce pedestrian exposure on streets with higher speeds or long block lengths.

WHY THIS MATTERS

Uncontrolled and midblock crossings are common near campus housing, transit stops, schools, and commercial destinations. Crash analysis shows that pedestrians face elevated risk at these locations, particularly where crossings lack refuge, lighting, or clear driver cues.

POTENTIAL LOCATIONS (EXAMPLES)

- **Berkeley Drive at Karen Drive** near **Clemson Elementary School**
- Other uncontrolled or midblock crossings near campus activity areas, transit stops, or long blocks

RECOMMENDED COUNTERMEASURES

A

Pedestrian refuge islands
(paint with delineators or concrete with no drainage changes)



B

Curb extensions using a temporary-to-permanent approach (paint and delineators transitioning to concrete)



C

Rectangular Rapid Flashing Beacons (RRFBs)



D

Daylighting at crossings using paint and delineators



E

Bicycle signage and/or solid green pavement markings at crossing conflict zones





SAMPLE APPLICATION

Example of recommended countermeasures applied (Lumberton, NC)

QUICK-WIN CATEGORY 3: INTERSECTION SAFETY ENHANCEMENTS

PURPOSE

This quick-win category focuses on vehicle-related safety improvements at intersections, where turning movements, yielding decisions, and speeds create frequent conflict points. These treatments are intended to calm traffic, improve sight distance, and clarify how drivers navigate intersections.

WHY THIS MATTERS

Intersection-related crashes, particularly those involving failure to yield and turning conflicts, account for a significant share of Clemson's fatal and serious injuries. Many of these crashes occur at locations where drivers must make rapid, judgment-based decisions.

POTENTIAL LOCATIONS (EXAMPLES)

- SC 93 at US 76
- Issaqueena Trail at US 123
- SC 93 at Centennial Boulevard

RECOMMENDED COUNTERMEASURES



A

Move stop bars to tighten intersections and reduce vehicle encroachment



B

Curb radius reduction to slow turning speeds



C

Remove slip lane where feasible so turns occur from the main intersection



SAMPLE APPLICATION

Example of recommended countermeasures applied (Jersey City, NJ)



PRIORITY SITE APPLICATIONS

While the *Crash Reduction Strategy* emphasizes **systemic improvements** that can be deployed across multiple locations, some safety challenges require **tailored, location-specific responses**. This section presents **six priority sites in Clemson** where documented crash patterns, roadway context, and community activity converge to create elevated risk.

Each site is illustrated through a dedicated application sheet that combines aerial mapping, street level imagery, and targeted countermeasure concepts. These applications are not design-ready projects; rather, they demonstrate how the strategies and tools outlined earlier in this chapter can be adapted to real places, helping guide future planning, coordination, and funding decisions.

PRIORITY SITE APPLICATIONS INCLUDED:

- | | | |
|--|---|---|
| 1 SC 93 at US 76 | 2 Walter T. Cox Boulevard Intersections (College Avenue, Sherman Street, Cherry Road) | 3 College Avenue (US 123 to Walter T. Cox Boulevard) |
| 4 SC 93 from US 76 to Douthitt Student Housing | 5 US 76 at Old Stone Church Road | 6 Walter T. Cox Boulevard Segment (Perimeter Road to Pine Street) |

FIGURE 5.H: Priority Site Application Locations Map

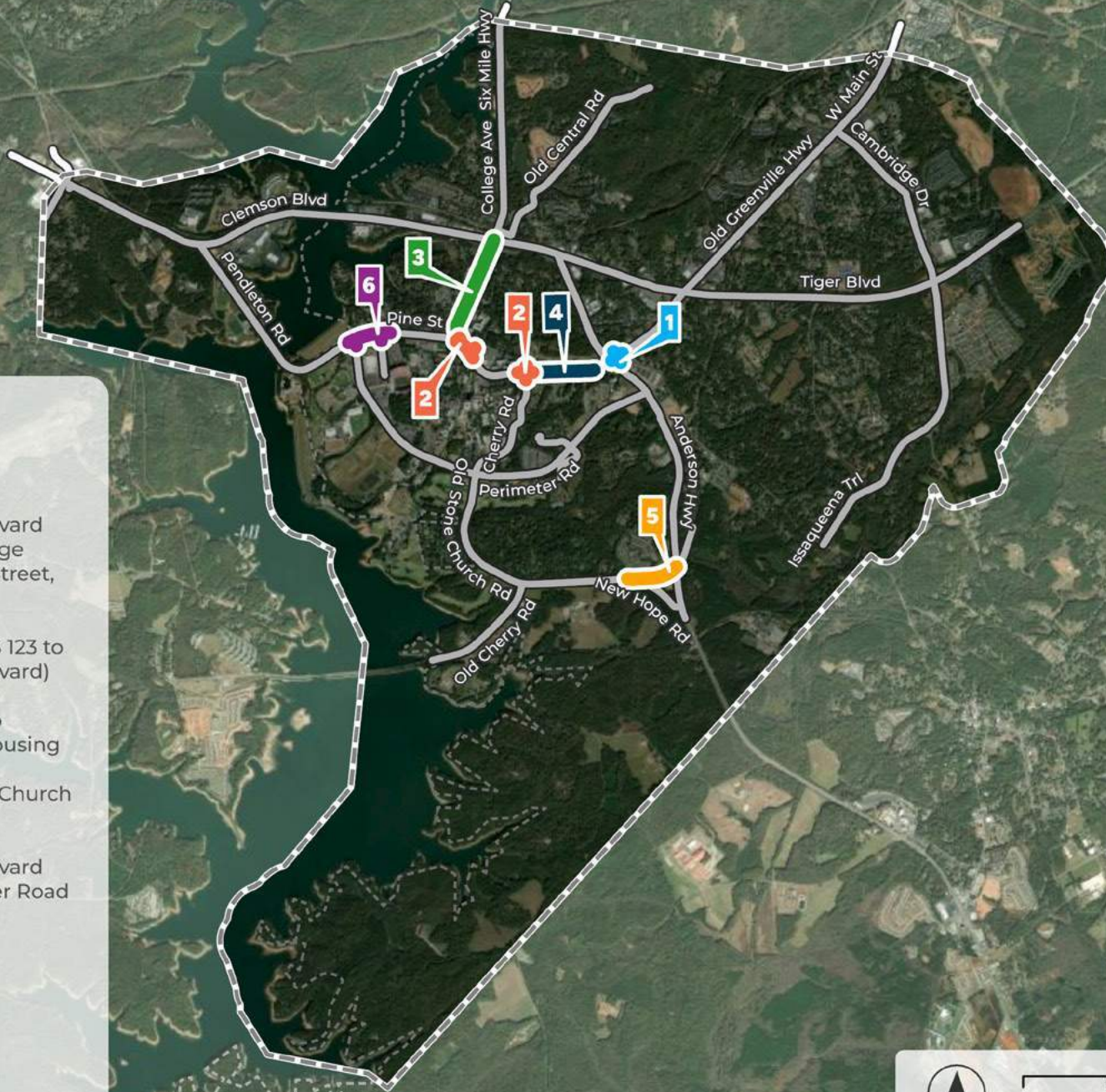
Priority Site Applications

- 1** SC 93 at US 76
- 2** Walter T. Cox Boulevard Intersections (College Avenue, Sherman Street, Cherry Road)
- 3** College Avenue (US 123 to Walter T. Cox Boulevard)
- 4** SC 93 from US 76 to Douthit Student Housing
- 5** US 76 at Old Stone Church Road
- 6** Walter T. Cox Boulevard Segment (Perimeter Road to Pine Street)

High Injury Network (HIN)

 Combined HIN

 Study Area



1 SC 93 AT US 76

The intersection of SC 93 and US 76 is a convergence of two high-speed arterials and appears on Clemson's HIN due to a history of severe crashes linked to **complex turning movements, lane misalignment, and high approach speeds.**

FIGURE 5.I: SC 93 at US 76 Injury Crashes



RECOMMENDED COUNTERMEASURES SUCH AS:

- **Move stop bars forward on SC 93 approaches** to tighten the intersection
- **Remove the channelized right-turn lane on US 76** to reduce high-speed turning conflicts
- **Restripe lanes** to improve alignment and **add green-painted bike lanes** through the intersection
- **Add protected left-turn phasing on SC 93** to reduce failure-to-yield crashes
- **Install high-visibility crosswalks and pedestrian refuge islands on SC 93**
- **Upgrade street lighting** to improve nighttime visibility
- **Reconstruct curb ramps** to meet current ADA standards
- **Relocate mast arm** to the other side of the intersection (from the southwest corner to the southeast corner)



2 WALTER T. COX BOULEVARD INTERSECTIONS: COLLEGE AVENUE, SHERMAN STREET, CHERRY ROAD

The Walter T. Cox Boulevard is a key connector between downtown Clemson, campus-edge destinations, and nearby neighborhoods. Intersections at College Avenue, Sherman Street, and Cherry Road fall within a corridor where crash analysis indicates elevated risk associated with vehicle speeds, pedestrian exposure, and frequent turning movements.

FIGURE 5.J: Injury Crashes Along the Walter T. Cox. Blvd Corridor



RECOMMENDED COUNTERMEASURES SUCH AS:

These locations are well-suited for **raised intersections**, a proven traffic calming treatment that elevates the entire intersection to sidewalk level:

- Reinforces pedestrian priority and reduces vehicle speeds
- Improves visibility between drivers and people crossing
- Shortens effective crossing distances
- Introduces vertical deflection that increases driver awareness

Raised crossings along Walter T. Cox Boulevard were previously identified in the **2017 Clemson University Long Range Framework Plan**, where they were recommended as raised crosswalk treatments.



SC 93 at College Ave intersection



SC 93 at Sherman St intersection

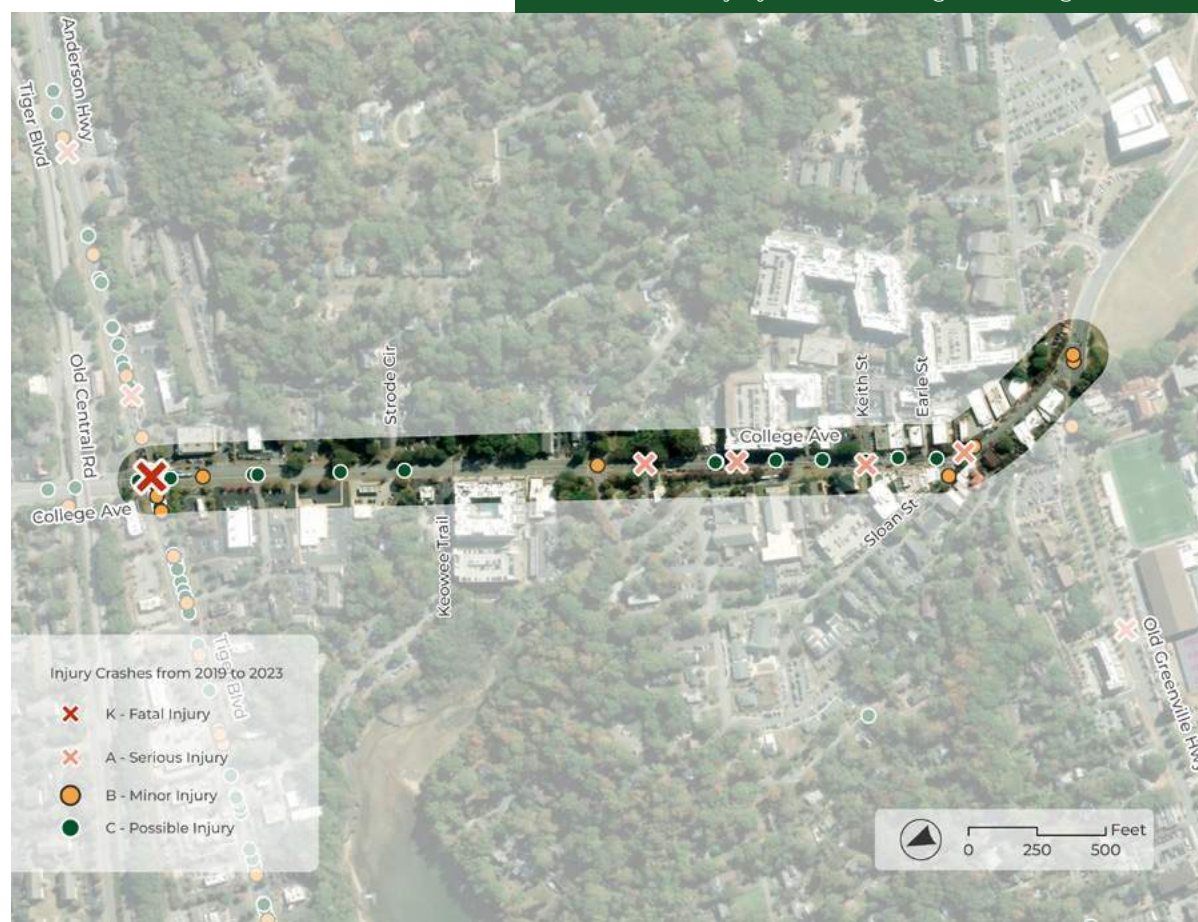


SC 93 at Cherry Rd intersection

3 COLLEGE AVENUE: US 123 TO WALTER T. COX BOULEVARD

College Avenue is a critical campus-edge corridor that carries high vehicle volumes while also serving as a primary route for walking, biking, and accessing nearby destinations. Crash analysis and field observations identify elevated risk along this segment driven by **vehicle speeds, frequent driveway access, limited crossing opportunities**, and **constrained visibility** outside of signalized intersections.

FIGURE 5.K: Injury Crashes Along the College Avenue



RECOMMENDED COUNTERMEASURES SUCH AS:

This segment is well suited for a **multimodal demonstration project** that builds on concepts identified in the **2017 Downtown Corridor Plan**. Recommended actions include:

- **Install enhanced midblock crossings** with advance signage, high-visibility striping, and upgraded pedestrian beacons
- **Improve lighting at crossings and along sidewalks** to support nighttime visibility
- **Trim vegetation near crossings** to improve sight lines and visibility
- **Introduce a shared-use path or protected bicycle lane** to provide continuous, separated space for bicyclists
- **Add green conflict markings and bicycle turning boxes** at key intersections
- **Remove one travel lane** to support speed management and **create space for planted curb extensions** with street trees

(Continued on following page)

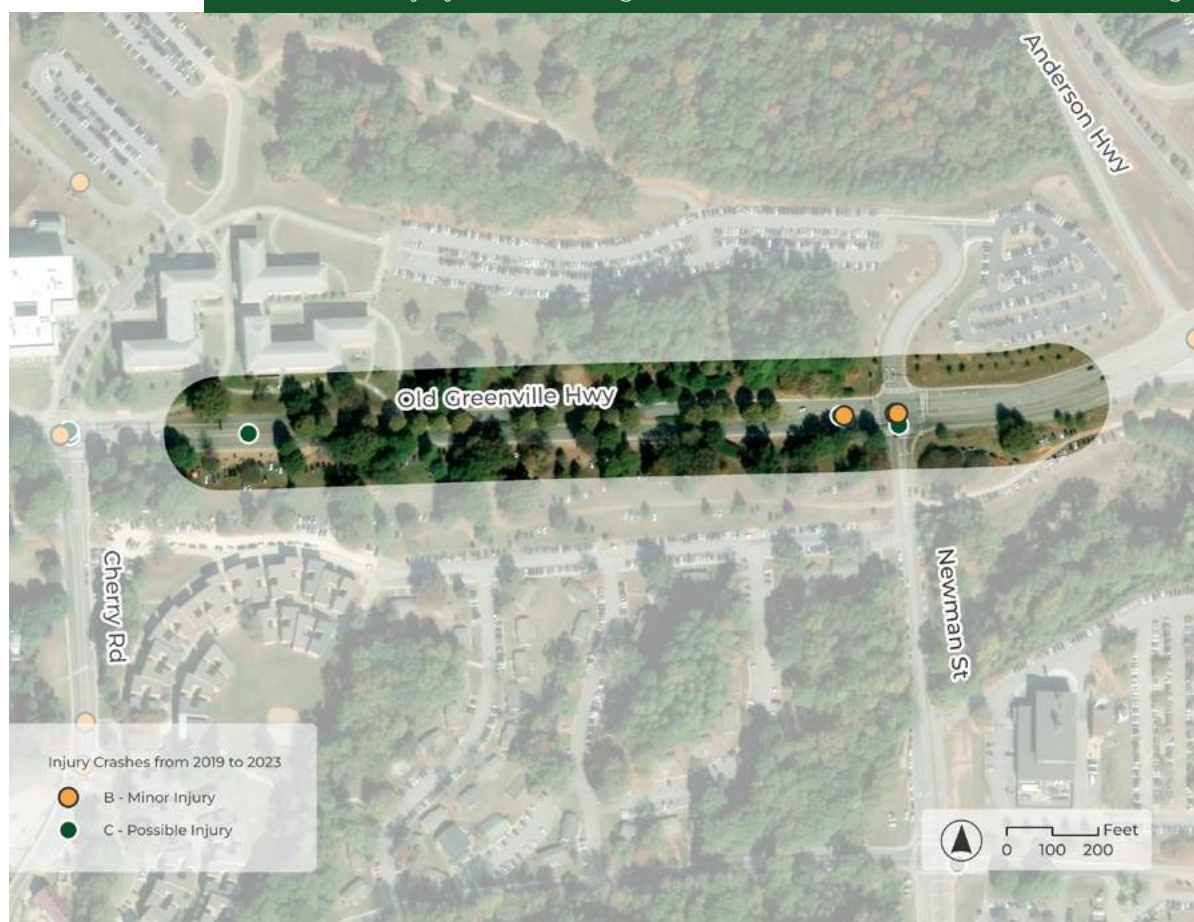


- **Install high-visibility pavement markings** at key conflict zones
- **Consolidate curb cuts** to reduce turning conflicts
- **Upgrade sidewalks and pedestrian ramps** to improve accessibility
- **Implement raised intersections** at select locations to reinforce pedestrian priority

4 SC 93 FROM US 76 TO DOUTHIT STUDENT HOUSING

This segment of SC 93 functions as a **primary gateway** between student housing, campus destinations, and surrounding neighborhoods. While posted speeds are relatively low, the corridor's width, geometry, and traffic volumes **encourage higher operating speeds**, creating **unsafe conditions for people walking and biking**. Crash patterns, field observations, and community input point to a clear mismatch between roadway design and daily use.

FIGURE 5.L: Injury Crashes Along SC 93 from US 76 to Douthit Student Housing



RECOMMENDED COUNTERMEASURES SUCH AS:

This segment is well suited for a **near-term implementation project** focused on separation, visibility, and predictability. Recommended actions include:

- **Construct a continuous, separated multiuse path** along SC 93 to provide dedicated space for pedestrians and bicyclists
- **Buffer the multiuse path** from vehicle travel lanes **using physical separation** where feasible
- **Install pedestrian-scale lighting** along the corridor to improve nighttime visibility



5 US 76 AT OLD STONE CHURCH ROAD

The intersection of US 76 and Old Stone Church Road is one of Clemson's most complex and high-risk locations, appearing on the Vehicle HIN with a history of severe crashes, including fatalities. **High approach speeds, closely spaced access points, and complex turning movements** create elevated crash risk and **increase the likelihood of severe outcomes** when conflicts occur.

FIGURE 5.M: Injury Crashes at US 76 and Old Stone Church Road



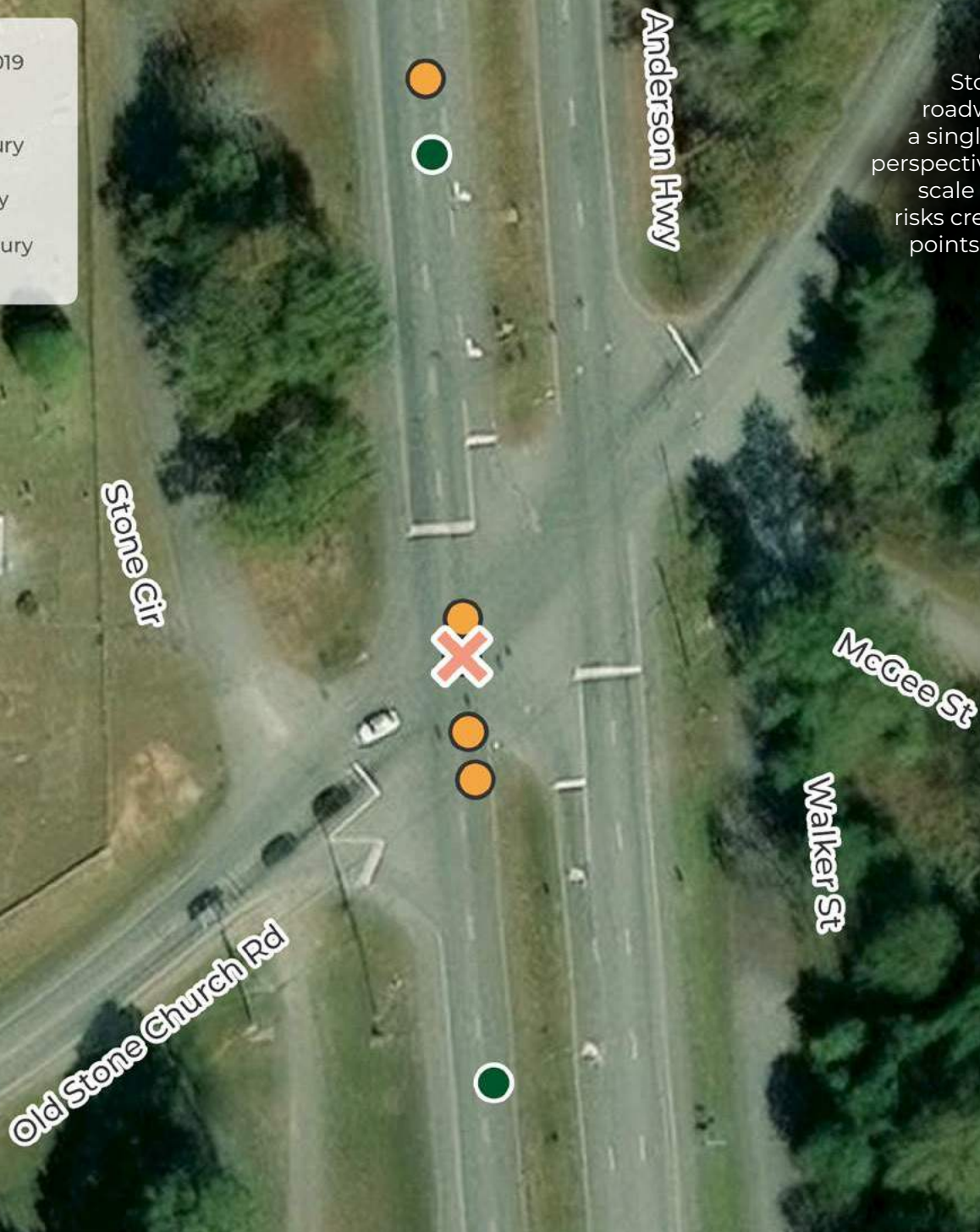
RECOMMENDED COUNTERMEASURES SUCH AS:

- **Redesign the intersection geometry** to reduce the number of conflict points, simplify turning movements, and **eliminate confusing yield conditions**
- **Add a multiuse path along the south side of Old Stone Church Road** to serve nearby community destinations, with **pedestrian-scale lighting**
- **Close, consolidate, or relocate adjacent side streets** to reduce conflicts near the intersection

Injury Crashes from 2019 to 2023

- ✖ A - Serious Injury
- B - Minor Injury
- C - Possible Injury

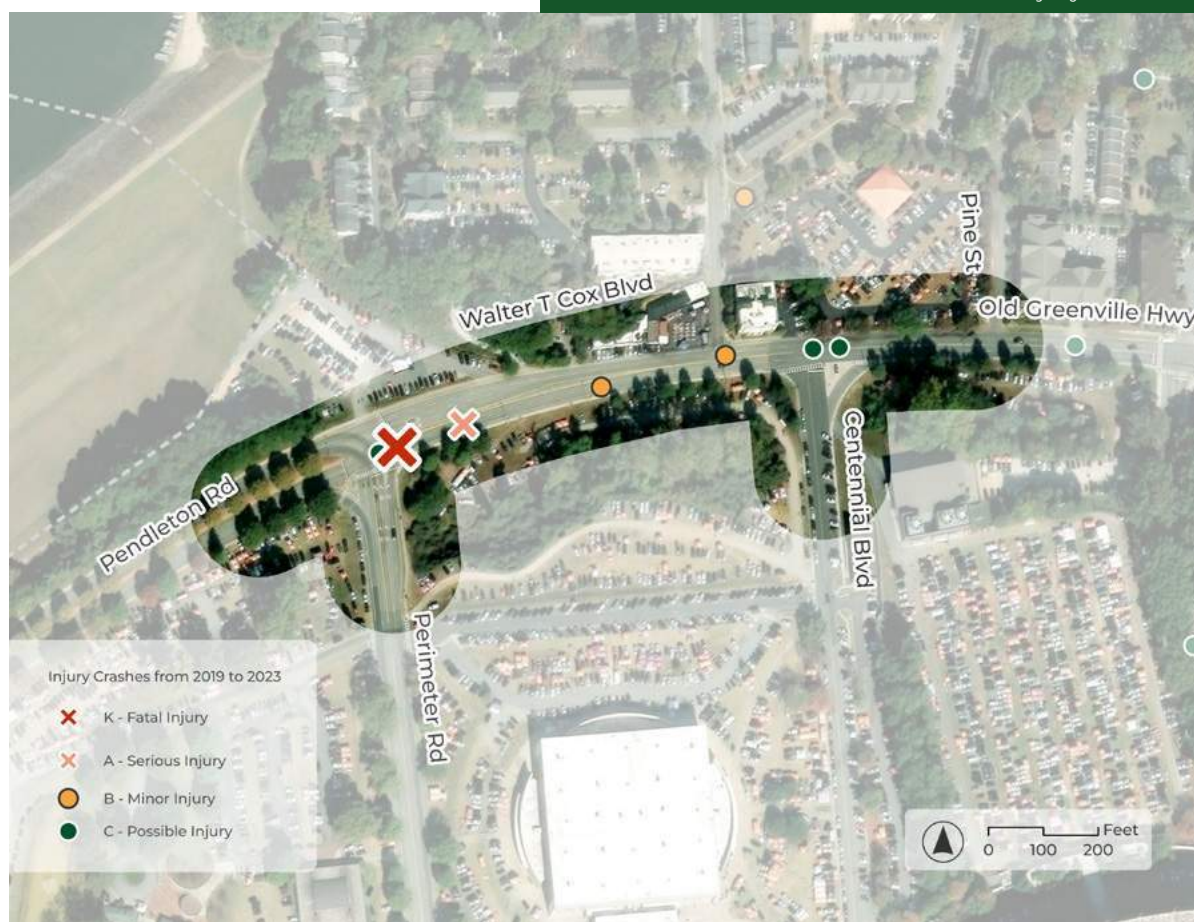
Aerial view of the intersection of Anderson Highway and Old Stone Church Road, where eight roadway approaches converge into a single complex junction. The aerial perspective illustrates the intersection's scale and complexity, reflecting the risks created by closely spaced access points and overlapping movements.



6 WALTER T. COX BOULEVARD SEGMENT: PERIMETER ROAD TO PINE STREET

Walter T. Cox Boulevard is a key campus-adjacent corridor serving students, residents, and visitors traveling between Clemson University, nearby neighborhoods, and major event destinations. This segment experiences **high pedestrian activity alongside vehicle traffic** and has a **history of severe crashes, including a fatal crash**, making it a **priority location** for targeted safety improvements.

FIGURE 5.N: Walter T. Cox Boulevard Injury Crashes



RECOMMENDED COUNTERMEASURES SUCH AS:

- **Lane narrowing to calm traffic** and better align vehicle speeds with pedestrian activity
- **Multiuse path from Pine Street to Perimeter Road** to provide a continuous, separated facility for people walking and biking
- **Midblock crossing with RRFB** to formalize pedestrian desire lines and improve yielding behavior
- **Remove channelized right-turn lanes** to reduce turning speeds and shorten pedestrian crossings
- **High-visibility crosswalks at both intersection and midblock locations** to reinforce pedestrian priority





PERFORMANCE MONITORING & EVALUATION STRATEGY

Implementing safety improvements is only effective if progress is tracked, evaluated, and used to guide future action. To support accountability and continuous improvement, the City of Clemson and Clemson University's post plan Study Review Team (SRT) will monitor safety outcomes over time and evaluate whether implemented countermeasures are reducing fatal and serious injury crashes as intended.

Performance monitoring will focus on two complementary efforts: **systemwide safety trends** and **project-level effectiveness**. This approach allows the City and University to track overall progress toward eliminating traffic fatalities and serious injuries, while also assessing whether specific investments are delivering meaningful safety benefits.

Monitoring efforts will prioritize locations on the **High Injury Network (HIN)**, where data indicates the greatest risk of severe crashes and where countermeasures are expected to produce the largest safety gains. Results will be documented through regular progress reporting and used to refine future project selection, design, and implementation.

The following metrics shown in Figure 5.O will be tracked to evaluate progress toward Clemson's safety goals:

FIGURE 5.O: Performance Measures and Reporting

Metric	Description	Goal (Purpose)	Reporting Frequency
KSI crashes on Clemson roads	Summary and trend analysis of all fatal and serious injury crashes since the previous reporting period	Track progress and trend direction toward eliminating traffic fatalities and serious injuries	Every 2 years
KSI crashes on the High Injury Network (HIN)	Summary and trend analysis of fatal and serious injury crashes occurring on HIN segments since the previous reporting period	Track progress and trend direction measuring effectiveness of targeted corridor improvements	Every 2 years
Total injury crashes on Clemson roads	Summary and trend analysis of all injury crashes since the previous reporting period	Track progress and trend direction to monitor broader safety conditions	Every 2 years
Safety project evaluation: Before/After	Comparison analysis of crash data collected before and after implementation of selected safety projects, with emphasis on fatal and serious injury crashes	Evaluate countermeasure effectiveness at reducing fatal and serious injury crashes to inform design refinements	At least 1 year after project construction is completed
Implementation of safety countermeasures	Number and type of countermeasures installed, suitability to with crash and injury types at project location, and expected crash reduction factors	Track delivery of the Safety Action Plan and progress toward eliminating traffic fatalities and serious injuries	Every 2 years
Investment in road safety projects	Total funding invested in safety improvements	Monitor commitment to safety implementation toward eliminating traffic fatalities and serious injuries	Every 2 years

USING RESULTS TO IMPROVE OUTCOMES

Monitoring results will not only document progress but actively inform decision-making, trends indicating persistent or emerging safety issues will guide updates to project prioritization, countermeasure selection, and implementation strategies. This adaptive approach supports the **Safe System principle** that **safety is an ongoing process**, requiring regular evaluation and course correction to reduce risk and prevent severe outcomes.

FROM ANALYSIS TO ACTION

Safer streets are not created by chance; they are shaped by intentional choices.

This **Safety Action Plan** reflects Clemson's commitment to designing a transportation system where people can move safely, confidently, and with dignity.

By focusing on the streets and conditions where harm is most concentrated, Clemson can make meaningful progress now while building toward a safer future over time. The strategies outlined here are practical, scalable, and rooted in the lived experience of the community.

This plan marks a clear step forward: from **understanding risk** to **transforming streets into places that protect life**.





CLEMSON
UNIVERSITY

SCDOT



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Nathan Hinkle, City Engineer

Date Submitted: 3/31/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Report/Discussion

Agenda Item Summary: (brief for public information and posted agenda)
Discuss the abandonment of a portion of Stone Circle. - City Engineer Nathan Hinkle

Agenda Item Detail: (expand as necessary for clarification)

This is a draft ordinance from the City of Clemson proposing the closure and abandonment of a portion of Singleton Street extending from Stone Circle to the US Highway 76 right-of-way. The request, initiated by adjacent property owner Property Quest, LLC, addresses a section of road that was effectively cut off and left over following previous highway improvements. If approved, the city will transfer the 0.127-acre "Closure Area" to Property Quest, LLC via a quitclaim deed while retaining all existing utility and public access easements. Final adoption of the ordinance is scheduled following a second reading on May 4, 2026.

CITY OF CLEMSON, SOUTH CAROLINA

ORDINANCE #2026-[]

CLOSING A PORTION OF SINGLETON STREET FROM THE INTERSECTION OF STONE CIRCLE TO ITS TERMINUS AT THE ANDERSON HIGHWAY (U.S. HWY 76) RIGHT-OF-WAY; TRANSFERRING SUCH ROAD TO PROPERTY QUEST, LLC; AND PROVIDING FOR RELATED MATTERS.

WHEREAS, the City Council (“Council”) of the City of Clemson (“City”) finds:

- (a) According to South Carolina Code Annotated section 5-27-150, the city council of any city containing more than five thousand inhabitants may close or alter streets in the city when, in the city council’s judgment, the closure or alteration may be necessary for the improvement of the city;
- (b) According to the 2020 Decennial Census, as of April 1, 2020, the City’s population is no less than 17,681;
- (c) The Council has received and reviewed the petition of Property Quest, LLC, which states that this portion of Singleton Street has been effectively abandoned for years, is not being maintained by the City, and is no longer necessary for public use or travel.
- (d) The Council has reviewed and considered the proposed area for closure of Singleton Street and abandonment of the same in favor of Property Quest LLC, such that, (a) no traffic would be permitted beyond the existing pavement termination as it approaches the Anderson Highway right-of-way, as more fully depicted in the crosshatched area on Exhibit A (“Closure Area,” which does on include any public right of other or other areas extending beyond the actual paved portion of the existing public street);
- (e) The Council has considered that, to the best of the Council’s knowledge after inquiry, all other intersections with Singleton Street in the Closure Area are for properties owned or operated by Property Quest, LLC.
- (f) After weighing the information received and considering the health and safety impacts and the necessity for the closure and abandonment to ensure the City’s continued improvement;

NOW, THEREFORE, the Council ordains as follows:

Section 1. The City hereby closes and abandons, in favor of Property Quest, LLC, the Closure Area and quits any claim the City may have in the Closure Area in favor of Property Quest, LLC, provided, however, the City reserves any and all easements and all other existing public uses, including legal access rights for any real property owners, other than Property Quest, LLC, whose property abuts Singleton Street and including the City’s ability to repair, maintain, and expand and/or extend such uses, of the Closure Area, including, for example, public utilities, and authorizes the City Administrator to execute a quit claim deed in favor of Property Quest, LLC with such reservations and such other and further documents as may be necessary and prudent to effect this Ordinance’s intent, provided that by accepting the deed from City, Property Quest, LLC is required simultaneously to convey individual, perpetual access and utilities easements to, and for the benefit of, any real property owners whose property abuts Singleton Street, which easements shall be in recordable form.

Section 2. Nothing in this Ordinance shall be construed to impact any proceeding inchoate or pending in any court, or any rights acquired, or liability incurred, or any causes of action acquired or existing, under any act or ordinance hereby repealed; nor shall any just or legal right or remedy of any character be lost, impaired, or affected by this Ordinance.

Section 3. All Ordinances, resolutions, orders, and parts thereof in conflict with this Ordinance, are to the extent of that conflict, repealed.

Section 4. This Ordinance shall take effect and be in full force upon enactment by the Council.

[ONE SIGNATURE PAGE AND ONE EXHIBIT FOLLOW] [REMAINDER OF
PAGE INTENTIONALLY BLANK]

IT IS SO ORDAINED: May 4, 2026.

ATTEST:

Jeremiah Jackson, City Clerk

G. Robert Halfacre, Mayor

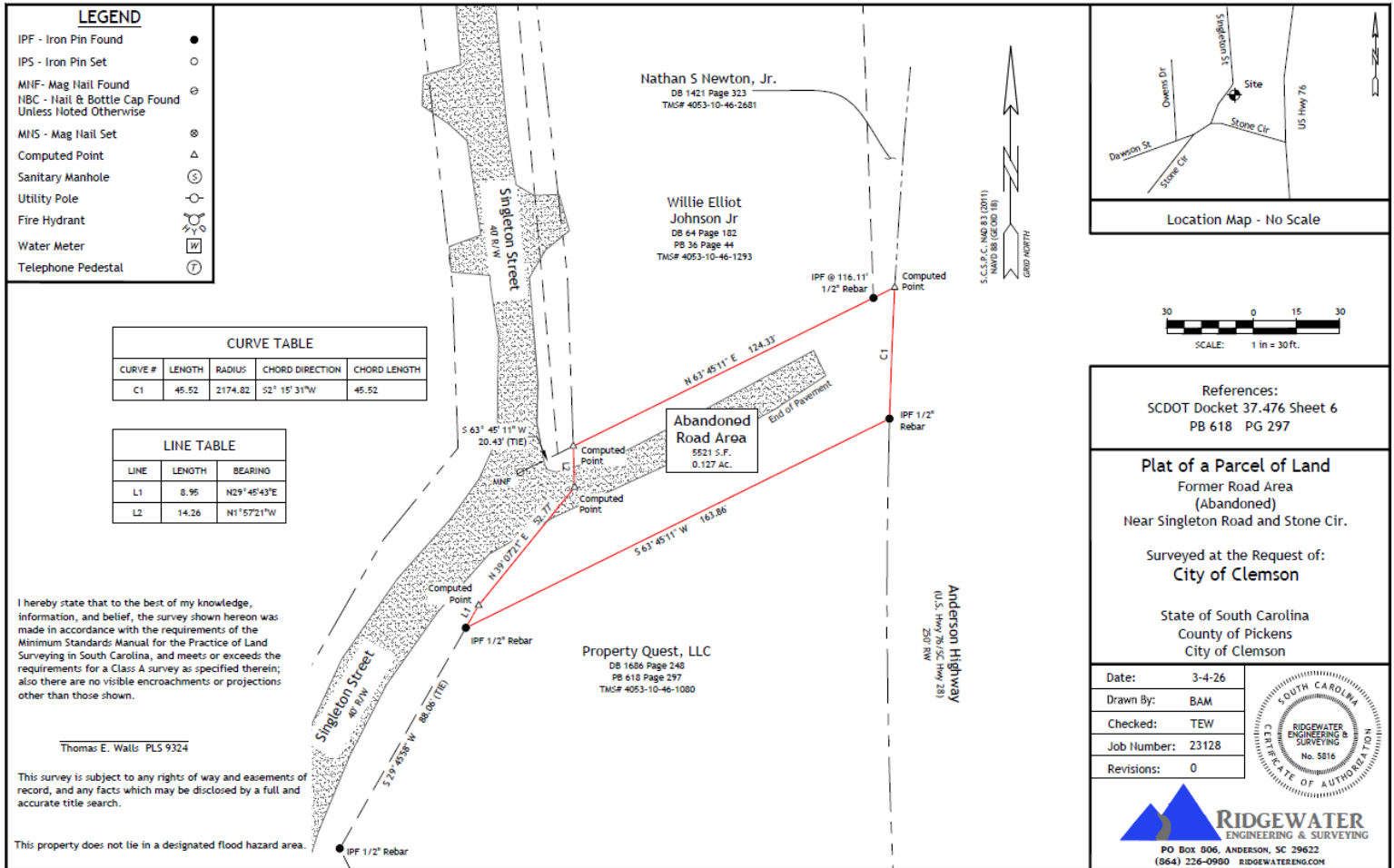
First reading: April 20, 2026

Second reading: May 4, 2026

EXHIBIT LIST

Exhibit A	Description/Depiction of Area Closed to Public Traffic
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EXHIBIT A **DESCRIPTION/DEPICTION OF AREA CLOSED TO PUBLIC TRAFFIC** **AND** **ABANDONED IN FAVOR OF PROPERTY QUEST, LLC**





CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Andy Blondeau, City Administrator

Date Submitted: 3/30/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Policy/Action

Agenda Item Summary: (brief for public information and posted agenda)
Consider 1st reading of an amendment to the City's FOIA policy.

Agenda Item Detail: (expand as necessary for clarification)

FOIA POLICY



CITY OF
Clemson
SOUTH CAROLINA

Policy adopted by Council 3/03/25

FREEDOM OF INFORMATION ACT POLICY AND FEE SCHEDULE

SOUTH CAROLINA LAW PROVIDES THAT IT IS A CRIME TO KNOWINGLY OBTAIN OR USE PERSONAL INFORMATION FROM A PUBLIC BODY FOR CERTAIN COMMERCIAL PURPOSES.

The City of Clemson, South Carolina ("City") adopts this Policy and Fee Schedule in compliance with the South Carolina Freedom of Information Act, codified in South Carolina Code Annotated section 30-4-10, *et seq.* (collectively, "FOIA").

FOIA requests should be directed to: FOIA Response Manager at FOIA@cityofclemson.org.

Mailing Address:

City of Clemson

Attn: FOIA Response Manager

1250 Tiger Blvd, Suite 1

Clemson, SC 29631

Following receipt of a written request for public records (other than law enforcement related records) under FOIA, the City will determine if any potentially responsive public records are in the custody of the City. The City will notify, in writing, the requestor of the City's determination: (a) for records less than two years old, no more than ten business days following the date of the City's receipt of the request; and (b) for records more than two years old, no more than 20 business days following the date of the City's receipt of the request. A business day excludes Saturdays, Sundays, and all legal public holidays, whether federal, state, or local.

If the City determines that the requested public records are in the custody of the City and available and are not exempt from disclosure, then the City will provide the public records to the requestor (a) for records less than two years old, no more than thirty calendar days following the date of the City's written determination; and (b) for records more than two years old, no more than thirty-five calendar days following the date of the City's written determination.

~~Upon receipt of costs and fees as outlined in this Policy and Fee Schedule, the City will provide access to or copies of public records in the City's custody unless the records are exempt from disclosure (a) under FOIA, or (b) according to other applicable state law or federal law. Based on the City's determination of the sensitivity of the public record requested (for example, whether the public record contains information of a sensitive personal nature, business income related information, information related to potential or pending litigation, or attorney-client or work product materials), the City will withhold an entire public record unless a portion of the public record may be sufficiently redacted to protect the sensitive information, in which case the City will redact the public record prior to release. In the absence of specific direction from City Council to the contrary, the City staff shall take precautions to ensure no exempt material is inadvertently disclosed.~~

Upon receipt of costs and fees as outlined in this Policy and Fee Schedule, the City will provide access to or copies of public records in the City's custody unless the records are exempt from disclosure pursuant to FOIA or other state or federal laws. Based on the City's determination of the applicability of any exemption, the City will withhold an entire public record unless a portion of the public record may be sufficiently redacted to protect the exempt information, in which case the City will redact the public record prior to release. In the absence of specific direction from City Council to the contrary, the City staff shall take precautions to ensure no exempt material is inadvertently disclosed.

Except as may otherwise be required by FOIA or other applicable state law or federal law, the City is required neither to create a public record (in any form) where either the public record or the requested form of the public record does not already exist nor to answer questions regarding public records, except to the extent necessary to provide the requestor with information regarding the City's FOIA policy and process and the production or transmittal of public records.

The City will provide each public record in a form that is convenient and practical for use by the requestor, to the extent, and only to such extent, as it is equally convenient for the City to provide the public records in the requested form. Once the City provides a public record to a requestor, a copy of the request and responsive public record(s) shall be published to a website maintained by the City for such purpose.

The following public records are available on the City's website, and, are therefore not subject to public inspection and copying at City Hall:

- (1) minutes of the meetings of the City for the prior six months;
- (2) all reports identified in South Carolina Code Annotated section 30-4-50(A)(8), for no less than 14 days; and
- (3) all documents produced by the City or its agent that were distributed to or reviewed by a member of City Council during a public meeting, not including any portion of a meeting held in executive session, for the preceding six-month period.

Upon written request and payment of any applicable costs and fees, the City shall copy and transmit such public records to a requestor.

The City adopts the Fee Schedule, which is attached to this Policy. To the best of the City's calculation, the costs and fees contained in the Fee Schedule do not exceed (a) the actual cost of the search, retrieval, and redaction (which may include the use of one or more attorneys to review such records at the attorney's standard hourly rates) of records, (b) the prorated hourly salary of the lowest paid employee who, in the reasonable discretion of the custodian of the records, has the necessary skill and training to perform the request, and (c) for copying, shall not exceed the prevailing commercial rate for the production of such copies. Further, the City shall not charge for copying public records that are stored by the City and provided to a requestor in electronic form. However, for public records that are not stored by the City in electronic format and the City agrees to provide such public records in electronic format, the City shall charge the appropriate staff time and a related technology fee for converting such public records to electronic form and providing a means of transferring the public records electronically.

A DEPOSIT IS REQUIRED prior to searching for and/or copying records pursuant to a request, if the search and/or retrieval time is anticipated to be greater than 30 minutes and/or the number of pages to be produced is anticipated to be greater than 10 pages. The deposit is equal to 25% of the reasonably anticipated cost and fees for reproduction of the public records. If a deposit is required, then the public records will be furnished (a) for records less than two years old, no more than thirty calendar days following the City's receipt of the applicable deposit; and (b) for records more than two years old, no more than thirty-five calendar days following the City's receipt of the applicable deposit. No public records shall be provided to the requestor prior to the balance being paid-in-full at time of production or transmittal.

Any deadline contemplated under FOIA may be extended by written, mutual agreement (which shall not be unreasonably withheld) of the City and the requestor.

Fee Schedule

The City's costs and fees shall be uniformly applied to each requestor.

If the search/retrieval time is less than half an hour and/or the total number of documents responsive to the request is 10 pages or less, no costs or fees will be charged.

The City shall not otherwise waive or discount the costs or fees associated with any request.

	Minutes/Hours	X Rate	= Cost
Search/Retrieval Time		\$*	
Copies	Number of Pages	Unit Price	
Black-white paper records/Standard reports 8.5x11		\$0.25/page	
Color paper records/Standard reports 8.5x11		\$0.50/page	
Standard maps/Plots up to 11x17 black-white		\$0.50/each	
Standard maps/Plots up to 11x17 color		\$1.00/each	
Standard maps/Plots larger than 11x 17		\$5.00/each	
Microfiche/Microfilm copies (black-white)		\$0.25/each	
Flash Drive		\$12.00/each	
TOTAL COST			

*Based on the prorated hourly salary of the lowest paid employee who, in the reasonable discretion of the custodian of the records, has the necessary skill and training to perform the request. This may also include the use of one or more attorneys to review such records at the attorney's standard hourly rates.



CITY OF Clemson SOUTH CAROLINA

Policy adopted by Council 3/03/25

South Carolina law provides that it is a crime to knowingly obtain or use personal information from a public body for commercial solicitation.

FOIA Records Request

Please Print

Name _____ Date Requested _____

Address _____ Daytime Phone _____

City/State/Zip _____ Cellular Phone _____

Agency, Firm, or Organization _____

Address (if different) _____ Daytime Phone _____

City/State/Zip _____ Cellular Phone _____

Requested Delivery:

Mail ☐ Pick Up ☐ Email ☐ Email Address _____

Information Requested (attach additional description, if required):



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Nathan Woods, Assistant City Administrator

Date Submitted: 3/31/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Policy/Action

Agenda Item Summary: (brief for public information and posted agenda)
Consider a 1st Reading of 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development). - Assistant City Administrator Nathan Woods

Agenda Item Detail: (expand as necessary for clarification)



CITY OF CLEMSON
AGENDA ITEM REQUEST FORM

Requested By:

Date Submitted:

Council Meeting Date:

Type of Request: (check only one)

☐ Report/Discussion

☒ Policy/Action

☐ Executive Session

Agenda Item Summary: (brief for public information and posted agenda)

First Reading of 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development)

Agenda Item Detail: (expand as necessary for clarification)

The proposed amendment would revise Chapter 19 (Zoning) of City Code to establish and/or update a series of standards. Included among the items addressed are definitions of mixed-use developments and building stories; height limits in various non-residential districts; conditional use and special exception standards for various uses in non-residential districts; and off-street parking space requirements for dwelling units in mixed-use developments. The Planning Commission approved a positive recommendation to Council on the matter at their regular meeting on March 9, 2026; and a public hearing was held on March 16, 2026.

Attachment: 2026-R-02 Proposed Text Amendment (Mixed-use High Density Development)

Sec. 19-107. Definitions

Mixed-use means a combination of usually separated land uses within a single development.

Mixed Use Development means a combination of usually separated land uses and buildings or building within a single development which must include residential uses in addition to non-residential uses permitted in that zoning district.

Mixed-use structure means a building containing residential in addition to non-residential uses permitted in the zone.

...

Stormwater management means the collecting, conveyance, channeling, holding, retaining, detaining, infiltrating, diverting, treating, or filtering of surface water, ground water, and/or runoff, together with applicable managerial (nonstructural) measures.

Story – the distance of that portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. **Stories that are 60% below ground will not be counted to maximum stories. Penthouses that are more than 20ft from the edge of the building of the story below it and do not take up more than 50% of the foot print of the building will not count toward the maximum stories**

(Ord. No. [CC-2021-32](#), 12/06/2021)

Effective on: 12/6/2021

Street, arterial means a major roadway designed to carry a large volume of through traffic in the area; normally controlled by traffic signs and signals.

Table 19-402 Table of Uses Non-residential Districts												
P= Permitted Use C = Conditional Use SE = Special Exception A = Accessory Dash (-) = Use not Permitted												
USE CATEGORY	USE TYPE	NAICS Code	C	C M	CP-1	CP-2	CP-3	OP	RI L	OR	M	C/SE Reference
A. RESIDENTIAL USES												
Residential Developments , Various	Mixed Use Structures: Developments: (three (3) stories or less)	NA	C	C	-	7	7	-	-	-	-	See Section 19-402 Endnote 7
	Mixed Use Developments: (over three (3) stories)	NA	C	C	-	7	7	-	-	-	-	See Section 19-402 Endnote 7
F. Services												
	Parking Lot	812930	C		C	C						

First Reading April 6, 2026

Other Personal Services	Freestanding Parking Structures	812930	C	C	C	C						
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Table 19-404-1. Density, Bulk, and Dimensional Requirements for Principal and Accessory Uses and/or Structures in the Non-residential Districts

P= Permitted Use C = Conditional Use SE = Special Exception A = Accessory Dash (-) = Use not Permitted

USE CATEGORY	C	CM	CP-1	CP-2	CP-3	OP	RIL	O R	M	Reference
A. MINIMUM DIMENSIONAL AND/OR BULK STANDARDS FOR ALL NON-RESIDENTIAL DISTRICTS										
8. Structure Height, max. in Stories	3/5 Stories 10, 11, 15	5/7 Stories 5, 10, 11, 15	40' 4	40'/65' ^{1,4} 4/7 ^{11, 15}	40' 4	35' 3	50' 5	-	65' 7 ⁷	See Section 19-404-1 Endnotes 5, 7, 9, 10 & 11

¹ The maximum front setback in the C district shall be three feet in C, except if the sidewalk in front of the that the maximum front setback may be 20 feet if a porte cochere or similar covered area serving a hotel's main entrance is provided. A five-foot maximum articulation may be provided that exceeds the maximum setbacks.

² In the CM district:

1.

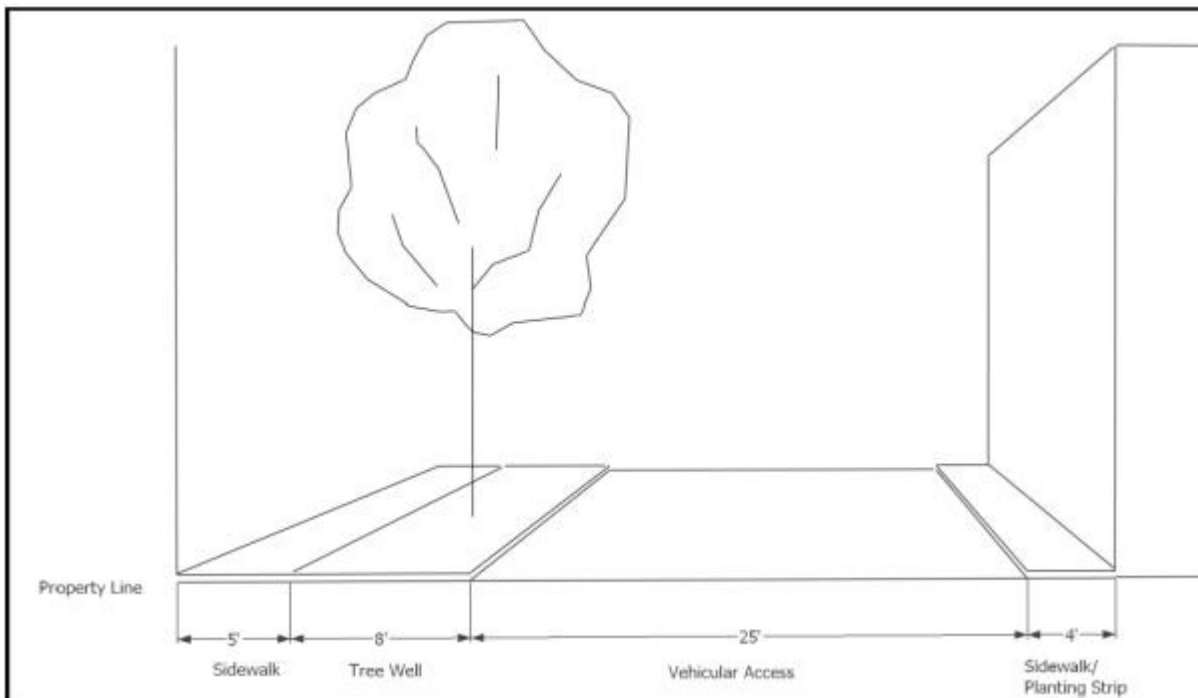
- Properties abutting any public right-of-way other than College Avenue, Keowee Trail, or Walter T. Cox Boulevard (Highway 93) shall have a minimum front setback of ten feet;
- Properties along College Avenue, Keowee Trail, or Walter T. Cox Boulevard (Highway 93) shall have a minimum front setback of 12 feet;
- The maximum front setback for all CM district properties shall be 15 feet, unless a public plaza is provided as per subsection d) of this endnote;
- A plaza having a minimum depth of 25 feet and a maximum depth of 50 feet may be provided fronting a public street, sidewalk, City of Clemson property, or land owned by the U.S. Army Corps of Engineers, provided it is accessible to the general public and is a minimum of 25 feet wide up to a maximum width of 30 percent of the building frontage occupancy requirement, provided, however, that all sides of the building abutting the plaza shall have retail, office or service uses having a minimum depth of 35 feet; and
- A five-foot maximum articulation may be provided that exceeds the maximum setbacks but shall not occupy more than 30 percent of the total frontage occupancy.
- for all setbacks in the CM District, the first 5 feet of the setback adjacent to a public right of way shall be constructed to match the adjacent sidewalk in both grade (topography) and comparable materials. The remaining setback between the building facade and the public right of way along College Avenue, Keowee Trail and Walter T. Cox Boulevard (Highway 93) shall be used as sidewalk, patio, outdoor cafes, bicycle parking, art installations, water features, and landscaping.
- No less than 10 percent of the setback area in the CM Districts (excluding the required 5 foot paving strip) is to be landscaped and no more than 35 percent of the setback area shall be landscaped.

³ Minimum lot size applies to both a standalone industrial facility or a multi-tenant business or development park/campus.

⁴ All properties in the C or those fronting College Avenue in the CM district shall be constructed side lot line to side lot line with a zero-foot side setback for the first 50 feet of depth, except for where an entrance is required to provide access to the interior of the site and is designed as per Figure 19-404-A, or as per required bufferyard

standards, ~~or per Architectural District standards or if required by Fire Marshal, Building Official or Zoning Official.~~ No more than one vehicular entrance, not exceeding 25 feet in width, may be allowed to provide access through the building to the interior of the building or site and whereas an additional five feet of width for a pedestrian sidewalk shall be provided.

Figure 19-404-2



⁵ Parcels in the CM district whose rear property line abuts a public alley or right-of-way shall provide a ~~30~~45-foot type "E" bufferyard directly abutting the alley or right-of-way. Frontages along Addison Lane and Knox Lane shall be considered rear yards.

⁶ Minimum rear setback for properties abutting U.S. Army Corp of Engineers' land or an active railroad right-of-way shall be five feet.

⁷ All dimensional standards shall be set by the board of zoning appeals for any proposed manufacturing use classified as special exception petition in the M district or any special exception in the OR district, but shall be no less than the standard indicated.

⁸ Minimum lot width at front building line shall apply to standalone uses on one acre parcels.

⁹ Principal use structures ~~other than mixed-use buildings and hotels~~ in the CM District shall have a maximum height of ~~40 feet~~ height 5 stories unless ~~a) the rear bufferyard is expanded by ten feet where such parcels shall have a maximum height of height of 50 feet 7 stories; mixed-use buildings and hotels will follow the conditional use standards and end notes 10 & 11. or b) the parcel is entirely contained in the CM District, fronts College Avenue, and abuts property owned by the U.S. Army Corps of Engineers where such parcels shall have a maximum height of 65 feet.~~

¹⁰ ~~For CM parcels fronting College Avenue, height shall be measured at the average grade of the sidewalk along College Avenue. Mixed-use Developments may be up to 7 stories in height in the CM district & up to 5 stories in height in the C district provided they follow the Conditional Use Standards set forth in 19-405 & up to 5 stories in the C district.~~

¹¹ Hotels may be permitted to have a maximum height of ~~65 feet~~ 7 stories in the CP-2, C & CM district subject to the approval of a conditional use in the CP-2 C & CM district. ~~For the East side of College Ave in the block created by the two ends of Strode Circle, the maximum height of a hotel is limited to 5 stories. Extending 100ft west of College Ave between North Clemson Ave and Old Greenville Hwy and extending 100ft east of College Ave between Keith Street and Old Greenville Hwy, no build can be taller than 2 stories and must maintain the existing building façade or be replaced with a reasonably close replica of the façade.~~

¹² Maximum gross floor area for retail establishments shall not exceed the permitted square feet on any one floor.

¹³ Maximum gross floor area of a single business occupying more than one floor of a building.

¹⁴ The maximum front setback for all CP-1 properties shall be 15 feet, unless a public plaza is provided. Any such plaza shall have a minimum depth of 25 feet and a maximum depth of 50 feet, front a public street or sidewalk, be accessible to the general public, be a minimum of 25 feet wide with a maximum width of 50 percent of the building frontage, and ensure that all sides of the building abutting the plaza have retail, office, or service uses with a minimum depth of 35 feet.

¹⁵ City owned buildings not subject to height limitations

ARTICLE IV. NON-RESIDENTIAL DISTRICTS AND DISTRICT REGULATIONS

Sec. 19-405. Standards for conditional use and special exceptions for non-residential districts

A. Residential Uses

1. Residential Developments. Various

a. Mixed-use Structures and Mixed-use Developments 3 Stories or less

1. Conditional Use Standards [*C District Only*]

a. Principal use structure(s) that:

- i. Front a public right-of-way shall have service, retail, or office uses along 100 percent of the facade that abuts the street, sidewalk, or grade level with the exception of Addison Lane and Daniel Drive.
 - ii. Principal use structure(s) that otherwise abut a public sidewalk, City of Clemson property or property owned by the U.S. Army Corps of Engineers shall have service, retail, or office uses along a minimum of 50% of the façade. On-site amenities may utilize the remaining frontage;
 - iii. On-site leasing and/or on-site management offices, shall comprise the lessor of 25% of a building facade abutting a public right-of-way or sidewalk or a maximum of 2,000 square feet; and
 - iv. No on-site amenities shall occupy the ground floor frontage along any public right-of-way or sidewalk.
- b. Of the required ground level commercial space, at least 50% of the frontage shall have a minimum depth of 50 feet. The remaining portion shall have a minimum depth of 35 feet. No commercial use shall be allowed to have a width of less than 15 feet.
- c. No more than one entrance, not exceeding 25 feet in width per street frontage, may be allowed to provide vehicular access to the interior of the building or site. An additional five feet of width for a pedestrian sidewalk shall be provided. Additional curb cuts maybe allowed for service and emergency access.
- d. All parking provided within or under a mixed-use building must be designed to allow for maneuvering space sufficient to allow each vehicle to individually enter and exit the structure, as well as, all other design requirements of ARTICLE VIII.
- e. Surface parking shall not be allowed abutting a public right-of-way, sidewalk, City of Clemson property or property adjacent to shoreline frontages of Lake Hartwell owned by the U.S. Army Corps of Engineers.
- f. One eight foot wide entrance doorway providing pedestrian access to the interior of the principal use structure may be permitted per street frontage.

- g. Balconies shall comply with the following:
 - i. Shall not extend past the property line;
 - ii. Shall not overhang any public or private sidewalks; and
 - iii. Balconies shall be prohibited for portions of buildings abutting residentially zoned R-20 and R-12 properties.
 - h. Dwelling units are permitted subject to the following:
 - i. Dwelling units are only allowed on floors above the grade level for any portion of a principal use structure(s) that abuts a public right-of-way or sidewalk or any property owned by the City of Clemson or the U.S. Army Corps of Engineers other than for properties fronting Daniel Drive as noted in subparagraph a)i.;
 - ii. For portions of a mixed use structure(s) not covered in subparagraph h)i.), dwelling units may be located within the principal use structure(s) on any grade/floor provided no access to the dwelling units shall be permitted along the exterior of the building other than as provided by subparagraph (f). All structures must be mixed-use; and
 - iii. Each dwelling unit shall have minimum floor area of 350 square feet.
 - i. On-site management shall be required for short-term rentals of any dwelling unit of less than 30 days of occupancy.
 - j. A bond in an amount equal to 150% of the estimated cost for building out the commercial space (based on the current average cost for commercial construction in the area as determined by the City) shall be posted at the time of the issuance of the first Certificate of Occupancy issued for any portion of the residential component of the mixed-use structure. The bond, which shall have a 2-year expiration date, may be either a cash or surety bond, and shall be released upon completion of the upfit of the commercial space. In the event the commercial space upfit is completed by units or phases, the bond amount may be proportionately reduced based on square footage as the space is occupied by a viable commercial entity possessing a business license issued by the City. The City shall reserve the right to call the bond for any uncompleted commercial space two weeks prior to the expiration of the bond.
 - k. If property fronts College Ave the developer is responsible for installing the Downtown Corridor Plan for their frontage. If City staff deems installation impractical due to no logical termination point the developer must pay into a fund the cost equal to 150% the cost of all aspects of installation of the Downtown Corridor Plan for the section.
 - l. Extending 100ft west of College Ave between North Clemson Ave and Old Greenville Hwy and extending 100ft east of College Ave between Keith Street and Old Greenville Hwy, no build can be taller than 2 stories and must maintain the existing building façade or be replaced with a reasonably close replica of the façade.
 - m. A 10' facade step-back shall be incorporated into the design of structures where the structure abuts Knox Road or Addison Lane beginning at the third floor or 30' whichever is the lesser.
 - n. A 20' facade step-back shall be incorporated into the design of structures where the structure abuts a R-20 or R-12 zoned property beginning at the fourth floor or 40' whichever is the lesser.
 - o. In addition to the required commercial parking public parking will be required in the amount equal to .75 of the required commercial parking.
2. Conditional Use Standards *[CM District Only]*
- a. Principal use structure(s) that:
 - i. Front a public right-of-way shall have service, retail, or office uses along 100 percent of the façade that abuts the street, sidewalk, or grade level with the exception of frontages along

- Addison Lane, Knox Lane, Riggs Drive, Strode Circle, Edgewood Ave, McHugh Lane, Shorecrest Drive and Hillcrest Drive;
- ii. Principal use structure(s) that otherwise abut a public sidewalk, Keowee Trail, City of Clemson property, or property owned by the U.S. Army Corps of Engineers shall have service, retail, or office uses along a minimum of 50% of the facade. On-site amenities may utilize the remaining frontage; and
 - iii. On-site leasing and/or on-site management offices shall comprise the lessor of 25% of a building facade abutting a public right-of-way or sidewalk or a maximum of 2,000 square feet; and
 - iv. No on-site amenities shall occupy the ground floor frontage along any public right-of-way or sidewalk.
- b. At least 50% of the required service, retail, or office uses shall occupy a space that has a minimum depth of 50 feet and the remaining portion shall occupy a space that has a minimum depth of 35', unless completely surrounding a public plaza as described in Section [19-404](#) Table 19-404-1 endnote 2.e. No commercial use shall be allowed to have a width of less than 15 feet.
 - c. All parking provided within or under a mixed-use building must be designed to allow for maneuvering space sufficient to allow each vehicle to individually enter and exit the structure, as well as, all other design requirements of ARTICLE VIII.
 - d. Surface parking shall not be allowed abutting a public right-of-way, sidewalk, City of Clemson property, or shoreline frontages of Lake Hartwell property owned by the U.S. Army Corps of Engineers.
 - e. No more than one entrance, not exceeding 25 feet in width per street frontage, may be allowed to provide vehicular access to the interior of the building or site On College Ave or Hwy 93. An additional five feet of width for a pedestrian sidewalk shall be provided. Additional curb cuts may be allowed for service and emergency access.
 - f. One eight foot wide entrance doorway providing pedestrian access to the interior of the principal use structure may be permitted per street frontage.
 - g. Balconies shall comply with the following:
 - i. Shall not extend past the property line;
 - ii. Shall not overhang any public or private sidewalks; and
 - iii. Balconies shall be prohibited for portions of buildings abutting residentially zoned R-20 and R-12 properties.
 - h. Dwelling units are permitted subject to the following:
 - i. Dwelling units are only allowed on floors above the grade level for any portion of a principal use structure(s) that abuts a public right-of-way (except Addison Lane Riggs Drive, Strode Circle, Edgewood Ave, McHugh Lane, Shorecrest Drive Keowee Trail or Knox Lane).
 - ii. For portions of a mixed use structure(s) not covered in subparagraph h)i., dwelling units may be located within the principal use structure(s) on any grade/floor provided no access to the individual dwelling units shall be permitted along the exterior of the building other than as provided by subparagraph f). All structures must be mixed use; and
 - iii. Each dwelling unit shall have minimum floor area of 350 square feet.
 - i. On-site management shall be required for short-term rentals of any dwelling unit of less than 30 days of occupancy.
 - j. A bond in an amount equal to 150% of the estimated cost for building out the commercial space (based on the current average cost for commercial construction in the area as determined by the City) shall be posted at the time of the issuance of the first Certificate of Occupancy issued for any portion of the residential component of the mixed-use structure. The bond, which shall have

a 2-year expiration date, may be either a cash or surety bond, and shall be released upon completion of the upfit of the commercial space. In the event the commercial space upfit is completed by units or phases, the bond amount may be proportionately reduced based on square footage as the space is occupied by a viable commercial entity possessing a business license issued by the City. The City shall reserve the right to call the bond for any uncompleted commercial space two weeks prior to the expiration of the bond.

- k. If property fronts College Ave the developer is responsible for installing the Downtown Corridor Plan for their frontage. If City staff deems installation impractical due to no logical termination point the developer must pay into a fund the cost equal to 150% the cost of all aspects of installation of the Downtown Corridor Plan for the section.
- l. A 10' facade step-back shall be incorporated into the design of structures where the structure abuts Knox Road or Addison Lane beginning at the third floor or 30' whichever is the lesser.
- m. A 20' facade step-back shall be incorporated into the design of structures where the structure abuts a R-20 or R-12 zoned property beginning at the fourth floor or 40' whichever is the lesser.
- n. In addition to the required commercial parking public parking will be required in the amount equal to .75 of the required commercial parking.

3. Conditional Use Standards *[CP-2 & CP-3 Districts Only]*

a. Dwelling units are permitted subject to the following:

- i. Dwelling units are only allowed on floors above the grade level for any portion of a principal use structure(s) that abuts a public right-of-way or sidewalk or any property owned by the City of Clemson or the U.S. Army Corps of Engineers except Holiday Ave, Holiday West, Holiday East, Stoney Creek Drive, Greenlee Place, Banks Street, Dupree Street, Carlton Lane, Reid Street, Freedom Drive, Presley Drive, Stephens Road, Wesley Street, any highway on or off ramp, Kelly Road, Vineyard Road, Brook Street, Berry Street, Canoy Lane, Newton Street, Liberty Drive, Stardust Lane, Summey Street, Skyview Drive, Williams Lane, Raven Lane West Lane and Cambridge Drive;
- ii. For portions of a mixed use structure(s) or developments not covered in subparagraph a)i., dwelling units may be located within the principal use structures(s) on any grade/floor provided no access to the individual dwelling units shall be permitted along the exterior of the building other than a common entrance serving the interior of the structure(s).
- iii. Each dwelling unit shall have minimum floor area of 350 square feet.

b. Frontage occupancy requirements for nonresidential uses in principal mixed-use structures that face Tiger Blvd (Hwy 123), Old Greenville Hwy (Hwy 93), Anderson Hwy (Hwy 76), Keowee Trail, Wall Street, or shoreline frontages of Lake Hartwell owned by the U.S. Army Corps of Engineers shall meet the following requirements:

- i. Shall have service, retail, or office uses along 100 percent of that facade at street or sidewalk level.
- ii. At least 50% of the required service, retail, or office uses shall occupy a space that has a minimum depth of 50' and the remaining portion shall occupy a space that has a minimum depth of 35', unless completely surrounding a public plaza as described in Section [19-404](#) Table 19-404-1 endnote 2.e. No commercial use shall be allowed to have a width of less than 15 feet.
- iii. On-site leasing and/or on-site management offices shall comprise the lessor of 25% of a building facade abutting a public right-of-way or sidewalk or a maximum of 2,000 square feet;

- iv. No on-site amenities shall occupy the ground floor frontage along any public right-of-way or sidewalk; and
- v. Site amenity facilities may be located along frontages of property owned by the City of Clemson or shoreline frontages of Lake Hartwell owned by the U.S. Army Corps of Engineers but may not comprise more than 25% of said frontage.
- c. No more than one entrance, not exceeding 25 feet in width per street of frontage on Hwy 123 or Hwy 93, may be allowed to provide vehicular access to the interior of the building or site. An additional five feet of width for a pedestrian sidewalk shall be provided. Additional curb cuts maybe allowed for service and emergency access.
- d. Parking may be provided underneath principal use structures located within the interior of the lot provided the exterior façade is designed to hide the parking from the exterior. The architectural treatment shall be compatible with the facades of the other buildings on the site.

4. Mixed-use Structures and Mixed-use Developments 4 to 7 stories (C district limited to 5)

1. Conditional Use Standards *[C District Only]*

a. Principal use structure(s) that:

- i. Front a public right-of-way shall have service, retail, or office uses along 100 percent of the facade that abuts the street, sidewalk, or grade level with the exception of Addison Lane and Daniel Drive.
- ii. Principal use structure(s) that otherwise abut a public sidewalk, City of Clemson property or property owned by the U.S. Army Corps of Engineers shall have service, retail, or office uses along a minimum of 50% of the façade. On-site amenities may utilize the remaining frontage;
- iii. On-site leasing and/or on-site management offices, shall comprise the lessor of 25% of a building facade abutting a public right-of-way or sidewalk or a maximum of 2,000 square feet; and
- iv. No on-site amenities shall occupy the ground floor frontage along any public right-of-way or sidewalk.
- b. Of the required ground level commercial space, at least 50% of the frontage shall have a minimum depth of 50 feet. The remaining portion shall have a minimum depth of 35 feet. No commercial use shall be allowed to have a width of less than 15 feet.
- c. No more than one entrance, not exceeding 25 feet in width per street frontage, may be allowed to provide vehicular access to the interior of the building or site. An additional five feet of width for a pedestrian sidewalk shall be provided. Additional curb cuts maybe allowed for service and emergency access.
- d. All parking provided within or under a mixed-use building must be designed to allow for maneuvering space sufficient to allow each vehicle to individually enter and exit the structure, as well as, all other design requirements of ARTICLE VIII.
- e. Surface parking shall not be allowed abutting a public right-of-way, sidewalk, City of Clemson property or property adjacent to shoreline frontages of Lake Hartwell owned by the U.S. Army Corps of Engineers.
- f. One eight foot wide entrance doorway providing pedestrian access to the interior of the principal use structure may be permitted per street frontage.
- g. Balconies shall comply with the following:
 - i. Shall not extend past the property line;
 - ii. Shall not overhang any public or private sidewalks; and
 - iii. Balconies shall be prohibited for portions of buildings abutting residentially zoned R-20 and R-12 properties.

- h. Dwelling units are permitted subject to the following:
 - i. Dwelling units are only allowed on floors above the grade level for any portion of a principal use structure(s) that abuts a public right-of-way or sidewalk or any property owned by the City of Clemson or the U.S. Army Corps of Engineers other than for properties fronting Daniel Drive as noted in subparagraph a)i.;
 - ii. For portions of a mixed use structure(s) not covered in subparagraph h)i., dwelling units may be located within the principal use structure(s) on any grade/floor provided no access to the dwelling units shall be permitted along the exterior of the building other than as provided by subparagraph (f). All structures must be mixed-use; and
 - iii. Each dwelling unit shall have minimum floor area of 350 square feet.
- i. On-site management shall be required for short-term rentals of any dwelling unit of less than 30 days of occupancy.
- j. A bond in an amount equal to 150% of the estimated cost for building out the commercial space (based on the current average cost for commercial construction in the area as determined by the City) shall be posted at the time of the issuance of the first Certificate of Occupancy issued for any portion of the residential component of the mixed-use structure. The bond, which shall have a 2-year expiration date, may be either a cash or surety bond, and shall be released upon completion of the upfit of the commercial space. In the event the commercial space upfit is completed by units or phases, the bond amount may be proportionately reduced based on square footage as the space is occupied by a viable commercial entity possessing a business license issued by the City. The City shall reserve the right to call the bond for any uncompleted commercial space two weeks prior to the expiration of the bond.
- k. Maximum height in the C District is 5 Stories and must meet the following requirements provided the requirements below are adhered to.
- l. If property fronts College Ave, the developer is responsible for installing the Downtown Corridor Plan for their frontage. If City staff deems installation impractical due to no logical termination point the developer must pay into a fund the cost equal to 150% the cost of all aspects of installation of the Downtown Corridor Plan for the section.
- m. Extending 100ft west of College Ave between North Clemson Ave and Old Greenville Hwy and extending 100ft east of College Ave between Keith Street and Old Greenville Hwy, no build can be taller than 2 stories and must maintain the existing building façade or be replaced with a reasonably close replica of the façade.
- n. A 10' facade step-back shall be incorporated into the design of structures where the structure abuts Knox Road or Addison Lane beginning at the third floor or 30' whichever is the lesser.
- o. A 20' facade step-back shall be incorporated into the design of structures where the structure abuts a R-20 or R-12 zoned property beginning at the fourth floor or 40' whichever is the lesser.
- p. If a developer wishes to exceed 3 stories, will contribute to the City of Clemson in the amount of \$30.00 per square foot for community improvements.
- q. In addition to the required commercial parking public parking will be required in the amount equal to .75 of the required commercial parking.

2. Conditional Use Standards *[CM District Only]*

- a. Principal use structure(s) that:
 - i. Front a public right-of-way shall have service, retail, or office uses along 100 percent of the façade that abuts the street, sidewalk, or grade level with the exception of frontages along Addison Lane, Knox Lane, Riggs Drive, Strode Circle, Edgewood Ave, McHugh Lane, Shorecrest Drive and Hillcrest Drive;

- ii. Principal use structure(s) that otherwise abut a public sidewalk, Keowee Trail, City of Clemson property, or property owned by the U.S. Army Corps of Engineers shall have service, retail, or office uses along a minimum of 50% of the facade. On-site amenities may utilize the remaining frontage; and
 - iii. On-site leasing and/or on-site management offices shall comprise the lessor of 25% of a building facade abutting a public right-of-way or sidewalk or a maximum of 2,000 square feet; and
 - iv. No on-site amenities shall occupy the ground floor frontage along any public right-of-way or sidewalk.
- b. At least 50% of the required service, retail, or office uses shall occupy a space that has a minimum depth of 50 feet and the remaining portion shall occupy a space that has a minimum depth of 35', unless completely surrounding a public plaza as described in Section 19-404 Table 19-404-1 endnote 2.e. No commercial use shall be allowed to have a width of less than 15 feet.
- c. All parking provided within or under a mixed-use building must be designed to allow for maneuvering space sufficient to allow each vehicle to individually enter and exit the structure, as well as, all other design requirements of ARTICLE VIII.
- d. Surface parking shall not be allowed abutting a public right-of-way, sidewalk, City of Clemson property, or shoreline frontages of Lake Hartwell property owned by the U.S. Army Corps of Engineers.
- e. No more than one entrance, not exceeding 25 feet in width per street frontage, may be allowed to provide vehicular access to the interior of the building or site On College Ave or Hwy 93. An additional five feet of width for a pedestrian sidewalk shall be provided. Additional curb cuts may be allowed for service and emergency access.
- f. One eight foot wide entrance doorway providing pedestrian access to the interior of the principal use structure may be permitted per street frontage.
- g. Balconies shall comply with the following:
 - i. Shall not extend past the property line;
 - ii. Shall not overhang any public or private sidewalks; and
 - iii. Balconies shall be prohibited for portions of buildings abutting residentially zoned R-20 and R-12 properties.
- h. Dwelling units are permitted subject to the following:
 - i. Dwelling units are only allowed on floors above the grade level for any portion of a principal use structure(s) that abuts a public right-of-way (except Addison Lane Riggs Drive, Strode Circle, Edgewood Ave, McHugh Lane, Shorecrest Drive Keowee Trail or Knox Lane).
 - ii. For portions of a mixed use structure(s) not covered in subparagraph h)i., dwelling units may be located within the principal use structure(s) on any grade/floor provided no access to the individual dwelling units shall be permitted along the exterior of the building other than as provided by subparagraph f). All structures must be mixed use; and
 - iii. Each dwelling unit shall have minimum floor area of 350 square feet.
- i. On-site management shall be required for short-term rentals of any dwelling unit of less than 30 days of occupancy.
- j. A bond in an amount equal to 150% of the estimated cost for building out the commercial space (based on the current average cost for commercial construction in the area as determined by the City) shall be posted at the time of the issuance of the first Certificate of Occupancy issued for any portion of the residential component of the mixed-use structure. The bond, which shall have a 2-year expiration date, may be either a cash or surety bond, and shall be released upon completion of the upfit of the commercial space. In the event the commercial space upfit is completed by units or phases, the bond amount may be proportionately reduced based on square

footage as the space is occupied by a viable commercial entity possessing a business license issued by the City. The City shall reserve the right to call the bond for any uncompleted commercial space two weeks prior to the expiration of the bond.

- k. If property fronts College Ave the developer is responsible for installing the Downtown Corridor Plan for their frontage. If City staff deems installation impractical due to no logical termination point the developer must pay into a fund the cost equal to 150% the cost of all aspects of installation of the Downtown Corridor Plan for the section.
- l. A 10' facade step-back shall be incorporated into the design of structures where the structure abuts Knox Road or Addison Lane beginning at the third floor or 30' whichever is the lesser.
- m. A 20' facade step-back shall be incorporated into the design of structures where the structure abuts a R-20 or R-12 zoned property beginning at the fourth floor or 40' whichever is the lesser.
- n. If a developer wishes to exceed 5 stories, they may contribute to the City of Clemson in the amount of \$30.00 per square foot (for properties on the east side of College Ave in the block bookended by Strode Circle the base maximum height is 3 stories, but a developer wishing to exceed 3 stories may contribute to the City of Clemson the amount of \$30.00 per square foot; in no case may the height in this block exceed 5 stores).
- o. In addition to the required commercial parking public parking will be required in the amount equal to .75 of the required commercial parking.

F. Services

7. Other Person Services

c. Parking Lots

1. Conditional Use Standards (C, ~~CM~~, CP-1 & CP-2 Districts only)

- a. A three foot masonry wall shall be constructed along all frontages that abut a public right-of-way.
- b. ~~An eight foot Type "A" buffer yard along all exterior property lines. See Section 19-908/A buffer in accordance with Article 9 will be installed.~~
- c. No More than one driveway entrance, not exceeding 24 feet in width per street frontage.
- d. A minimum four foot wide pedestrian connection shall be provided to any abutting public sidewalk
- e. The interior of the parking lot shall comply with the landscape standards of Section 19-905-E

d. Freestanding Parking Structures

2. Conditional Use Standards (C, CM, CP-1 & CP-2 Districts only)

- a. Facades visible from any public right-of-way shall be designed to obscure the view of parked vehicles.
- b. The minimum front setback for any façade abutting a public right-of-way shall be five feet and the maximum shall be 15 feet
- c. A minimum of one upperstory tree shall be planted for every 30 feet of linear street frontage and a continuous row of three gallon shrubs planted three feet on center allowing for an approved pedestrian plaza or seating areas, excluding tree planting areas.
- d. No more than one entrance, not exceeding 25 feet in width per street frontage, may be allowed to provide vehicular access to the interior of the building or site. An additional five feet of width for a pedestrian sidewalk shall be provided.
- e. Shall not exceed 45 feet, including parapet or screening walls, but excluding stair towers and elevator penthouses.

f. The height of stair towers and elevator penthouses for parking decks shall not exceed an additional 15 feet above the top of the principal structure and shall be screened from view from the public right-of-way.

g. Ownership of parking structures permitted in the C and CM District shall be limited to City of Clemson, or City of Clemson/private partnerships.

h. Ownership of parking structures permitted in the C and CM District shall be approved by the City of Clemson following a public hearing by City Council.

ARTICLE VIII. OFF-STREET PARKING REGULATIONS

Table 19-802. Off-street Parking Space Requirements		
NAICS Category	Use Type	Parking Spaces Required
Residential Uses		
Dwelling Units (Incorporated into a Mixed-Use Building Development)		4 .5 space per bedroom ¹



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Andy Blondeau, City Administrator

Date Submitted: 4/2/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Policy/Action

Agenda Item Summary: (brief for public information and posted agenda)

Consider a resolution appointing Council Member John Fulmer to serve as an ex-officio liaison to the Board of Directors of the Friends of the Green Crescent. - City Administrator Andy Blondeau

Agenda Item Detail: (expand as necessary for clarification)

Resolution for Clemson City Council R-2026-04

A RESOLUTION TO APPOINT A LIAISON TO THE FRIENDS OF THE GREEN CRESCENT

WHEREAS, the Green Crescent Trail is a regional initiative to develop a connected network of walking and bicycling infrastructure across Clemson, Central, and Pendleton; and

WHEREAS, the City of Clemson is a key partner in planning, funding, and implementing segments of this network; and

WHEREAS, coordination and communication between the City of Clemson and the Friends of the Green Crescent (FGC), a 501(c)(3) nonprofit organization, are important to the successful development of the trail system;

NOW, THEREFORE, BE IT RESOLVED that the Clemson City Council hereby appoints Council Member John Fulmer to serve as an ex-officio liaison to the Board of Directors of the Friends of the Green Crescent.

BE IT FURTHER RESOLVED that this liaison role is intended to facilitate communication, coordination, and alignment between the City of Clemson and FGC, and does not confer voting authority within the FGC Board.

BE IT FURTHER RESOLVED that this appointment shall be for a one-year term and may be renewed at the discretion of the City Council.

ADOPTED this ____ day of _____, 2026.

Robert Halfacre, Mayor

Attest: Jeremiah Jackson, City Clerk



CITY OF CLEMSON AGENDA ITEM REQUEST FORM

Requested By:
Andy Blondeau, City Administrator

Date Submitted: 4/1/26

Council Meeting Date: April 6, 2026

Type of Request: (Choose Only One)
Policy/Action

Agenda Item Summary: (brief for public information and posted agenda)

Authorize the City Administrator to negotiate a contract with Creech and Associates for property and growth needs assessment. - City Administrator Andy Blondeau

Agenda Item Detail: (expand as necessary for clarification)