

*January 2026*

*The City of Gastonia*

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# STATE OF SAFETY REPORT

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**The City of Gastonia**

with

**Kimley-Horn**

# INTRODUCTION

The City of Gastonia is committed to creating safer, more accessible streets for all users. As part of the **Safe Streets and Roads for All (SS4A)** initiative, this State of Safety Report provides a comprehensive, data-driven overview of current crash trends, community context, and current plans and policies in place related to transportation safety. It serves as a foundation for the City's **Safety Action Plan (SAP)**, aligning with the U.S. Department of Transportation's Vision Zero goal to reduce fatalities and serious injuries on Gastonia's roadways.

## WHY THIS REPORT MATTERS

The Charlotte Metro region has seen tremendous growth over recent years as it has regularly been known as one of the best areas to live; and the City of Gastonia will likely experience even more development and growth pressures for years to come as I-85 is widened between Gastonia and Charlotte, reducing the daily strain currently experienced traveling between these economic centers. With the increased projection in development and traffic volumes, the need for proactive safety measures has never been greater; safety must be prioritized in the City's future vision. This report highlights systemic issues contributing to crashes, reports vulnerable road user statistics, and identifies key emphasis areas.

## OUR APPROACH

The State of Safety Report combines:

- **Crash Data Analysis** – A detailed review of crash trends and patterns
- **Transportation Conditions** – A review of crash history within the study area including existing and planned transportation facilities
- **Community Conditions** – An examination of Gastonia's current zoning along with demographic and socioeconomic characteristics that influence transportation safety
- **Plan, Program, and Policy Review** – A literature review of Gastonia's existing policies, programs, and initiatives
- **Key Emphasis Areas** – Identification of priority safety improvement areas aligned with safety performance measures adopted by Gaston-Cleveland-Lincoln Metropolitan Planning Organization (GCLMPO) and the North Carolina Strategic Highway Safety Plan (NC SHSP)

*By leveraging federal SS4A funding and local partnerships, Gastonia is advancing a comprehensive safety strategy to create a transportation network that significantly reduces roadway fatalities and serious injuries for all users.*

## DATA SOURCES

The State of Safety Report showcases the information and trends most relevant for identifying safety needs in Gastonia. This report uses a variety of data sources that provide unique and foundational data related to transportation safety in Gastonia. The sources that provided the bulk of the data in this report are identified and described below.

### US Census American Community Survey (ACS)

The ACS is an ongoing survey by the US Census Bureau that collects detailed population and housing information on a yearly basis down to block group level.

### 2024 North Carolina Strategic Highway Safety Plan Update (NC SHSP Update)

The NC SHSP Update is a statewide, data-driven strategy that aims to cut roadway fatalities and serious injuries in half by 2035 and ultimately eliminate them by 2050 through a collaborative, Safe System Approach focused on engineering, education, enforcement, and equity.

### Connect NCDOT Mapping Resources

The North Carolina Department of Transportation (NCDOT) maintains these mapping resources to help with planning and mapping characteristics like traffic volumes, safety scores, speed limits, planned projects, and other transportation network data.

### NCDOT Crash Data

NCDOT maintains a crash database for planning-level analysis. Due to differences in recording methods, not all crashes are captured within the location-based data; however, those recorded act as a strong high-level representation of crashes in the area.

The analysis in this report reflects five (5) years of crash data from January 2020 through December 2024, and excludes crashes along I-85 (to avoid skewing the data along non-freeway facilities). Note that the Gastonia Police Department also provided supplemental 2025 fatal and serious injury (FSI) crash data that had occurred through September 8th, 2025; these crashes are reflected for mapping purposes, but are not reflected in the detailed analyses since they do not reflect a full calendar year.

### NC OneMap, Gaston County, and Gaston-Cleveland-Lincoln Metropolitan Planning Organization (GCLMPO) GIS

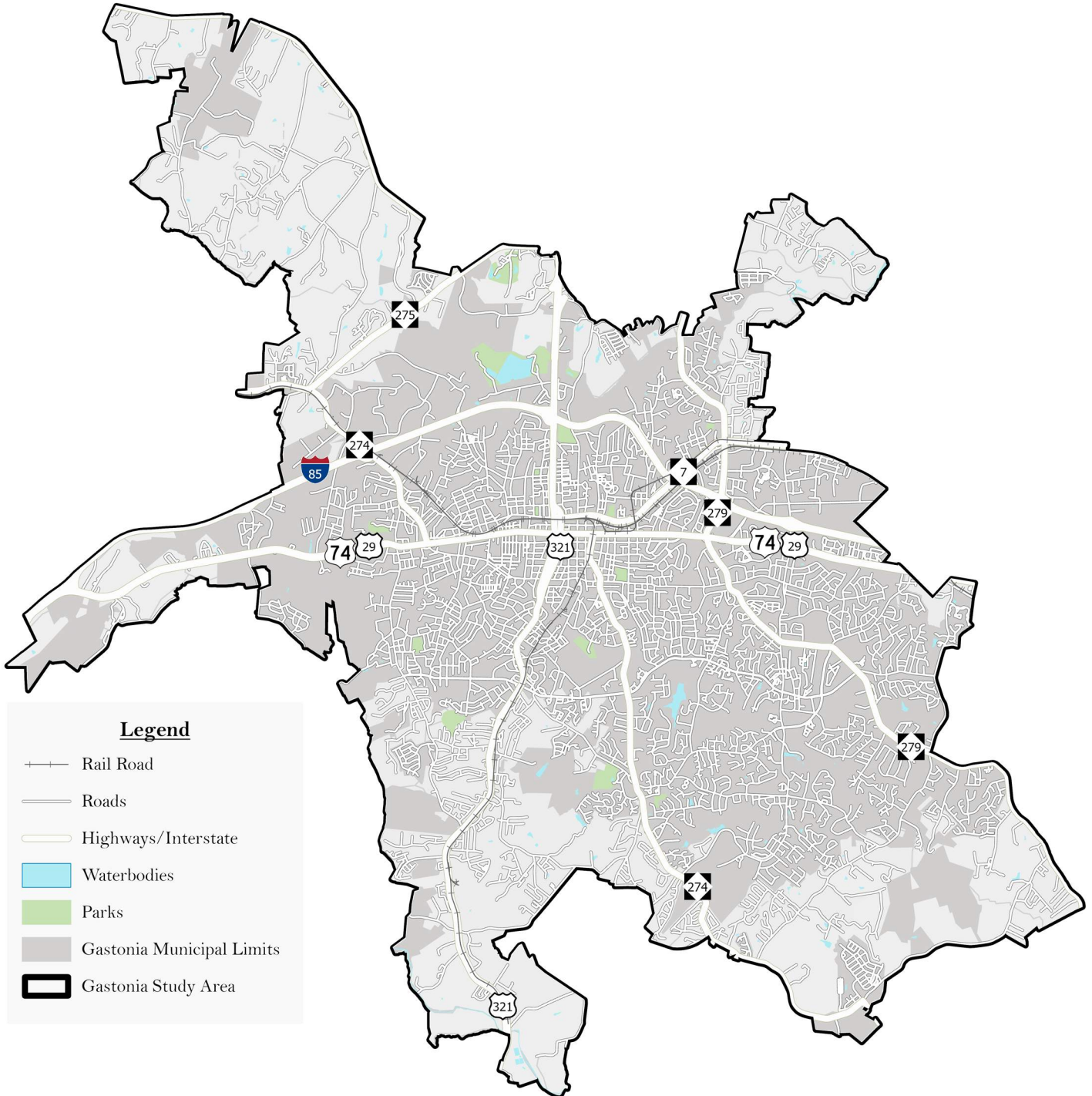
NC OneMap is North Carolina's open data portal with mapping layers for the entire state. Similarly, Gaston County and GCLMPO maintain a similar open data portal with county-specific data.

### City of Gastonia

The City of Gastonia maintains the City's data and a public data portal with mapping layers.

## STUDY AREA

The study area for the City of Gastonia SAP encompasses everything within Gastonia’s municipal boundaries including areas of annexation and strategic growth. Through coordination with City staff, areas outside the municipal boundary were identified using the Gastonia 2050 Comprehensive Plan excluding areas designated as “Rural Residential”. As part of the planning process, the project team will review and analyze transportation safety data within the study area to help ensure a comprehensive approach to transportation safety planning.

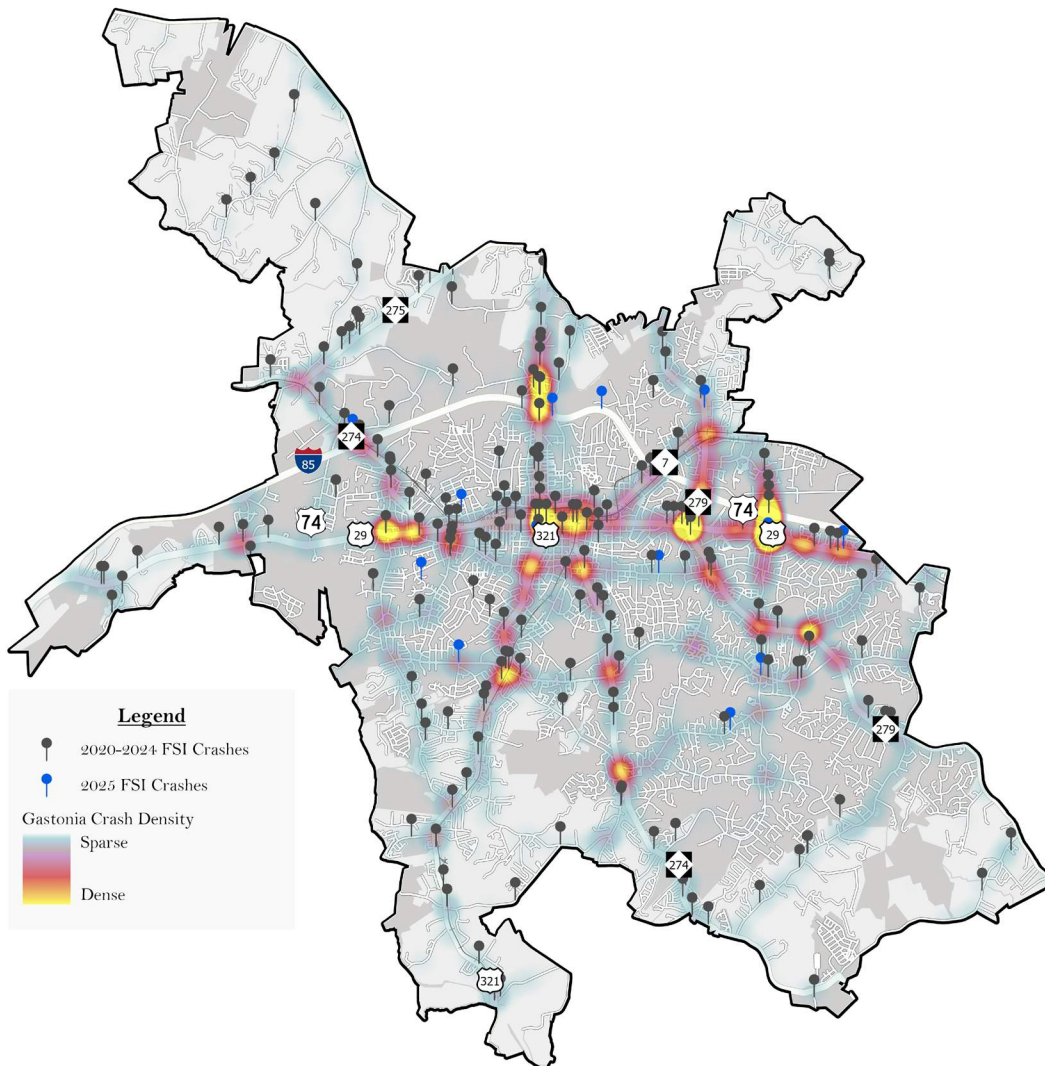




# TRANSPORTATION CONDITIONS

## CRASH HISTORY

From 2020-2024, Gastonia experienced over 13,300 reported crashes. The majority of reported, mappable crashes are heavily concentrated along major corridors, particularly US 74 and its key intersections. Downtown Gastonia exhibits multiple hotspots, indicating frequent crashes in areas with mixed land use and higher pedestrian activity. Significant clusters also appear near I-85 interchanges and US 321, where high traffic volumes and complex merging patterns contribute to increased risk. Peripheral neighborhoods show more dispersed crashes (both injury/fatal and non-injury crashes), with occasional hotspots near major connectors. The map below highlights crash density for all reported crashes, while also showing pins for FSI crashes. As shown below, severe crashes are most common along high-speed arterials and busy intersections, underscoring the need for both systemic countermeasures and targeted safety improvements. For the purposes of this study, crashes along I-85 were not included.



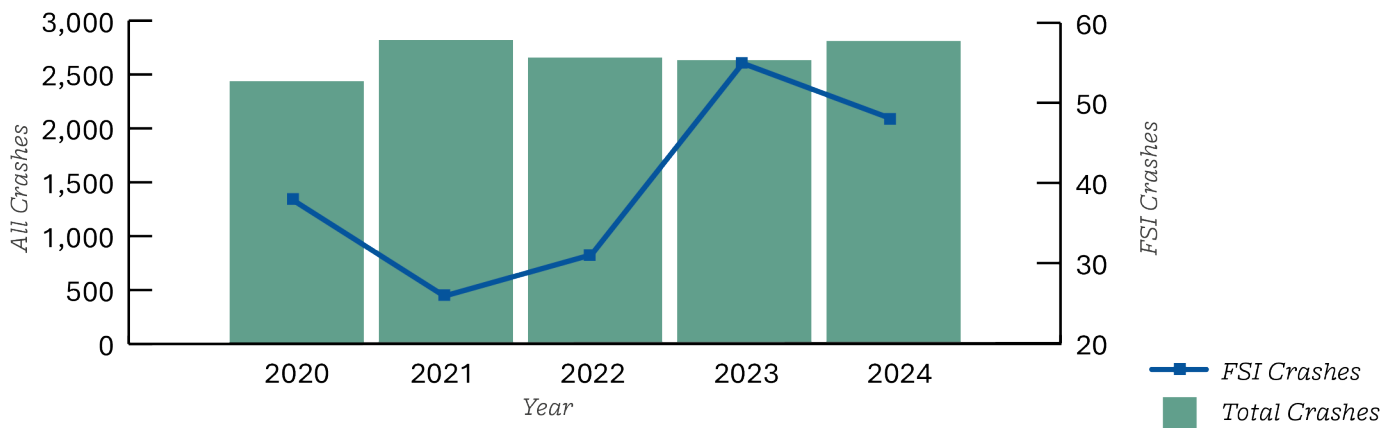
*Several hot spots (in yellow) where a higher number of crashes occurred appear to be at or near major intersections throughout Gastonia. Specifically, the intersection of US 74 and Cox Road reflects a high number of total crashes, yet not reflective of a high number of FSI crashes.*

For the purposes of creating the City of Gastonia SAP, the crash statistics used for this plan are based on complete annual data from 2020–2024. The City recognizes that the community has been recently impacted by FSI crashes that occurred in 2025. The Gastonia Police Department provided FSI crashes that had occurred in 2025 as of September 8th, 2025, and have been added to the crash map on the previous page (however, note that 2025 data is not included in the statistical analyses since it does not represent a full calendar year).

### All Crashes and FSI Crashes

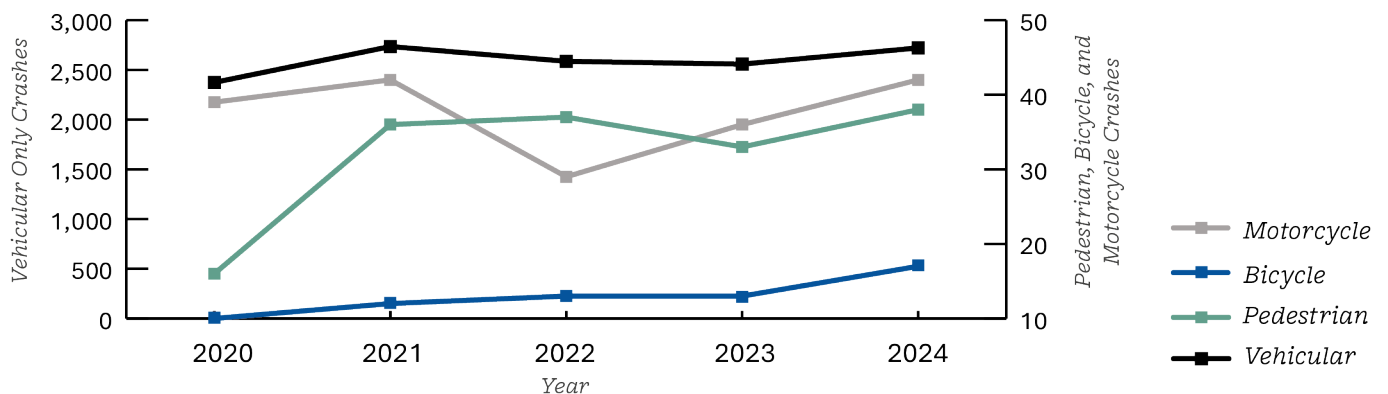
Total crashes dipped in 2020, consistent with pandemic-related travel reductions, and then rebounded, remaining relatively high from 2021–2024.

FSI crashes (fatal and serious injuries) were comparatively low in 2021–2022, followed by a sharp increase in 2023. Although FSI crashes eased slightly in 2024, they remained elevated relative to earlier years.



### Total Crashes by Mode

Vehicular-only crashes remain the highest category throughout 2020–2024, with a modest rise overall and a peak in 2024. Motorcycle crashes fluctuate—rising in 2021, dipping in 2022, and then climbing again through 2023–2024. Pedestrian crashes spike sharply in 2021, decline in 2022, and recover with steady increases in 2023–2024. Bicycle crashes show a gradual, continuous increase across the period, reaching their highest level in 2024.



## CONTRIBUTING FACTORS FOR ALL CRASHES

Across all recorded crashes, distracted driving was the most common contributing factor, leading to over 27% of all total crashes between 2020 and 2024. Two population age groups, older drivers (22%) and teen drivers (13%), were also major contributing factors.

### Contributing Factors

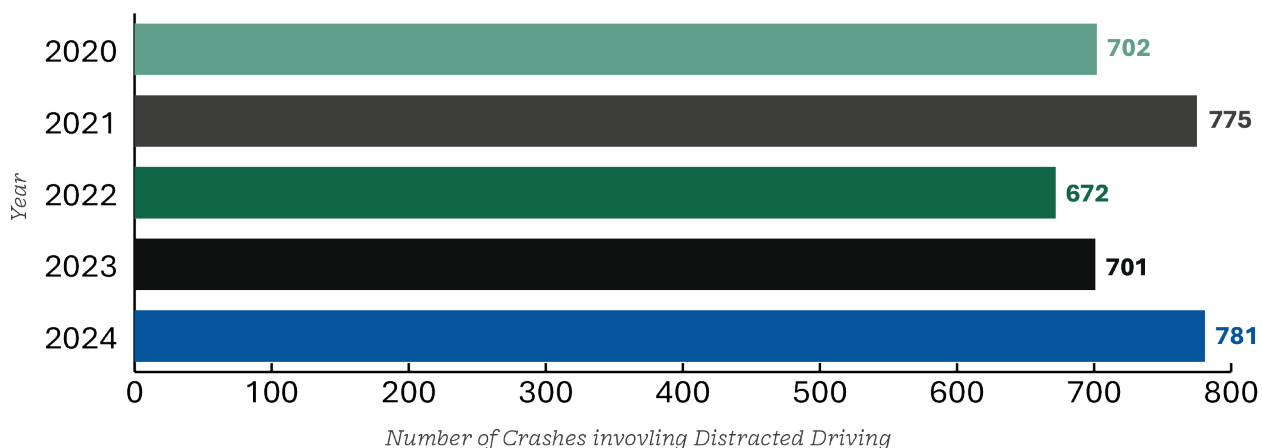
Contributing Factor	Number of Crashes
Distracted Driver	3,631
Older Driver (65+)	2,899
Teen Driver (15–19)	1,790
Alcohol Presence	423
Speed	417
Animal	273
Unbelted Driver	270
Drug Presence	208
Drowsy Driver	96

*Graphic above excludes crashes classified with an “Unknown” crash severity*

## CRASHES INVOLVING DISTRACTED DRIVING

Distracted driving is a significant contributor to roadway crashes and greatly impacts crash severity. When a driver’s attention is diverted from the road whether by mobile devices, passengers, or other distractions, the likelihood of a collision increases. These crashes often occur suddenly, leaving little time for corrective action, which can lead to more severe outcomes. The risk is especially pronounced when pedestrians or cyclists are involved, as the lack of driver focus reduces reaction time and amplifies the potential for serious injury or fatality.

### Distracted Driving Crashes by Year



### Distracted Driving Crash Map

18% of crashes involving a distracted driver resulted in an outcome of possible injury, evident injury, disabling injury, or fatality.



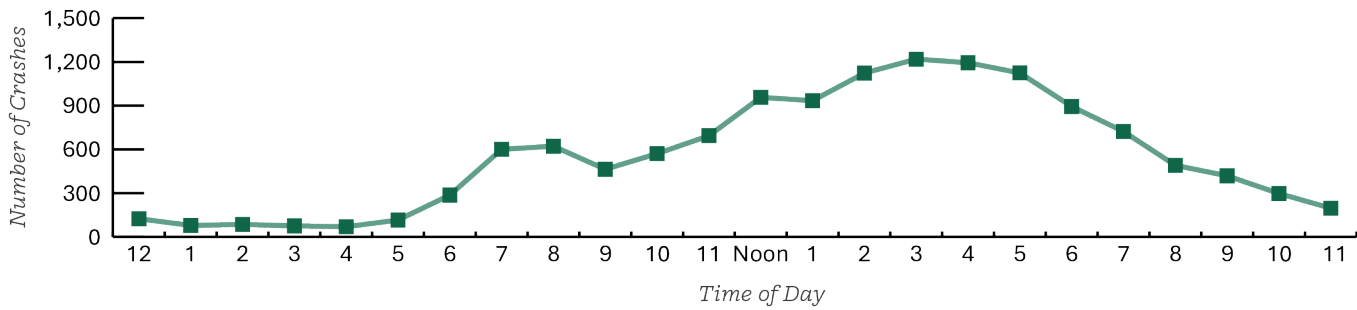
## ENVIRONMENTAL FACTORS FOR ALL CRASHES

Beyond driver behavior, environmental factors outside the vehicle also play a significant role in crash occurrence and severity. Time of day influences visibility and driver alertness, with nighttime and early morning hours often associated with higher risks due to reduced lighting and fatigue. Lighting conditions, such as poorly illuminated intersections or stretches of roadway without adequate streetlights, can make it harder for drivers to detect hazards in time. Weather conditions—like rain, fog, or icy surfaces—further compound these challenges by reducing traction, impairing visibility, and increasing stopping distances. Understanding how these external factors interact with roadway design and traffic patterns is essential for developing targeted safety strategies that address both human and environmental elements.

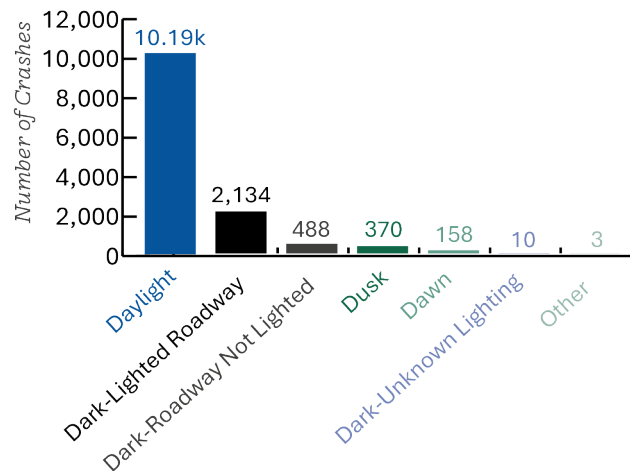
### Summary of Patterns

The data suggest clear temporal and environmental concentrations of risk in Gastonia. Crashes peak in the late morning and early afternoon (around noon–3 PM), with notable FSI (fatal/serious injury) counts between 3–7 PM when volume stays high and severity rises (e.g., 5–7 PM show double digit FSIs). While the vast majority of crashes occur in daylight (≈10.19K total; 103 FSI), the dark-lighted roadway category stands out for severity with 2,134 crashes and 66 FSIs—indicating nighttime risks remain disproportionately severe even when street lighting is present. Weather-wise, clear conditions dominate overall volume (~10.3K crashes) but also account for the highest number of FSIs (167), underscoring that most serious outcomes happen under “normal” conditions rather than storms.

### Time of Day

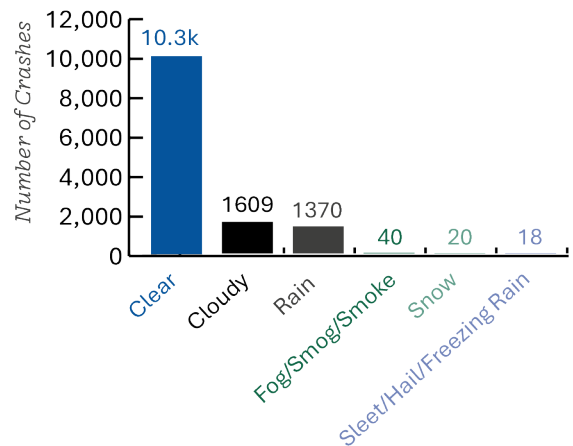


### Lighting Conditions



Lighting Conditions

### Weather Conditions



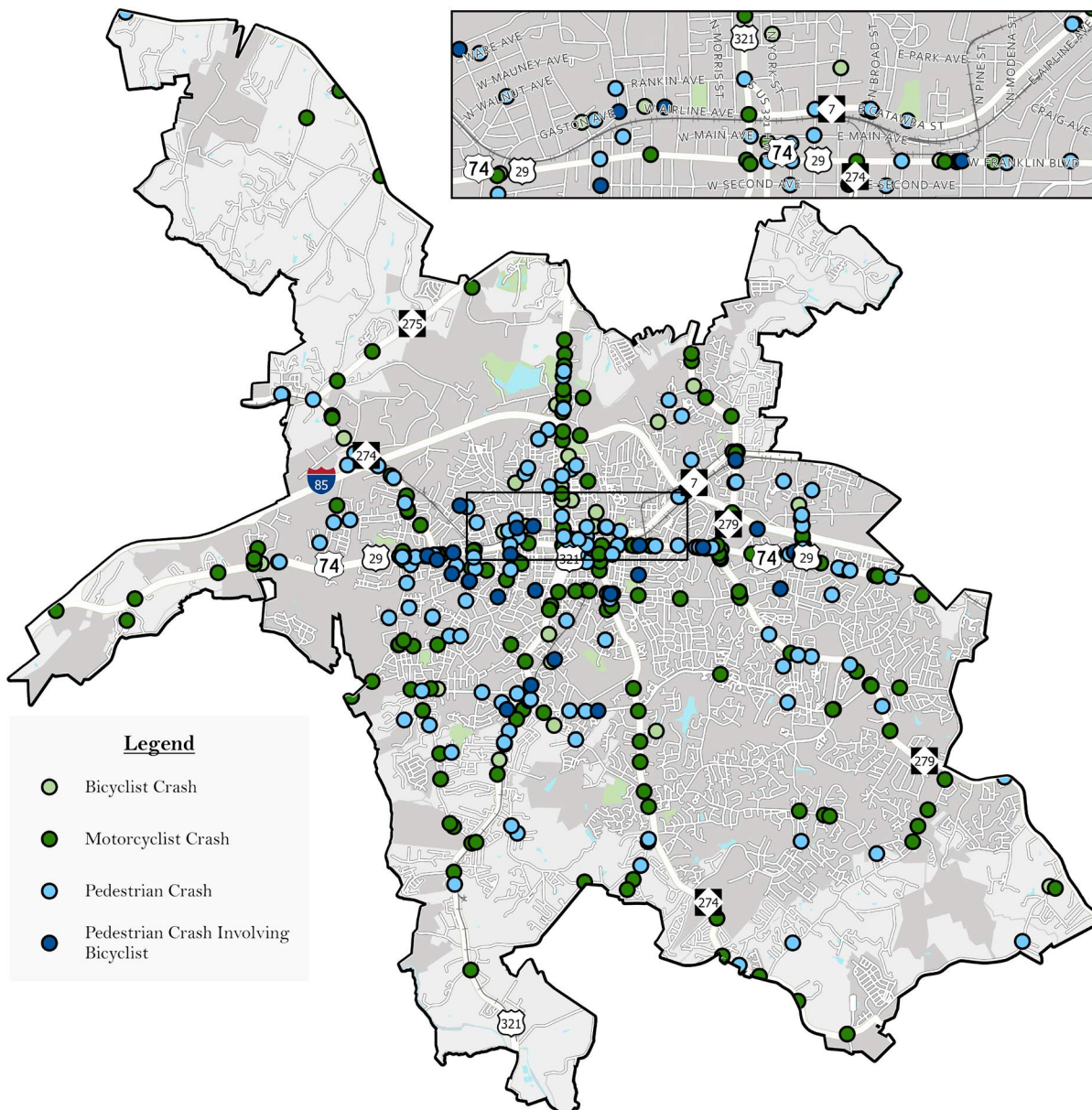
Weather Conditions

## PEDESTRIAN, BICYCLE, AND MOTORCYCLE CRASHES

Building on the previous discussion of overall crash patterns, this section turns the spotlight to vulnerable road users including pedestrians, cyclists, and motorcyclists whose exposure and risk demand special attention. The map below illustrates all crashes involving at least one of these users, revealing concentrations that align with high activity corridors such as Downtown and central areas of Gastonia. Unlike vehicle only incidents, crashes involving vulnerable road users carry a disproportionate likelihood of serious injury or fatality, making their safety a critical measure of system performance. By focusing on these groups within the broader safety picture, we underscore the need for targeted strategies that protect those most at risk and advance a transportation network that prioritizes human life above all else.

### Pedestrian, Bicycle, Motorcycle Crash Map

*Gastonia's most critical safety challenges for vulnerable road users are clustered in the downtown and adjacent arterial areas*



## TOTAL CRASH RATES (ROADWAY SEGMENTS)

A practical way to identify roadways with greater safety concerns is by analyzing locations where crash rates are disproportionately high compared to the traffic volumes they carry. Screening for all crashes per 1,000 daily vehicles (2020-2024), the following segments had some of the highest crash rates:

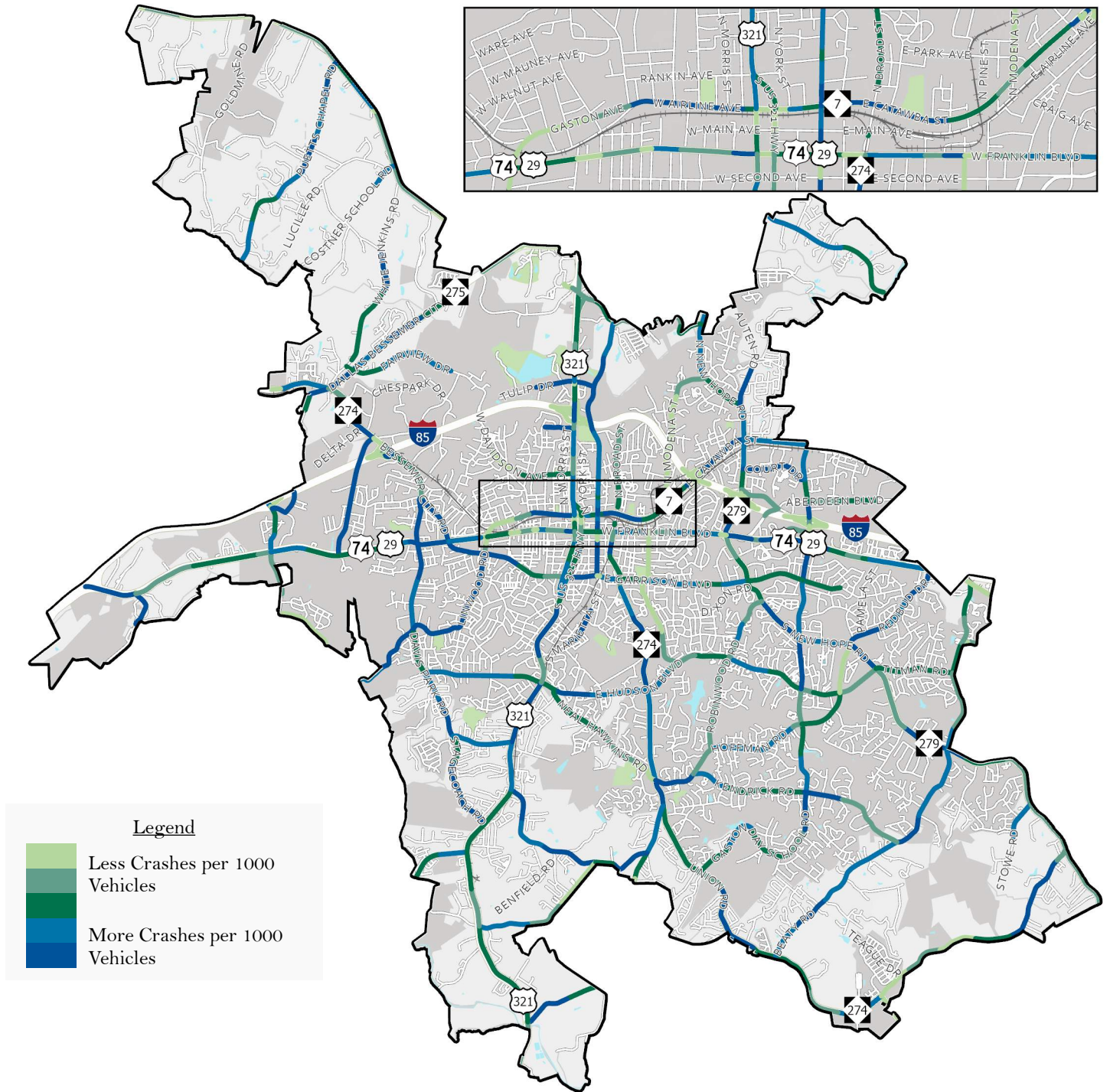
- S Marietta Street
- Court Drive
- Radio Street
- N Chester Street
- Kendrick Road

Some of highest rates of crashes by volume primarily occur along arterials throughout Gastonia, including US 321, Armstrong Park Road, Ozark Avenue, and Bessemer City Road.



### Segment Crash Rate Map

Although the highest traffic volumes are seen along US 321, roads near Downtown observed higher crash rates per volume.



## TOTAL CRASH RATES (INTERSECTIONS)

In addition to roadway segments, intersections can also be assessed to see where there are disproportionately high crashes as compared to traffic volumes passing through the intersection. Screening for all crashes per 1,000 daily vehicles (2020-2024), the following intersections have the some of highest crash rates within the Gastonia study area:

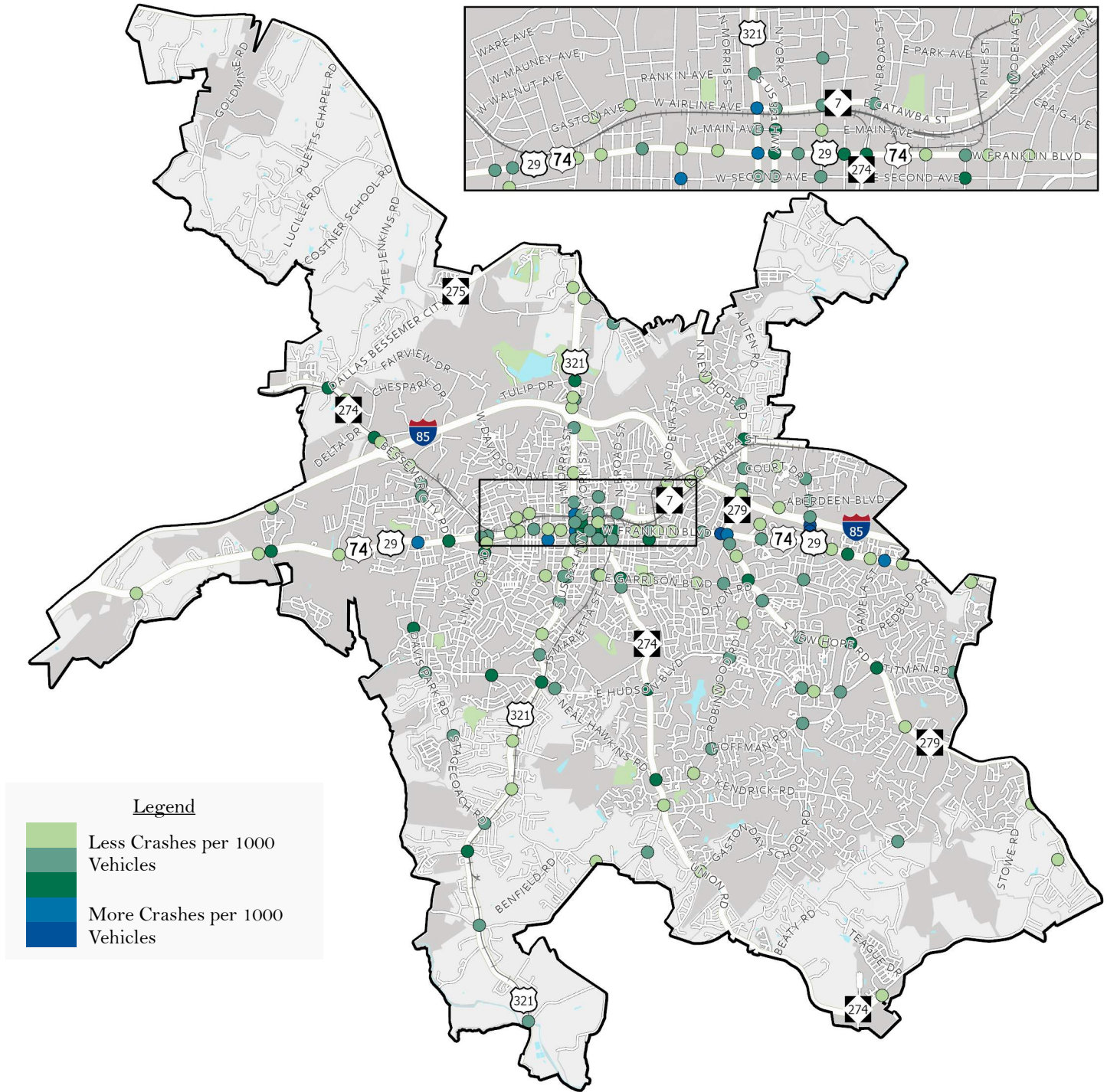
- Cox Road at I-85 Northbound Ramps
- N New Hope Road (NC 279) at I-85 Northbound Ramps
- Cox Road at Gaston Mall Drive
- E Franklin Boulevard (US 74-29) at Beverly Drive
- E Franklin Boulevard (US 74-29) at Cox Road/Armstrong Park Road

Intersections located near Downtown and along Franklin Boulevard (US 74-29) had some of the highest intersection crash rates.



### Intersection Crash Rate Map

Intersections located along arterials such as New Hope Road (NC 279), Franklin Boulevard (US 74/US 29), and US 321 saw the highest intersection crash rates.

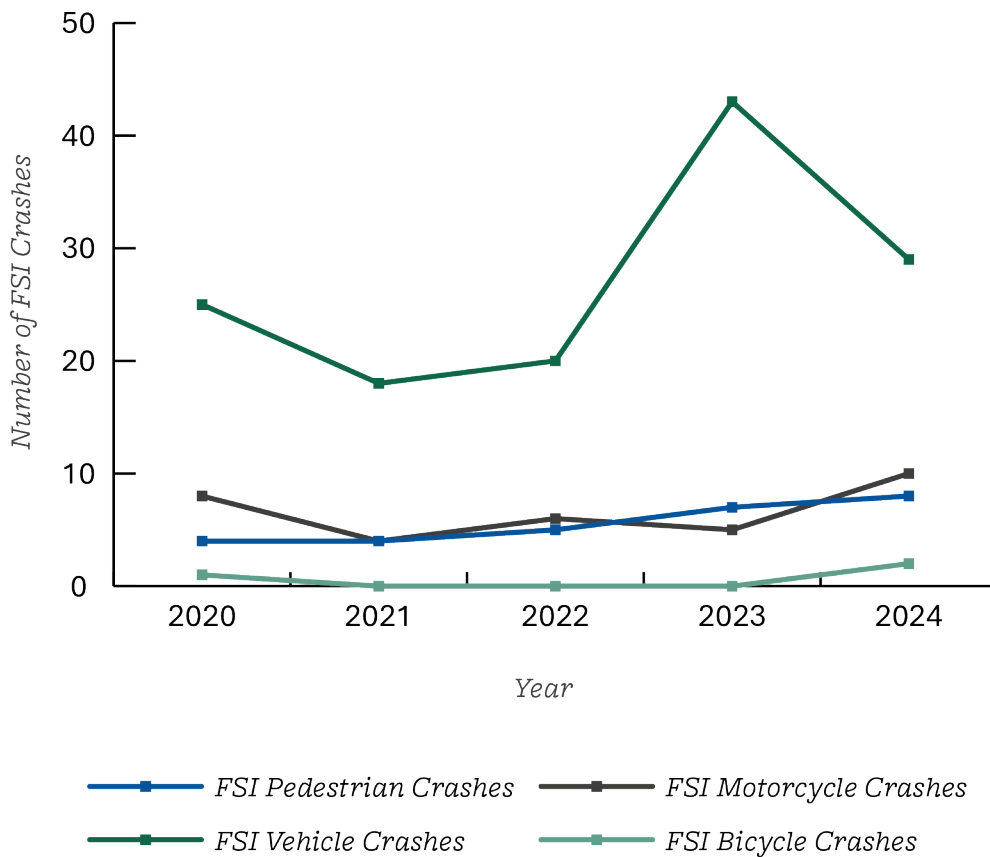


## FSI CRASHES BY YEAR, BY MODE

As the preceding section established the full landscape of crash activity across our network, this State of Safety Report now pivots to the subset of **FSI crashes**—the incidents with the greatest human and community cost. While total crashes reveal where conflicts and exposure are highest, FSI crashes illuminate patterns of severity and systemic weaknesses that demand urgent action. Accordingly, the analyses, priorities, and countermeasures that follow are **anchored to FSI trends and risk factors**; they will guide emphasis areas, inform corridor selection, and shape programmatic investments. By elevating FSI crashes as the backbone of the SAP, we sharpen our focus on saving lives and preventing life altering injuries, ensuring every recommendation is measurable against the outcomes that matter most. Gastonia experienced a notably high volume of crashes overall, underscoring the complexity of its roadway safety challenges. Within that total, a significant share involved severe outcomes: **135 FSI vehicle crashes, 28 FSI pedestrian crashes, and 37 FSI bicycle or motorcycle crashes**. While these figures represent a smaller percentage compared to all crashes, each one reflects a life-altering event with profound consequences for individuals and the community. These numbers highlight why addressing FSI incidents remains a top priority in shaping effective safety strategies for Gastonia.

### FSI by Year, by Mode

*Total FSI crashes in Gastonia increased by 26.32% over the 2020-2024 period, compared to the 5.86% increase reported for the state of North Carolina.*



## CONTRIBUTING FACTORS FOR FSI CRASHES

Across recorded FSI crashes, presence of an unbelted driver was the most common contributing factor, leading to just over 23% of FSI crashes between 2020 and 2024. Alcohol presence (19%) and distracted driving (15%) were also major contributing factors. These leading factors—unbelted driving, alcohol use, and distracted behavior—are all conscious decisions made by drivers. They reflect choices that directly impact safety. Because these behaviors account for the highest share of severe crashes, it’s critical for every driver to recognize that safety starts with personal responsibility. Buckling up, staying sober, and keeping full attention on the road are simple actions that can prevent tragedies and save lives every single time someone gets behind the wheel.

### Contributing Factors for FSI Crashes

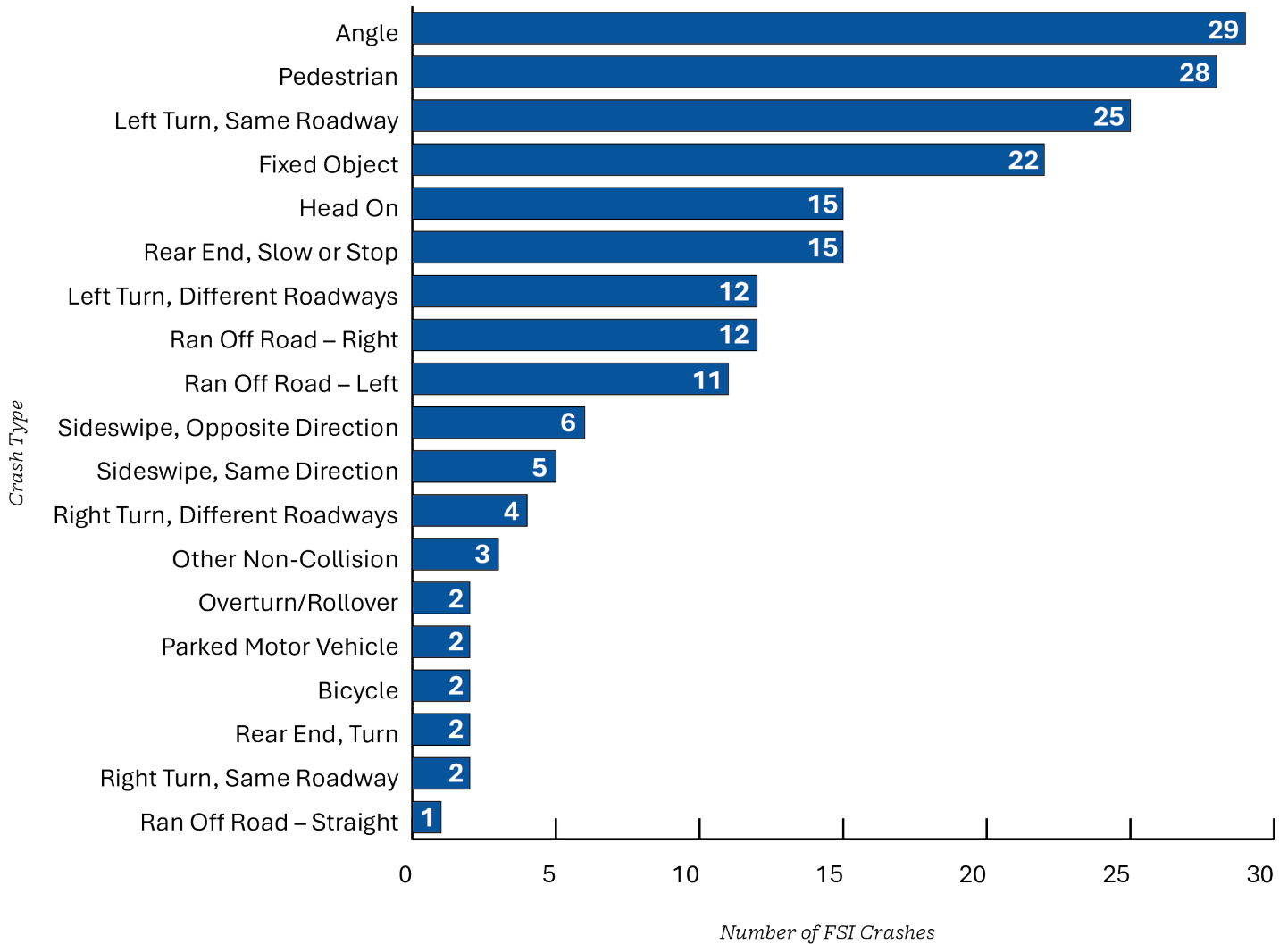
*Crashes involving an unbelted driver or alcohol contributed to 5% of all crashes but account for 42% of all FSI crashes*

Contributing Factor	Number of Crashes
Unbelted Driver	46
Alcohol Presence	37
Distracted Driver	31
Older Driver (65+)	28
Speed	26
Teen Driver (15–19)	25
Drug Presence	21
Drowsy Driver	3
Animal	0



### Number of FSI Crashes By Type

Among the 198 recorded fatal and serious injury crashes between 2020 and 2024, most were a result of angle crashes (14.6%), followed by pedestrian (14.1%), and left turn, same roadway (12.6%).

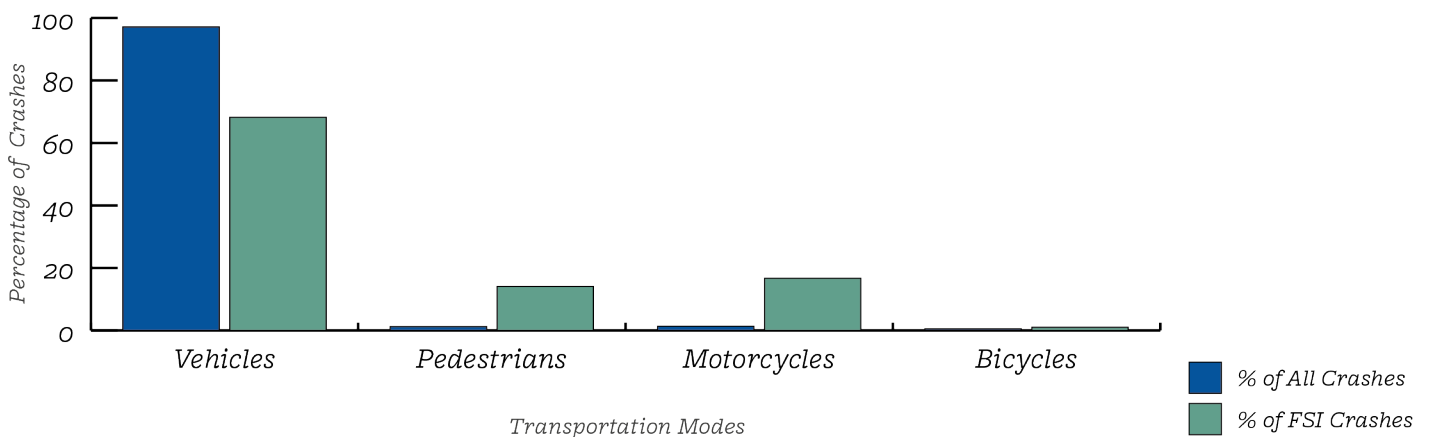
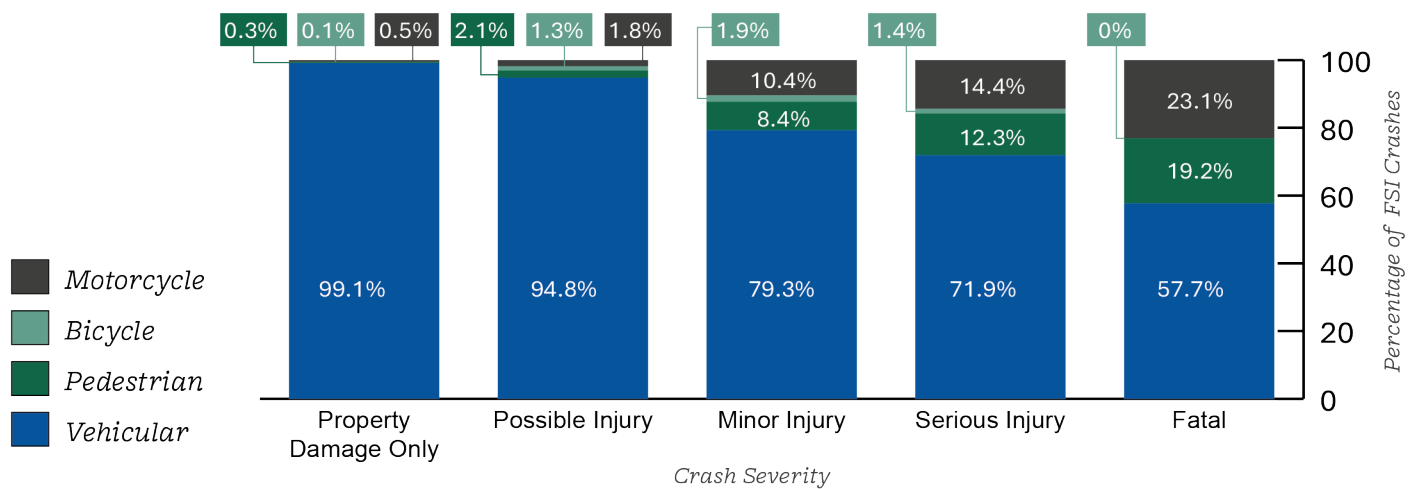


## LIKELIHOOD OF FSI IN CRASHES INVOLVING EACH MODE

Vulnerable road users in Gastonia are at a significantly higher risk of sustaining injuries or fatalities compared to occupants in vehicle-only crashes. The data shows that crashes involving only vehicles result in property damage only, with around 99% falling into this category, while pedestrians, bicyclists, and motorcyclists combined account for less than 1%. When injuries are possible, vehicles still dominate at around 95%, but the share of vulnerable road users begins to rise, with pedestrians at ~2%, bicycles at ~1%, and motorcycles at ~2%. For minor injuries, the disparity narrows further: vehicles account for about 79%, while pedestrians represent ~8%, bicycles ~2%, and motorcycles ~10%. Serious injuries show an even greater shift, with vehicles at around 73%, pedestrians at ~12%, bicycles at ~1%, and motorcycles at ~14%. Fatal crashes highlight the greatest risk for vulnerable road users—pedestrians make up around 19% and motorcycles ~23%, compared to ~58% percent for vehicles, while bicycles account for none. These figures underscore that injury or fatality is common in crashes involving vulnerable road users, with pedestrians and motorcyclists facing particularly severe outcomes.

### FSI Crashes by Mode

*Vulnerable road users, particularly pedestrians, are at higher risk of injury or death while using the City’s transportation system, and future investments should prioritize improving safety for these users.*



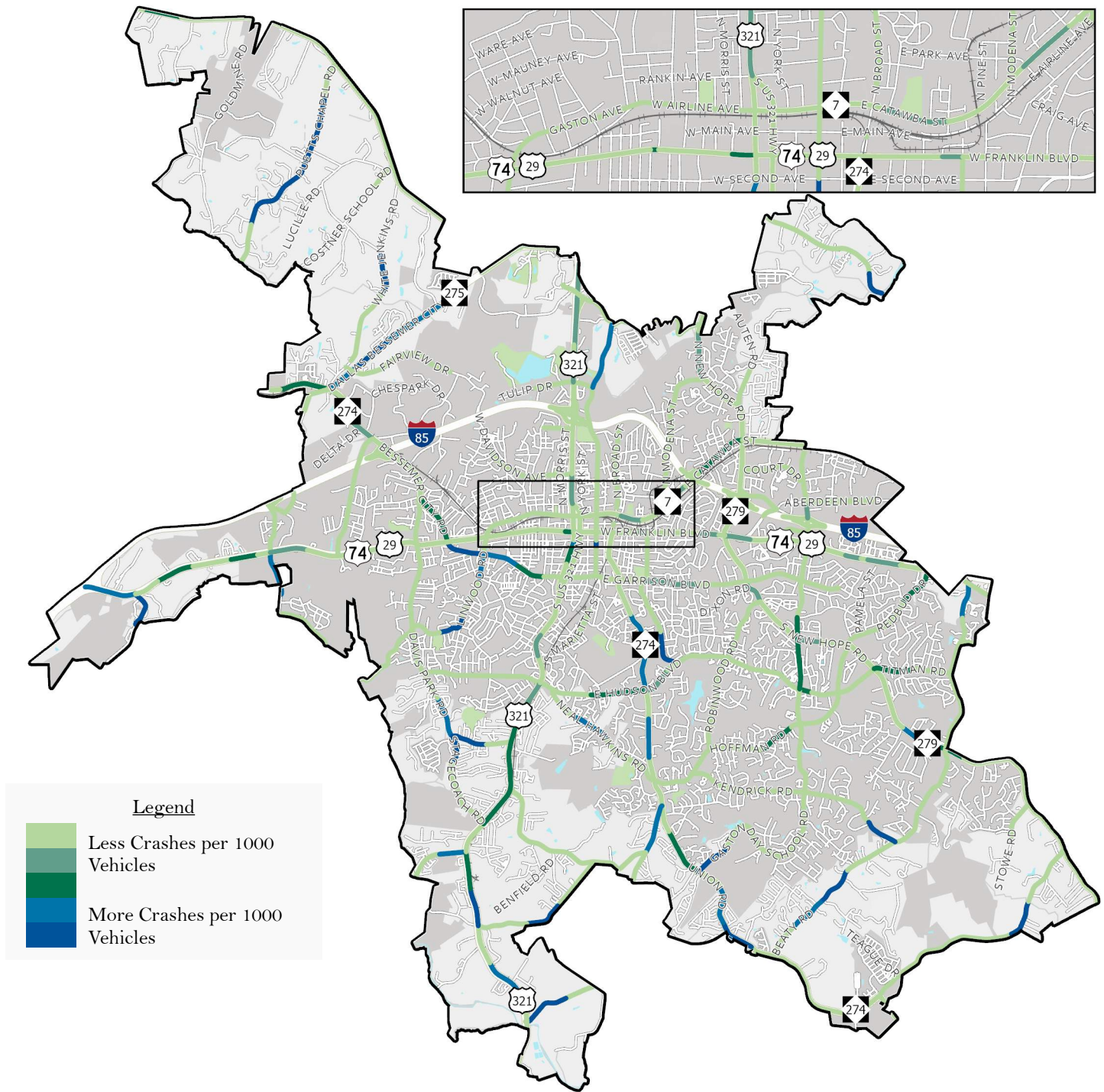
## FSI CRASH RATES (ROADWAY SEGMENTS)

From 2020 to 2024, Dallas Spencer Mountain Road recorded the highest rate of FSI crashes per 1,000 daily vehicles, largely due to its low AADT of around 3,000 combined with severe incidents, including one fatal crash and one serious injury crash. US 321, though carrying a higher AADT of about 9,200, still exhibited a high crash rate because it had one serious injury crash, underscoring the severity of incidents even on busier roads. Fern Forest Drive, with an AADT of roughly 1,600, had fewer crashes overall but still recorded one serious injury crash, which significantly impacts its rate given the low traffic volume. Puetts Chapel Road also showed a high crash rate because of its low AADT of about 1,800, yet it experienced one serious injury crash and one motorcycle crash.



### FSI Segment Crash Rate Map

*Despite the lower volume of vehicles, Dallas Spencer Mountain Road saw the highest rate of fatal and serious injury crashes per 1,000 vehicles.*



## FSI CRASH RATES (INTERSECTIONS)

Among intersections analyzed for FSI (Fatal and Serious Injury) crashes per 1,000 daily vehicles from 2020 to 2024, the following had some of the highest crash rates:

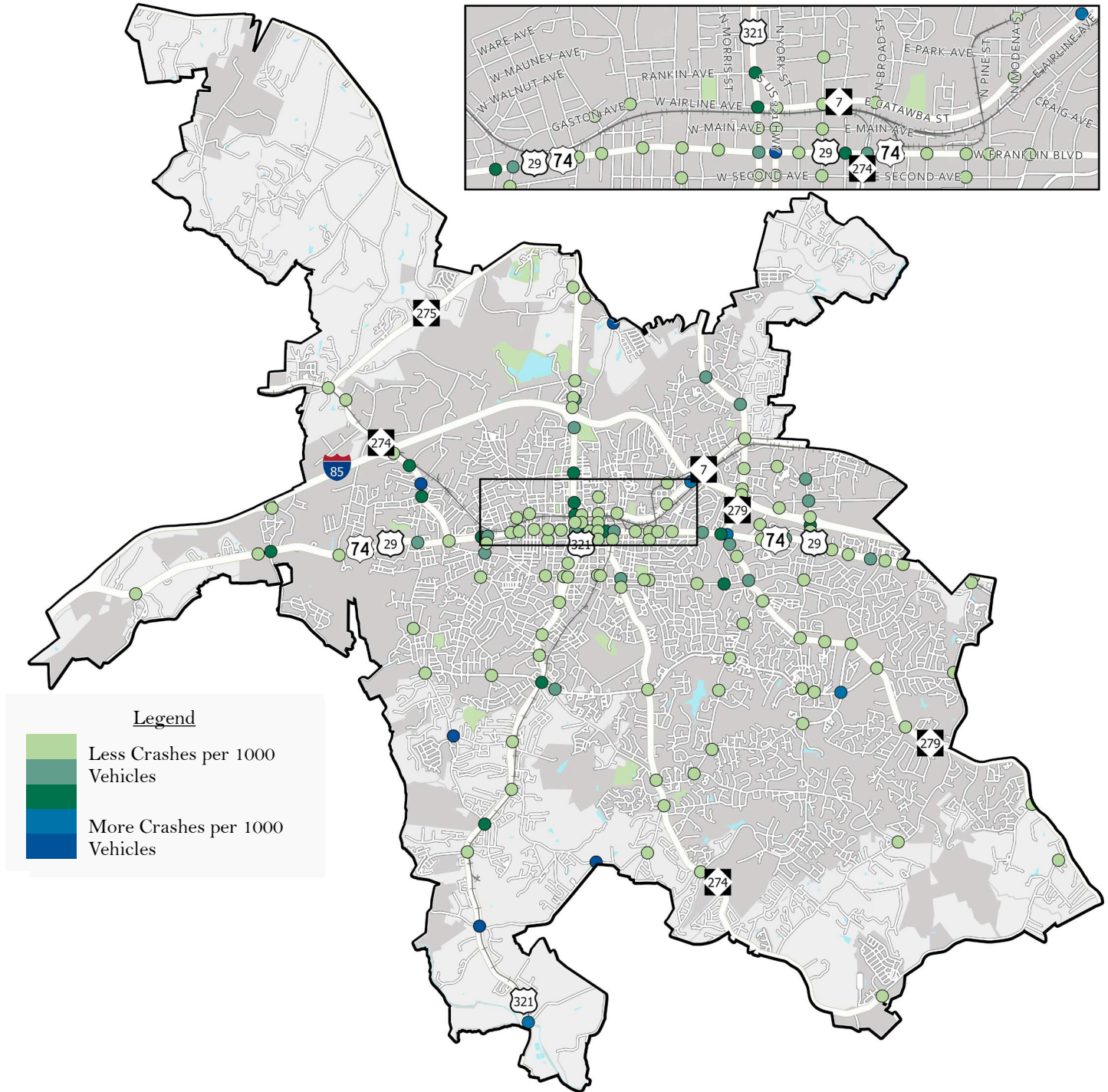
- Forbes Road at Little Mountain Road
- Stagecoach Road at Davis Park Road
- S York Street at W Franklin Boulevard
- Bessemer City Road at Milton Avenue/Brown Street
- US 321 at Superior Stainless Road/Forbes Road

Intersections with disproportionately high FSI crash rates often signal critical safety concerns, whether due to complex traffic movements, visibility issues, or design challenges. Identifying these high-risk intersections is essential for targeting improvements that can significantly reduce severe crashes and enhance overall roadway safety.



### FSI Intersection Crash Rate Map

Intersections located along arterials such as Franklin Boulevard (US 74/US 29), Bessemer City Road (NC 274), and US 321 saw the highest rate of fatal and serious injury crashes per 1,000 vehicles.



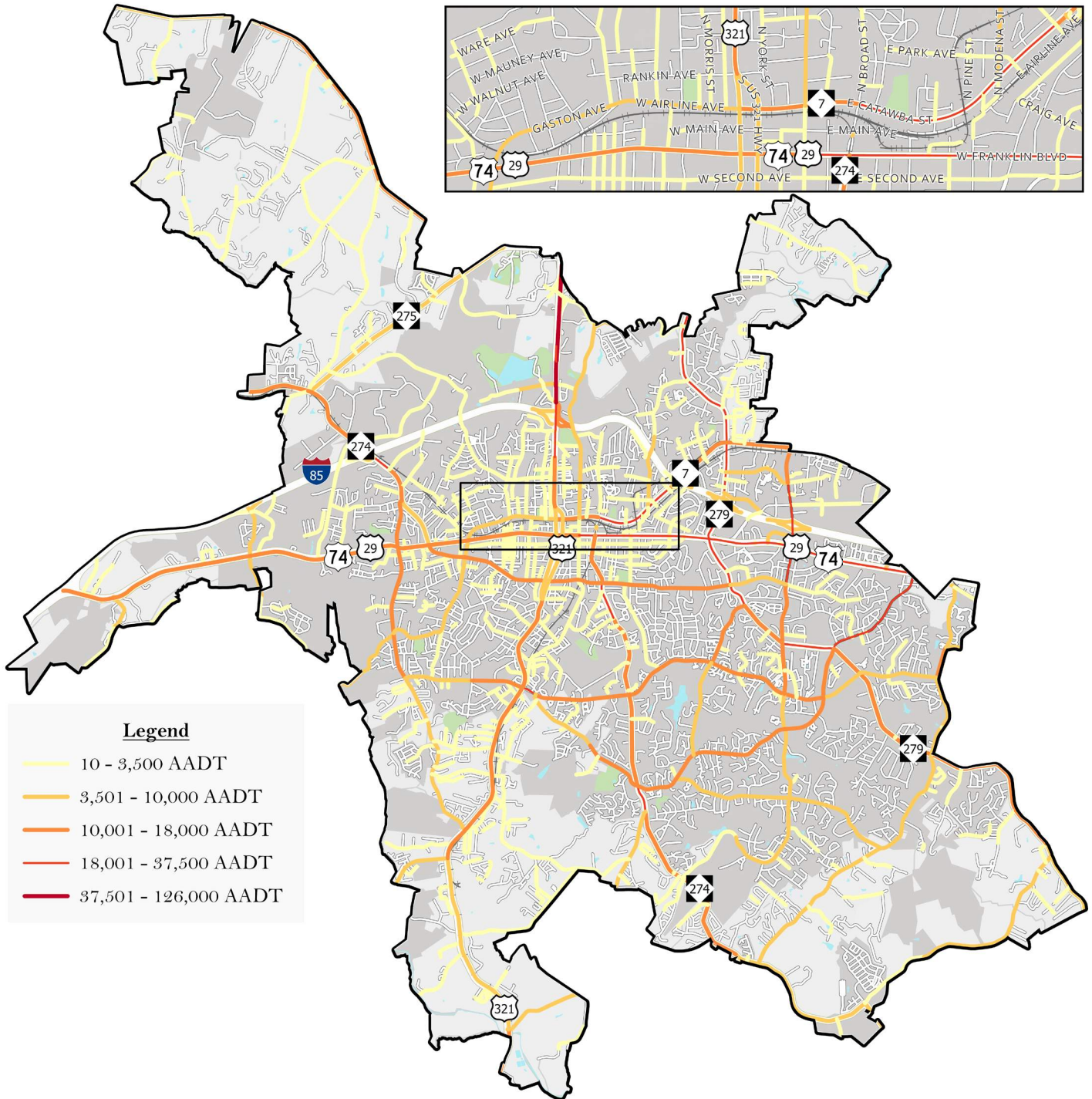
## TRAFFIC VOLUMES

Traffic volumes in Gastonia are highest along major corridors such as US 74 and US 321, which serve as primary regional connectors. These routes experience significant daily traffic, reflecting their role in accommodating both local and through movements. Secondary streets and neighborhood roads show moderate volumes, with noticeable reductions away from commercial and industrial centers. Overall, traffic patterns indicate concentrated demand along east-west and north-south arterials, underscoring the importance of managing congestion and improving safety on these high-volume corridors.



## AADT Map

*Gastonia's highest annual average daily traffic (AADT) volumes are along US 321 with more than 41,000 vehicles per day (vpd) in 2024.*



## PROGRAMMED TRANSPORTATION IMPROVEMENTS

NCDOT, through the Statewide Transportation Improvement Program (STIP), has programmed key upgrades to improve safety and efficiency such as an intersection improvement project in downtown at Franklin Boulevard and Broad Street. Beyond the State's STIP-funded projects, the City of Gastonia has identified, through its Gastonia Intersection Improvement Program (IIP), additional targeted upgrades at critical intersections to address congestion and crash patterns. These improvements are designed to enhance traffic flow and reduce severe crashes along high-volume corridors. Developer-driven projects identified through Traffic Impact Analyses (TIAs) will also play a role in mitigating transportation impacts from new developments, ensuring that growth aligns with safety and capacity needs. TIAs typically recommend measures such as turn lanes, signal modifications, and access management strategies to maintain roadway performance as development intensifies. The Gaston-Cleveland-Lincoln MPO's Metropolitan Transportation Plan (MTP) further identifies corridors requiring attention, including US 321, US 74, Garrison Boulevard, and Hudson Boulevard. These plans emphasize not only roadway upgrades but also sidewalk and trail improvements to support multimodal connectivity discussed in the following section. While the Comprehensive Transportation Plan (CTP) outlines long-term strategies for integrated mobility, it was excluded from the maps below. Together, these initiatives reflect a layered approach: state projects, local intersection improvements, developer-funded enhancements, and MPO-led multimodal investments all working toward a safer, more connected Gastonia.



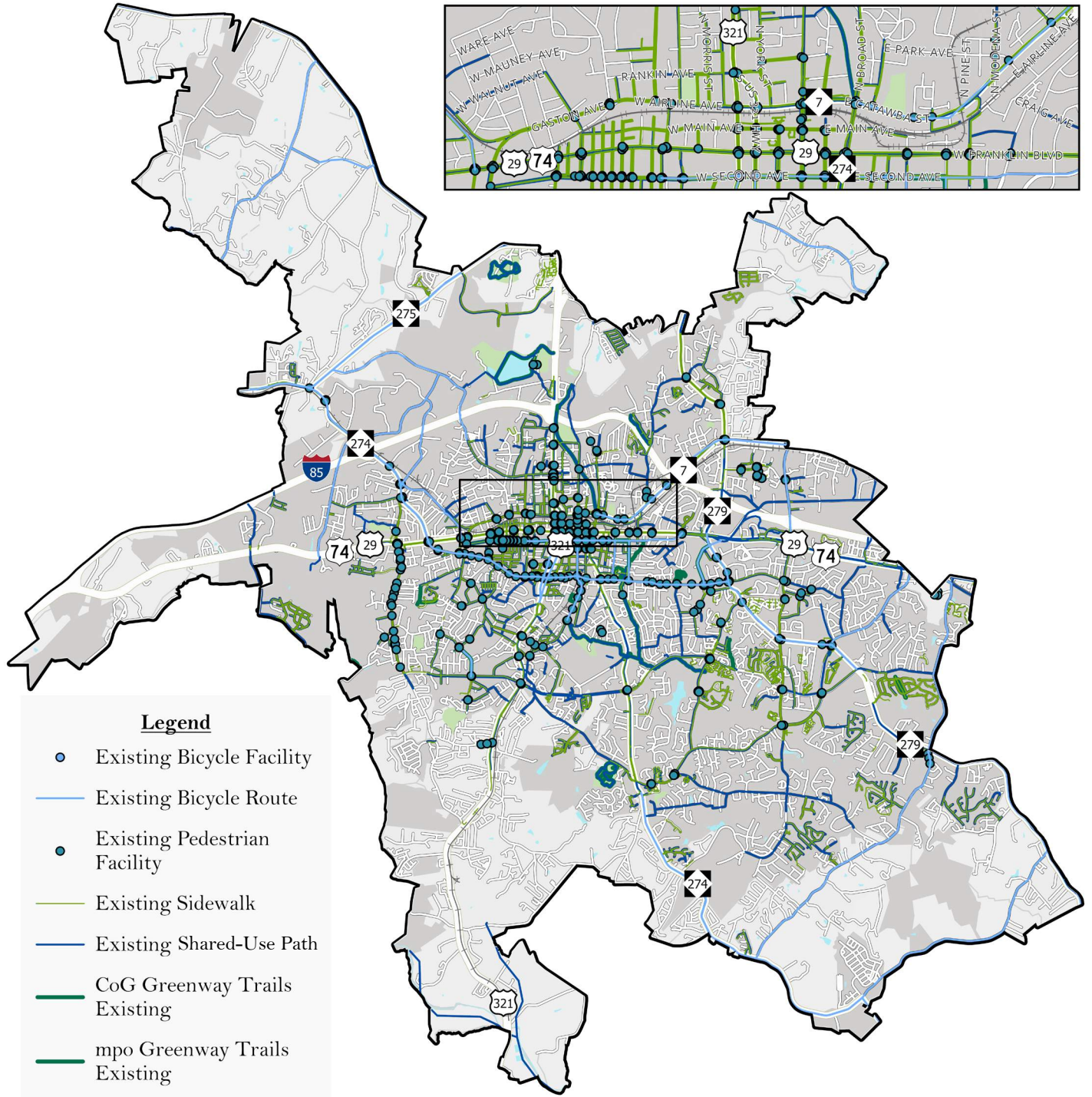
## EXISTING AND PLANNED MULTIMODAL FACILITIES

Gastonia currently has a relatively disconnected network of multimodal facilities, with most existing sidewalks concentrated in the downtown core. To address these gaps, the Comprehensive Pedestrian Plan identifies 62 intersection improvements and 124 corridor projects, including sidewalks, multiuse paths, pedestrian bridges, and greenways, aimed at improving walkability and connectivity across the City. Complementing this, the Comprehensive Bicycle Plan seeks to create a safe and connected bike network linking neighborhoods, commercial areas, and parks. These plans emphasize reducing crashes, enhancing access to downtown, and promoting health and equity through active transportation. Additionally, the Gastonia 2050 Comprehensive Plan and the GCLMPO MTP propose several greenways, trails, and parks to expand recreational and transportation options. However, the GCLMPO CTP was excluded from the maps below.

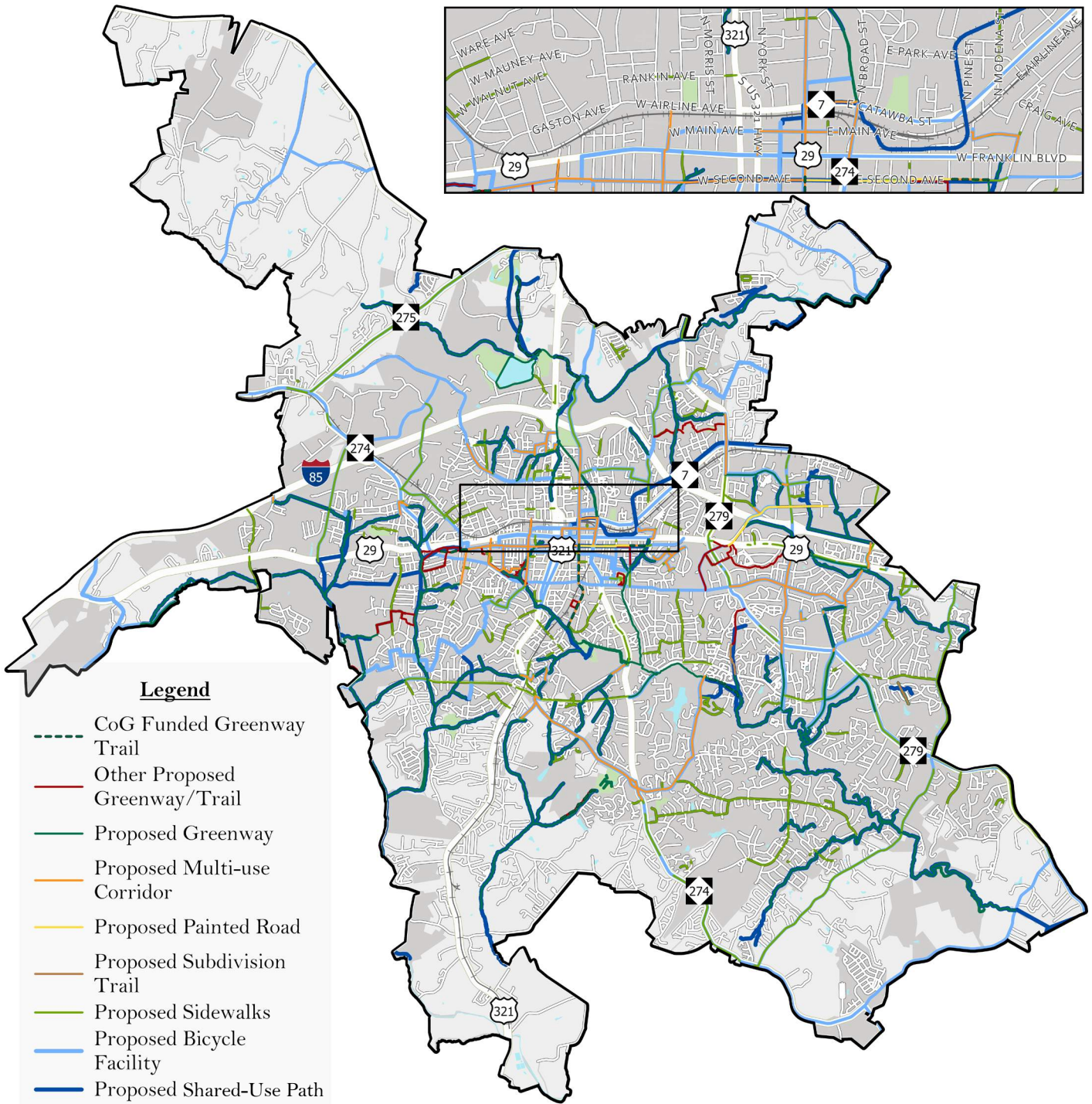
### Transit and Community Enhancements

In Summer 2024, Gastonia launched its GoGastonia microtransit service, replacing the traditional fixed-route bus system with a more flexible, on-demand model to improve mobility and access for residents. This service complements ongoing efforts to create a more integrated transportation network. Beyond transit, the City's transportation bond projects will deliver new recreational spaces and connectivity improvements, reinforcing multimodal goals. Together with developer-driven enhancements and local initiatives, these investments reflect a commitment to building a safer, more accessible, vibrant Gastonia for all users.

### Existing Multimodal Facilities/Projects Map



Planned Multimodal Facilities/Projects Map

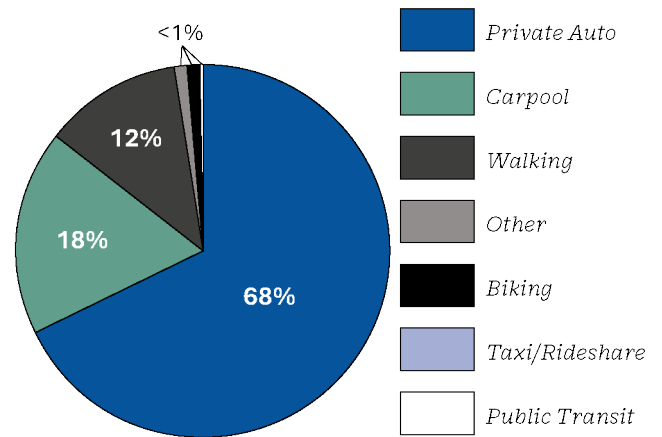


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# COMMUNITY CONDITIONS

## COMMUTE MODES

When commuting to and from work, 68% of all trips by Gastonia residents are generated by driving alone. Carpooling is the second most common mode at 18%, followed by walking at 12%, which reflects a significant share of multimodal commuting. It is important to note that this data is from 2023, predating the creation of Gastonia's microtransit system, GoGastonia. GoGastonia replaced the traditional fixed-route bus system with a more flexible, on-demand model to improve mobility and access for residents. With the implementation of GoGastonia, reported transit usage is subjected to change when updated information becomes available. Overall, the data highlights a strong dependence on private auto, with relatively low adoption of public transit and active transportation options.

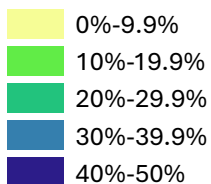


*68% of Gastonia's residents use private auto to commute to and from work.*

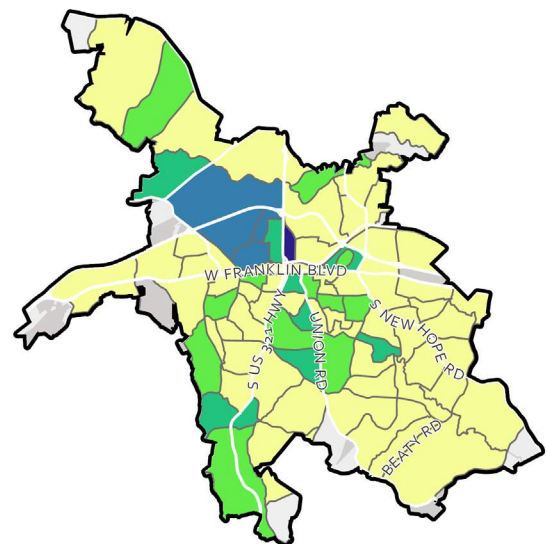
## VEHICLE ACCESS

Areas with limited vehicle access are more likely to need safe, reliable transportation alternatives compared to other areas of the community. Note that the northwest corner of the study area is comprised of industrial parks and sparse residential areas.

### Percentage of Households with No Vehicle:

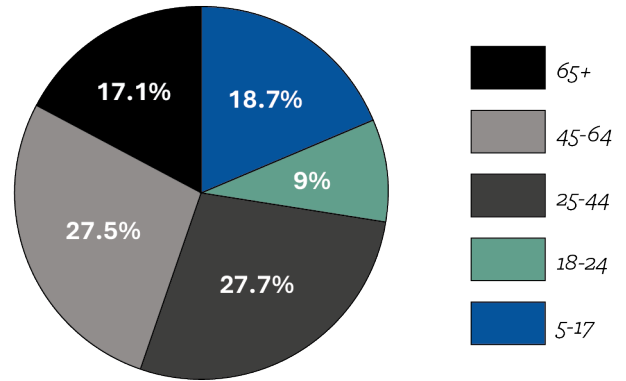


*An estimated 8% of households in Gastonia do not have access to a vehicle.*



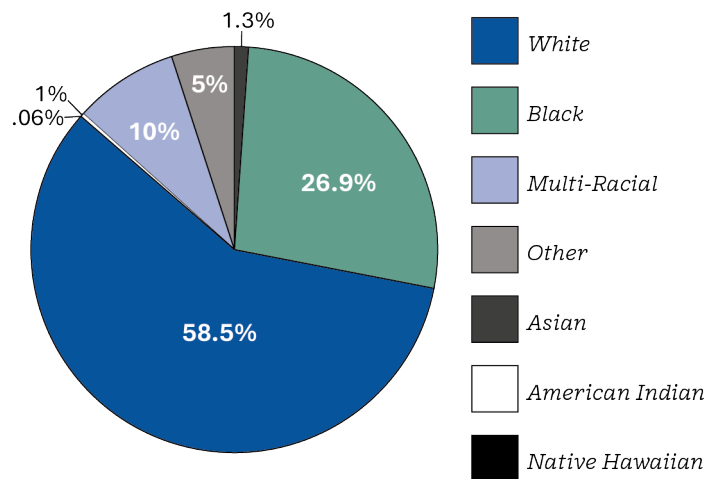
## AGE OF POPULATION

More than half of Gastonia’s residents fall within the 25 to 64 age range, and over 80% of the population is old enough to drive. Among those eligible drivers, roughly 11% have held driving privileges for less than a decade. Drivers aged 65 and older are categorized as “older” and make up approximately 17% of Gastonia’s population. This group is listed as a contributing factor in more than 21% of all crashes in the City.



## RACIAL DISTRIBUTION

More than half of Gastonia’s population identifies as White, while approximately 42% identify as Non-White. Among Non-White residents, the largest group is Black or African American, followed by individuals identifying as two or more races. Additionally, about 11% of residents reported being Hispanic or Latino. Because the U.S. Census Bureau classifies Hispanic/Latino as an ethnicity rather than a race, this category is not included in the racial breakdown chart.



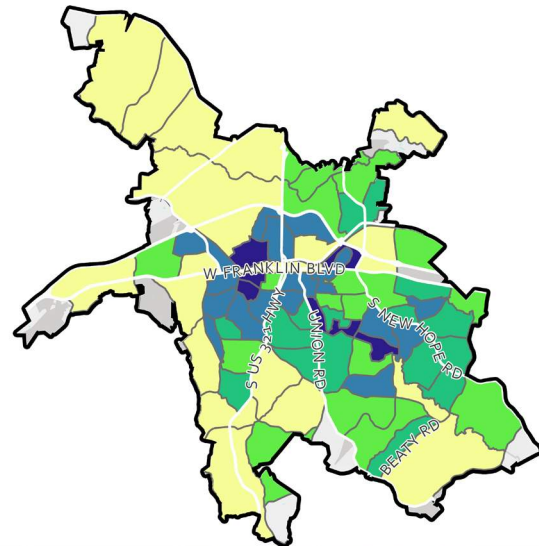
## Population Density

Southeast portions of the City currently show the highest population densities along Union Road and S New Hope Road. In addition, there are some pockets around Downtown which contain other high population density areas due to growth from residential subdivisions surrounding the historic City center. Based on input from City staff, proposed residential developments will likely increase population densities near the outer edges of Gastonia. There is an increased demand for multimodal transportation in areas with high population density.

### Population Total:

- 366-651
- 652-989
- 990-1346
- 1347-1823
- 1824-2935

*Areas with high population density require increased design attention to the safety of non-motorists.*



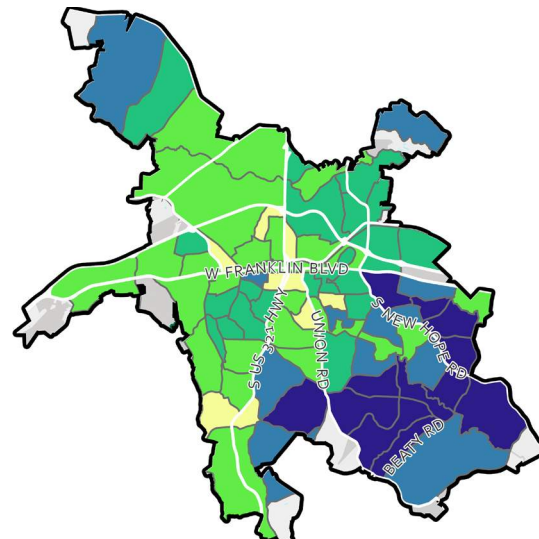
## Median Household Income

Lower-income areas are clustered in the northwest part of the City where the median incomes fall below the City's median income of \$50,000. Higher-income households tend to be located in southeast Gastonia where more established neighborhoods are located, which includes Gaston Country Club. The median household income in this area is typically higher than \$100,000.

### Income Total:

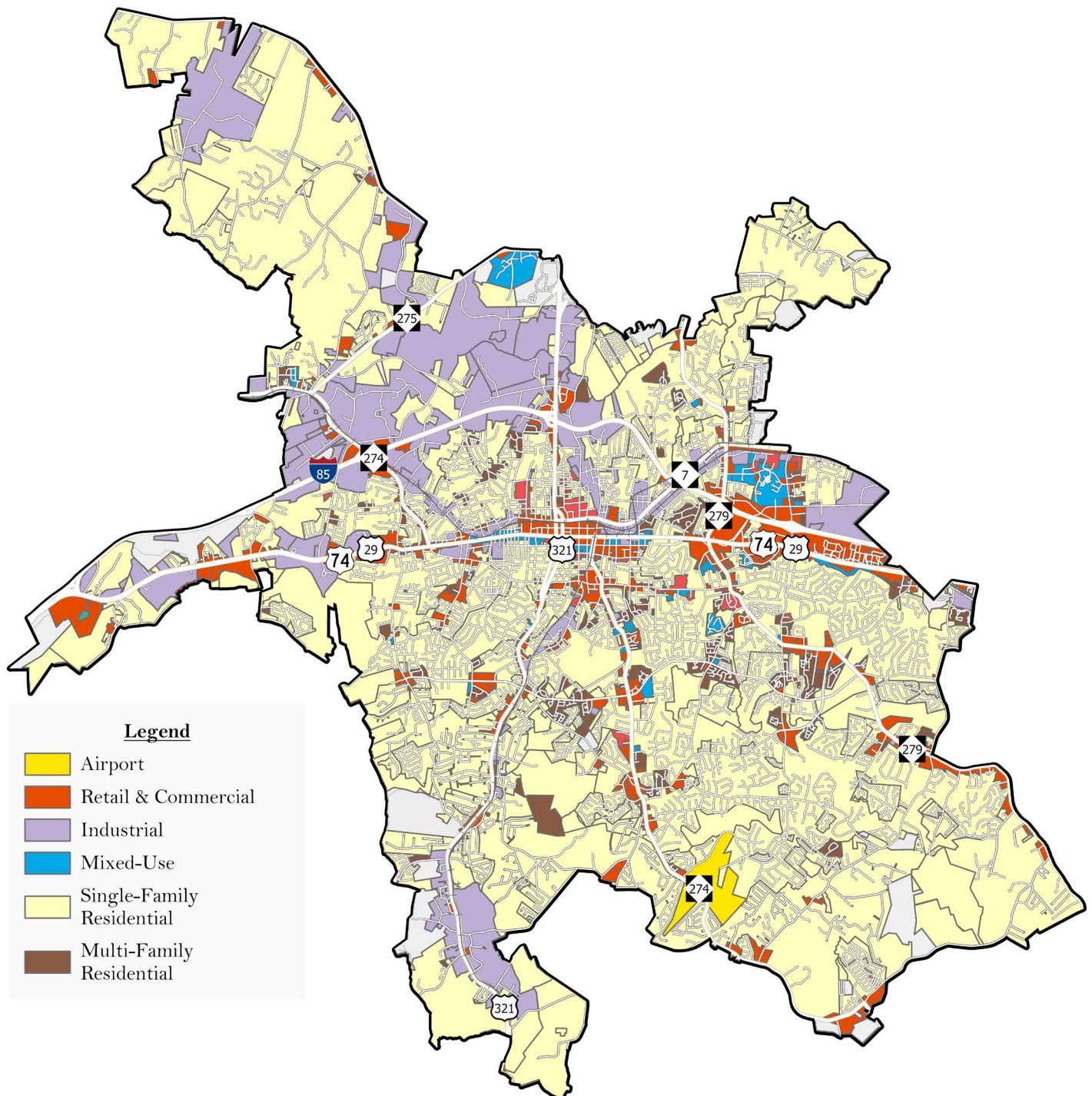
- \$0 - \$18,411
- \$18,412 - \$47,596
- \$47,597 - \$67,813
- \$67,814 - \$98,056
- \$98,057 - \$143,036

*The overall Median Household Income in Gastonia is \$50,000*



## Current Zoning Map

The zoning map, containing a mix of Gaston County and Gastonia zoning data, displays a well-defined mix of land uses that support residential, commercial, industrial, and institutional development. The Central Business District (CBD) serves as the City's core, with concentrated commercial and mixed-use zones. Surrounding this core are multi-family residential areas, transitioning outward to predominantly single-family neighborhoods interspersed with parks and green spaces. Industrial and heavy commercial zones, supporting manufacturing and logistics, are primarily located along major transportation corridors and in the northwest section of the City. Key arterial routes such as US 74 and US 321 influence adjacent zoning, with commercial nodes and employment centers positioned for accessibility. Overall, the zoning layout reflects Gastonia's goal of balancing growth, mobility, and community character.



# PLAN, POLICY, AND PROGRAM REVIEW

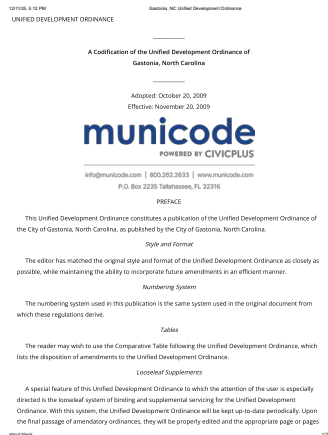


## City of Gastonia's Engineering Standards and Standard Details

The City Specifications and Standard Details document provides the official construction and design standards for public infrastructure in Gastonia. It serves as a guide for developers, engineers, and contractors to ensure consistency and quality in projects involving streets, sidewalks, utilities, drainage systems, and other public facilities. These specifications help maintain safety, durability, and compliance with city requirements for all development and improvement projects.

### Objectives:

- Establish uniform standards for public infrastructure design and construction
- Ensure safety, durability, and long-term performance of city facilities
- Provide clear guidance for developers and contractors to streamline project approvals

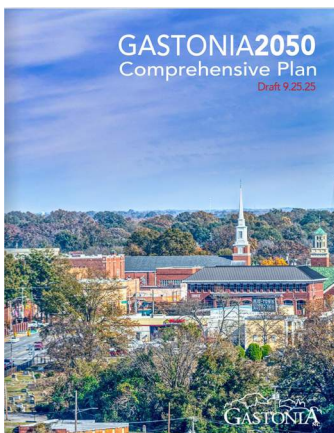


## Unified Development Ordinance

The Unified Development Ordinance is Gastonia's consolidated framework for land use regulations, combining zoning and subdivision ordinances into a single document. Adopted in 2009, it establishes standards for property use, building design, parking, landscaping, signage, and subdivision development, while addressing environmental considerations like floodplain construction. The UDO was developed collaboratively with local municipalities, schools, and planning organizations to ensure consistency and inclusivity.

### Objectives:

- Streamline the development review process
- Make regulations more understandable and user-friendly
- Promote quality, uniformity, and consistency in development standards across the city



## Gastonia 2050 Comprehensive Plan

The Gastonia 2050 plan is the City's blueprint for growth over the next 25 years. It uses community ideas to create a vision for sustainable growth. The plan aims to guide growth and development to leverage positive outcomes for Gastonia and surrounding areas.

### Objectives:

- Balance new development with preserving the environment
- Improve connection throughout the study area
- Make Gastonia more vibrant and livable
- Enhance transportation safety by prioritizing complete streets, multimodal networks, and traffic-calming strategies that reduce crashes and improve accessibility for all users



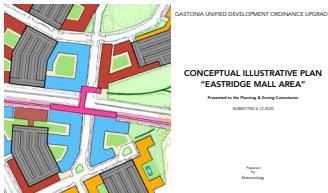
## **Gastonia 2025 Comprehensive Plan Audit (2018)**

Gastonia’s 2025 Comprehensive Plan Audit is a strategic roadmap that combines ideals with practical steps. It includes community input to guide the city’s long-term growth and development, builds on past successes, and adds new goals to meet changing social, economic, and environmental needs.

### *Objectives:*

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- Develop a balanced strategy for city growth considering social, economic, and environmental factors
- Improve infrastructure for better multimodal connectivity
- Advocate for environmental sustainability and preservation in city development plans
- Promote transportation safety by incorporating design standards and traffic-calming measures that reduce crashes and improve pedestrian and cyclist safety



## **Eastridge Small Area Plan (2021)**

Eastridge Mall was the first major shopping center to move from downtown Gastonia to the suburbs, becoming the City’s second main hub by the late 1980s. The small area plan envisions the mall and surrounding properties redeveloped into a high-density urban center.

### *Objectives:*

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- Improve mobility with the Gastonia Planning Department’s Connectivity Plan, linking key spots like -Eastridge Mall and CaroMont Regional Medical Center
- Plan for mixed-use development, accommodating both large national retailers and small local businesses to make the area more attractive
- Create walkable neighborhoods with streets and open spaces, aligning future growth with modern urban planning principles
- Enhance transportation safety by designing pedestrian-friendly streets and integrating traffic-calming features

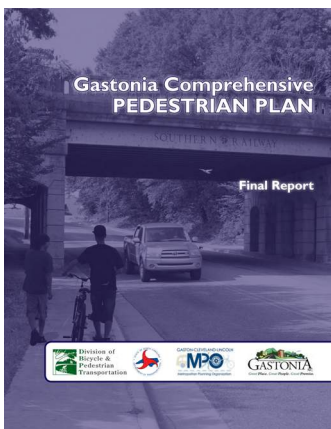


## Highland – Sims Park Small Area Plan (2021)

The Highland-Sims Park Small Area Plan aims to connect Downtown Gastonia with Downtown Dallas via Marietta Street (Martin Luther King St), highlighting its importance as a north-south corridor intersecting the Carolina Thread Trail. This plan envisions redeveloping the area into a mixed-use center. Aiming to integrate existing industrial zones with residential and commercial properties, enhance accessibility, and promote sustainable growth within the community.

### *Objectives:*

- Strengthen Marietta Street (Martin Luther King St) as a key north-south route in Gastonia
- Transform the Highland/Sims Park area into a modern mixed-use center
- Enhance pedestrian and cycling infrastructure to increase access to the Carolina Thread Trail
- Improve transportation safety by incorporating traffic-calming measures, safe crossings, and protected bike lanes along key corridors



## Comprehensive Pedestrian Plan (2014)

The Gastonia Comprehensive Pedestrian Plan aims to make walking safe, convenient, and appealing for everyone. The plan aims to ensure that residents and visitors of all ages and abilities can enjoy walking as a part of their daily lives regardless of the destination.

### *Objectives:*

- Reduce pedestrian crashes with enforcement, education, and infrastructure improvements
- Boost downtown pedestrian access to support businesses and economic growth
- Improve neighborhood connectivity and ensure new developments promote social equity and health
- Promote transportation safety by prioritizing well-designed crosswalks, traffic-calming features, and ADA-compliant sidewalks to protect pedestrians and reduce conflicts with vehicles

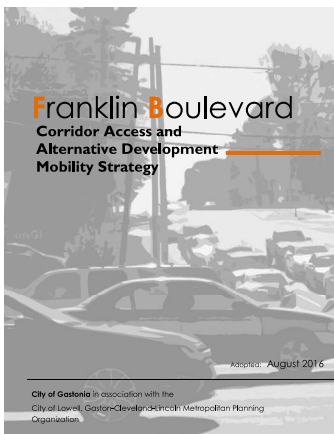


## Comprehensive Bicycle Plan (2023)

The City of Gastonia Comprehensive Bicycle Plan is designed to make bicycling a safe, convenient, and enjoyable transportation and recreation option for all residents and visitors. Whether riding to work, school, local businesses, or parks, the plan ensures that cyclists of all ages and abilities have access to a connected and secure network.

### *Objectives:*

- Reduce bicycle crashes through education, enforcement, and infrastructure improvements
- Expand bike access to downtown and commercial areas to support economic vitality and active transportation
- Improve neighborhood and regional connectivity with bike-friendly routes that promote health and equity
- Collaborate with local agencies to integrate bicycle facilities into roadway projects and address high-risk corridors and intersections



## Franklin Boulevard Corridor Access and Alternative Development Mobility Strategy (2016)

The Franklin Boulevard Corridor Strategy aims to improve operations and capacity for Franklin Boulevard and surrounding streets in Gastonia and Lowell. It includes a phased implementation plan, focusing on multi-modal corridors, improved mobility, and quality of life. The study assesses mobility needs, proposes strategic improvements, and serves as a planning tool to manage growth, attract economic opportunities, and enhance infrastructure both short-term and long-term.

### *Objectives:*

- Determine existing transportation challenges and needs in the corridor
- Develop and implement strategic solutions to enhance mobility, support economic development, and maintain quality of life
- Improve accessibility through expanded roadway capacity
- Promote transportation safety by incorporating intersection upgrades, signal timing improvements, and dedicated facilities for pedestrians and cyclists to reduce crash risks and improve corridor safety



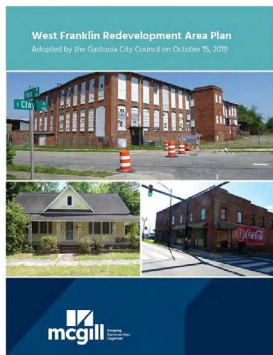
## **Downtown Gastonia East Small Area Plan (2023)**

The Downtown Gastonia East Small Area Plan will convert 90 acres of underutilized properties along E. Franklin Blvd into a vibrant, mixed-use area serving as the eastern gateway to the central City. The plan includes enhancing pedestrian connectivity, repurposing historical structures like Avon Mill, and adding new streets and pedestrian links to improve accessibility. This redevelopment aims to boost the City’s tax base, create jobs, attract residents, and foster a walkable, sustainable community hub.

### *Objectives and Relevant Recommendations:*

---

- Redevelop 90 acres of underused properties into a lively, mixed-use district
- Enhance walkability with new streets and pedestrian paths for better access and circulation
- Create a sustainable community with green spaces and balanced development
- Transform the abandoned Charlotte Western Railroad rail corridor into a dedicated pedestrian and public realm corridor - enhancing pedestrian connectivity, safety, and accessibility across the Downtown East area
- Reimagines E Franklin Blvd shifting away from car-dominant design standards in favor of a more pedestrian- and mixed-use-focused streetscape, aiming to “rebalance” the corridor by reducing highway-level traffic prioritization and improving safety for non-drivers



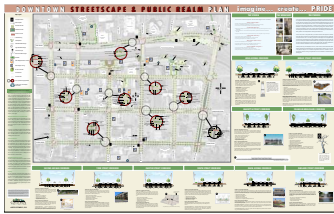
## **West Franklin Redevelopment Area Plan (2019)**

The West Franklin Redevelopment Area Plan has goals to stimulate private investment, promote economic growth, eliminate blight, and improve quality of life. This collaborative effort involves elected officials, City staff, residents, businesses, and organizations working together to upgrade and sustain areas along West Franklin Boulevard. The plan aims to transform blighted areas into vibrant, sustainable communities, ultimately becoming a focal point for Gastonia’s future.

### *Objectives:*

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- Encourage private sector investment to drive economic growth and development
- Address and remove blighted properties to improve the overall image and livability
- Upgrade public spaces and infrastructure to boost the quality of life for residents
- Promote transportation safety by improving street design, adding pedestrian-friendly features, and implementing traffic-calming measures to create safer, more accessible corridors



### **Downtown Streetscape and Public Realm Plan (2014)**

The Downtown Streetscape & Public Realm Plan for Gastonia emphasizes sustainability and green practices, aiming to enhance residents’ quality of life through recommendations such as on-street bike lanes, green spaces, and pedestrian enhancements. The plan also supports the potential for LEED certification by focusing on energy conservation, stormwater management, and recycling initiatives.

*Objectives:*

---

- Increase vegetation and create parks
- Use methods like rain gardens and permeable pavements
- Encourage and provide the means to help businesses recycle more materials
- Promote transportation safety by integrating traffic-calming features, safe crosswalks, and protected bike lanes to reduce conflicts and enhance mobility for all users



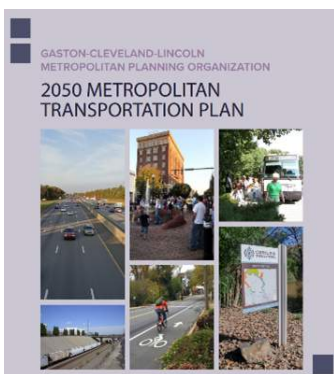
### **“Hand-Wilson Area” Conceptual Illustrative Plan (2020)**

The Hand-Wilson Area Conceptual Illustrative Plan envisions a vibrant, connected community that balances residential, commercial, and recreational spaces surrounding the intersection of E Hudson Boulevard and Redbud Drive. Through thoughtful design, the plan aims to enhance livability, improve access to local amenities, and foster economic development.

*Objectives:*

---

- Promote mixed-use redevelopment
- Improve pedestrian and bicycle connectivity and accessibility
- Incorporate green spaces and community gathering areas



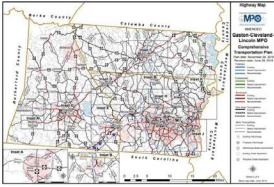
### **2050 Metropolitan Transportation Plan (2025)**

The Gaston-Cleveland-Lincoln Metropolitan Planning Organization (GCLMPO) Metropolitan Transportation Plan establishes a long-range vision for transportation improvements that meet the region’s mobility, safety, and economic development needs. Covering a 25-year horizon, the plan ensures that roadway, transit, bicycle, and pedestrian projects are coordinated to support sustainable growth and regional connectivity.

*Objectives:*

---

- Identify and prioritize transportation investments that enhance safety and reduce congestion
- Expand multimodal options
- Support economic vitality by improving freight movement and regional connectivity
- Enhance transportation safety by integrating traffic-calming measures, safe crossings, and protected bike lanes to create a secure environment for all users

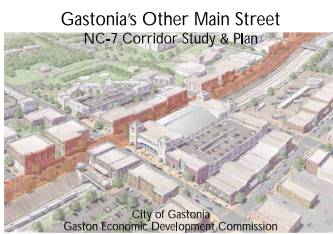


## **GCLMPO Comprehensive Transportation Plan (CTP)**

The GCLMPO Comprehensive Transportation Plan (CTP) is a long-range, multimodal strategy developed to guide transportation investments and policies for Gastonia and the surrounding region. The plan identifies future needs for roadways, bicycle and pedestrian facilities, public transit, and freight movement, ensuring that the transportation network supports anticipated growth and enhances quality of life. The CTP is a collaborative effort involving NCDOT, local governments, stakeholders, and the public to create a unified vision for mobility.

### *Objectives*

- Plan for a safe, efficient, and connected transportation system
- Support economic development and regional growth
- Expand multimodal options for all users
- Promote transportation safety by prioritizing roadway design improvements, integrated bike/pedestrian facilities, and intersection upgrades to reduce crashes and protect all travelers

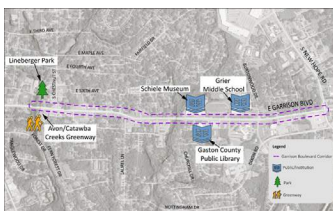


## **NC-7 Corridor Study and Plan (2018)**

The NC-7 Corridor Study and Plan aims to transform NC-7 into “Gastonia’s Other Main Street” through three key interventions: New Connections, Street Improvements, and Redevelopment Plans. The vision seeks to bridge the economic and social divide between northern and southern Gastonia caused by the Norfolk Southern rail corridor.

### *Objectives:*

- Enhance links between the NC-7 Corridor, downtown Gastonia, and nearby neighborhoods
- Improve streets and redevelop areas to strengthen the corridor’s economic and social resilience
- Transform the NC-7 Corridor into a thriving area with more jobs, businesses, and improved quality of life



## **Garrison Boulevard LEARNS Corridor Study (2024)**

The Garrison Boulevard project is a major transportation improvement initiative aimed at reducing congestion and improving safety along one of Gastonia’s key corridors. The project includes changes the roadway cross-section, upgrading intersections, and enhancing pedestrian and bicycle accommodations to support multimodal travel. These improvements are designed to improve traffic flow, reduce crash risks, and provide better connectivity for residents and businesses along the corridor.

### *Objectives:*

- Improve intersection safety and efficiency
- Add sidewalks and bike facilities to support multimodal transportation
- Promote transportation safety by incorporating complete street designs, safe pedestrian crossings, and traffic-calming strategies to reduce crashes and improve accessibility for all users



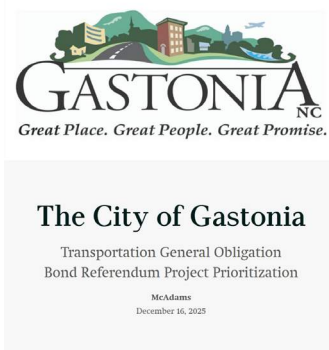
### GoGastonia

GoGastonia is an on-demand microtransit service launched in July 2024 to replace the City’s public bus system. It functions as a public rideshare, allowing residents to book trips anywhere within Gastonia’s city limits using a smartphone app or by phone.

#### *Objectives:*

---

- Allow residents to easily book a ride instead of following a fixed bus schedule
- Provide transportation to all areas within Gastonia, including those previously underserved by the old bus routes
- Offer reliable and consistent service with short wait times for passengers



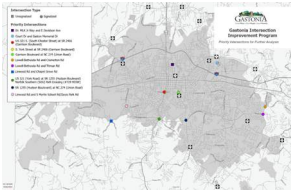
### School and Park Safety Improvements

The City of Gastonia is committed to advancing roadway safety and reducing fatalities and serious injuries for all road users. This commitment is highlighted through the usage of Gastonia’s \$75 million transportation bond program passed by voters in 2022 for safer streets through major investments in intersection improvements, repairing infrastructure, and improving pedestrian visibility. The City is expanding connectivity with greenways, school access projects, and neighborhood upgrades while securing federal grants to enhance safety and accessibility. With nearly half of the funds already allocated, these initiatives reflect a proactive approach to creating a safer, more connected transportation network. The School and Park Safety Improvements initiative is funded by Gastonia’s 2022 Transportation Bond Referendum. This program focuses on enhancing safety and accessibility around schools and parks throughout the city. Improvements include upgraded crosswalks, new sidewalks, better lighting, and traffic calming measures to create safer environments for students, families, and park visitors.

#### *Objectives:*

---

- Improve pedestrian and bicycle safety near schools and parks
- Enhance accessibility and connectivity for all users
- Create safer, more welcoming community spaces



## Gastonia Intersection Improvement Program

Similar to the School and Park Safety Program, the Intersection Improvement Program (IIP) is funded through Gastonia's transportation bond program. Gastonia's IIP targeted initiative is to enhance safety, reduce congestion, and support future growth at key intersections across the city. Developed in coordination with City staff, NCDOT, and GCLMPO, the program uses data-driven analysis and community input to prioritize intersection upgrades. The process included inventorying 151 intersections, screening for congestion, safety, opportunity, equity, and context, and conducting detailed analysis for the highest-priority locations. Preferred alternatives and conceptual designs were developed for the top-ranked intersections, with cost estimates and scoring criteria guiding final selections.

### Objectives:

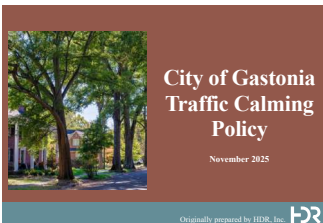
- Improve safety and reduce crash rates at critical intersections
- Alleviate congestion and enhance traffic flow
- Support equitable access and future development opportunities
- Coordinate improvements with community priorities and growth areas

## Gastonia Traffic Calming Policy

The City of Gastonia Traffic Calming Policy adopted in November 2025 provides a structured approach for implementing traffic calming measures on City-maintained streets in both new and existing neighborhoods. The policy aims to enhance safety for all road users by managing vehicle speeds and promoting a high quality of life through safer, more efficient local transportation networks. It outlines clear processes for residents and developers to request or plan traffic calming interventions, supported by a toolkit of proven design strategies and objective scoring criteria for project selection.

### Objectives:

- Guide the consistent selection, design, and application of effective traffic calming measures
- Improve safety and reduce vehicle speeds to protect vulnerable road users
- Provide clear processes for both existing neighborhoods and new developments to request/implement traffic calming measures





## 2024 North Carolina Strategic Highway Safety Plan Update

The 2024 North Carolina Strategic Highway Safety Plan Update (NC SHSP Update) is a statewide, data-driven framework designed to significantly reduce fatalities and serious injuries on all public roads. The plan adopts a “Vision Zero” approach, aiming to cut these numbers in half by 2035 and ultimately eliminate them by 2050. The NC SHSP Update is built on collaboration among state, regional, and local partners, and emphasizes a Safe System Approach to protect all road users. The NC SHSP Update is the primary source for establishing Emphasis Areas when analyzing crash data.

### *Objectives:*

---

- Reduce roadway fatalities and serious injuries through targeted strategies, engineering, education, enforcement, and emergency response
- Address key emphasis areas
- Promote equity and accessibility by considering social, demographic, and geographic factors in safety planning
- Integrate safety into all aspects of transportation planning, project development, and policy decisions statewide

# EMPHASIS AREAS AND SAFETY TARGETS

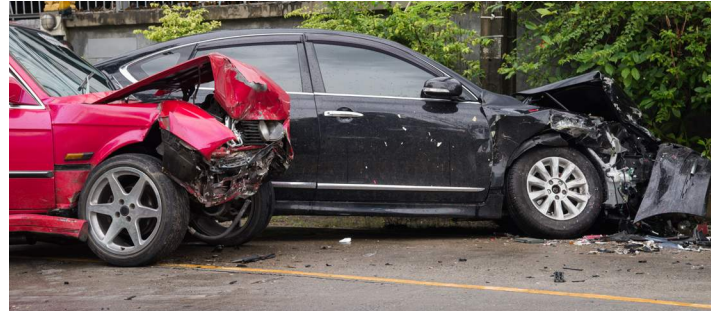
## EMPHASIS AREAS

Gastonia's SAP statistical analysis will coincide with the methods discussed in the [North Carolina Strategic Highway Safety Plan \(NC SHSP\) Update](#) Emphasis Areas. The NC SHSP Emphasis Areas chapter is designed to identify the most critical safety challenges on the state's roadways and outline targeted strategies to reduce FSI crashes. Similarly, this chapter discusses Gastonia's current crash trends and how they compare to the State's 2024 emphasis areas identified in the NC SHSP Update. This analysis will guide future investments, policy decisions, and community engagement efforts.

The emphasis areas within Gastonia discussed here are based on five years of crash data (2020–2024) and reflect both the frequency and severity of crashes.

## NORTH CAROLINA'S SAFETY PRIORITIES

The NC SHSP Update identifies nine (9) emphasis areas which are roadway safety elements or concerns that have the greatest potential for reducing fatalities and serious injuries. The nine emphasis areas are the following:



### Lane Departures

Crashes resulting from a vehicle leaving its designated lane, including incidents such as run-off-road, collisions with fixed objects, head-on impacts, rollovers, and opposite-direction sideswipes.



### Pedestrians, Bicyclists, and Personal Mobility

Crashes involving people walking, riding bicycles, or using personal mobility devices (such as scooters), whether on sidewalks, crosswalks, bike lanes, or shared roadways.



### Intersections

Crashes occurring within the limits of intersections. Intersections can include driveways, alleyways, and on/off ramps.



### Seat Belts and Car Seats

Crashes where improper or non-use of seat belts or child safety seats contributes to injury severity, emphasizing occupant protection measures.



### Substance Impaired Driving

Crashes involving drivers under the influence of alcohol, drugs, or other substances that impair judgment, reaction time, and overall driving ability.



### Speed management

Crashes where excessive speed or driving too fast for conditions is a contributing factor, increasing the likelihood and severity of collisions.



### Older Drivers

Crashes involving drivers typically aged 65 and older, often associated with age-related changes in vision, reaction time, and physical ability.



### Motorcyclists

Crashes involving individuals operating motorcycles, including single-vehicle and multi-vehicle incidents, often linked to visibility and vulnerability factors.



### Younger drivers

Crashes involving drivers under a specified age threshold (ages 15 - 19), often related to inexperience and higher-risk behaviors.

All statistics referenced below are in the NC SHSP Update unless otherwise stated and accompanied by the appropriate source.

When comparing Gastonia’s crash data to statewide figures, it is essential to use **percentages of crashes within each emphasis area rather than raw numbers**. This approach accounts for the significant difference in study area size and population between Gastonia and the entire state of North Carolina. Using percentages normalizes the data, allowing for a fair comparison of relative risk and emphasis area priorities. Without this adjustment, raw numbers would disproportionately reflect the larger scale of statewide data and obscure meaningful trends at the local level. When comparing crash percentages, Gastonia **consistently falls below the State average in all categories** listed in the 2024 NC SHSP Update.

The table below shows the statewide and Gastonia’s percentage of FSI crashes out of total crashes attributed to emphasis area:

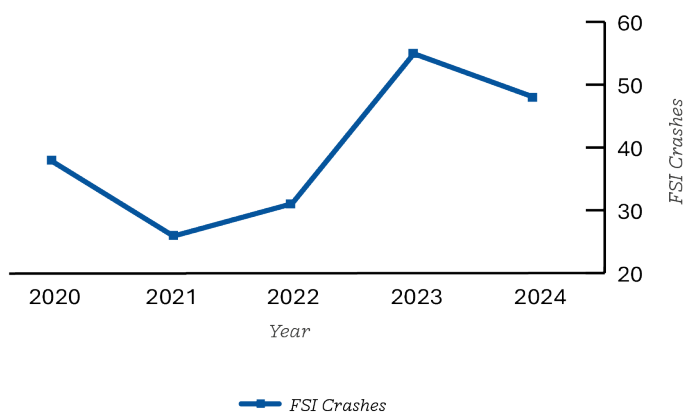
Emphasis Area	North Carolina	Gastonia	Difference
Lane Departure	5.08%	4.11%	-0.97%
Seat Belts and Car Seats*	19.17%	17.49%	-1.68%
Substance Impaired Driver	10.89%	9.09%	-1.70%
Intersections	2.16%	0.81%	-1.35%
Safer Speeds	6.41%	6.23%	-0.18%
Older Drivers (65+)	2.30%	0.97%	-1.33%
Pedestrians	24.10%	17.50%	-6.60%
Motorcyclists	22.36%	17.55%	-4.81%
Younger Drivers (15–19)	1.93%	1.40%	-0.53%
Bicyclists	11.60%	4.76%	-6.84%

Source: 2024 NC SHSP Update

\*Crash data acquired for Gastonia only depicts crashes where an unbelted driver was involved

## Number of Emphasis Area FSI Crashes in Gastonia

	2020	2021	2022	2023	2024
Lane Departure	17	8	13	15	14
Unbelted Drive	15	7	4	8	12
Substance Impaired Driver	16	4	12	11	10
Intersections	7	5	6	21	13
Safer Speeds	6	3	4	9	4
Older Drivers	0	4	6	8	10
Pedestrians	4	4	5	7	8
Motorcyclists	8	4	6	5	10
Younger Drivers	8	2	0	9	6
Bicyclists	1	0	0	0	1
<b>Total</b>	<b>82</b>	<b>41</b>	<b>56</b>	<b>93</b>	<b>88</b>



## DETAILED ANALYSIS FOR TOP THREE EMPHASIS AREAS

### Vulnerable Road Users (Pedestrians, Motorcyclists, and Bicyclists)

Nearly **46% of fatal or serious injury crashes involving pedestrians and bicyclists in North Carolina occur on arterial roadways**, even though these roads make up only **8% of the state's total mileage**. This disproportionate risk underscores a critical safety concern: arterials, designed for high-speed traffic, often lack adequate pedestrian and bicyclist infrastructure such as sidewalks, crosswalks, and protected bike lanes. The issue is even more pronounced in **Gastonia**, where **64% of fatal or serious injury pedestrian and bicyclist crashes occur on arterials**, despite these roads representing just **7% of local road miles**. This comparison suggests that both statewide and City-level strategies must prioritize arterial corridors for safety improvements, with Gastonia requiring particularly aggressive interventions to address its higher concentration of severe crashes.

### Seat Belts and Car Seats

As cited in the [2024 North Carolina Observational Survey of Seat Belt Use](#), the 2024 weighted statewide seat belt use rate for drivers is **93.1%**, an increase from **91.9% in 2023**. These figures indicate that overall seat belt compliance across North Carolina remains high and has improved for drivers year-over-year.

Gastonia reflects similar positive trends in seat belt usage, aligning with statewide improvements. However, despite these encouraging averages, crash data reveals that **in Gastonia approximately 17% of crashes involving an unbelted driver result in an FSI and 19% statewide involved an unbelted driver or occupant**. This statistic underscores a critical safety concern: even with high compliance rates, the minority who fail to buckle up contribute disproportionately to severe outcomes.

The data demonstrates that simply wearing a seat belt can significantly reduce the risk of fatalities and serious injuries. Continued emphasis on public education, enforcement campaigns, and community outreach is essential to close the remaining gap and ensure that every driver and passenger adopts this life-saving habit.

### Substance Impaired Driver

In North Carolina, alcohol is the dominant factor in substance-impaired crashes. Of those crashes, 84% of those were attributed to alcohol and 85% to substance-impaired FSI crashes. Drugs were involved in 23% of substance-impaired crashes and 26% of substance-impaired FSI crashes. In comparison, Gastonia shows a lower proportion of alcohol-related crashes (**67% in all substance-impaired crashes and 64% in FSI cases**) but a higher share of drug involvement (**33% in all substance-impaired crashes and 36% of fatalities or serious injuries**). Additionally as previously stated, crashes involving an unbelted driver or alcohol contributed to 5% of all crashes but account for 42% of all FSI crashes. These figures highlight a critical message: whether impairment comes from alcohol or drugs, the risk of devastating consequences is significant. Staying sober behind the wheel is essential to protect lives and reduce the alarming impact of impaired driving across the state and in communities like Gastonia.

### Summary and Next Steps

Gastonia's emphasis areas will guide the development of targeted safety strategies and infrastructure improvements. By comparing local data to statewide benchmarks, the City can prioritize interventions where risk is greatest. These findings will influence Gastonia's SAP and support applications for federal and state funding, including SS4A grants.

## NORTH CAROLINA SAFETY PERFORMANCE TARGETS

In addition to emphasis areas, another vital metric for measuring transportation safety throughout the state is the [North Carolina Safety Performance Targets](#). Earlier this year, the Federal Highway Administration (FHWA) assessed the NCDOT’s progress toward its calendar year 2022 safety targets, using five-year averages from 2018 to 2022 for each measure. According to federal regulations (23 CFR 490.211(c)(2)), a state is considered to have met or made significant progress toward its safety performance targets if at least four of the established targets are achieved or if actual outcomes surpass baseline performance. FHWA’s review found that North Carolina did not meet these criteria. As a result, NCDOT is now required to ensure that all Highway Safety Improvement Program (HSIP) safety funds are used to develop an HSIP Implementation Plan, detailing the actions the state will take to achieve or make significant progress toward its safety targets. Given this, it is important for the City of Gastonia, alongside GCLMPO, to acknowledge these findings and take decisive action. The GCLMPO has historically demonstrated its commitment by supporting NCDOT’s annual safety targets, aligning local efforts with statewide goals for reducing fatalities and serious injuries.

Below is a table representing the GCLMPO 5-year rate from 2020-2024 for fatalities, serious injuries and non-motorized fatalities and serious injuries. Additionally, the table includes the recommended GCLMPO 2026 Safety Performance Target using the NCDOT’s methodology of reducing FSI crashes by half by 2035. As a comparison, the table also includes Gastonia’s existing crash data and Gastonia’s ideal target with the 2026 NCDOT’s Safety Performance Target applied.

Year/Area of Interest	Fatalities (5 Year Average)	Serious Injuries (5 Year Average)	Non-Motorized Fatalities and Serious Injuries (5 Year Average)
2020-2024/GCLMPO	61.4	207.0	27.6
2026 Target/GCLMPO	51.5	113.5	13.8
2020-2024/Gastonia Study Area	28.4	29.2	6.0
2026 Target/Gastonia Study Area	19.0	17.2	3.5

Developing the Gastonia SAP is a critical and timely step that not only addresses local safety challenges but also reinforces the City’s dedication to the broader objectives outlined by the State and FHWA and supported by the GCLMPO. By proactively planning and implementing targeted safety strategies, Gastonia positions itself as a leader in North Carolina’s journey toward safer roadways, helping to drive progress toward the goal of reducing traffic-related fatalities and serious injuries by half by 2035, and ultimately moving toward zero by 2050.

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# KEY TAKEAWAYS

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## **1. FSI Crashes Are Concentrated on Major Arterials and Intersections, Especially for Vulnerable Road Users**

In Gastonia, the majority of fatal and serious injury crashes are clustered along major corridors such as US 74 and US 321, as well as at key intersections and downtown hotspots. Vulnerable road users, including pedestrians, bicyclists, and motorcyclists, face a particularly high risk, with a disproportionate number of serious crashes occurring on high-speed arterials that lack adequate infrastructure. This pattern is even more pronounced in Gastonia than statewide, highlighting the urgent need for targeted safety improvements on these corridors and intersections to better protect those most at risk.

## **2. Gastonia's FSI Crash Rate is Rising Faster Than the State Average, with Distracted Driving and Unbelted Occupants as Key Factors**

The City has experienced a 26% increase in FSI crashes from 2020 to 2024, a rate much higher than the statewide increase. This troubling trend is driven largely by distracted driving, which is the leading contributing factor, as well as significant involvement from older and teen drivers. Additionally, while seat belt usage is generally high, unbelted occupants still account for a substantial portion of severe crashes, underscoring the need for ongoing education and enforcement to address these persistent risks.

## **3. Gastonia is Investing in Safety but Faces Gaps in Multimodal Connectivity and Must Prioritize High-Risk Areas**

Gastonia is making substantial investments in transportation safety, including a \$75 million bond program, federal grants, and alignment with state and federal safety priorities. These efforts are focused on infrastructure upgrades, resurfacing, and improving pedestrian visibility. However, the City's multimodal network remains fragmented, with many sidewalks and connectivity improvements still needed. To achieve meaningful progress, Gastonia must focus its future safety strategies on closing these gaps and prioritizing high-risk corridors and intersections, especially to protect vulnerable road users and reduce the rising rate of severe crashes.

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