



SAFE TRANSPORTATION. WELL CRAFTED.

HICKORY

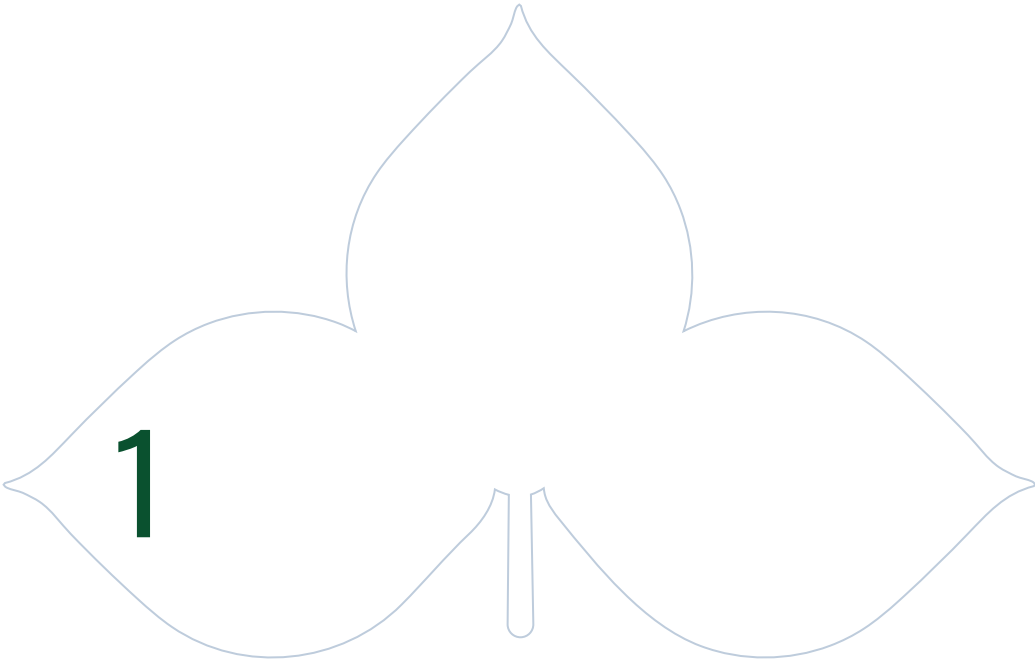
MOVING FORWARD

Adopted by Hickory City Council
April 2026



Contents

Introduction	3
Local Context.....	3
Hickory Moving Forward.....	4
Safety Planning Process.....	5
The Safe System Approach	6
Building a Culture of Safety	7
Local Plan, Policy, Guidance, and Project Review.....	8
Safety Data Analysis	11
Crash Trends.....	12
Where Are Crashes Occurring?	12
High Injury Network.....	15
Focus Crash Types and Safety Problems.....	16
Proactive Safety	17
Public Involvement.....	19
Approach.....	19
Phase 1: Discovery	20
Phase 2: Collaboration.....	21
Phase 3: Accountability	23
Crash Reduction Framework	25
Goals.....	25
Strategies	26
Timeline.....	26
Performance Measures.....	26
Implementation Partners.....	26
Priority Locations.....	33
Countermeasures.....	34
Priority Location Action Plans.....	35
Implementation Tools.....	56
Project Funding.....	57
Evaluating and Updating the Safety Action Plan.....	59
Reporting Progress	59
Statewide and Regional Coordination	59
Safe Streets and Roads for All (SS4A) Compliance.....	60
Hickory Moving Forward in Action	61



1

Introduction

*Between 2016 and 2024, 49 people were killed in traffic crashes in the City of Hickory. During this same period, another 115 were seriously injured in traffic crashes. The 148 crashes that account for these fatalities and serious injuries represent 1.3% of the 11,727 total crashes on local and state roads in Hickory during this period. The City of Hickory is committing to **reducing fatal and serious injury crashes on streets and roads serving residents and visitors by 50% by 2035, working to zero by 2050.***

Local Context

The City of Hickory is a growing city in the foothills of western North Carolina—a regional hub between the Piedmont Triad, Western North Carolina, and the Charlotte metropolitan area. Over the past few decades, Hickory has been transitioning from a historically small town character, with industry and suburban residential development radiating from the City center to a more urban regional anchor. Hickory's population at the 2020 decennial Census was approximately 43,500, and the City has continued to grow in the first half of this decade, reflecting broader regional trends of in migration that have contributed significantly to population growth across North Carolina. As development has intensified, bringing more housing, employment, and commercial activity, areas that once functioned with a more rural or suburban roadway pattern are increasingly taking on urban characteristics, including higher traffic volumes, more complex intersections, and growing demand from roadway users of all modes. These shifts place new pressures on Hickory's transportation network. Within this context, it becomes critical that the City have a framework to ensure that as it continues to grow and evolve it does so in a way that prioritizes safety for all modes—driving, walking, rolling, using transit—so that existing safety concerns are not exacerbated and new ones do not emerge as travel demand and development intensify.



Main Ave NE and 2nd St NE, facing City Walk trail crossing

Hickory Moving Forward

Hickory Moving Forward (HMF) is a comprehensive safety action plan developed by the City of Hickory to address transportation safety concerns through proactive planning and data-informed decision-making to achieve the goal of zero fatal and serious injury crashes by 2050. The City pursued funding for this action plan through the US Department of Transportation (USDOT)'s Safe Streets and Roads for All (SS4A) program. This action plan addresses the City's most urgent safety problems through the implementation of short- and long-term strategies and projects aimed at reducing serious injury and fatal crashes on roadways in the short term and long term.

The plan is designed in alignment with regional, state, and national plans and initiatives, including the Greater Hickory Metropolitan Planning Organization (GHMPO)'s Western Piedmont Transportation Safety Plan (WPTSP), the North Carolina Department of Transportation (NCDOT)'s Strategic Highway Safety Plan (SHSP) and Highway Safety Improvement Program (HSIP), and the USDOT SS4A program.

Safety Planning Process

The planning process for Hickory Moving Forward followed five main steps: establishing partners, analyzing safety data, determining key safety problems, identifying effective crash reduction strategies, and implementing and monitoring the Action Plan.

Establish Partners

The safety planning process starts by identifying and engaging the partners and stakeholders who will participate in and guide the planning process. These partners contribute local knowledge, share safety concerns, and provide diverse perspectives that help shape Hickory Moving Forward's priorities and recommendations. More information about stakeholder involvement for HMF is included in Chapter 4, "Public Involvement".

Analyze Safety Data

The second step involves identifying crash types and trends and locations and populations most at risk of fatal and serious injury crashes. Qualitative data from public input, local plans, and policies add important local context to this analysis. High risk locations are mapped on a High Injury Network (HIN), which displays corridors and intersections with a concentration of severe crashes and roadway characteristics that would benefit most from safety improvements.

Determine Safety Problems

The third step defines the primary safety problems, focus crash types, and systemic risk factors that contribute to severe crashes. This step narrows the focus to key safety problems and factors that can have the highest impact on the reducing the most severe crashes.

Identify Crash Reduction Strategies

This step combines previous inputs into a set of strategies to address key safety risks by targeting priority crash patterns, locations, and contributing conditions through engineering, enforcement, education, and policy measures.

Implement and Monitor the Action Plan

Through adoption of Hickory Moving Forward, the City of Hickory initiates the fifth step in the safety planning process. The Action Plan outlines a Crash Reduction Framework that includes strategies, specific actions, project examples, and potential policy changes designed to reduce fatalities and serious injuries across the City. The City will regularly review progress toward the goals and actions laid out in this plan. As conditions, funding, and data evolve, the City will update Hickory Moving Forward to ensure that implementation remains effective, responsive, and focused on achieving a safer transportation system for all users.

The Safe System Approach

The adoption of HMF signals a commitment by the City of Hickory to implement a Safe System Approach (SSA) framework in the planning, design, and management of the City's community form. The SSA is a holistic methodology adopted by the USDOT that provides a comprehensive framework to address and mitigate safety risks in transportation systems. The SSA framework is built on the idea that humans make mistakes, and that proactive, data-informed, thoughtful planning and design can minimize the opportunity for mistakes to result in a fatality or serious injury. The SSA identifies five elements to a safe system:

Safer People: Promote safe and responsible driving habits among road users while prioritizing conditions that ensure their safe arrival at destinations.

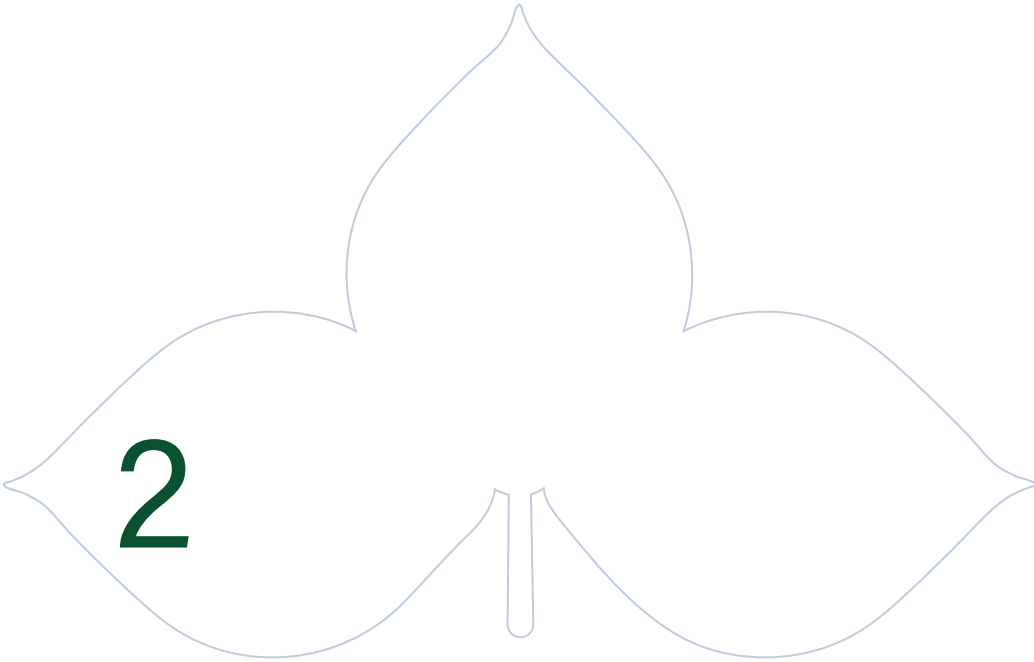
Safer Vehicles: Increase the number of vehicle systems and features that prevent crashes and reduce the impact on people inside and outside the vehicle.

Safer Speeds: Encourage safer driving speeds on all roadways by using a combination of smart road design, setting speed limits, educating drivers, spreading awareness, and enforcing rules.

Safer Roads: Design roads that help reduce human errors and consider injury tolerances. This encourages safer behavior and facilitates easier travel for the most vulnerable people.

Post-Crash Care: Enhance crash survivability through access to medical care, keep first responders safe, and prevent secondary crashes through traffic incident management practices.





2

Building a Culture of Safety

Safety culture is the foundation of transportation safety and a pivotal component of successfully reaching Hickory's safety goals. Building a culture of safety begins with a shared commitment from everyone in Hickory to prioritize safety in their values, actions, and daily behaviors. Within the transportation safety context, there are two types of safety culture: **organizational safety culture**, which reflects how agencies and institutions prioritize and elevate safety, and **public safety culture**, which reflects the norms, expectations, and behaviors of individuals.

To reach Hickory's safety goal, local government and stakeholder agencies need to elevate roadway safety as a priority within their agencies—officials must advocate for improved transportation safety through innovative approaches to policymaking, engineering, planning, public health, and public safety. Organizational safety culture also means communicating clear safety expectations, centering safety in decision-making, sharing data informed messages, and educating residents about how individual choices contribute to community progress toward eliminating fatal and serious injury crashes.

The responsibility to build and foster a culture is collective. Public safety culture is about this shared responsibility and both personal and collective accountability. Strong organizational safety culture can reinforce public safety culture as everyone in Hickory continues to prioritize and center transportation safety daily.

Sustaining a safety culture requires a routine review of what is working, collaboration between new and longstanding partners, transparent reporting to decision makers and community members, and consistent emphasis on the community-wide benefits of preventing fatal and serious injury crashes.

Hickory Moving Forward establishes the data-informed foundation for a culture of safety, but ultimately Hickory will sustain a safety culture when everyone understands safety as a fundamental value and collective responsibility.

Local Plan, Policy, Guidance, and Project Review

Plans, policies, guidance documents, and projects set the foundation for safety culture, giving residents, decision-makers, employers, consultants, and anyone who lives, works, or plays in Hickory a clear direction on the values and priorities of the City. Together, these set the near- and long-term vision for transportation safety in Hickory. Understanding how these existing resources address transportation safety is important for determining opportunities to further embed organizational safety culture throughout Hickory. Future updates to these and other plans and policies in Hickory can support building a culture of safety by specifically connecting goals and recommendations and associated safety data and outcomes that support them.

This section summarizes the extent to which local plans, policies, and guidance documents address the elements of a Safe System and/or include references to Proven Safety Countermeasures (PSCi). This section also includes a summary of recent and upcoming safety projects.

Hickory by Choice 2030 Comprehensive Plan (2030)

The Hickory by Choice 2030 Comprehensive Plan addresses **Safer Roads, Safer Speeds, and Safer People**. The comprehensive plan mentions the importance of separating modes, implementing roadway improvements that enhance safety for bicyclists and pedestrians, reducing vehicle speeds, driver behavior, and education.

Hickory Pedestrian + Bicycle Plan (2020)

The Hickory Pedestrian + Bicycle Plan addresses **Safer Roads, Safer Speeds, and Safer People**. This plan includes recommendations designed to slow speeds, separate road users, and encourage safe driver behavior.

City of Hickory Community Development Block Grant Program (2024)

The City of Hickory Community Development Block Grant Program plan addresses **Safer Roads**. This plan promotes the separation of road users through pedestrian and multiuse facilities.

Hickory Land Development Code (updated Fall 2025)

The Hickory Land Development Code (LDC) addresses **Safer Road Users, Safer Roads, and Post Crash Care**. The LDC identifies specific roadway design features to improve driver awareness of pedestrians, details pedestrian path provisions, and acknowledges the importance of emergency vehicle access on roadways.

Engineering Department Manual of Practice

The Engineering Department Manual of Practice is a technical guide with design standards set forth by the City of Hickory for public infrastructure and utilities. Within this manual are guidelines for streets and curbs, gutters, sidewalks, and driveways.

This document includes design standards for different roadway types with bike lanes and sidewalks. However, it does not include design standards for different bicycle facilities, such as separated or buffered bike lanes, and would benefit from this additional guidance. Additionally, the streets standards include guidance on speed humps, speed tables, and pedestrian tables, which help reduce vehicle speeds.

This manual provides detailed guidance on sidewalks that meet ADA requirements, curb cuts, and crosswalks at intersections. It also illustrates standards for driveway cuts, but does not include considerations for crosswalks, should there be sidewalks along the adjoining street.

The Engineering Department Manual of Practice would benefit from additional standards on the following infrastructure improvements, which are proven safety measures:

- › Guardrails
- › Median barriers
- › Roundabouts
- › Reduced conflict intersections (RCI)
- › Intersection channelization
- › Curb extensions
- › Pedestrian refuge island
- › Buffered bike lanes
- › Separated bike lanes



Recent and Upcoming Proposed Safety Projects

Within the HSIP and the Strategic Transportation Improvement Program (STIP) are various state and federally funded safety-related roadway projects occurring in Hickory. These projects are part of an ongoing effort to address local safety issues, specifically at intersections.

Recently Completed

NC 127 at 3rd Avenue SE (SS-4912BR)

Install actuated flashers on vehicle entering warning signs on NC 127 and stop signs on 3rd Avenue SE.

NC 127 at 1st Avenue NE (SS-4912BM)

Replace the NC 127 5-section signal heads with 4-section Flashing Yellow Arrow heads. Install pedestrian signals and crosswalks for people crossing 1st Avenue on the east side of NC 127.

Under Design

NC 127 at 2nd Avenue NE (SS-4912CS)

Upgrade signals with Flashing Yellow Arrow, retroreflective backplates, centered signals on lanes, and one-way signs.

US 70/US 321 Business at 10th Avenue Drive SE / 6th Street SE (SS-6012B)

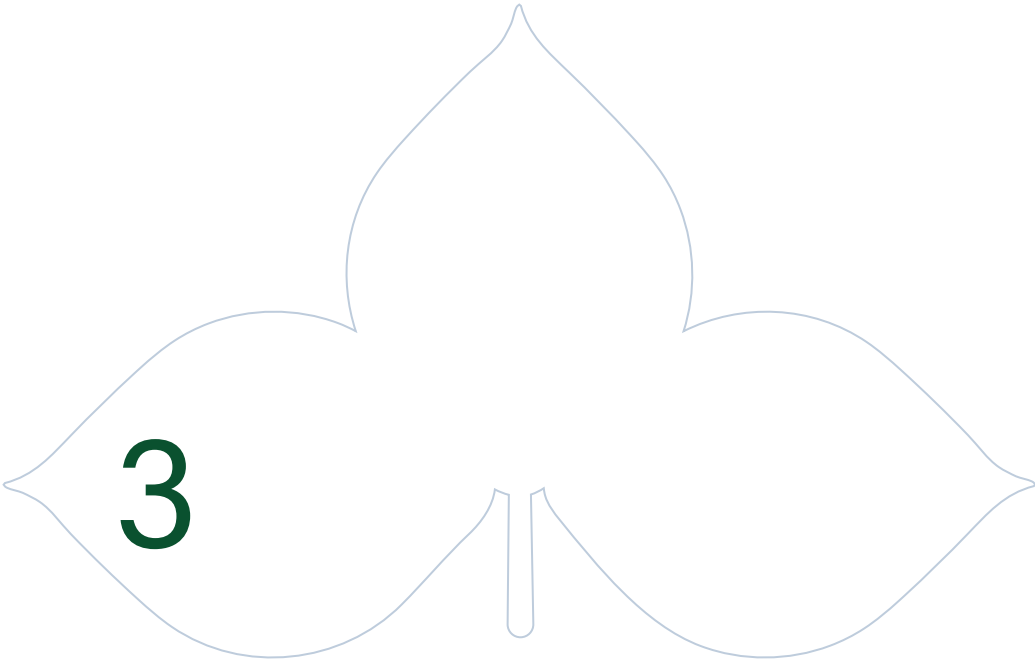
Median removal to provide space for offset left turns.

Lenoir Rhyne Boulevard SE at 3rd Avenue SE (SS-6212C)

Install 10-foot-wide high visibility crosswalk pavement markings with a leading pedestrian interval (LPI). Install two "No Pedestrian Crossing" signs at 2nd Avenue Place SE with "Use Crosswalk" signs pointing south to the new crosswalk at 3rd Avenue SE. Install Flashing Yellow Arrow signal head on south bound left turn lane and retroreflective backplates on all signal heads.

Section House Road at Sipe Road (SS-4912BC)

Installation of "Prepare to Stop" signage in advance of the unsignalized intersection.



3

Safety Data Analysis

Crash data form the foundation for the data-driven analysis process in HMF. By examining the patterns and characteristics of fatal and serious injury crashes over the specified period, HMF presents a holistic approach to addressing where crashes have happened and where crashes are likely to happen in the future, focusing on crash types that have the highest severity outcomes. This chapter describes key areas of concern and potential risk factors.

The project team obtained crash data from the North Carolina Department of Transportation (NCDOT) for crashes occurring between 2016 and 2024 on public roadways. This data included information such as location, collision type, and crash severity. The analysis of this data is represented in the tables and figures throughout this chapter. The project team obtained NCDOT's route characteristics file in a geographic information systems (GIS) format. The combination of crash and roadway characteristics informs this preliminary risk-based analysis.

The safety analysis in this chapter addresses several key questions:

- › What are the historic **crash trends** in the City?
- › **Where are crashes occurring** with the most frequency and severity?
- › What are the **focus crash types** and safety problems in the City?
- › What systemic risk factors can inform **proactive safety** improvements?

Crash Trends

This section describes in detail the fatal and serious injury (KA) crash histories to identify trends, overrepresentation, focus crash types and characteristics. This analysis is conducted for all crash types (all modes), including bike/pedestrian-involved crashes. In the City of Hickory between 2016 and 2024, there were a total of **11,727 crashes** and **148 fatal and serious injury crashes**. These crashes resulted in **115 serious injuries** and **49 deaths**. Figure 1 shows fatal and serious injury crash totals during the study period. Fatal and serious injury crash totals have trended up since 2019, peaking in 2024.

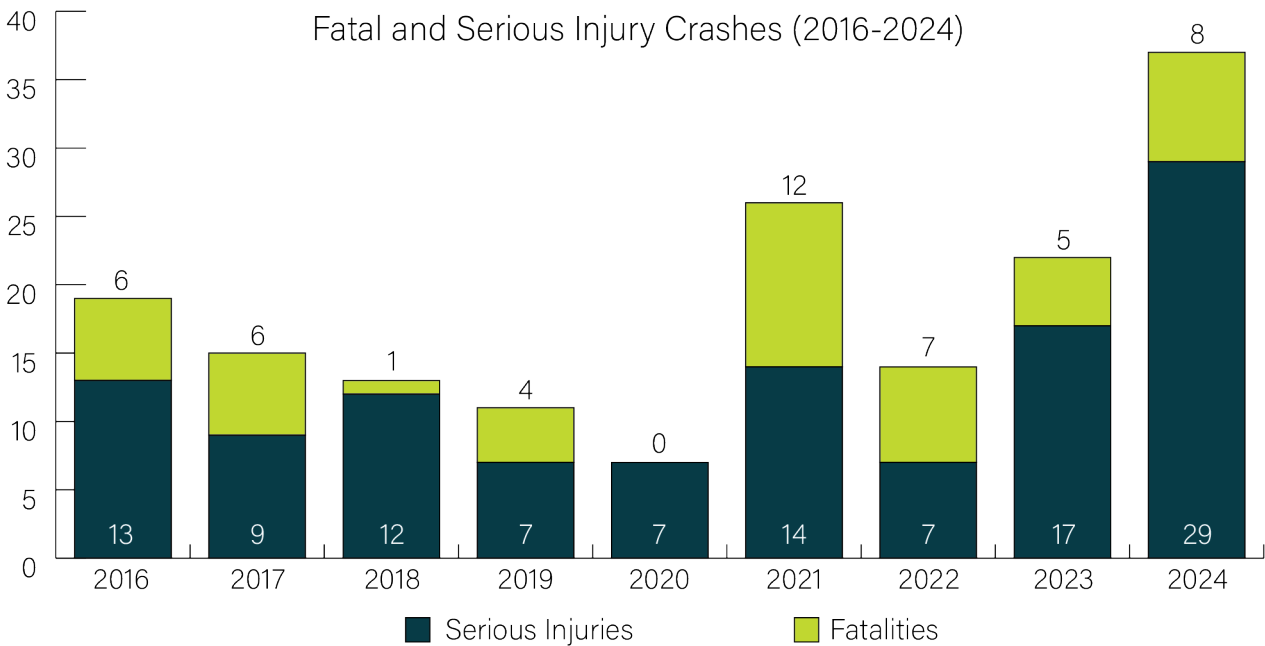


Figure 1. Fatal and Serious Injury Crashes (2016 - 2024)

During the week, the proportion of all crashes steadily rose from Monday to Thursday before jumping to their highest level on Friday. The weekend has the highest proportion of crashes, with the most KA crashes occurring on Fridays (18%). Fatal and serious injury crashes peaked between 6:00 – 7:00pm (10%). Crashes of all severity remained relatively stable throughout the first nine months of the year, before rising above the yearly trend in October, November, and December. Fatal and serious injury crashes peaked in July, September and October.

Where Are Crashes Occurring?

Comparing the percentage of total crashes and KA crashes by route class, lane configuration and other physical characteristics to the total proportion of the City’s transportation network mileage within these categories is a critical tool to inform decision-making based on crash severity and over-representation.

North Carolina Route Classification

Route class refers to the signage of the route (e.g., US 321 or NC 64), which correlates with road ownership/maintenance. Interstates, US Routes, NC Routes, and Secondary Routes are maintained by NCDOT, while Non-System roads are not maintained by NCDOT (typically owned and/or maintained by a local agency or are private). Figure 2 compares the proportion of KA crashes and total crashes on each route classification, as well as the total mileage in the City of Hickory.

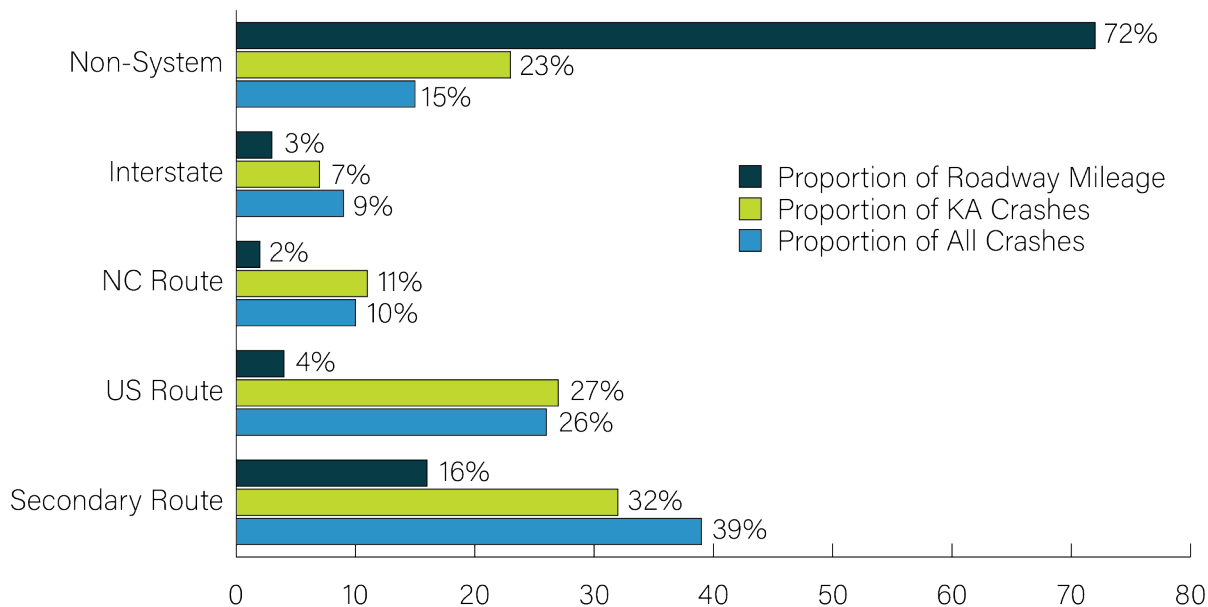


Figure 2. Crashes by Route Class

Key Takeaways

- › **Non-System Routes:** Non-System roads make up 72% of the network and account for 23% of fatal and serious injury crashes. This is a significant over-representation compared to all crashes (15%).
- › **Secondary Routes:** secondary routes account for the highest proportion of KA crashes (32%). This exceeds the proportion of road mileage (16%) but not all crashes (39%).
- › **US Routes:** the proportion of KA crashes on US Routes (27%) slightly exceeds the proportion of all crashes (26%) but substantially exceeds the proportion of road mileage (4%)
- › **NC Routes:** the proportion of KA crashes on NC Routes (11%) slightly exceeds the proportion of all crashes (10%) but substantially exceeds the proportion of road mileage (2%).
- › **Interstates:** the proportion of KA crashes on interstates (7%) is lower than the proportion for all crashes (9%) but higher than the proportion of road mileage (3%).

Number of Lanes and Configuration

The number of travel lanes (not including turn lanes) typically correlates to traffic volume. More traffic and travel lanes increase exposure to potential crashes. NCDOT analyzes crash rates for these and all route types in all contexts, and NCDOT has calculated a Fatal Crash Rate for all categories based on frequency of fatal crashes per 100 million vehicle miles of travel. The statewide Fatal Crash Rate for all route types and contexts is 1.25. The best performing route class are full access control Interstates in urban contexts (0.44); the poorest performing route class are two-lane, undivided roads along the Secondary Route system in rural contexts (2.50). Multi-lane, undivided routes (with no control of access) consistently result in high crash and fatality rates. Table 1 describes fatal crash rates for the focus route class types for Hickory – urban NC and US routes.

Table 1. Comparison of Fatal Crash Rates for US and NC Routes in Urban Contexts

Statewide Fatal Crash Rates	US Routes (Urban)	NC Routes (Urban)
4+ Lanes, Undivided	1.81	2.24
4+ Lanes, Continuous Left Turn Lane	1.55	1.72
4+ Lanes, Partial Control Access	1.30	.99

Source: <https://connect.ncdot.gov/resources/safety/Documents/Crash%20Data%20and%20Information/2023%20Crash%20Rates.pdf>

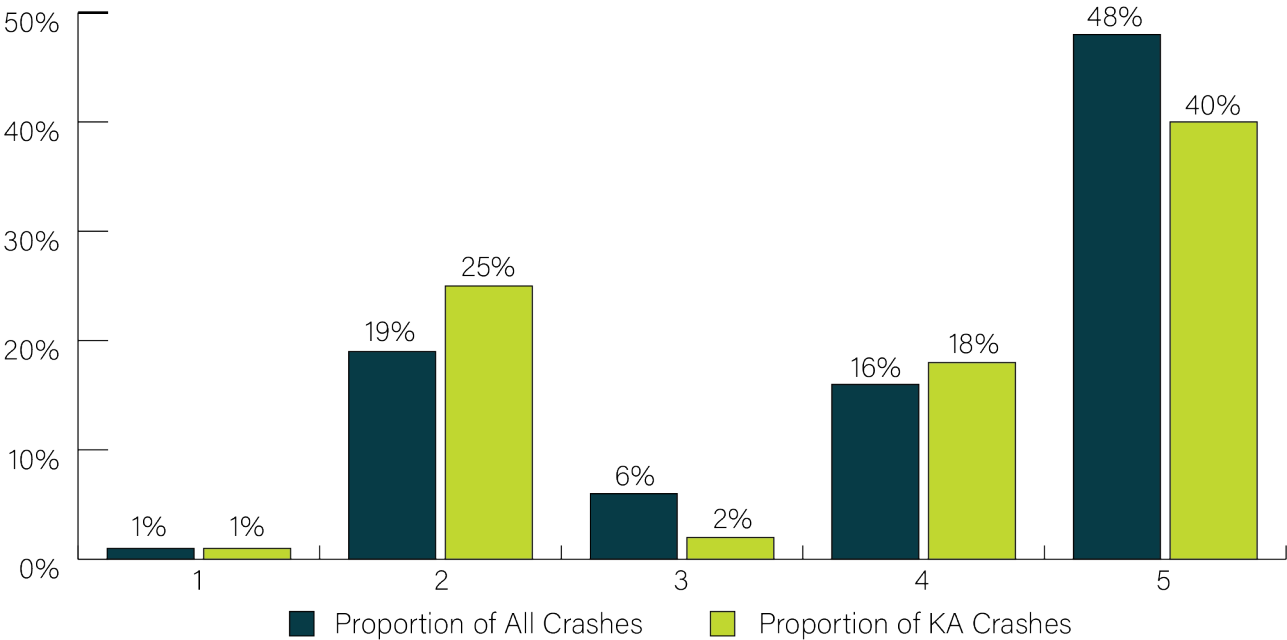


Figure 3. Crashes by Number of Lanes

Key Takeaways

- 4+ Lane Roads:** 58% of KA crashes and 64% of all crashes occurred on multi-lane roads.
- 5-Lane Roads:** The largest share of KA crashes (29%) occurred on five-lane roads. Further analysis shows that 72% of KA crashes occurred on undivided, 5-lane roads.
- 2-Lane Roads:** 26% of KA crashes and 17% of all crashes occurred on 2-lane roads. This is the only lane total with an overrepresentation of crash severity, where the proportion of KA crashes exceeds the proportion of all crashes.

High Injury Network

A High Injury Network (HIN) focuses on roadway segments and intersections where the highest number of fatal and serious injury crashes have occurred over a set timeframe. These are the locations with the greatest concentration of the highest severity crashes. HINs can be used to prioritize locations where safety improvements can reactively address conditions that contributed to historical crashes. The HIN helps to identify where to prioritize near-term safety strategies such as Road Safety Assessments (RSAs) or targeted law enforcement. HMF produced three High Injury Networks, mapped in Figure 4.

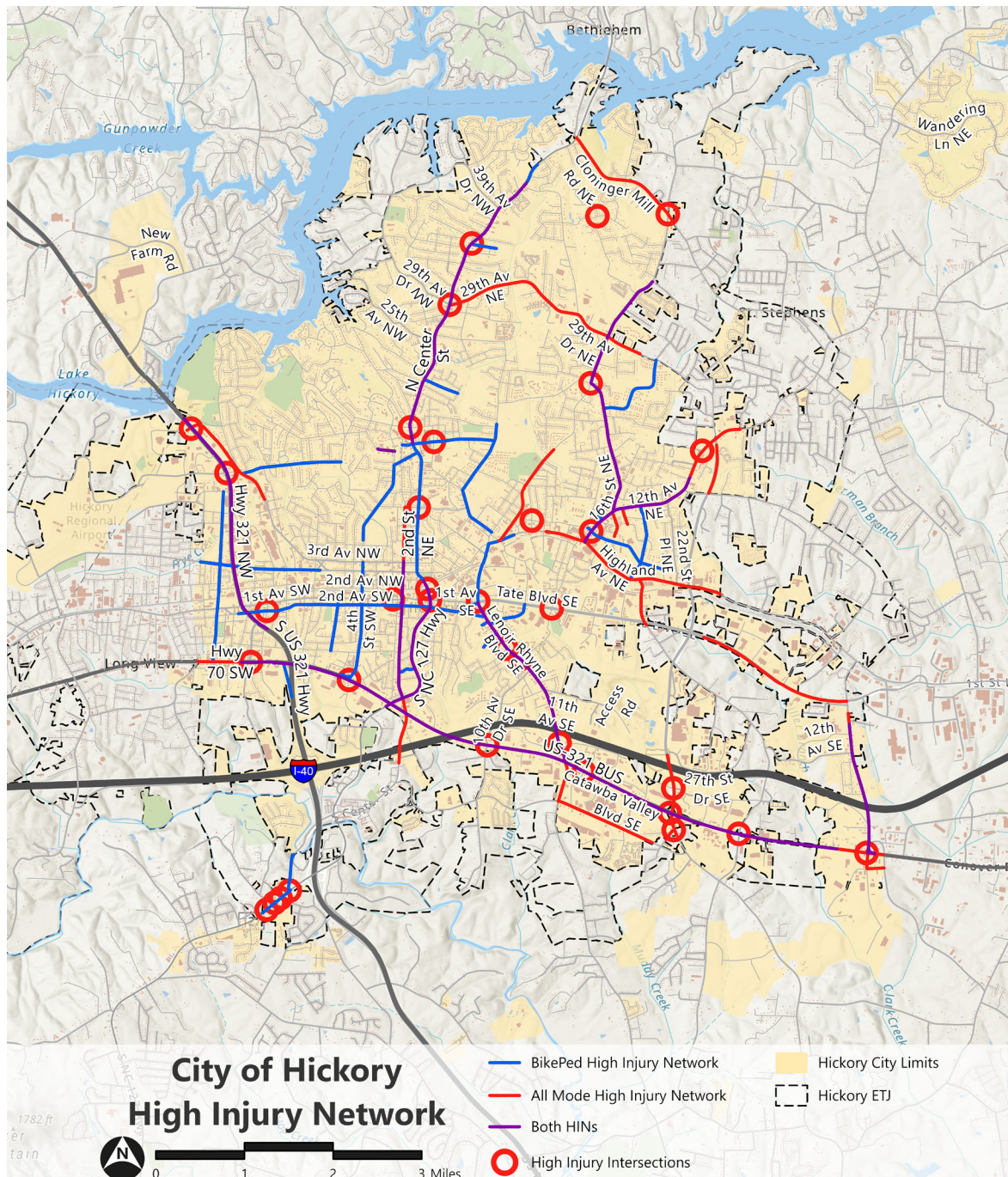


Figure 4. City of Hickory High Injury Networks

Key Takeaways

- › **The All Mode HIN represents 11% of the total roadway miles and accounts for 55% of fatal and injury crashes.**
- › **The HII represents 2% of all intersections and accounts for 6% of fatal and injury crashes occurring at intersections.**
- › **The Bicycle Pedestrian HIN represents 11% of the total roadway miles and accounts for 52% of fatal and injury crashes involving pedestrians or bicyclists.**

Focus Crash Types and Safety Problems

Crash Types are derived from crash reports filled out by law enforcement. HMF analysis identified five focus crash types that account more than 70% of fatal and serious injury (KA) crashes and resulted in a higher proportion of KA crashes compared to all crashes (all crash injury severities, including property damage only)

Angle (16% of KA crashes)*

Collision most often resulting in the vehicles hitting at or near right angles, with the front of one vehicle striking the side of the other vehicle. Most often occurs at an intersection when two vehicles are going straight on intersecting roads and neither vehicle is turning.

Head-On (10% of KA crashes)

Head-on collision of motor vehicles moving in opposite directions in which initial contact is on the fronts of both vehicles.

Left-Turn (18% of KA crashes)*

Collision of vehicles with one or multiple turning left.

Ran Off Road (14% of KA crashes)

Vehicle runs off roadway.

Vulnerable Road User (16% of KA crashes)*

Collision with a pedestrian or bicyclist (pedalcyclist).

**Crash types overrepresented in severity and when compared to state averages.*

In addition to the crash types identified for the City of Hickory, additional analysis identified contributing factors for fatal and serious injury crashes in Hickory. Key findings from the additional analysis revealed the following:

- › **Intersection Related crashes** represented 32% of KA crashes.
- › **Speed Related crashes** represented 9% of KA crashes.
- › **Impaired Driver crashes** represented about 18% of KA crashes.
- › **Occupant Protection crashes** (where an occupant did not use Car Seats and/or Seat Belts) accounted for about 16% of KA crashes.

Proactive Safety

Risk analysis identifies locations where crashes might not have historically occurred with a high frequency, but where underlying conditions create a reasonable expectation for a future crash that results in death or serious injury. Used alongside historical crash analysis and HINs, risk analysis can improve the City’s ability to proactively address transportation safety. These are important tools for the City to embed safety in project scoping and implement systemic safety improvements across the network.

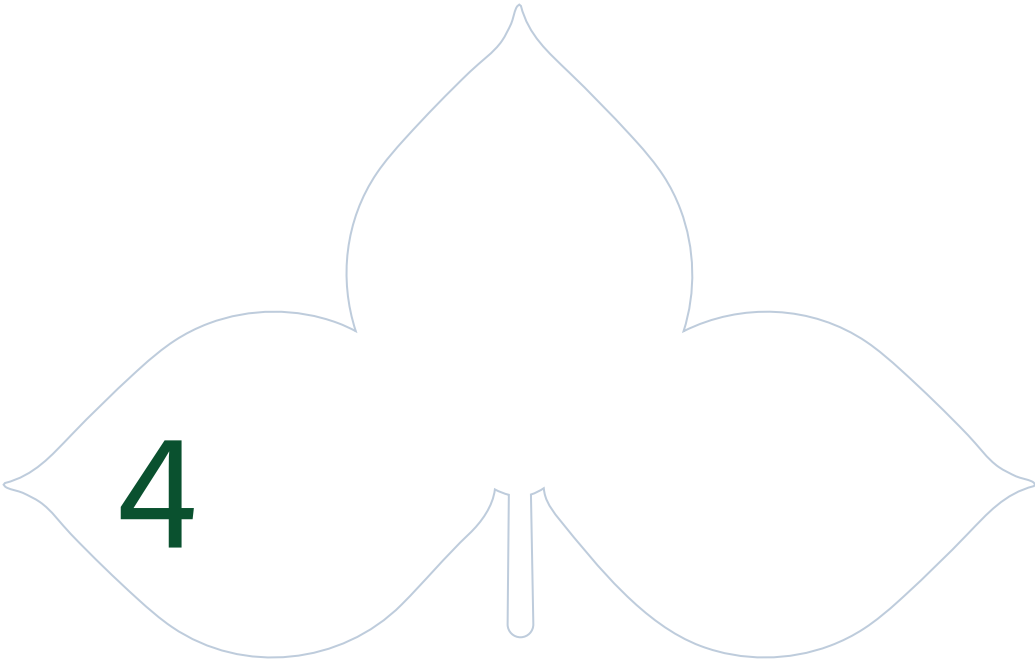
Hickory Moving Forward developed individual statistical models and performed spatial analysis for each of the focus crash types at intersections and non-intersections (segments). This analysis is mapped in a series of risk layers identifying locations with very low, low, moderate, high, and very high crash risk for each focus crash type at intersections and along segments across the City of Hickory.

Fatalities and serious injuries in Hickory can be reduced significantly by focusing on:

Multi-lane, undivided NC and US Routes , focusing on locations high risk for Head On crashes	Signalized intersections , focusing on locations that are high risk for Angle and Left-Turn crashes
Speeding, Impaired Driving and Occupant Protection , focusing on locations high risk for Run Off Road crash types	High zero vehicle household locations , focusing on locations with high risk for bicyclist/pedestrian crashes
Multi-lane roads in urban contexts with mixed land uses (residential, commercial, institutional), focusing on locations with high risk for bicyclist/pedestrian crashes	High volume intersections and routes , as Average Annual Daily Travel (AADT) is correlated with increased crash risk for all five focus crash types



NC-127 and 18th Ave Dr, facing north



4

Public Involvement

Public involvement was a critical part of this Action Plan, providing a link between crash data and lived experiences. Public voices are key to informing the existing needs and future vision for transportation safety in Hickory. This chapter details the approach taken to engage the public, including public involvement goals, activity types, and key takeaways.

Approach

The HMF public involvement approach focused on creating robust, ongoing opportunities for stakeholder and community voices—including historically disadvantaged communities—to participate in the planning process. The approach also emphasized transparent feedback loops to show how public input shaped the planning process and outcomes.

Public involvement began with a broad view, to establish a baseline understanding of safety culture in Hickory. The approach then transitioned from safety culture to safety concerns. The approach concluded with safety improvement strategies—asking community members for strategies that they would favor to achieve safety goals, and gathering input on commonly used proven countermeasures to understand which recommendations would be helpful, positively received, and effective.

Public involvement for Hickory Moving Forward consisted of community events, digital surveys, focus groups, and a technical steering committee.

Technical Steering Committee

To guide the development of HMF, the City project team created a Technical Steering Committee (TSC). The TSC members represented a multidisciplinary group of professionals who helped establish a vision for the planning process, provided key input on the plan outputs, and will continue to oversee the implementation of the Action Plan. TSC members include representatives from City planning, public works, fire and police departments; public health and transit agencies; NCDOT and Federal Highway Administration (FHWA); and the Greater Hickory Metropolitan Planning Organization (GHMPO). The TSC met three times during the planning process to provide input at key project milestones.

Goals

The public involvement approach for HMF was phased around three goals: which

Discovery sought to ask questions about safety culture, where people feel unsafe, and what people believe is causing unsafe conditions.

Collaboration involved presenting data to inform stakeholders and the public on the current state of safety, soliciting input to identify areas in greatest need of investment.

Accountability centered around developing targeted engagement strategies for communities that disproportionately experience safety problems, allowing for meaningful feedback on draft action plan project, policy, and program recommendations, and making clear connections between Plan recommendations, data, and public input.

Phase 1: Discovery

Public engagement kicked off with stakeholder **focus groups** in December 2024. Stakeholders included local employers, public health officials, and community representatives. These focus groups were designed to shed light on traffic safety culture, identify preliminary safety concerns and opportunities, and establish the role of community organizations in supporting roadway safety and their priorities. This phase also included the first meeting of the **Technical Steering Committee** and the launching of an **online survey**. The following is a list of key themes and feedback from this phase:

- › **Behavior:** Key words to describe driving behavior included distracted, impatient, hurried, and selfish.
- › **Education and Awareness:** Focus groups identified a need for increased traffic education and awareness for all road users in the Hickory region. Survey responses supported this, with 47% of respondents agreeing that public education and awareness play a significant role in improving safety, while only 21% disagreed.
- › **Red Light Running:** Both focus group participants and survey respondents identified red light running as a major safety concern. It was ranked among the top three most frequently observed risky behaviors and one of the top four behaviors believed to contribute most to roadway safety issues.
- › **Speeding:** Speeding was a prominent concern in both the focus groups and survey responses. Roads frequently mentioned as encouraging speeding included Highway 321, Highway 70, Lenoir Rhyne Boulevard, 4th Street, Tate Boulevard, and Highway 127. Survey respondents specifically identified high-speed roads as one of the top three areas that would benefit most from safety improvements in Hickory. Additionally, speeding was the number one roadway safety concern cited in the survey and was the most observed unsafe behavior in the City.

- **Pedestrian Safety:** Pedestrian safety emerged as a concern due to a growing interest in walking and running in the area. Survey responses echoed this concern, identifying the “lack of sidewalks” as the top issue currently making multimodal transportation unsafe.



Youth and adults building safe streets at Traffic Safety Day

Phase 2: Collaboration

In Spring 2025, the HMF team hosted a **Traffic Safety Day** event at the Catawba Science Center. This event was targeted at youth, and through thoughtfully crafted engagement materials, the HMF team informed attendees on how youth can be safe road users and encourage others to practice safe behaviors; practiced with attendees on identifying unsafe behaviors and encouraging others to practice safe behaviors; and gathered input from youth on transportation safety. The team also engaged with parents at the event.

The **online survey** continued through Phase 2 and was distributed by the HMF team at Traffic Safety Day and promoted through City of Hickory communication channels. Survey questions sought to understand roadway conditions and asked respondents to map locations that contribute to or have a pattern of safety concerns. Survey results were analyzed in conjunction with crash data to understand major safety issues and their contributing factors.

This phase included the second meeting of the **TSC**, where committee members reviewed a summary of the analysis, engagement, and focus areas, and brainstormed safety strategies.

The following is a list of key themes and feedback from this phase:

- **Behavior:** Failure to obey traffic signals, signs, and general distractedness and reckless driving were all identified as contributing factors to safety concerns. There is an expressed interest in improving safety culture and accountability.
- **Multimodal safety:** Need for improved sidewalks, additional bicycle paths, and a connected network outside downtown are all identified as priorities at the event and in the survey.
- **Intersections:** At the event and in responses to the survey, intersections are regularly identified as a priority safety concern, with participants mentioning sight distance, signal timing, and pedestrian crossing among the primary other concerns.
- **High Injury Network Validation:** The mapped HINs are generally validated by attendees at the event and respondents to the survey, with very few locations of concern identified that are not aligned with a HIN.



Residents discuss safety countermeasure prioritization at Oktoberfest

Phase 3: Accountability

In Fall 2025, the HMF team hosted a table at the **Hickory Oktoberfest** event. This event focused on presenting crash and public engagement trends, preliminary crash focus areas, and potential safety countermeasures. After reviewing the trends, participants identified types of countermeasures and strategies that they would like to see in Hickory.

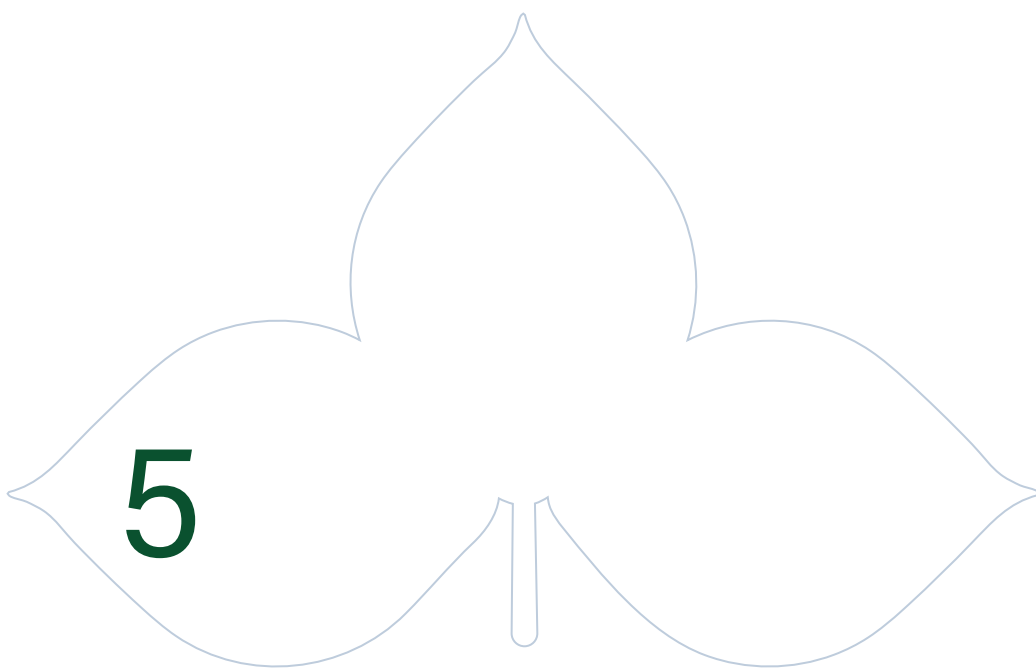
In November 2025, the HMF team hosted a pop-up event at the monthly **Ridgeview Community Meeting** at the Ridgeview Community Center. Ridgeview historically has been and continues to be a predominantly African-American neighborhood, and is bordered by NC-127, US-70, 4th Street SW, and 2nd Avenue SE, each of which is on the High Injury Network (HIN) identified in this Action Plan. As such, the Ridgeview neighborhood may experience a disproportionate amount of transportation safety concerns compared to other neighborhoods in the City. This event was identified by the project team and steering committee as an important effort in the Accountability phase of the public involvement to ensure that resident voices were playing a key role in shaping the final recommendations of the Action Plan.

At this event, the HMF team facilitated a discussion on crash data and community experience and sought to understand how residents of Ridgeview would respond to various safety strategies, including some that might be new or unfamiliar. This input helped inform and prioritize the final strategies included in HMF.

This phase also included the third and final meeting of the **TSC**, where committee members reviewed and provided prioritization inputs on the final Action Plan and safety strategies.

The following is a list of key themes and feedback from this phase:

- › **Countermeasure Education:** This round indicated a strong need for safety countermeasure education. Residents have extremely varied knowledge base of safety countermeasures. Many residents, particularly at the Ridgeview Community Meeting, express frustration at roundabouts because they create confusion, and people don't know how to use them, which causes congestion, for instance. Many residents identify the need for speed management and associate that only with law enforcement. There is a distinct opportunity for the City of Hickory to pair the implementation of safety strategies with community education to build a broader understanding of transportation safety.
- › **User Behavior:** There is a consistent and emphatic expression of the need to address user behavior and safety culture concerns. These include lack of turn signal use, red light running, speeding, and observed driver hostility toward other road users.
- › **Intersections:** Intersection safety is consistently a high priority for the public. Many residents identified the role of signal timing, the need for safety strategies like Leading Pedestrian Interval, and other intersection safety improvements that reduce conflicts. Residents at the Ridgeview Community Meeting identified the need for enhanced crossing opportunities and lighting improvements at intersections.
- › **Red Light Running and Speed Management:** Red light running and speeding proved to be high priority throughout all phases of public involvement.



Crash Reduction Framework

The cornerstone of Hickory Moving Forward is the Crash Reduction Framework (Table 2). It includes overarching safety goals for the City and supporting strategies that address safety problems identified through data analysis, engagement, and unique characteristics. The strategies are consistent with the Safe Systems Approach (SSA), including project types, programs, and policy recommendations that engage all disciplines and community partners: education, enforcement, engineering, emergency services, and evaluation. Each strategy is matched with a performance measure and implementation approach, lead agency, and relevant inputs the informed the strategy. The Crash Reduction Framework is the roadmap for the City's ultimate goal to eliminate serious injuries and fatalities roadway crashes. Goals, strategies, and timelines should be re-evaluated, modified, and adjusted as the Action Plan is updated, significant progress is made, or the transportation safety landscape changes in the City through increases in crashes or divergent crash trends.

Goals

The Crash Reduction Framework is guided by a set of goals identified to support the City's commitment to reaching zero deaths and serious injuries on local roads by 2050 and reducing fatal and serious-injury crashes by half by 2035. The Crash Reduction Framework goals relate to the key safety concerns identified through Hickory Moving Forward analysis and public involvement. Goals represent an overarching category of work to support the safety strategies and performance measures.

Strategies

Strategies in the Hickory Moving Forward Crash Reduction Framework are high-level approaches, based on safety goals and outcomes. Strategies outline the work Hickory and partners will collaborate on in implementing Hickory Moving Forward. These strategies represent a range of programs and policies designed to address the safety concerns identified during the HMF planning process.

Timeline

Implementation horizons are described as Near-Term, Mid-Term and Long-Term. The Near-Term horizon is the first five years (2026-2031) following the adoption of Hickory Moving Forward, focusing on lower-cost strategies that are consistent with current policy and programs. The Mid-Term horizon overlaps the Near-Term and spans the first 10 years, including complex projects and strategies that will require several years to develop prior to implementation. Strategies in the Long-Term will be revisited in future updates to the safety action plan, following changes to agency policies over the next 10-20 years.

Criteria for developing and prioritizing strategies include the following:

- › Relative cost to implement
- › Impact on reducing fatal and serious injury crashes
- › Association with focus crash types and key safety problems
- › Ease for quick or systemic application (wide-spread, near-term)
- › Public comments received throughout the planning process

Performance Measures

Performance measures serve as indicators of progress for reach of the strategies identified in Hickory Moving Forward. Key Performance Indicators (KPIs) are required in comprehensive safety action plans and include measures of outputs (e.g., levels of activity) and measures of outcomes (e.g., levels of effectiveness). KPI outputs include specific safety projects or improvements, and KPI outcomes include reductions in crashes or shares of the population impacted by severe crashes. See the Strategy Action Tables on the following pages for performance measures applied to each strategy in Hickory Moving Forward, along with suggested metrics for evaluation during the proposed implementation timeline. The City of Hickory will revisit and update metrics upon implementation of HMF.

Implementation Partners

Hickory Moving Forward identifies agencies and local partners to lead the implementation of strategies identified in the Crash Reduction Framework. Leads identified in the framework are responsible for managing and tracking progress on each strategy, and partners identified are critical to the efficient and effective delivery of each strategy but are not responsible for leading. Additional agencies and partners may be identified as implementation progresses.

- **City of Hickory** will lead actions involving local coordination, including transportation planning activities or affecting discretionary funding programs the City administers, such as the Capital Improvement Programs (CIPs), maintenance projects, local plans and studies. The City will pursue competitive grants to deliver safety projects and enforce traffic laws. The following City departments are identified in the Crash Reduction Framework:
 - Communications
 - Engineering
 - Fire
 - Planning
 - Police
 - Streets
 - Traffic
 - Transportation Planning
- **NCDOT** will support actions requiring coordination with Division 12 and the Traffic Safety Unit (TSU), such as conducting Road Safety Audits on state-system roads, pairing funds with the HSIP for project implementation, setting annual safety targets, and other strategies involving state-system roads.
- **Other Partners** may be identified to lead or assist in certain actions:
 - **Community Organizations** may be valuable partners when developing education programs
 - **Local Universities** such as Lenoir Rhyne, App State, and Catawba Valley Community College (CVCC)
 - **Hickory City Schools**
 - **Greenway Public Transportation/** Western Piedmont Regional Transit Authority (WPRTA)
 - **Duke Energy**
- **Greater Hickory Metropolitan Planning Organization** will support actions aligned with the safety strategies and goals in the Western Piedmont Transportation Safety Plan (WPTSP)

Table 1. Reduce Vulnerable Road User Crashes

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Close sidewalk gaps, prioritizing sections with high risk for pedestrian crashes. As new development occurs and constructs new sidewalk, prioritize connecting into network.	Streets	NCDOT Div 12 Traffic Safety Unit	# of gaps filled Total length of gaps % of gaps on HIN New sidewalk connection constructed through dvpt.	5 gaps filled by 2031	Near
Provide or improve pedestrian crossings at or near all transit stops, prioritizing the HIN and areas with high proportions of zero vehicle households.	Streets	Greenway GHMPO	# of transit stops evaluated # of crossings improved or added	10 transit stops evaluated by 2031 1 crossing improvement annually	Near

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Distribute safety education materials and reflective gear for nighttime visibility.	Communications	Traffic HFD/HPD Public Health Community Partners	# of materials distributed	Develop one safety education resource annually Funding secured for reflective gear	Near
Evaluate and implement Right Turn on Red Restriction (RTORR).	Traffic	NCDOT Div 12 Traffic Safety Unit	Strategic RTORR corridors identified	Implement coordinated RTORR in high pedestrian and intersection crash risk locations	Near
Hold "open streets" events and local traffic safety conversations to increase awareness of bicycle and pedestrian safety.	Communications	Traffic GHMPO Greenway Community Partners	Ongoing	Ongoing	Near
Improve all signalized intersections in developed areas with pedestrian countdown signal heads and LPI, prioritizing high volume corridors.	Traffic	NCDOT Div 12	# of signals improved New signals include safety enhancements	50% of signals with sidewalks have LPI and pedestrian signal heads by 2031, 75% by 2036. 100% of signals on HIN/ HII have LPI	Mid
Install lighting near areas with high-pedestrian activity and un-housed populations, prioritizing arterial roads and areas near transit stops.	Traffic	Duke Energy Community Partners	Lighting improvement projects	Identify 5-10 priority pedestrian lighting locations by 2036	Mid
Where warranted, add marked crosswalks and visibility improvements at midblock locations with sidewalk, prioritizing locations more than 800 feet from protected crossings.	Traffic	NCDOT Div 12	# of midblock crossings added # of crossings on multilane arterials with marked crossing within 800'	HIN has marked crossings every 800' for any segment with sidewalk	Long

Table 2. Address High Risk Locations

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Conduct RSAs on US Routes and multi-lane arterials on High Injury Network or high risk for angle, head-on, and bicycle/pedestrian crashes.	Traffic	NCDOT Div 12 Traffic Safety Unit	# of RSAs conducted	1 RSA annually through 2031	Near
Evaluate intersection geometry and corner radii at locations high risk for angle crashes	Traffic	NCDOT Div 12 Traffic Safety Unit	# of locations evaluated # of projects identified for long-term	Evaluate 3-5 intersections per year Implement quick-build solutions by 2031 Project scoping by 2036	Near
Review all MTP and STIP projects in Hickory for inclusion of medians and access management treatments to address segment risk for head on, left turn, and angle crashes.	Transportation Planning	Traffic GHMPO Engineering	# of access management projects included	All planned projects on high risk corridors include access management strategies by 2036	Near
Evaluate signal timing and phases to adjust cycle lengths, add protected left-turn phases at intersections high risk for left turn crashes.	Traffic	NCDOT Div 12 Traffic Safety Unit	# of signal enhancements		Near
Conduct a Corridor Study on US-70	Traffic	Streets NCDOT Div 12 Traffic Safety Unit	Study completed		Mid
Implement lighting improvements along locations high risk for run-off road and pedestrian/bicycle related crashes to address night-time crash patterns.	Traffic	Duke Energy NCDOT Div 12 Traffic Safety Unit	Lighting improvement projects	Identify 5-10 priority lighting corridors by 2036	Long

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Evaluate intersections for roundabout and neighborhood traffic circles	Traffic	NCDOT Div 12 Traffic Safety Unit	All development review and intersection projects begin with roundabout evaluation		Long

Table 3. Reduce Speeding and Red-Light-Running

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Deploy speed management treatments along corridors with documented speed-related crash patterns or high risk for run off road crashes.	Traffic	NCDOT Div 12 Traffic Safety Unit	Coordinate with GHMPO Speed Management Plan goal		Near
Review posted speed limits in urban areas based on context and potential bicycle and pedestrian activity.	Traffic	NCDOT Div 12 Traffic Safety Unit	% of HIN corridors evaluated	Strategic locations identified for context-sensitive speed reductions	Near
Deploy targeted education and awareness campaigns at high schools, colleges, and community centers focused on speeding, distraction, and impaired driving.	Communications	Hickory City Schools, CVCC, App State, LR Centro Latino HPD Traffic NCDOT Div 12 Traffic Safety Unit	Focus data-driven behavioral campaign on different safety topic each year. # of schools reached	One campaign per year	Near
Evaluate new signal treatments, policies, and enforcement strategies including Rest on Red, extended all-red intervals, Targeted Enforcement, and Automated Enforcement	Traffic	HPD NCDOT Div 12 Traffic Safety Unit	Evaluate locations for Rest on Red pilot # of pilot locations launched # of enforcement activities	Pilot 1 Rest on Red Track annual red light running crashes, produce memo on automated enforcement feasibility by 2031	Near

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Conduct targeted enforcement campaigns in areas with speed-related crash patterns and to collect data to support reduced speed limits.	HPD	Traffic	# of targeted enforcement campaigns	Annual coordination meeting with peer cities	Mid
Leverage neighborhood traffic calming program to prioritize streets identified on the HIN for pedestrians and cyclists	Traffic	Community Partners	Funding allocated to traffic calming	Publish traffic calming program update annually	Ongoing
Increase support for public education and enforcement campaign (P.A.C.T. — Pay Attention in City Traffic) program about distracted and aggressive driving.	HPD	LR, CVCC, App State Communications	Funding allocated to PACT		Ongoing

Table 4. Safety Culture: Advance Data-Driven and Systemic Projects

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Create screening guidance for local capital and development projects to describe crash history and risks.	Transportation Planning	NCDOT Div 12 Traffic Safety Unit	All capital and development projects identify the crash history and crash risks, proven safety countermeasures included in designs.		Near
Update signal inventory to include information about protected left turn and pedestrian phasing.	IT (GIS Services)	Traffic NCDOT Div 12 Traffic Safety Unit	Inventory updated	Inventory updated Process established for data maintenance	Near
Update land development to include full range of safety countermeasures and road design guidance.	Planning	Engineering Traffic	Updates made	Publish safety impacts of development practices	Near

Strategic Action	Lead	Partners	Potential Performance Measures	Potential Examples of Metrics	Timeline
Pilot a community ambassador program focused on trust-building, outreach, engagement, and education in neighborhoods with high crash risks and vulnerable users.	Traffic	Planning Communications	Create program description Launch pilot Recruit and train ambassadors		Mid
Convene the Technical Steering Committee (TSC) annually to review annual safety performance, track progress of safety improvements, and review strategies.	Engineering	TSC Members	Ongoing	Annual Meeting	Ongoing
Publish annual safety performance report and track progress of safety improvements.	Engineering	Traffic Planning	Ongoing	Report published	Ongoing
Secure funding for traffic safety programming, to include potential staffing, digital message campaigns, saturated enforcement, educational programming.	Traffic		Annual increase in funding allocation		Ongoing

Priority Locations

Priority locations for review focus on geographic locations within the City as well as the HIN and HII. These locations are filtered through crash risk, public and stakeholder input, and program review to prioritize corridors and intersections not scheduled for improvement by STIP or safety projects in the 2025-2030 horizon. The priority locations focus on high injury, high risk locations that should be further examined for near-term improvements to address safety concerns in the near term.

Due to the extent of safety concerns on US-70, it is not included in the priority locations, and is included in the strategies for a Corridor Study. Corridor Studies are best suited for a longer segment or a series of intersections with significant crash patterns, when safety improvements are expected to impact Right of Way or change the cross-section/move the curb, and where traffic analysis is required to determine countermeasure feasibility and impact. Corridor studies are an effective tool at identifying high-cost countermeasures or large construction projects and are most effective to identify safety improvements that can be included in long-term implementation and project development.

These priority locations should be targeted for safety review and programming within the first five years of the Action Plan adoption. The Action Plan includes cut sheets for each priority location. These cut sheets summarize key data and potential safety countermeasures for each location. All locations should be further assessed for development in future safety projects.

Priority locations are:

- › NC-127 between 3rd Avenue NE and 29th Avenue NE
- › McDonald Parkway NE/24th Street NE at Springs Road NE
- › Downtown Intersections between 9th Street and Center Street from 2nd Avenue SW to 3rd Avenue NW

Table 5 includes a summary of each priority area's crash history, an overall description of the recommendations, and a planning-level cost estimate for construction. The estimates do not account for preliminary design, permitting, property acquisition, utility relocation or additional enhancements such as lighting or accessibility updates. Estimates provided are in present-day dollars; future inflation and cost escalation will need to be evaluated for future year construction.

Table 5. Priority Location Action Plan Summary

	Notable Safety Problems	Recommended Improvements	Estimated Cost for Construction
NC-127 between 3rd Avenue and 29th Avenue	Angle and left-turn crashes at high volume intersections; distance between protected crossings exceed 1000 feet in sections	Raised center medians; Pedestrian refuge islands and Pedestrian Hybrid Beacon (PHB) crossings; LPI, protected left turns, and signal head updates	\$4.7 million
McDonald Parkway NE/24th Street NE at Springs Road NE	Left turn crash pattern; nighttime crashes; rear end crashes due to queuing	Implement U-2307B project, including protected left turns, added turn lanes, lighting and medians; Add pedestrian crossings and countdown signal heads across 3 legs	\$175,000* (not including U-2307B improvements)
Downtown Intersections	High pedestrian exposure at intersections	Crosswalks; curb ramps; pedestrian countdown signal heads; LPI	\$2.9 million

Each location is further described per its unique safety problems and recommendations in the following cut sheets. NC-127 is subdivided into multiple sections. The cut sheets are supplemented with additional technical data, traffic analysis, and cost estimation methodology information.

Countermeasures

The countermeasures identified for the Hickory Moving Forward priority locations have been rigorously researched for their effectiveness to treat certain crash types by NCDOT and other safety experts. Many are identified as Proven Safety Countermeasures by the Federal Highway Administration (FHWA). Countermeasures identified most often for application at specific locations at Hickory priority locations are shown in Table 3. This table does not account for added safety benefits of complementary treatments such as marked crosswalks, improved pavement markings, curb ramps and high-visibility signage that are typically installed with these countermeasures. The expected Crash Reduction Factor is the percent reduction in crashes as a result of implementing the treatment at a site.

Table 6. Priority Location Countermeasures

Countermeasure		Crash Reduction Factor	Additional Considerations
	Raised Medians	12-39%	Crash reduction is expected to be on the high end of the range for urban, multilane arterials such as NC-127.
	Pedestrian Hybrid Beacons (PHB)	55%	PHBs are most effective on multi-lane arterials, such as NC-127, at specific crossing locations. Additional public outreach and education may be needed for new safety treatments such as the PHB.
	Pedestrian Refuge Island	31%	Refuge islands can be integrated into raised medians with little additional cost and especially effective for urban, multi-lane arterials such as NC-127.
	Leading Pedestrian Interval (LPI)	13%	LPI can be implemented with ease and low cost, using modern software and signal controllers to make the minor timing adjustments. Most LPI will be implemented as a pedestrian-actuated function.
	Protected Turn Phases	70%	This crash reduction value is expected for left-turn crashes in urban contexts, such as along NC-127.
	Pedestrian Countdown Signal Heads	25%	The crash reduction value is expected where no pedestrian signal heads exist currently, such as across multiple Downtown Intersections.
	Additional Turn Lanes	4-62%	Crash reduction is expected to be on the high end of the range for the intersection of McDonald Parkway NE/24th Street NE at Springs Road NE.
	Overhead Lighting	69-77%	The range in crash reduction values vary for roadway segments (69%) to standard intersections and roundabouts (77%).

Conducting field reviews is necessary to describe explicit safety problems and to identify opportunities for specific countermeasures. Additional analysis may be necessary to evaluate the impacts of potential countermeasures on traffic operations, pedestrian and bicycle mobility, constructability, and implementation costs. Refer to the NCDOT Countermeasure Glossary for more information about treatments and other strategies to consider. Countermeasures match identified safety needs (such as crash types) and are chosen based on their effectiveness in addressing the types and severity of the safety problems specific locations.

Priority Location Action Plans

Priority Location Action Plans are on the following pages. While reviewing these locations in the field and conducting further analysis, engineering, and design to implement the proposed safety improvements, additional or different countermeasures may be identified, associated design elements (such as u-turn accommodations) may be identified, or countermeasure locations may be shifted (such as PHB location to accommodate utilities). Priority locations on state maintained roads will require coordination with and approval from NCDOT in implementation.

HICKORY

Downtown Core Intersections

ROADWAY PROFILE

Functional Classification: Minor Arterial, Other Principal Arterial, Major Collector

Average Number of Lanes: 2-3

Median: None

AADT: 2,500 - 5,000

Posted Speed: 20 mph

TYPICAL INTERSECTION

ROW: 50 ft

Crosswalks: No pedestrian countdown signal heads; standard crosswalk markings, non-compliant curb ramps

Refuge: None

Sidewalks: Narrow sidewalks on both sides

Bike Facilities: No bike lanes

Transit Facilities: 4 bus stops south of Main Ave

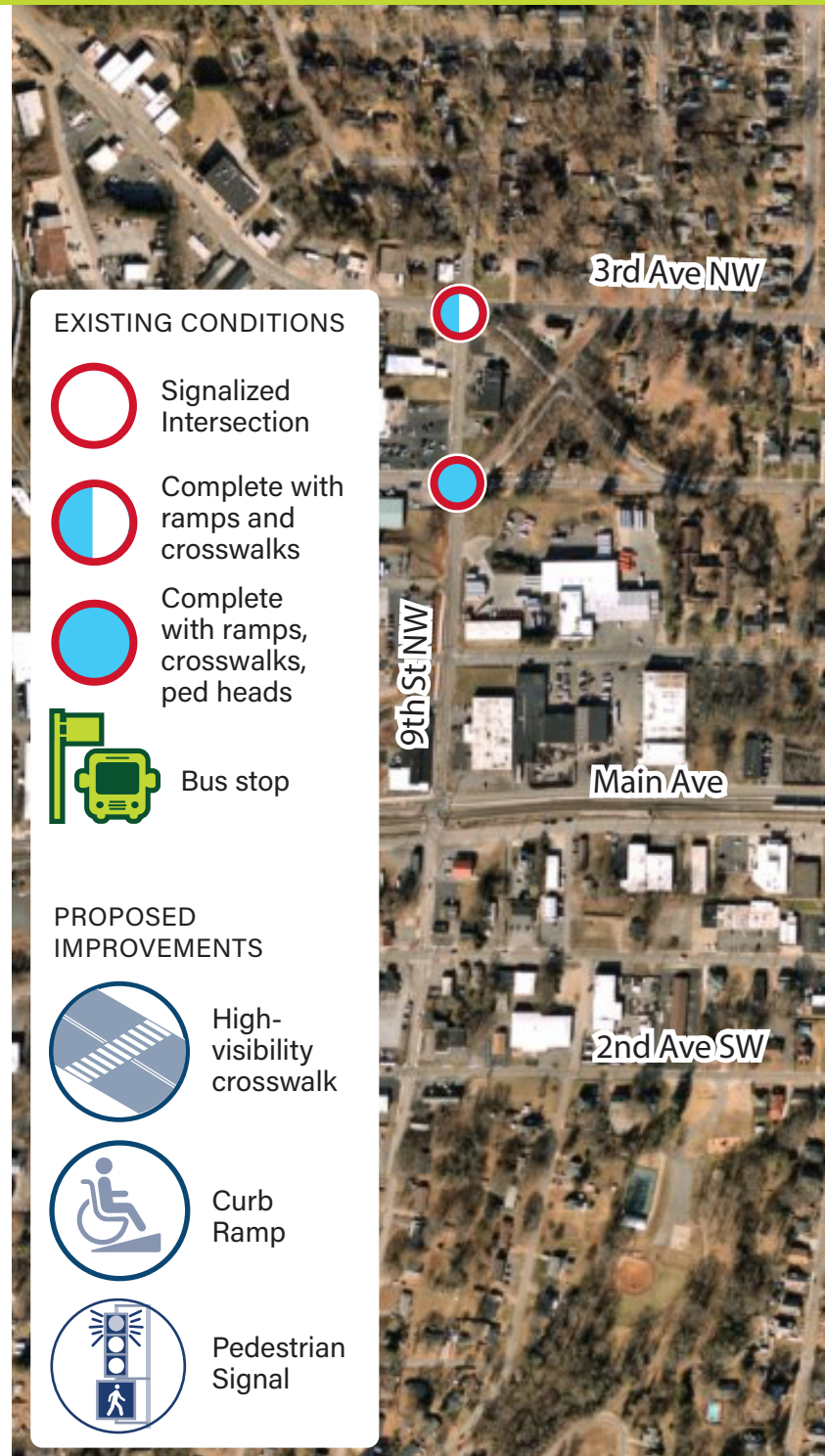
Land Use Context: Downtown Core

Ped Phasing: 5 of 28 intersections

Leading Pedestrian intervals: 0 of 28 intersections

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle		✓
Left Turn	✓	✓
Head On	✓	
Ran Off	✓	✓
Bike Ped	✓	

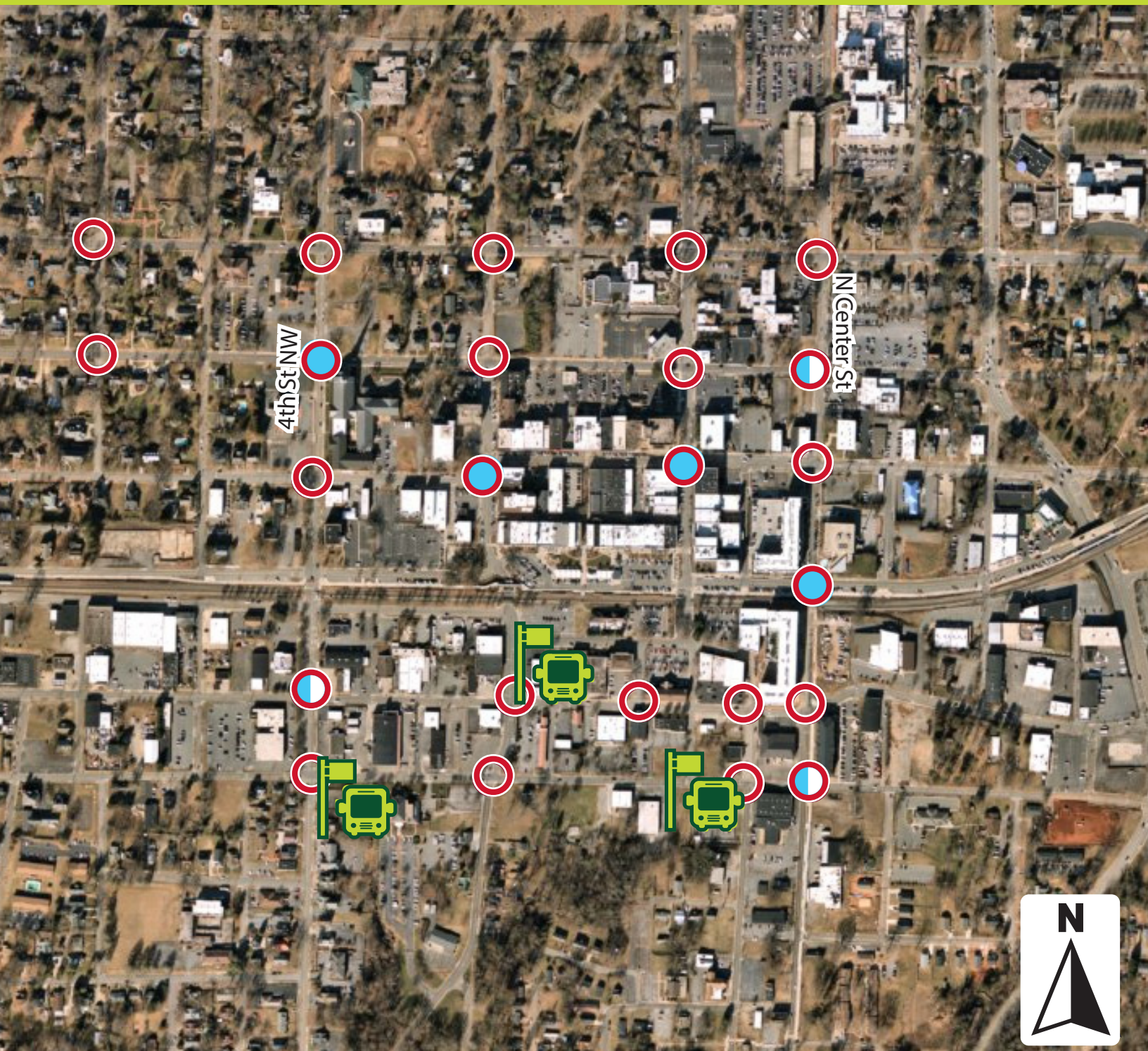


PROPOSED COUNTERMEASURES

This corridor is from 9th Street to Center Street between 2nd Avenue SW/SE and 3rd Avenue SW/SE. Recommendations include adding pedestrian signal heads, high-visibility crosswalks, and upgrading curb



Downtown Hickory Conditions and Countermeasures



ramps. Proposed high visibility crosswalks at 16 intersections. The project proposes upgrading curb ramps at 13 intersections and pedestrian signal heads at 18 intersections. To implement countermeasures for all downtown intersections, the cost would be over \$2.9 million. The cost per intersections averages from \$98,000 to \$155,000 based on the improvements being proposed.

\$
2.9 mil

NC 127 / 2ND ST CORRIDOR: 3rd Ave to 7th Ave

ROADWAY PROFILE

Functional Classification: Other
Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: ~23,000

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 100 ft

Crosswalks: At signalized intersection

Refuge: None

Sidewalks: Limited to one side of the road

Bike Facilities: None

Transit Facilities: 4 bus stops

Land Use Context: School Zone, Residential

CRASH TYPES

The intersection of 3rd Ave NE and 2nd St NE have the most crashes of this corridor section with over half being angle and left turn crashes. At the 2nd Ave NE intersection, 73 crashes have been reported with the majority being angle and left turns.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	✓

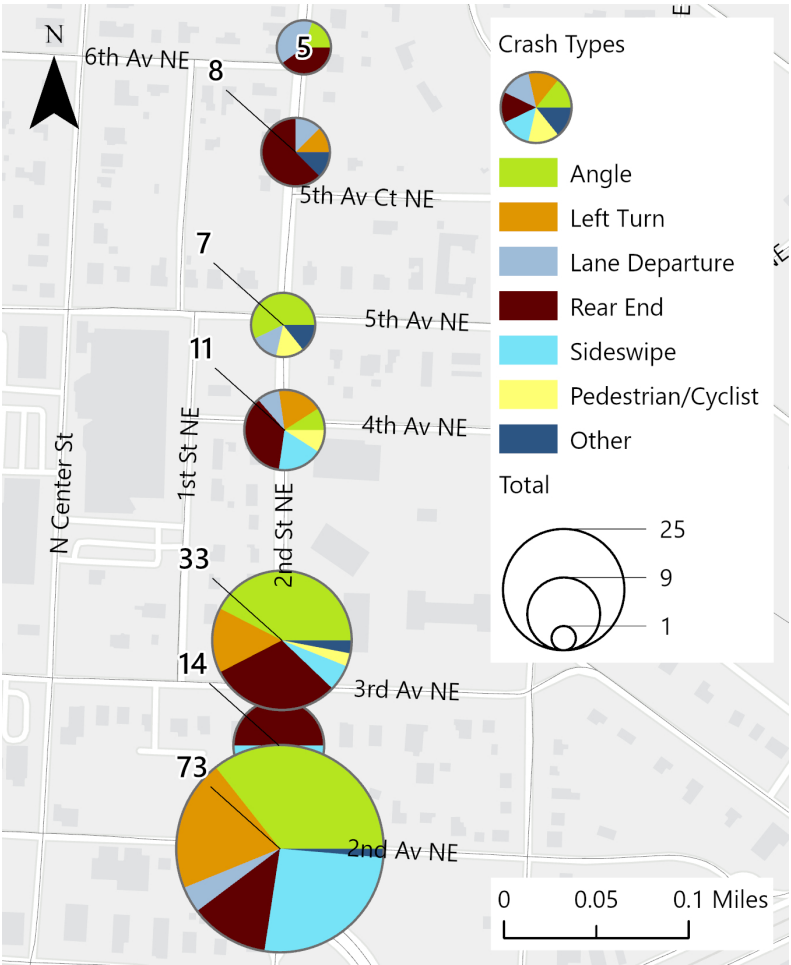
TRAFFIC OPERATIONS

NC-127 between 3rd Avenue NE and 7th Avenue NE functions as a principle arterial serving commuter traffic as well as local business traffic. The corridor includes two signalized intersections, one at 3rd Avenue NE and another at 5th Avenue NE. Queues in this segments are typically less than 200 feet. There are several access points from side streets, residential driveways, and a few businesses. There is a noticeable lack of pedestrian facilities to cross NC-127 as well as across side streets.

LEVEL OF SERVICE (LOS)

INTERSECTION	LOS (2025)	LOS (2045)
5th Ave NE	A	B

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements

EXISTING CONDITIONS



Signalized Intersection



Bus stop



School



Medical Facility

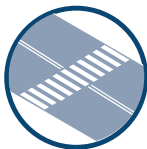
PROPOSED IMPROVEMENTS



PHB



Pedestrian Island



High-visibility crosswalk



PROPOSED COUNTERMEASURES

Recommendations along NC-127 between 3rd and 7th Avenues NE include a pedestrian island, high-visibility crosswalk, and Pedestrian Hybrid Beacon signal between 3rd Ave NE and 5th Ave NE (at 4th Ave NE) to shorten the 1000' between existing crossings. The estimated cost to implement these countermeasures for this corridor section is \$300,000. Alternative or additional countermeasures to be evaluated should be closing the sidewalk gap between 4th Ave NE and 5th Ave NE.

\$
300,000

NC 127 / 2ND ST CORRIDOR: 7th Ave to 10th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: 23,000 - 24,500

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 100 ft

Crosswalks: At signalized intersection

Refuge: One at 8th Ave

Sidewalks: Limited to one side of road until 9th Ave Dr NE

Bike Facilities: None

Transit Facilities: 4 bus stops

Land Use Context: Residential, some commercial

CRASH TYPES

The intersection of 10th Ave NE and NC 127 have the most crashes of this corridor section at 25 crashes. Half of the crashes are angle or left turn crashes.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	✓

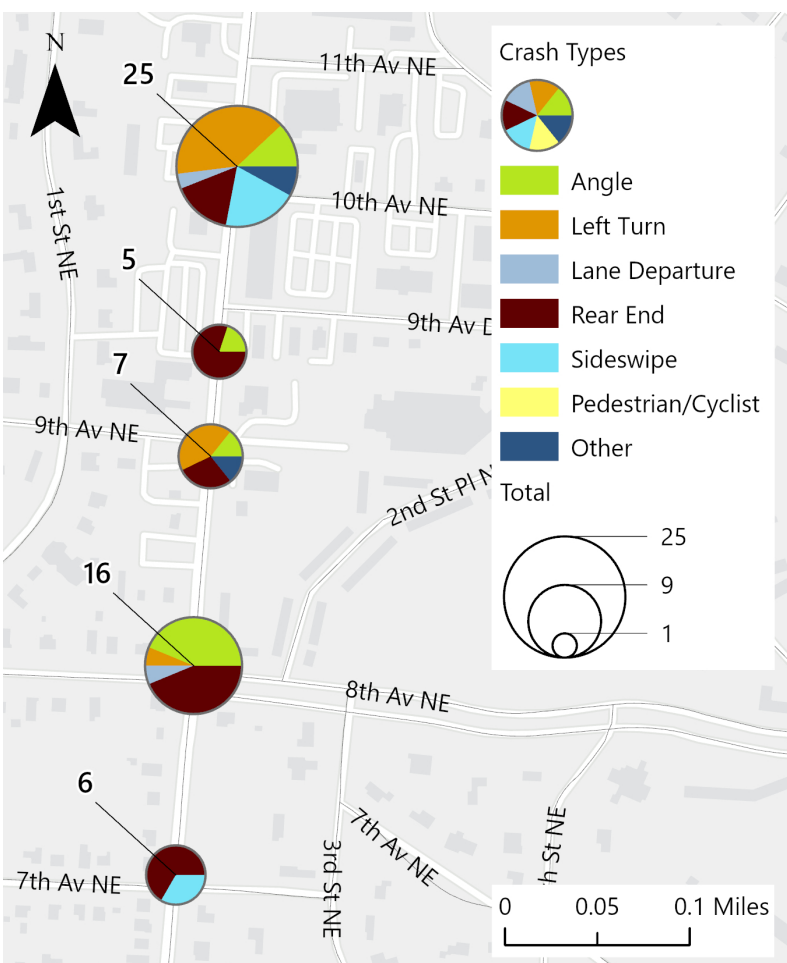
TRAFFIC OPERATIONS

The segment of NC-127 between 7th Avenue NE and 10th Avenue NE functions as a principle arterial serving commuter traffic as well as local businesses.10th Avenue NE predominantly serves cut-through commuter traffic and experiences significant turning movements compared to other side streets in this segment. There is one signalized intersection at 8th Avenue NE. Simulations for this segment estimate queues reaching 300 feet at 8th Avenue NE. This intersection is the only marked location for pedestrians to cross NC-127. Additional operational challenges exist at 9th Avenue NE where the existing building in the northeast corner of the intersection creates sight-distance issues for drivers.

LEVEL OF SERVICE (LOS)

INTERSECTION	LOS (2025)	LOS (2045)
8th Ave NE	B	B

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Recommendations between 7th and 10th Avenues NE include a pedestrian crossing at 7th Ave NE complete with a high-visibility crosswalk and Pedestrian Hybrid Beacon (PHB) signal, a channelized right turn island at 9th Avenue Drive NE accompanied by a median along NC-127, and a new traffic signal at 10th Ave NE complete with pedestrian signal heads, crosswalks, and curb ramps. Additional countermeasures should evaluate movement restrictions at 9th Ave NE. Bus stops should be consolidated to locations within 100 feet of crossings. Recommendations include updating signal head and phasing at 8th Ave NE to replace head with 4-section head and include Protected Left Turn phasing. The estimated cost to implement these countermeasures for this corridor section is \$800,000.

\$
800,000

NC 127 / 2ND ST CORRIDOR: 10th Ave to 13th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: 24,000

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 80 ft

Crosswalks: At signalized intersections

Refuge: None

Sidewalks: On both sides of the road

Bike Facilities: None

Transit Facilities: Two bus stops

Land Use Context: Commercial

CRASH TYPES

The intersection at 13th Ave NE and NC 127 have the most crashes of this corridor section. Over half of the crashes at this location are angle and left turn crashes. The same is true for the intersection at 12th Ave NE and NC 127, with the second most crashes of this section.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	✓
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	✓

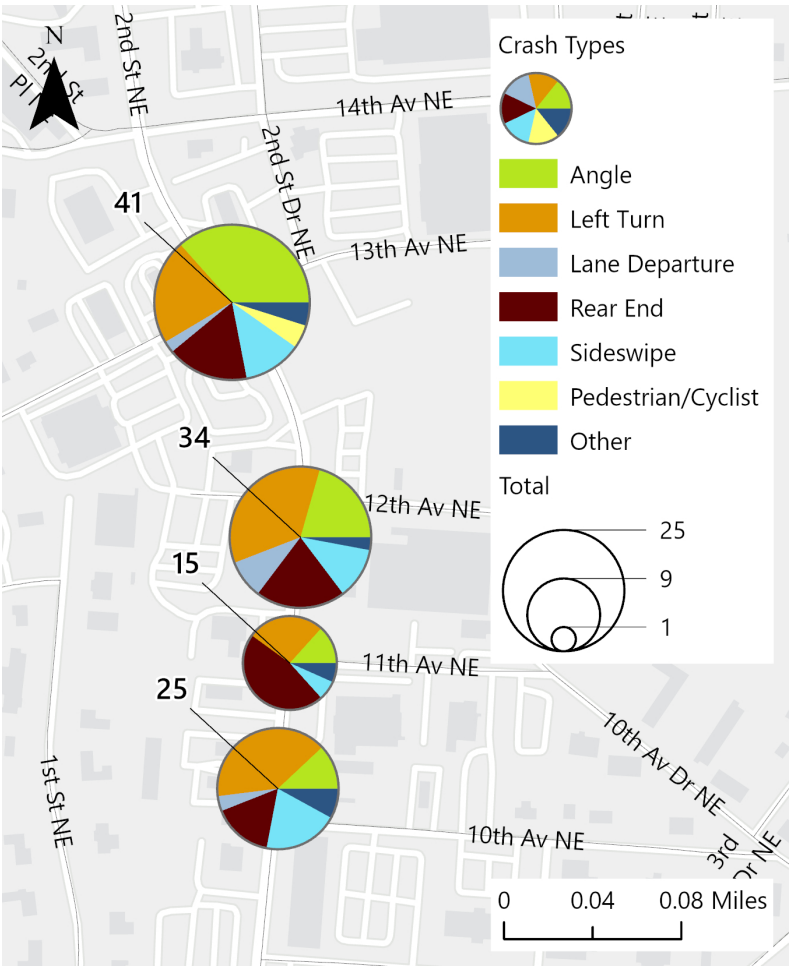
TRAFFIC OPERATIONS

NC-127 between 10th Avenue NE and 13th Avenue NE functions as a principle arterial serving commuter and business traffic. The surrounding area serves more businesses than residential homes and connects to Hickory High School to the east. The queue at 13th Avenue NE may extend up to 450 feet, based on simulations. The signal at this intersection does not provide a protected left-turn phase, which may contribute to left-turn crashes at this location.

LEVEL OF SERVICE (LOS)

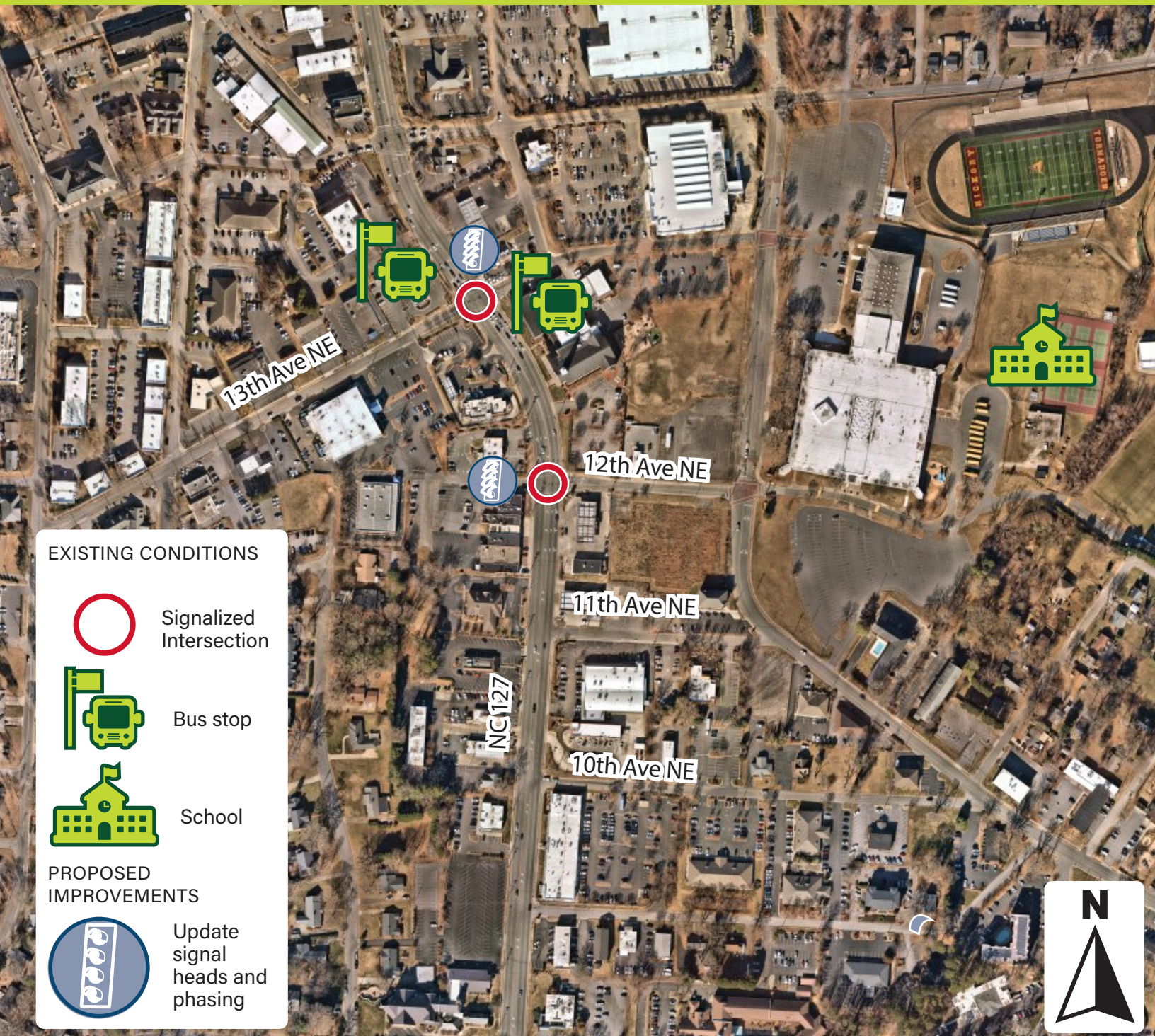
INTERSECTION	LOS (2025)	LOS (2045)
13th Ave NE	B	C

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Between 10th and 13th Avenues NE, recommendations include upgrading signals at 12th and 13th Avenues that replace head with 4-section head and include protected left turn phasing. Recommendations include adding all red phasing at 13th Ave NE. The estimated cost to implement these countermeasures for this corridor section is \$700,000.

\$
700,000

NC 127 / 2ND ST CORRIDOR: 13th Ave to 16th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: ~24,000

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 80 ft

Crosswalks:At signalized intersections

Refuge: None

Sidewalks: On both sides of the road; disconnected

Bike Facilities: None

Transit Facilities: 4 bus stops

Land Use Context: Commercial

CRASH TYPES

The section from 13th Ave to 16th Ave on NC 127 has 3 intersections with 40 or more recorded crashes. With the most number of crashes at 55, 16th Ave NE and NC 127, one third are angle and left turn crashes.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	✓
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	

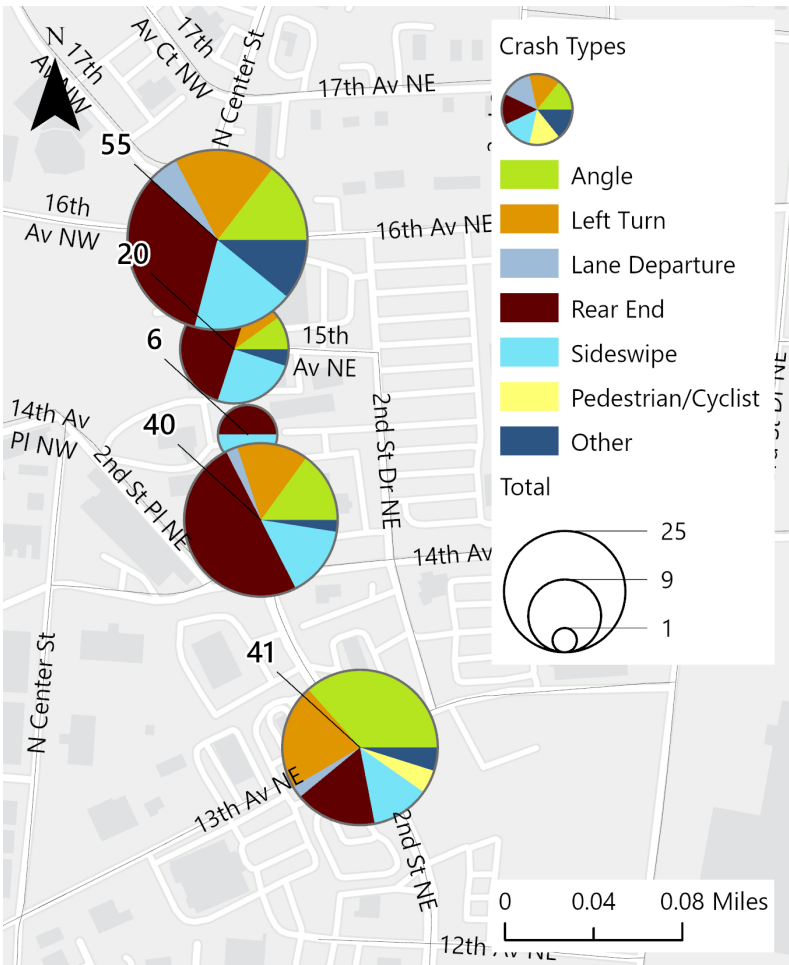
TRAFFIC OPERATIONS

This segment of NC-127 between 13th Avenue NE and 16th Avenue NW serves commuter and business traffic. The land use in this segment is predominantly business with several restaurants, banks, a grocery store, and a hardware store. There are three signalized intersections: at 13th Avenue NE, 14th Avenue NE, and 16th Avenue NW. Through lanes in this segment are expected to reach queue lengths of up to 800 feet along NC-127. Additionally, this segment has a high number of access points which may contribute to the number of angle crashes in the area.

LEVEL OF SERVICE (LOS)

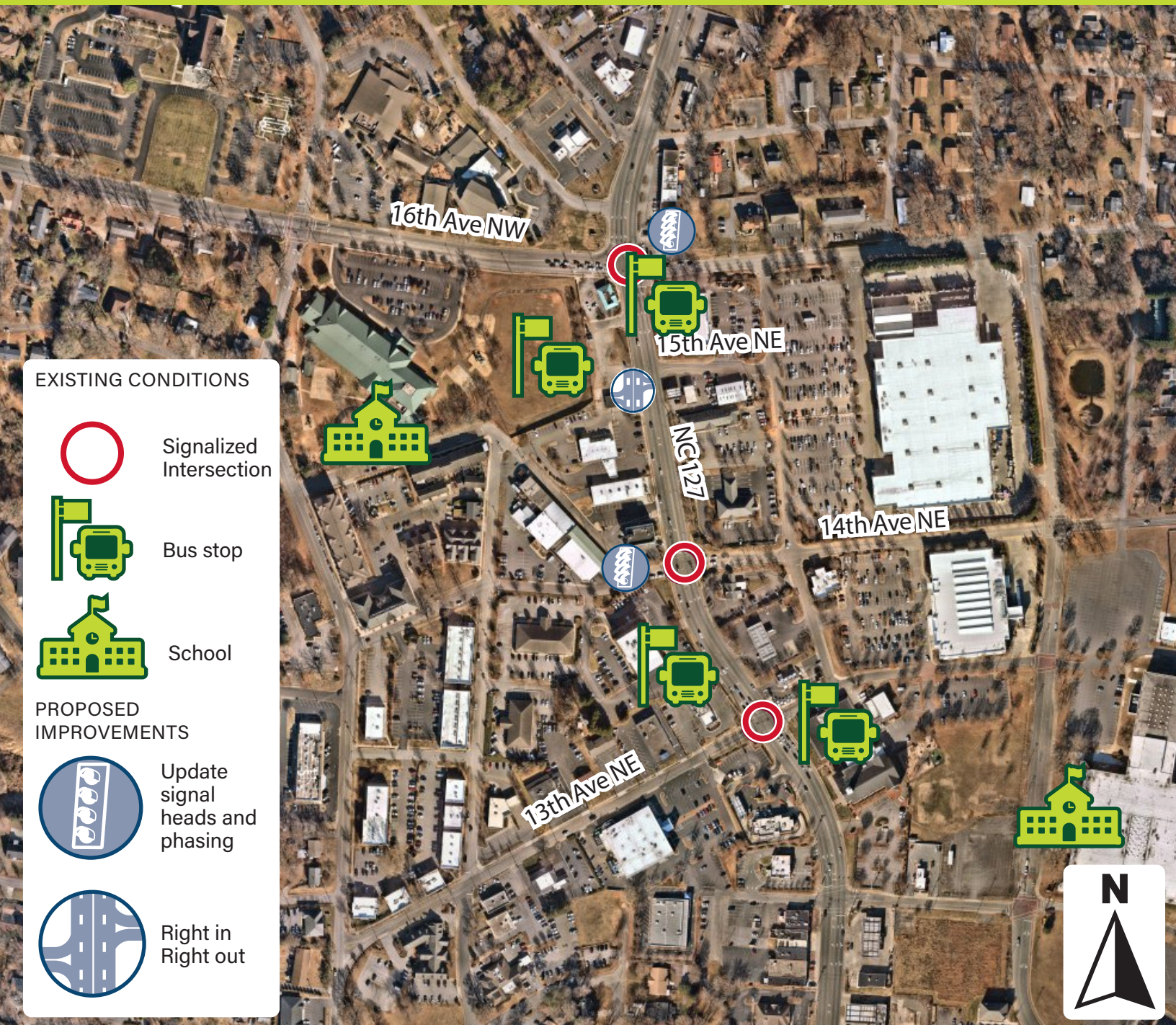
INTERSECTION	LOS (2025)	LOS (2045)
14th Ave NE	B	B

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Recommendations between 13th and 16th Avenues include upgrading signals at 14th and 16th Avenues to provide protected left turn phases. Additionally, it is recommended to include channelization and restrictions at 15th Ave NE to facilitate right-in/right-out maneuvers. Recommendations also include reviewing speed limit sign posting as a speed management tool. The estimated cost to implement these countermeasures for this corridor section is \$750,000.

\$
750,000

NC 127 / N CENTER ST CORRIDOR: 16th Ave to 19th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median:None

AADT: ~32,500

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 80 ft

Crosswalks: Only at the intersection of 16th Ave NE

Refuge: None

Sidewalks: On both sides of road; highly disconnected

Bike Facilities: None

Transit Facilities: 3 bus stops on east side

Land Use Context: Primarily residential with new development

CRASH TYPES

The intersection of 17th Ave NE and NC 127 have the most crashes of this corridor section at 55 crashes. One third of the crashes are angle and left turn.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	
Left Turn	✓	✓
Head On		✓
Ran Off		✓
Bike Ped		✓

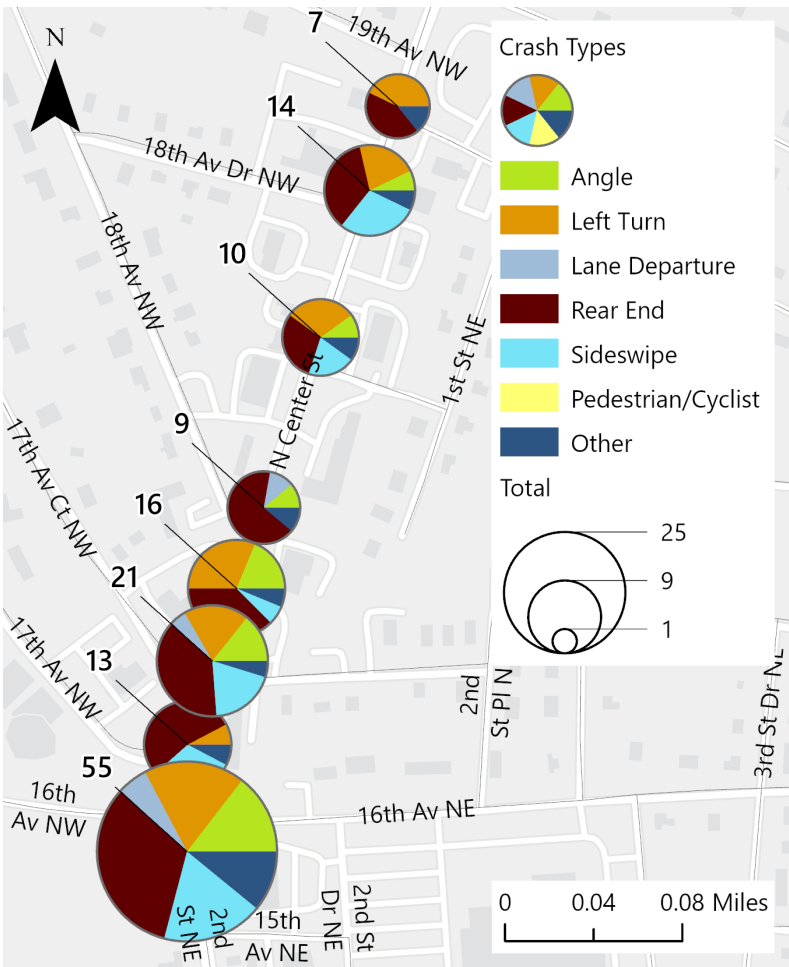
TRAFFIC OPERATIONS

NC-127 between 16th Avenue NW and 19th Avenue NW predominantly serves commuter traffic. The land use fronting NC-127 in this area is commercial, and the area has significant residential influence on the east and west. The only signalized intersection in this segment is at 16th Avenue NW. Because this area is mostly residential, the access density is less that other segments of NC-127. The intersection at 16th Avenue NW is the only marked pedestrian crossing in this segment.

LEVEL OF SERVICE (LOS)

INTERSECTION	LOS (2025)	LOS (2045)
16th Ave NW/NE	D	D

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Between 16th and 19th Avenues NW, a median is recommended with accommodations for southbound left turn lanes at 16th Avenue NW/NE. Additionally, a Pedestrian Hybrid Beacon (PHB) signal is recommended between 18th and 19th Ave NE. The estimated cost to implement these countermeasures for this corridor section is \$900,000.

\$
900,000

NC 127 / N CENTER ST CORRIDOR: 19th Ave to 22nd Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: ~32,500

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 80 ft

Crosswalks: None

Refuge: None

Sidewalks: On both side of road, highly disconnected and no buffer

Bike Facilities: None

Transit Facilities: 3 bus stops

Land Use Context: Primarily residential with new development

CRASH TYPES

The intersection at 21st Ave NW and NC 127 has the most crashes of the corridor section at 21 crashes. One third of these crashes are angle and left turn crashes.

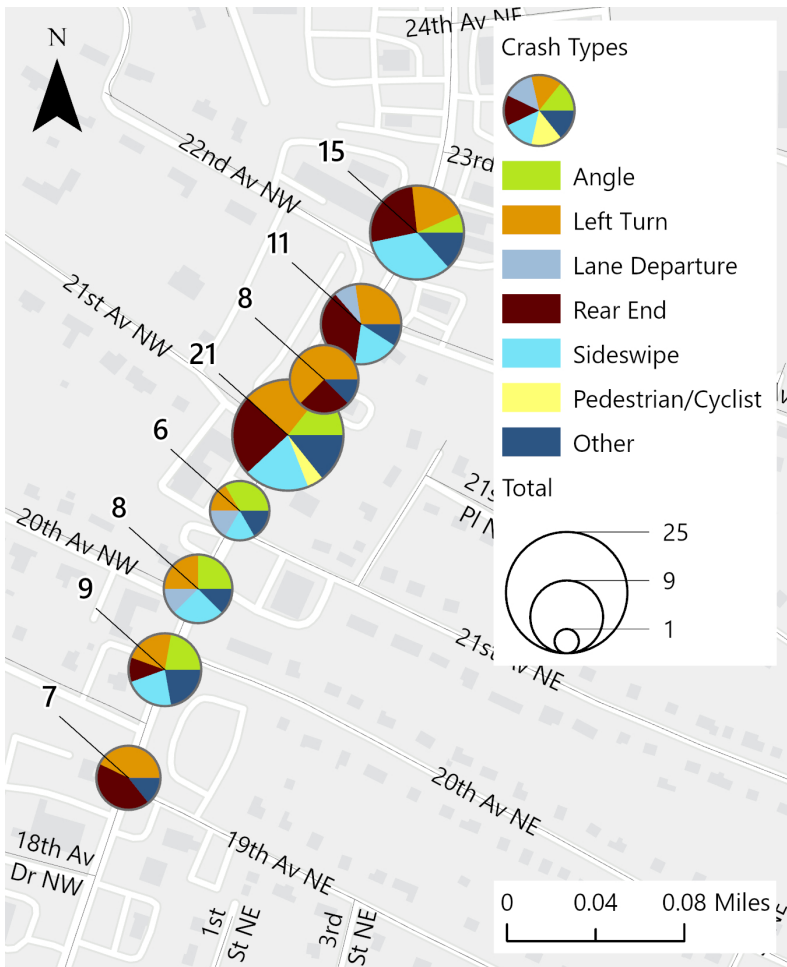
CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	
Left Turn		✓
Head On		✓
Ran Off		✓
Bike Ped	✓	✓

TRAFFIC OPERATIONS

NC-127 between 19th Avenue NW and 22nd Avenue NW serves commuter and business traffic. There are no signalized intersections in this segment. The nearest protected pedestrian crossing locations are at 16th Avenue NW or 23rd Avenue NW.

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Recommendations between 19th and 22nd Avenues NW include a full width median and Pedestrian Hybrid Beacon (PHB) signal between 21st Ave NE and 23rd Ave NE. The estimated cost to implement these countermeasures for this corridor section is \$550,000.

\$
550,000

NC 127 / N CENTER ST CORRIDOR: 22nd Ave to 25th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: None

AADT: ~31,500

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 80 ft

Crosswalks: 2 at 23rd Ave, full crossing at 25th Ave

Refuge: None

Sidewalks: On both sides of road, disconnected and no buffer

Bike Facilities: None

Transit Facilities: 2 stops

Land Use Context: Residential, commercial, new development

CRASH TYPES

The intersection at 25th Ave NW and NC 127 has the most crashes of this corridor section with 28 crashes. Over half of the crashes are angle and left turn.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	✓

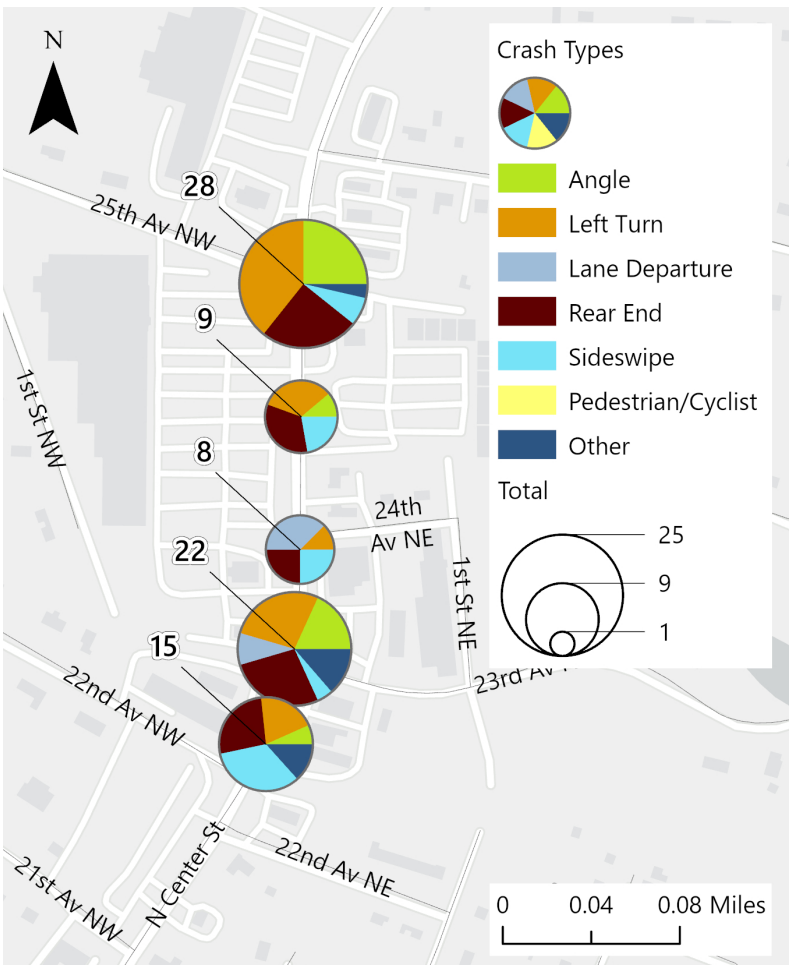
TRAFFIC OPERATIONS

NC-127 between 22nd Avenue NW and 25th Avenue NW serves commuter and business traffic. Land use in this segment is largely commercial. Signalized intersections in this segment are located at 23rd Avenue NE and 25th Avenue NW. There are protected pedestrian crossings at 23rd Avenue NE and 25th Avenue NW. There are significant queues for through-traffic at 25th Avenue NE of approximately 600 feet as well as nearly 300 feet of storage needed for left-turn movements.

LEVEL OF SERVICE (LOS)

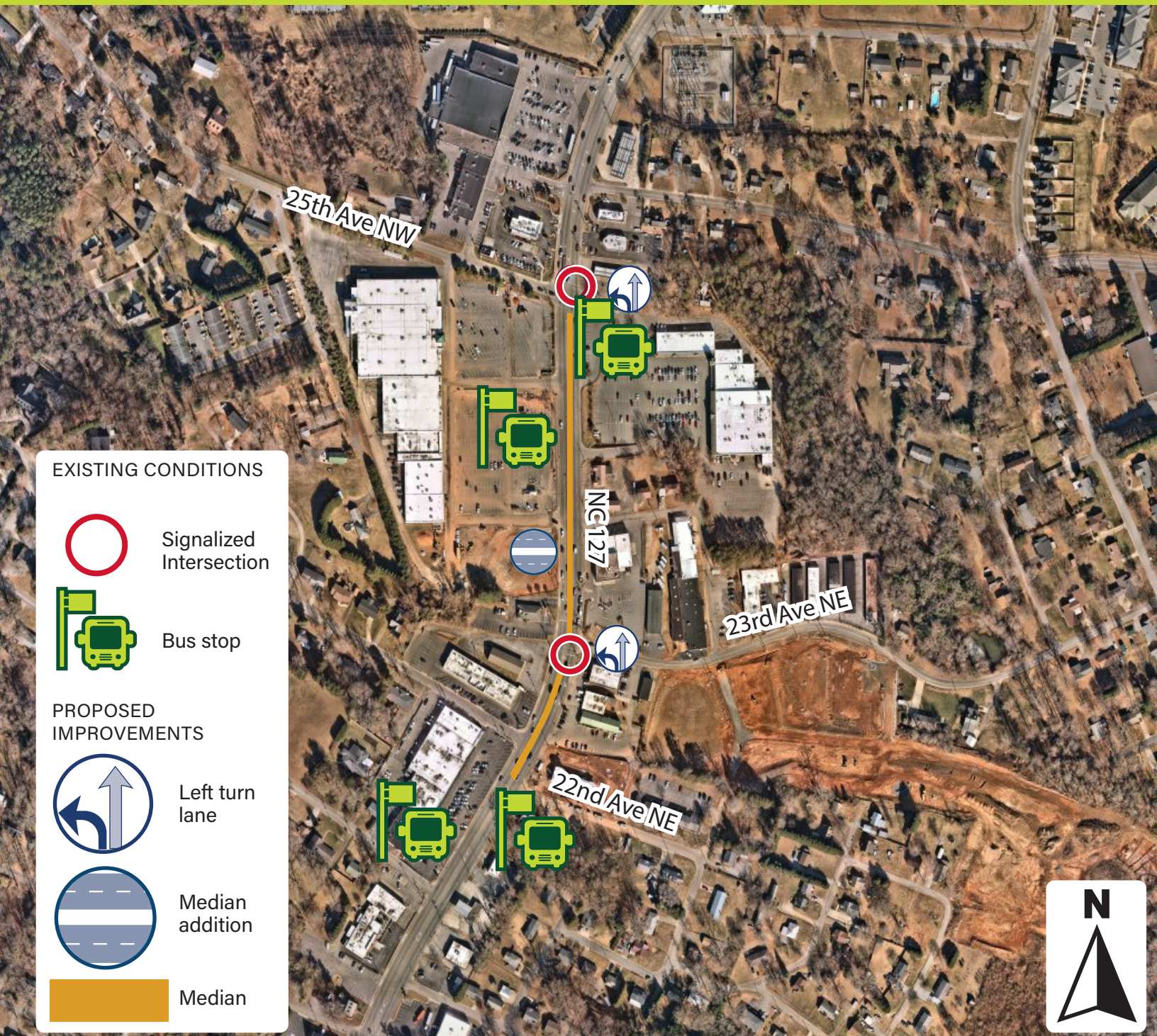
INTERSECTION	LOS (2025)	LOS (2045)
25th Ave NE	B	B
23rd Ave NE	?	?

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



PROPOSED COUNTERMEASURES

Recommendations include a median between 22nd Avenue NW and 25th Avenue NW with storage for left turn lanes at 23rd Avenue NE and 25th Avenue NW. Recommendations include adding protected left turn phasing to southbound traffic at 25th Ave NW. The estimated cost to implement these countermeasures for this corridor section is \$700,000.

\$
700,000

NC 127 / N CENTER ST CORRIDOR: 25th Ave to 29th Ave

ROADWAY PROFILE

Functional Classification: Other Principal Arterial

Average Number of Lanes: 5

Median: Small median between 28th Ave and 29th Ave

AADT: ~30,000

Posted Speed: 35 mph

TYPICAL INTERSECTION

ROW: 100 ft

Crosswalks: At 29th Ave NE

Refuge: None

Sidewalks: On one side of the road

Bike Facilities: None

Transit Facilities: 1 stop North of 25th Ave

Land Use Context: Denser commercial and multi-family

CRASH TYPES

The intersection at 25th Ave NW has 28 crashes with over one half of them angle and left turn crashes.

CRASH TYPE RISKS

CRASH TYPE	INTERSECTION	SEGMENT
Angle	✓	✓
Left Turn	✓	✓
Head On	✓	✓
Ran Off	✓	✓
Bike Ped	✓	✓

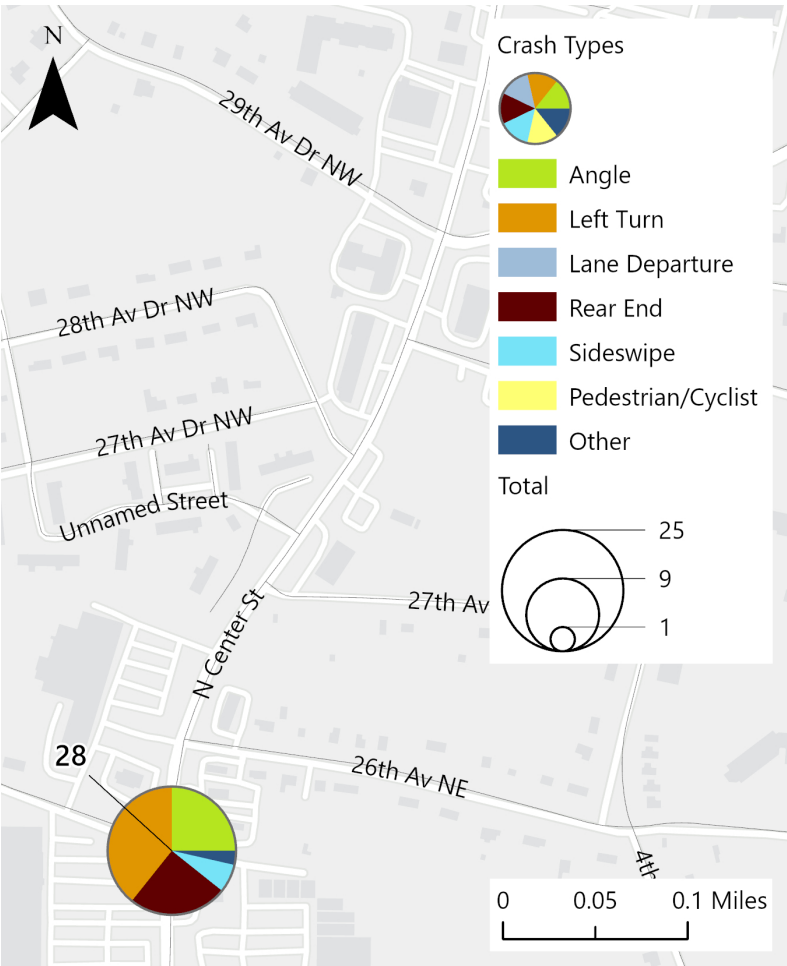
TRAFFIC OPERATIONS

Segment D of NC-127 between 25th Avenue NW and 29th Avenue NE predominantly serves commuter traffic. 29th Avenue NE connects to Springs Road NE and experiences significant traffic volumes. Signalized intersections at 25th Avenue NW and 29th Avenue NE operate at LOS B and D respectively. This is anticipated to be addressed by a planned project U-2307B: 29th Avenue NE Improvements Project.

LEVEL OF SERVICE (LOS)

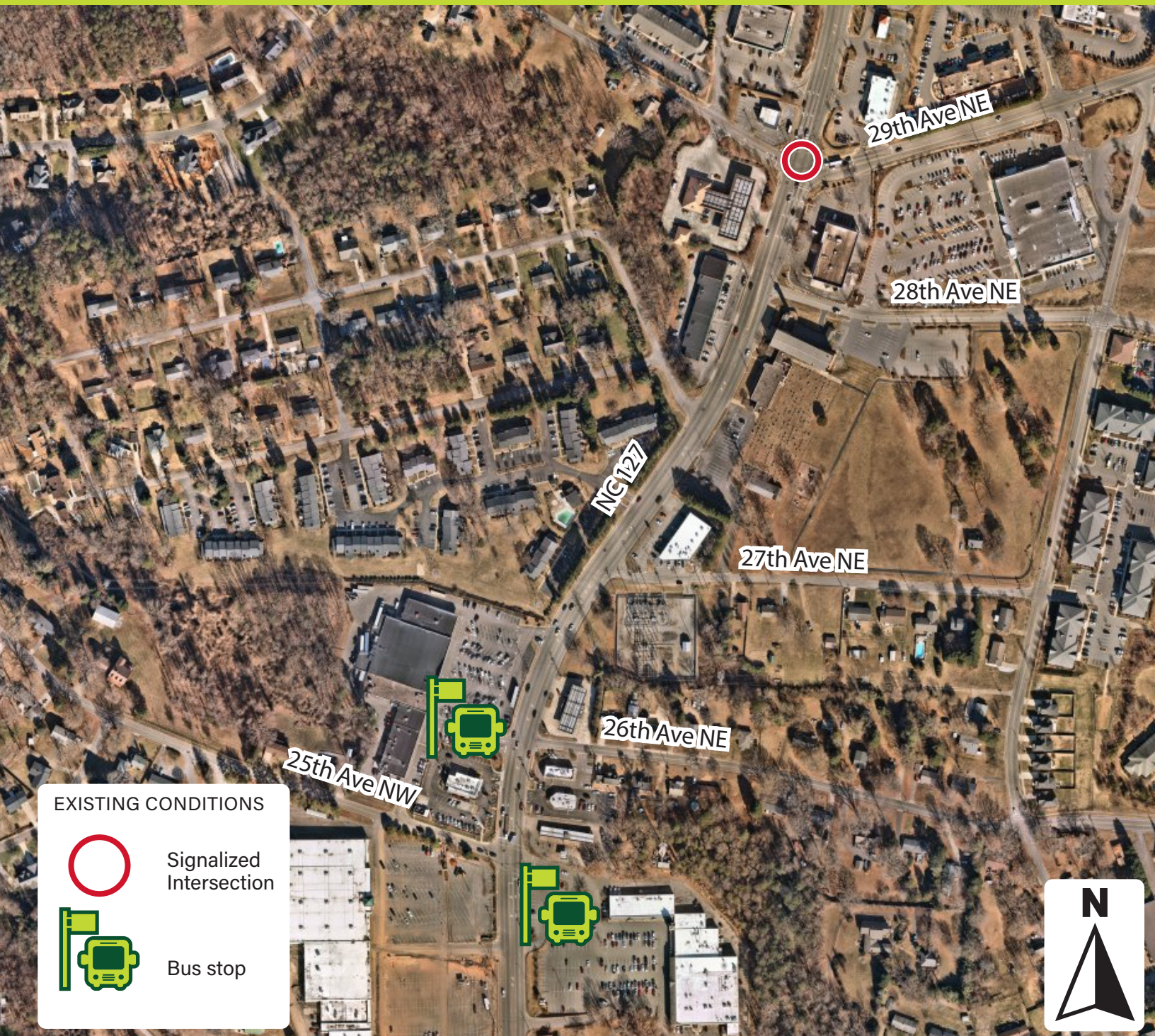
INTERSECTION	LOS (2025)	LOS (2045)
29th Ave NE	D	E

INTERSECTION CRASH TYPES





NC 127 Corridor Proposed Improvements



EXISTING CONDITIONS



Signalized Intersection



Bus stop

PROPOSED COUNTERMEASURES

This intersection will be improved through U-2307B: 29th Avenue NE Improvement Project. No further recommendations are needed for this segment.



INTERSECTION:

McDonald Pkwy/24th St NE and Springs Rd NE

ROADWAY PROFILE

	McDonald Pkwy/24th St	Springs Rd NE
Classification:	Other Principal Arterial	Minor Arterial
Average number of Lanes:	5	5
Median:	Yes	Yes
AADT:	15,000 - 35,000	~16,000
Posted Speed:	45 mph	45 mph

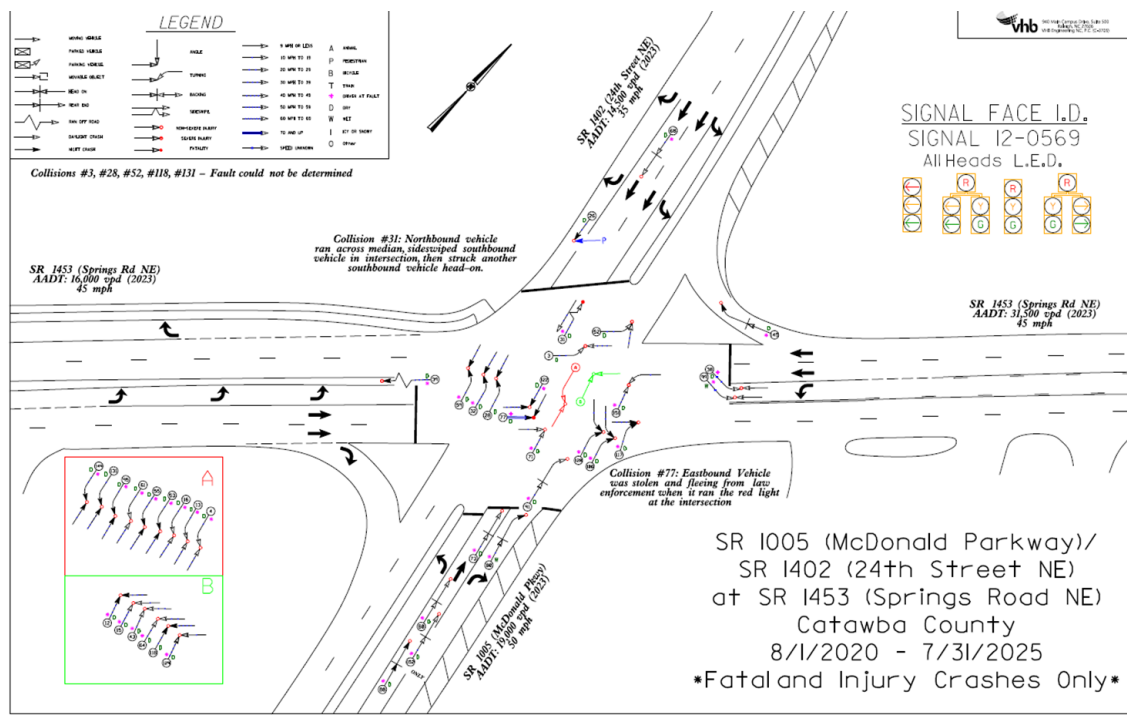
TYPICAL INTERSECTION

ROW:	80 ft	120 ft
Crosswalks:	No crosswalks or pedestrian signal heads	
Refuge:	None	None
Sidewalks:	None	Sidewalks on North side
Bike Facilities:	No bike lanes	No bike lanes
Transit Facilities:	No bus stops	No bus stops
Land Use Context:	Commercial	Commercial

CRASH ANALYSIS

Crash analysis shows an over representation of nighttime crashes, indicating a need for more lighting in the intersection. Additionally, left-turn crashes represent the majority of crashes. This is likely due to the unprotected left-turn phases in the signal operation as well as the angle of the intersecting roads. The angle between McDonald Parkway NE and Springs Road NE creates a large conflict zone, therefore, vehicles are in the intersection for a longer period of time compared perpendicular intersections.

CRASH DIAGRAM





McDonald Pkwy/Springs Rd NE Intersection Proposed Improvements



PROPOSED COUNTERMEASURES

This intersection will be improved through U-2307B: 29th Avenue Improvement NE Project. Additional recommendations at this intersection include adding pedestrian crossings on the west, north, and east legs and modifying the signal to include pedestrian signal heads and Leading Pedestrian Interval (LPI). Recommendations also include enhanced lighting. The estimated cost to implement these countermeasures at the intersection is \$175,000.

STIP PROJECT

U-2307B will modify the configuration of this intersection to add a through northbound lane along McDonald Parkway onto 24th Street NE. Additionally, it will add a second left turn lane to southbound 24th Street NE as well as both directions on Springs Road NE. It will also create dedicated right turn lanes on Springs Road NE with two right turn lanes westbound. This new configuration will require signal modification and protect left-turn phasing.

\$
175,000

Implementation Tools

Intersection Improvements

This type of review is considered for specific intersections with skewed alignments or poor sight distance, where the traffic volumes or crash patterns at an intersection require traffic analysis to assess countermeasure alternatives, or where the safety improvements are likely to require additional right-of-way to implement. Intersection review should be conducted for near-term capital projects being developed for delivery, including STIP projects, SPOT project proposals, or an application for a locally administered project funded through competitive grant or federal programs.

This type of study is best suited for more rural sections or intersections with lane departure, motorcycle, or speed safety risk or crash history. Site investigations are effective to incorporate low-cost or systemic safety improvements into a roadway maintenance project, such as an unfunded STIP project.

Road Safety Audits (RSA)

An RSA or other robust field review can be quickly implemented along specific sections or along a series of intersections where crash risk is moderate, where anticipated countermeasures do not require additional right-of-way, or where changes to the typical section are not expected to construct new curbing. The lower-cost treatments or countermeasures identified are considered for implementation as a dedicated safety improvement or as part of a near-term capital project, such as a STIP project. RSAs are most helpful for identifying low-cost improvements that may be eligible for the NCDOT HSIP.

Speed Management and Traffic Calming

Speed management is an overall approach to slowing vehicle speeds to more closely align with target speeds selected based on local development context and the mix of roadway users. Improvements for managing speeds can be identified as part of other safety project implementation strategies, such as an RSA, or developed through a separate process involving speed studies and public engagement. Strategies like signal coordination for slower progression, roundabouts, and roadside streetscape elements may be considered for higher-speed roads carrying higher volumes of traffic.

Traffic calming treatments or devices are typically applied to local or lower-volume streets with target speeds below 35 mph. Traffic calming devices typically change the horizontal or vertical alignment of the roadway using geometric features like raised islands, curb extensions, and speed humps. Enhanced posted speed limit signage, pavement markings that narrow the width of travel lanes, or speed feedback signs can also be considered for roads of all design speeds.

Education and Enforcement

Crash types and safety problems associated with human factors like impairment, distraction, excessive speeding, improper use of seat belts and car seats, and aggressive driving are corrected with extensive community outreach and sustained, targeted enforcement. Education and outreach strategies should be developed in partnership with community organizations and be tailored to population groups—youth, elderly, residents of communities that disproportionately experience safety problems. Enforcement actions should be implemented in coordination with community outreach strategies, focus on the highest risk roadways or intersections, and be sustained over extended periods of time (weeks or months) to have the most impact on

human behavior. These strategies should be piloted by local agencies by including nominal funding in annual operating budgets. More costly strategies or sustained campaigns may be eligible for NC Governor's Highway Safety Program grants or funding by non-profit organizations committed to underserved populations.

Policy

Policy – including the development of roadway design guidelines, standard procedures for reviewing transportation or development projects for safety needs, and criteria for prioritizing safety projects and programs – is a core implementation approach. Assessing current policies and legal frameworks at the state, regional, and local levels may reveal gaps in policy or barriers to the use of proven safety countermeasures. These strategies should be incorporated in the scope of all future transportation plans and project development procedures.

Public Involvement

Meaningful public involvement is a process that actively seeks full representation from the community, considers public comments and feedback, and incorporates that feedback into a project, program, or plan whenever possible. This process enables the community and agencies to make informed decisions through collaborative efforts and improves the decision-making process. Public input should be used to inform project prioritization, refine countermeasure selection, and guide implementation decisions. This practice should be embedded in the development of all future transportation plans, programs, and projects.

Project Funding

Federal Programs

The USDOT and NCDOT manage several funding programs to support local transportation safety projects. The USDOT FHWA provides core federal-aid funding to NCDOT specifically for safety and other transportation improvements. NCDOT programs most of these core federal funds through its Strategic Transportation Investments (STI) process, known as SPOT. The SPOT ranking system evaluates safety alongside other scoring criteria. Partners should consider these federal funding sources valuable resources for project implementation.

USDOT Discretionary Grants

The USDOT offers several discretionary grant opportunities each year to implement safety improvements. The USDOT Better Utilizing Investments to Leverage Development (BUILD) Grant Program is available to local agencies to construct eligible safety projects. The USDOT Safe Streets and Roads for All (SS4A) program has offered two grant types since 2021. Planning and Demonstration Grants can be used to supplement the Hickory Moving Forward plan by testing temporary installations of safety improvements or conducting additional safety reviews. Implementation Grants provide federal funds to implement projects and strategies identified in a comprehensive safety action plan to address a roadway safety problem. Applicants must have an eligible action plan to apply for an Implementation Grant. All applications must address safety problems by proposing to implement projects and strategies (e.g., construction) included in the action plan within 5 years of executing a grant agreement. Eligible projects and strategies can include infrastructural, behavioral, or operational activities. Project-level planning, design, and development activities must connect directly to the completion of projects and strategies funded through an Implementation Grant.

Planning and Demonstration Grants may be used to:

- › Develop, complete, or supplement a safety action plan
- › Supplementary planning activities (e.g., RSAs) and demonstration activities (e.g., feasibility studies).

Implementation Grants may be used to fund projects and strategies identified in an Action Plan, and:

- › Safety demonstration activities to inform an existing Action Plan
- › Supplemental safety planning to inform an existing Action Plan
- › Project-level planning, design, and development activities for projects and strategies identified in an Action Plan

NCDOT Highway Safety Improvement Program (HSIP)

HSIP is a federal-aid program that implements safety projects through a data-driven process. NCDOT manages the HSIP to identify and address specific traffic safety concerns statewide. North Carolina's HSIP focuses on reducing traffic crashes, injuries, and fatalities by targeting potentially hazardous (PH) locations. Using a data-driven methodology, NCDOT systematically identifies and addresses traffic safety issues with targeted interventions. The HSIP categorizes PH locations into five types: intersections, roadway sections, bicycle and pedestrian intersections, bicycle and pedestrian mid-block crossings, and bridges. The program flags locations with identifiable crash patterns that warrant safety interventions.

Funding for HSIP projects comes through the State Transportation Improvement Program (STIP) and STI allocations. However, the SPOT process does not program HSIP projects. Each year, NCDOT identifies locations for review and potential project development. The Regional Traffic Engineers (RTE) within NCDOT's Traffic Safety Unit (TSU) analyze these sites and submit projects for quarterly funding consideration. The HSIP and state-funded Spot Safety programs fund selected projects. Additionally, TSU provides technical support and may assist with funding for safety reviews, such as Road Safety Assessments (RSAs).

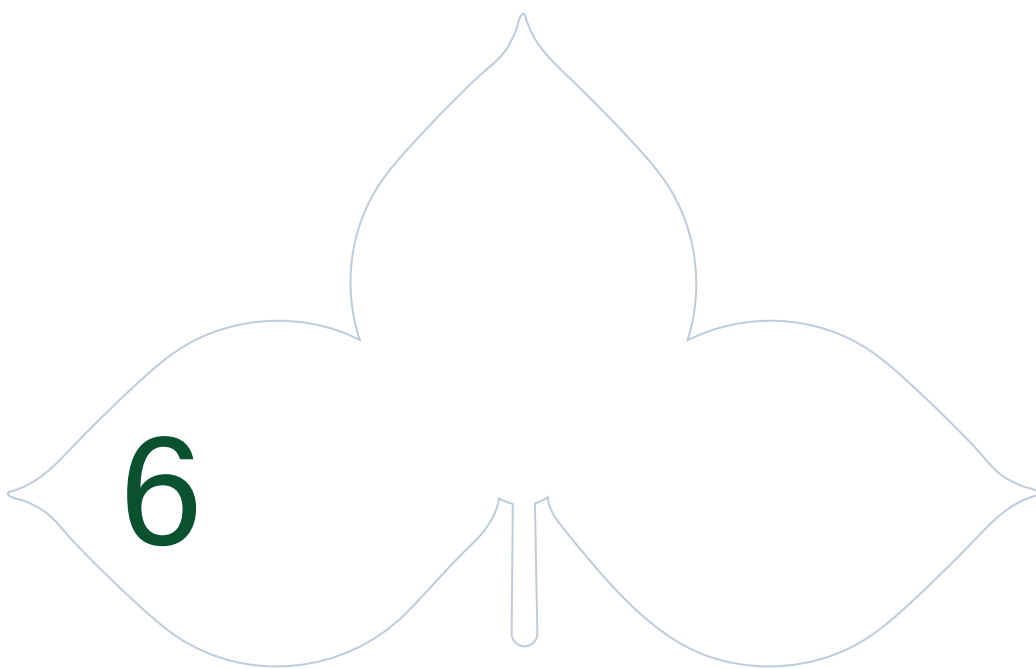
NC Governor's Highway Safety Program (GHSP)

The GHSP solicits grant applications to fund law enforcement and public awareness campaigns. GHSP grants prioritize programs that aim to increase driver and passenger restraint use, reduce impaired driving, enhance motorcyclist safety, address bicycle and pedestrian safety, and improve data systems—though priorities may change annually. GHSP grants primarily receive funding from NHTSA apportionments to NCDOT, supplemented by state or local matching funds, and operate on a reimbursement basis.

Eligible grant recipients include law enforcement agencies, state departments, local governments, universities, nonprofit organizations, and medical institutions. The application period typically opens each January, with selections finalized by summer. Projects generally start in October, and grantees must submit at least quarterly progress reports throughout the one-year grant cycle.

Local Funding

The City should conduct a Road Safety Assessment, or similar safety study, prior to developing the final scope for routine roadway resurfacing projects and other maintenance activities to consider the inclusion of low-cost safety improvements such as revised pavement markings, rumble strips, warning signage, and temporary median islands. The City should also consider appropriating funds to match state and federal grants for sustained law enforcement campaigns, safety education programs, and large-scale capital projects.



Evaluating and Updating the Safety Action Plan

Reporting Progress

The City of Hickory will drive the Action Plan forward by meeting regularly to discuss and track implementation progress. The City will report on progress annually using an annual report template. These reports will align with the goals, strategies, and performance measures in the Crash Reduction Framework and highlight key accomplishments from the previous year.

The Technical Steering Committee launched during the development of HMF will transition its role to tracking and promoting the implementation of the Action Plan. The TSC membership may shift to include more or new partners. The TSC will develop and present annual reports.

The City will review new information from ongoing coordination and innovation to propose new strategies or projects for plan updates. The Action Plan should be updated every five years, and updated to Crash Analysis and HINs should use the most recent five years of all crash data and the most recent ten years of bicycle and pedestrian crashes.

Statewide and Regional Coordination

NCDOT and its divisions administer federal funds and state grants that can support the implementation of the Action Plan. NCDOT supports the prioritization and implementation of the strategies and actions outlined in the plan for Hickory's goals for improved safety, mobility, and community investment. In addition to supporting funding and prioritization, the City of Hickory and its stakeholders can communicate their interests to state lawmakers to increase access to safety countermeasures and strategies.

A strong line of communication between local, regional, and state agencies can help establish local safety guidelines and policies for safer transportation laws, increase enforcement and visibility, increase accessibility to safety countermeasures, and create resource libraries across the state.

The Greater Hickory MPO is an important partner for implementation of Hickory Moving Forward. Hickory is the largest city in the MPO region, and residents travel across the region experiencing traffic safety needs across the MPO area. The City should work with GHMPO to integrate safety data tools into studies and plans, prioritize safety in regional projects, and promote safety education messages and materials across the region.

NCDOT TSU serves as a resource for expertise, including safety data analysts, engineers who evaluate the effectiveness of safety projects, and regional field staff who review locations for potential safety improvements. The City will coordinate with NCDOT to develop future safety projects and identify opportunities for funding and implementation.

Safe Streets and Roads for All (SS4A) Compliance

The following table outlines the components of an Action Plan, as defined by the FY25 SS4A Notice of Funding Opportunity (NOFO). The City will ensure future compliance with SS4A NOFOs with future plan updates.

Table 7. SS4A Action Plan Components

	Description	Hickory Moving Forward Reference
Leadership Commitment and Goal Setting	▸ A high-ranking official and/or governing body in the jurisdiction publicly committed to an eventual goal of zero roadway fatalities and serious injuries; ▸ 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.	▸ Adoption by Hickory City Council in April 2026 ▸ Goal to reduce KA crashes by half by 2035, working toward zero by 2050. (Page 3)
Planning Structure	▸ A committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring	▸ Technical Steering Committee. (Page 20)
Engagement and Collaboration	▸ 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	▸ Chapter 4: Public Involvement

	Description	Hickory Moving Forward Reference
Safety Analysis	▸ Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction; ▸ 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.	▸ Chapter 3: Safety Analysis
Policy and Process Changes	▸ The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; ▸ The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards	▸ Chapter 2: Building a Culture of Safety ▸ Chapter 5: Crash Reduction Strategies
Strategy and Project Selections	▸ The plan identifies a comprehensive set of projects and strategies to address the safety problems in the Action Plan, with information about time ranges when projects and strategies will be deployed, and an explanation of project prioritization criteria.	▸ Chapter 5: Crash Reduction Strategies
Progress and Transparency	▸ A description of how progress will be measured over time that includes, at a minimum, outcome data. ▸ The plan is posted publicly online	▸ Chapter 5: Crash Reduction Strategies ▸ Chapter 6: Evaluating and Updating the Safety Action Plan

Hickory Moving Forward in Action

Hickory Moving Forward underscores the City of Hickory's commitment to reaching zero fatal and serious injury crashes on Hickory roadways. The City of Hickory is committed to diligently pursuing the outlined strategies and actions in this Action Plan. This includes a commitment to the level of departmental and inter-agency collaboration required to advance the goals laid out in Hickory Moving Forward.

Traffic safety is a shared responsibility—everyone has a role to play! Every action we take and every choice we make can model safety behavior, can support a culture of traffic safety, and can affirm our shared responsibility to protect lives on Hickory roads.

