



SAFETY ACTION PLAN

APRIL 9, 2026



Admonition Statement

This document is exempt from open records, discovery or admission under Alabama Law and 23 U.S.C. §§ 148(h)(4) and 409. The collection of safety data is encouraged to actively address safety issues on regional, local, and site-specific levels. Congress has laws, 23 U.S.C. §148(h)(4) and 23 U.S.C. § 409 which prohibit the production under open records and the discovery or admission of crash and safety data from being admitted into evidence in a Federal or state court proceeding. This document contains text, charts, tables, graphs, lists, and diagrams for the purpose of identifying and evaluating safety enhancements in this region. These materials are protected under 23 U.S.C. §409 and 23 U.S.C. §148(h)(4). In addition, the Alabama Supreme Court in *Ex parte Alabama Dept. of Transp.*, 757 So. 2d 371 (Ala. 1999) found that these are sensitive materials exempt from the Alabama Open Records Act.

Elmore County Commission



Resolution

A RESOLUTION ADOPTING TRAFFIC SAFETY GOALS FOR REDUCING TRAFFIC FATALITIES AND SERIOUS INJURIES ON ELMORE COUNTY ROADS

WHEREAS, Elmore County, Alabama (the “County”) recognizes that the safety and well-being of its residents and roadway users are of the utmost importance; and

WHEREAS, the County is committed to the ultimate goal of eliminating roadway fatalities and serious injuries on all county-maintained roadways; and

WHEREAS, the County supports the principles of the Safe System Approach as a guiding framework for improving roadway safety through shared responsibility, proactive strategies, and data-driven decision-making; and


WHEREAS, the County endeavors to achieve measurable progress toward its Vision Zero goal by prioritizing safety in its policies, programs, and projects; and


WHEREAS, the County will strive to achieve a five percent (5%) reduction in fatalities and serious injuries by year 2045, measured as a five-year rolling average compared to a baseline average from 2019-2023; and


WHEREAS, the County Commission is committed to allocating the necessary resources to support the implementation of the Elmore County Safety Action Plan and to monitoring, evaluating, and reporting progress to ensure transparency and accountability.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSION OF ELMORE COUNTY, ALABAMA, that the Elmore County Safety Action Plan is hereby formally adopted, and the County Commission affirms its commitment to the Plan’s vision, goals, and implementation strategies aimed at reducing roadway fatalities and serious injuries within Elmore County.

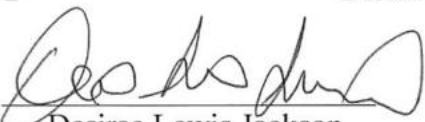
Presented on this the 9th day of April, 2026.


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Acronyms

AADT	Annual Average Daily Traffic
ALDOT	Alabama Department of Transportation
AoPP	Areas of Persistent Poverty
DUI	Driving Under the Influence
EPDO	Equivalent Property Damage Only
FHWA	Federal Highway Administration
FYA	Flashing Yellow Arrow
HIN	High Injury Network
KA	Fatal and Serious Injury Crashes
LRSP	Local Road Safety Plan
MMUCC	Model Minimum Uniform Crash Criteria
MUTCD	Manual on Uniform Traffic Control Devices
NHTSA	National Highway Traffic Safety Administration
NOFO	Notice of Funding Opportunity
PSCi	Proven Safety Countermeasure Initiative
RSA	Road Safety Assessment
SAP	Safety Action Plan
SS4A	Safe Streets and Roads for All
SSA	Safe System Approach
USDOT	United States Department of Transportation
VRU	Vulnerable Road User

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Acknowledgements

Elmore County gratefully acknowledges the contributions of the Task Force members who played such an instrumental role in the development of the Safety Action Plan. Their active engagement, thoughtful input, and consistent commitment throughout the planning process reflected a shared dedication to advancing the well-being, mobility, and overall quality of life for residents across Elmore County. The guidance and support offered by the Task Force ensured that the Safety Action Plan addressed immediate safety needs and positioned the County to responsibly accommodate future development. The expertise and perspectives they provided were critical in shaping a plan that will strengthen transportation safety initiatives and goals while aligning with the County's long-term vision for continued sustainable growth.

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02

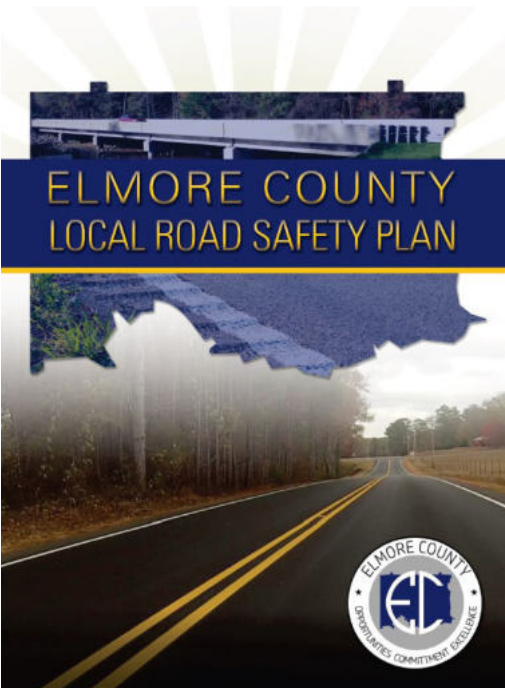
Introduction

Background

Elmore County, located in east central Alabama, is a growing community within the Montgomery Metropolitan Area. As of the 2020 census, Elmore County was home to 87,977 residents. The County covers 657 square miles. Wetumpka serves as the County seat, while Millbrook (partly in Autauga County) is the largest city located within the County. Other cities and towns within the County include: City of Tallassee (partly in Tallapoosa County), City of Prattville (partly in Autauga County), City of Wetumpka, Town of Coosada, Town of Deatsville, Town of Eclectic, and Town of Elmore.

Between 2019 and 2023, 9,487 crashes occurred on public roadways in Elmore County. These motor vehicle crashes resulted in 56 fatalities, 297 individuals sustaining serious injuries, 1,225 non-incapacitating, and 1,287 possible injuries. Among the fatalities and serious injuries, approximately 36% occurred on county-maintained roadways.

Acknowledging that even one life lost is too many, Elmore County leaders are committed to making significant improvements in roadway infrastructure and fostering a stronger culture of safety.



Reducing fatal and serious injury crashes is a top priority shared by the partners and transportation safety stakeholders in Elmore County. With that safety focus, Elmore County prepared a Local Road Safety Plan (LRSP). The Elmore County LRSP was designed to support Alabama's commitment to safer streets and highways through data-driven planning, targeted infrastructure investment, and coordinated policy implementation.

In 2019, Elmore County prepared an LRSP, which supports the vision of the Alabama Department of Transportation (ALDOT) Alabama Strategic Highway Safety Plan goal of a fifty percent reduction in fatalities and serious injuries by 2035. The LRSP highlighted the need for proven safety countermeasures on county-maintained roads, including rumble strips, skid resistant surfaces, and enhanced compliant signing and markings to address and reduce motor-vehicle crashes. The plan focused on identifying cost effective countermeasures and safety investments that could be applied systemically.

Following implementation of the recommended LRSP strategies, Elmore County pursued funding from the United States Department of Transportation's (USDOT) Safe Streets and Roads for All (SS4A) grant program to prepare a comprehensive Safety Action Plan to identify any additional safety strategies or projects that may help further advance the goal of reducing fatal and serious injury crashes.

Safety Action Plan Overview

To advance the progress made through the previous LRSP, Elmore County has developed this SS4A Safety Action Plan (SAP) for county-maintained roadways. This plan:

- Evaluates the safety performance of motorized and non-motorized transportation modes,
- Identifies and prioritizes data-driven projects and strategies for implementation,
- Assesses existing policies and practices that may help or hinder transportation safety, and
- Engages the public and underserved communities to uncover safety trends and community needs.

The Safety Action Plan serves as a strategic framework to guide future investments and policy decisions that improve transportation safety on county-maintained roads in Elmore County. This plan will assist Elmore County with addressing the objective of reducing fatal and serious injury crashes on the County's roadways.

The plan uses crash data and census data analysis to identify roadway crash trends and prioritize transportation safety improvements on the County's roadway network. As specified by the USDOT's SS4A program, it contains eight key components:

1. Leadership and goal setting
2. Planning structure
3. Safety analysis
4. Engagement and collaboration
5. Equity
6. Policy and process changes
7. Strategy and project selections
8. Progress and transparency

To guide these efforts, Elmore County has adopted an ambitious goal: **to achieve a 5% annual reduction in fatal and serious injuries by Year 2045 (based on 5-year average from 2019-2023).** The Safety Action Plan identifies transportation countermeasures, strategies, and projects to help achieve this goal.



03

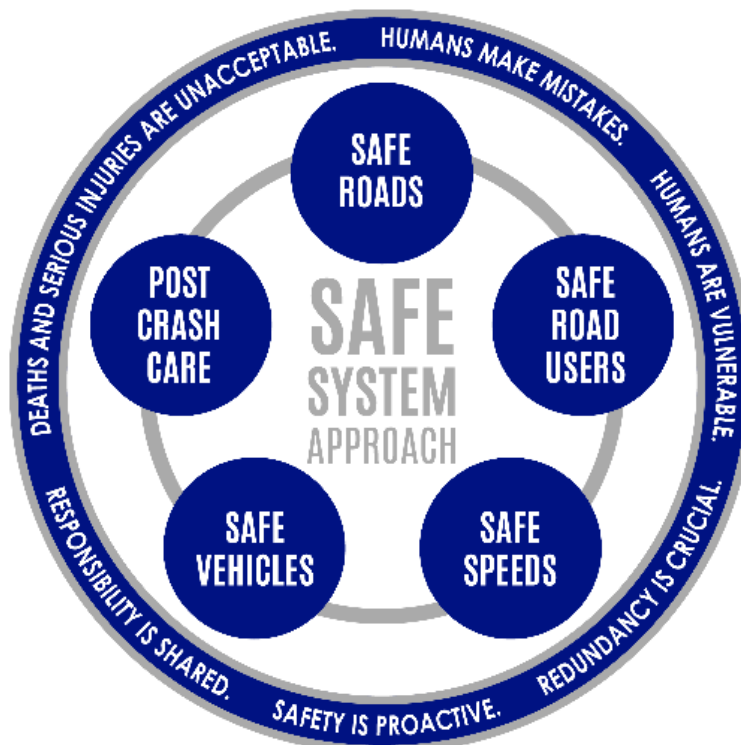
Guiding Principles

The Safety Action Plan

Elmore County developed this comprehensive safety action plan to develop a data-driven strategy for reducing serious injuries and fatalities on county-maintained roadways. This plan focuses on vehicle crashes involving drivers, passengers, pedestrians, bicyclists, and other roadway users. This plan was developed in collaboration with community leaders and key stakeholders to guide future safety-focused initiatives, with an emphasis on prioritizing county-maintained roadway and infrastructure improvements.

This Safety Action Plan is aligned with the Safe System Approach (SSA) and guided by the principle that the only acceptable number of fatalities on our roadways is zero. The SSA recognizes that people will make mistakes and that humans have limited capacity to withstand crash impacts. Our transportation system and policies should be designed and implemented to ensure those mistakes do not lead to serious injuries or fatalities.

The SSA is a holistic method that encourages a sense of shared responsibility, redundancy in the system, and a proactive approach. While the SSA is a relatively new concept in the United States, the safety strategy has been implemented in other countries since the 1990's. The SSA strives to foster a culture of safety with the expectation that all users of the roadway system, regardless of mode, will be protected from being fatally or seriously injured. Achieving this goal is a shared responsibility among everyone who plans, designs, constructs, maintains, and uses the transportation system. This includes planners and engineers, as well as elected officials who oversee policy decisions that influence road safety.



Source: FHWA

Six Principles of the Safe System Approach:

1. Deaths and serious injuries are unacceptable

While no crashes are desirable, the SSA focuses on preventing crashes that cause death or serious injury. No one should suffer these outcomes when using the transportation system.

2. Humans make mistakes

Road users will inevitably make mistakes, and those mistakes can lead to crashes. The expectation of the SSA is for the road system to be planned, designed, and operated to be forgiving of inevitable human mistakes, so that fatal and serious injury outcomes are unlikely to occur.

3. Humans are vulnerable

Humans have limited ability to tolerate crash impacts before serious harm occurs. Although the exchange of kinetic energy in collisions among vehicles, objects, and road users has multiple determinants, applying the SSA involves managing and reducing that kinetic energy to avoid fatal and serious injury outcomes.

4. Responsibility is shared

Everyone, road users, transportation agencies, vehicle makers, and others, shares the responsibility to make sure crashes do not result in death or serious injury.

5. Safety is proactive

Transportation agencies should use proactive and data-driven tools to identify and mitigate underlying risks in the system, rather than waiting for crashes to occur and react afterwards.

6. Redundancy is crucial

Every part of the transportation system should work together to protect people. If one part fails, others should still help prevent death or serious injury.

Five Elements of the Safe System Approach:

1. Safe Roads

Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.

2. Safe Road Users

Encourage safe, responsible driving and behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.

3. Safe Speeds

Promote safer speeds in all roadway environments through thoughtful, equitable, and context-appropriate roadway design, speed-limit setting, targeted education, outreach campaigns, and enforcement.

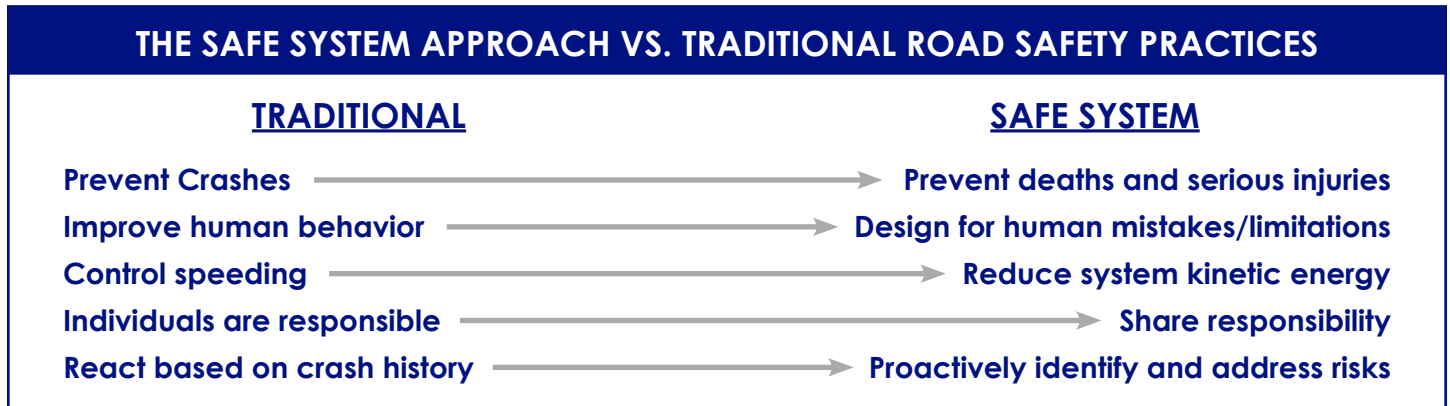
4. Safe Vehicles

Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.

5. Post Crash Care

Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

Previous safety efforts and strategies have aimed to eliminate crashes of all severities entirely to reach zero; however, the SSA prioritizes reducing fatalities and serious injuries resulting from these collisions. The road towards zero deaths and serious injuries should be focused on reducing the kinetic exchange of energy to a tolerable limit for the human body. This important principle is at the core of the successful implementation of the SSA as it relies on those responsible for designing and operating the road system. Human error is inevitable; it is essential to design and operate road infrastructure and vehicle technology to eliminate or significantly reduce the risk of death or serious injury. Reducing traffic-related deaths and serious injuries require strengthening all five elements of the SSA.



Source: FHWA

Why does Elmore County need a Safety Action Plan?

Between 2019 and 2023, 4,066 crashes occurred on public roads in Elmore County. During the five-year analysis period, there were 47 Fatal crashes (resulting in 56 Type-K fatalities), 224 suspected serious Injury Crashes (297 Type-A injuries), 876 Non-Incapacitating Injury Crashes (1,225 Type-B injuries), 859 Possible Injury Crashes (1,287 Type-C injuries), 7,336 Property Damage-Only crashes, and 145 unknown-severity crashes. The total values provided within the parentheses for fatalities and injuries are estimated based on CARE data.

Elmore County recognizes that rural Alabama communities encounter numerous and complex challenges related to growth, infrastructure, and mobility. These challenges include demographic change, development pressures, shifting travel patterns, funding limitations, right-of-way constraints, maintenance demands, heavy vehicle volumes, rural roadway conditions, and challenging terrain. Across all of these factors, one guiding principle remains unchanged: safety must remain the highest priority.

Table 3.1 — Crashes by Severity

Crash Severity		Number of Crashes	Number of Resulting Injuries
K	Fatal	47	56
A	Suspected Serious Injury	224	297
B	Non-Incapacitating Serious Injury	876	1,225
C	Possible Injury	859	1,287
O	Property Damage Only	7,336	
U	Unknown	145	
Total		9,487	2,865

04

Safety Data Analysis

For the purposes of this Safety Action Plan, an in-depth safety review and data analysis was performed. The scope included all roadways within Elmore County but with a focus on the county-maintained roads.

The analysis covered crash data for a five-year period from 2019 through 2023. Crash data was obtained from state-maintained sources for use in the analysis.

There were, on average, 1,897 crashes per year. The month of December tends to have the highest number of crashes, with June having the fewest number of crashes, on average. Sundays had the lowest number of crashes, with Fridays having the highest number of crashes, on average.

On average, the 26th week (usually the week before the 4th of July) had the fewest crashes, with the 50th week (usually the week before Christmas) having the highest number of crashes.

The hours between 2 am and 3 am had the fewest crashes, and those between 5 pm and 6 pm tended to have the highest.

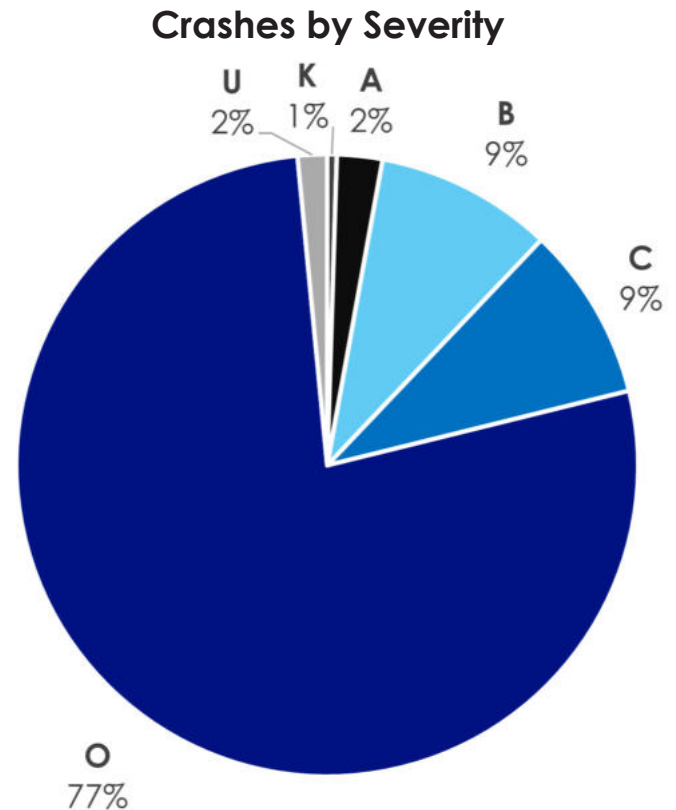


Figure 4.1 — Crashes by Severity

9,487
Total Crashes

224
Total Serious Injury Crashes

47
Total Fatal Crashes

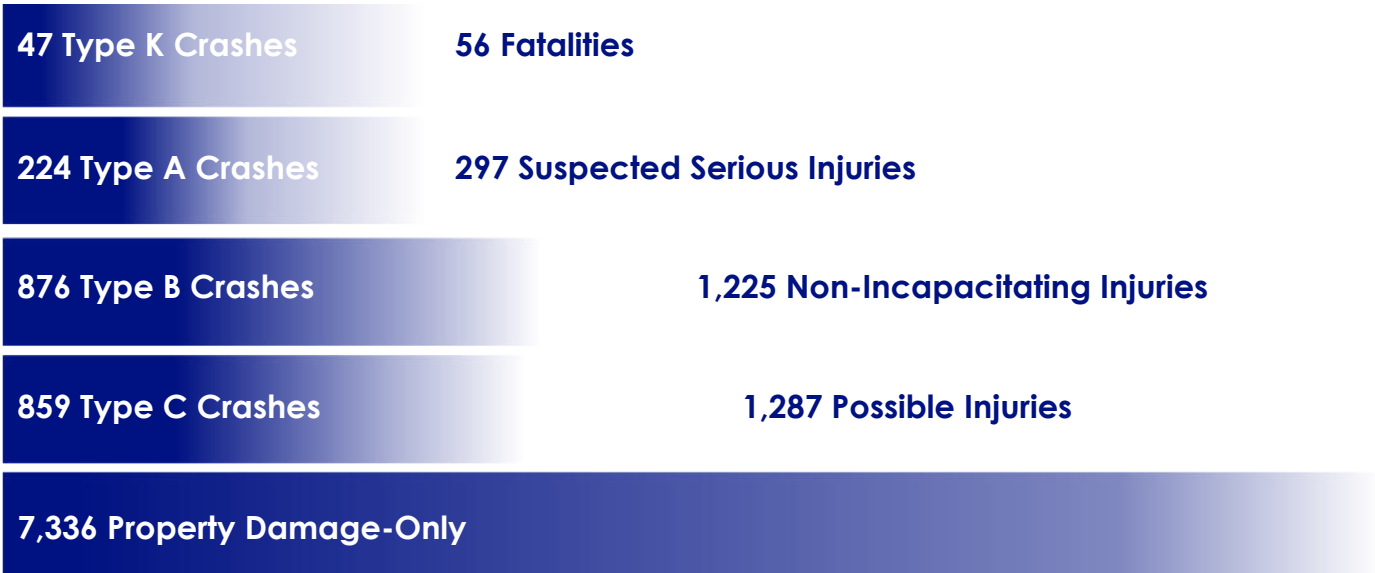
Key Findings:

- 56 people died in 47 motor-vehicle-related crashes
- 297 people were seriously injured in 224 motor-vehicle-related crashes
- State and interstate routes accounted for 6,109 crashes, county routes for 2,251, and municipal routes for 1,127 of the 9,487 total.
- Total crashes are trending flat but fatal and serious injury crashes are trending downward in urban areas and flat in rural areas.
- 61% of most fatal and serious injury crashes occurred on 10 routes and accounted for 72% of total crashes
- Fatal crashes are twice as likely to occur in rural areas and slightly more likely on state roads than County routes
- 36% of the fatal and 38% of the serious injury crashes occurred on county-maintained roads
- 60% of the fatal and 54% of the serious injury crashes occurred on state-maintained roads
- The fatality rates per 100,000 population are as follows:
 - Incorporated areas – 7.8 per capita
 - Unincorporated areas – 16.1 per capita
 - Overall – 12.7 per capita
- Pedestrians accounted for approximately 0.3% of total crashes, while rural was 0.3% and urban was 0.3%.
- Motorcycle crashes accounted for 155 total crashes, of which 34 were KA crashes. In general, motorcycle-involved crashes accounted for 1.2% of total crashes yet were nearly 12% of KA crashes.
- Single-vehicle crashes accounted for 24.7% of total crashes (47.6% in Rural and 13.4% in Urban) and 62% of KA crashes (64.2% in Rural and 39.3% in Urban).



**FATAL
CRASHES ARE
2X MORE
LIKELY
TO OCCUR IN
RURAL AREAS.**

2019 – 2023 Crash Data



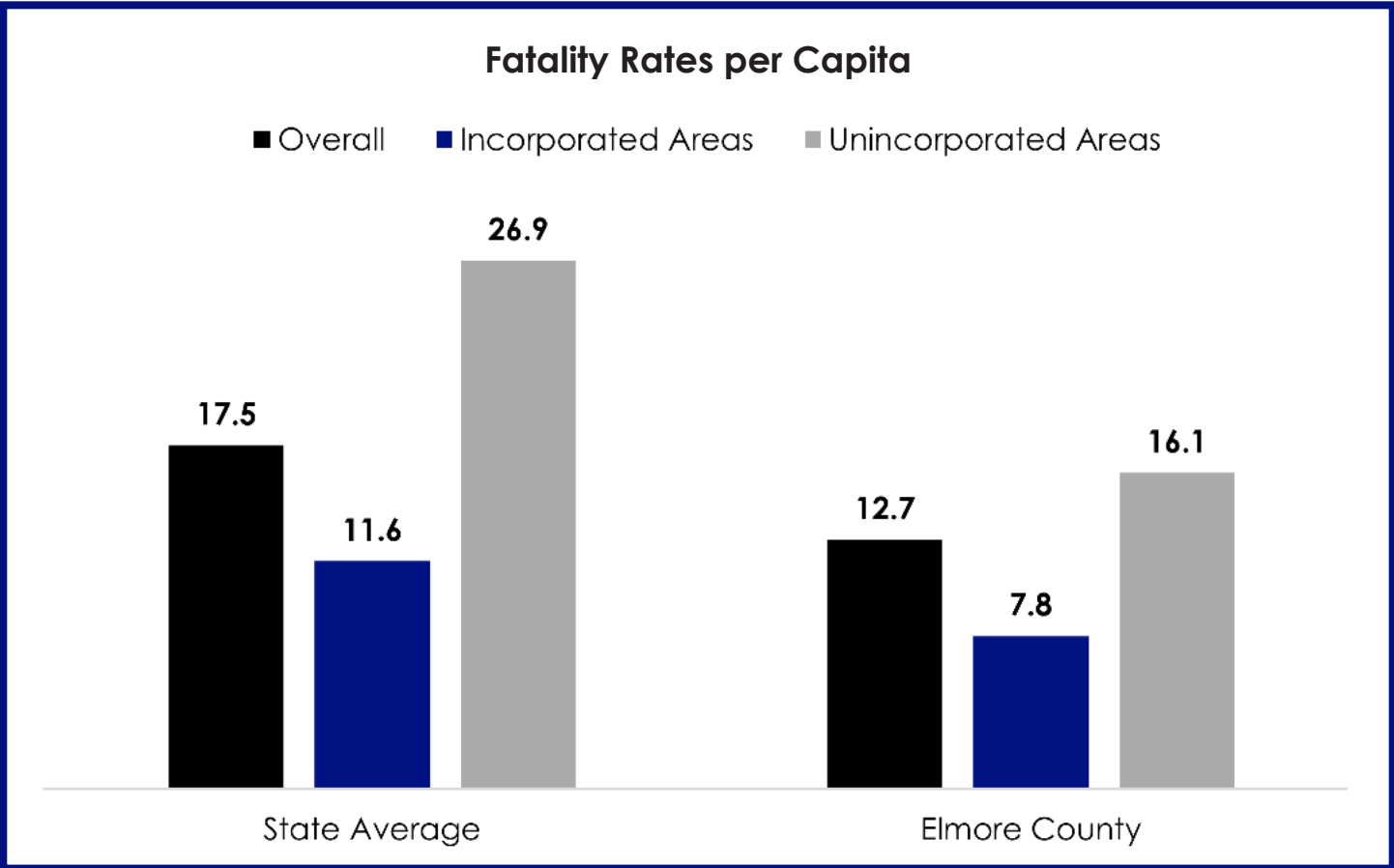


Figure 4.2 — Fatality Rates per Capita

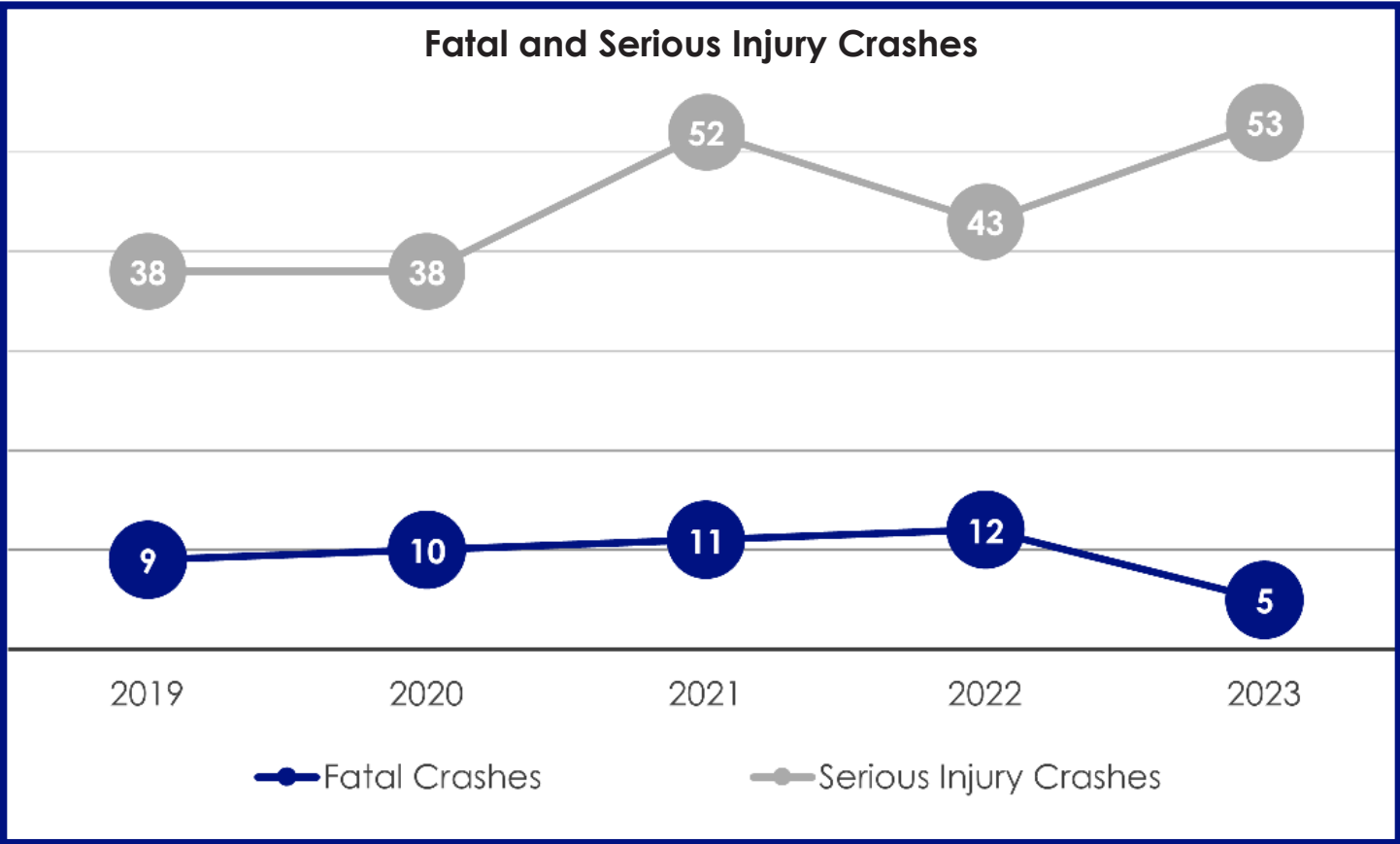


Figure 4.3 — Fatal and Serious Injury Crashes

Roadway Maintenance Responsibilities

For the purposes of this safety action plan, county-maintained roads are defined as roadways for which Elmore County is responsible for routine maintenance and improvements. Elmore County is not responsible for maintaining state highways and interstate facilities within its jurisdiction. Elmore County does not maintain any roadways located within the corporate limits of Deatsville, Elmore, Millbrook, Prattville, Tallassee, or Wetumpka. While several roadways cross municipal boundaries, Elmore County's maintenance responsibilities apply only to roadway segments located outside of municipal corporate limits.

Within the Town of Coosada, the following roadways located inside the corporate limits are maintained by Elmore County through a maintenance agreement: Airport Road, Coosada Parkway, Coosada Road, Kennedy Road, Lindsey Road, Lower Gibson Town Road, Pecan Grove, Pit Road/Pit Lane, and Upper Gibson Town Road.

Within the Town of Eclectic, the following roadways located inside the corporate limits are maintained by Elmore County through a maintenance agreement: Main Street from the city limits to First Street (AL 63 to First Street is maintained by the Town of Eclectic), Central Avenue, Central Road, North Ann Street, South Ann Street, Old Salem Road, and Fleahop Road from Jean Street to the city limits.

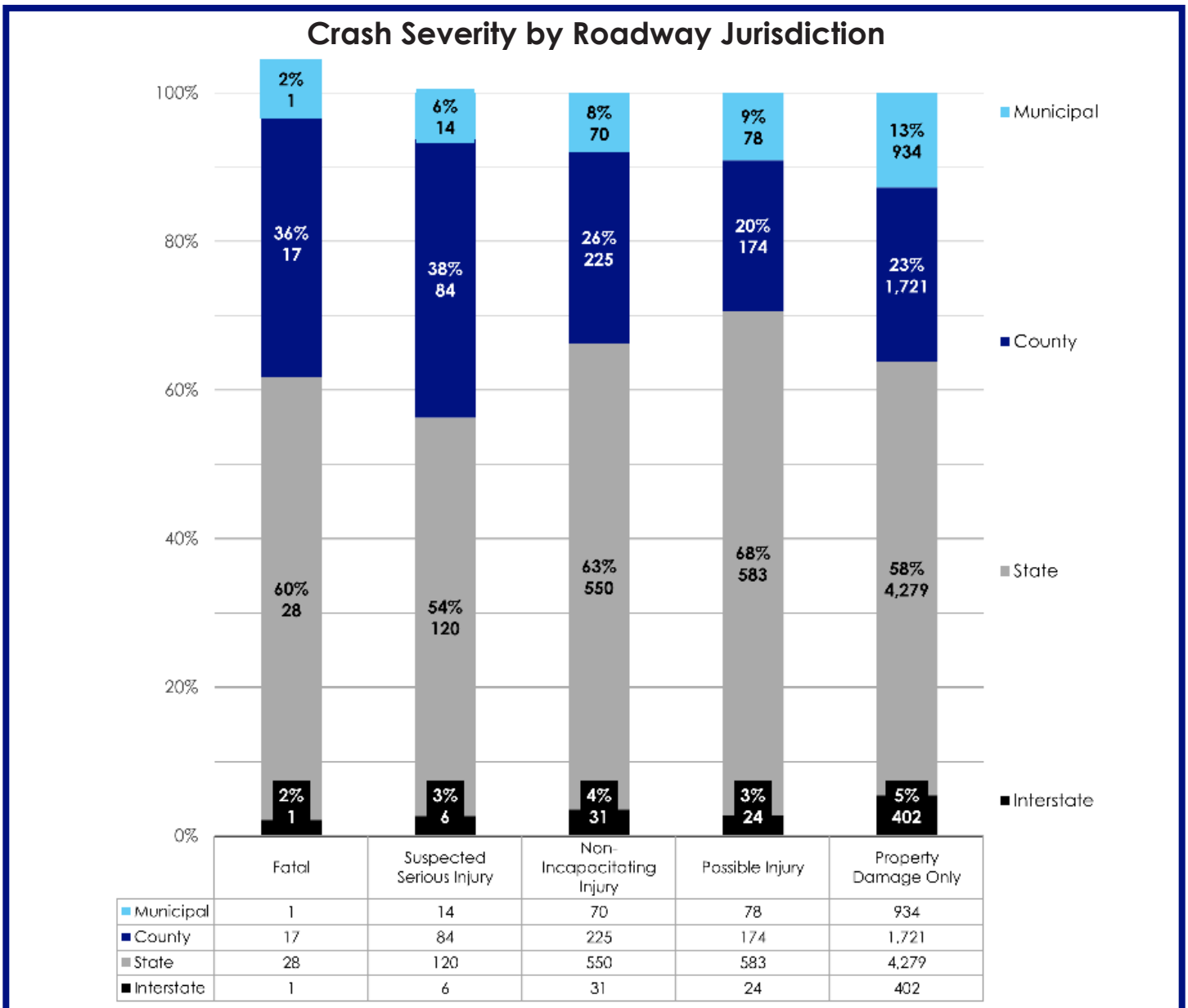


Figure 4.4 — Crash Severity by Roadway Jurisdiction

Elmore County Top Crash Trends

Elmore County has averaged 1,897 crashes per year for the past five years (2019-2023). Rural crashes averaged 630 yearly, and urban crashes averaged 1,267 yearly.

Through the data analysis, five primary crash trends were identified for each urban and rural setting respectively. Urban crash trends were identified within incorporated jurisdictions of the County and Rural top crash trends were identified for the unincorporated portions of the County:

Table 4.1 — Top Crash Trends

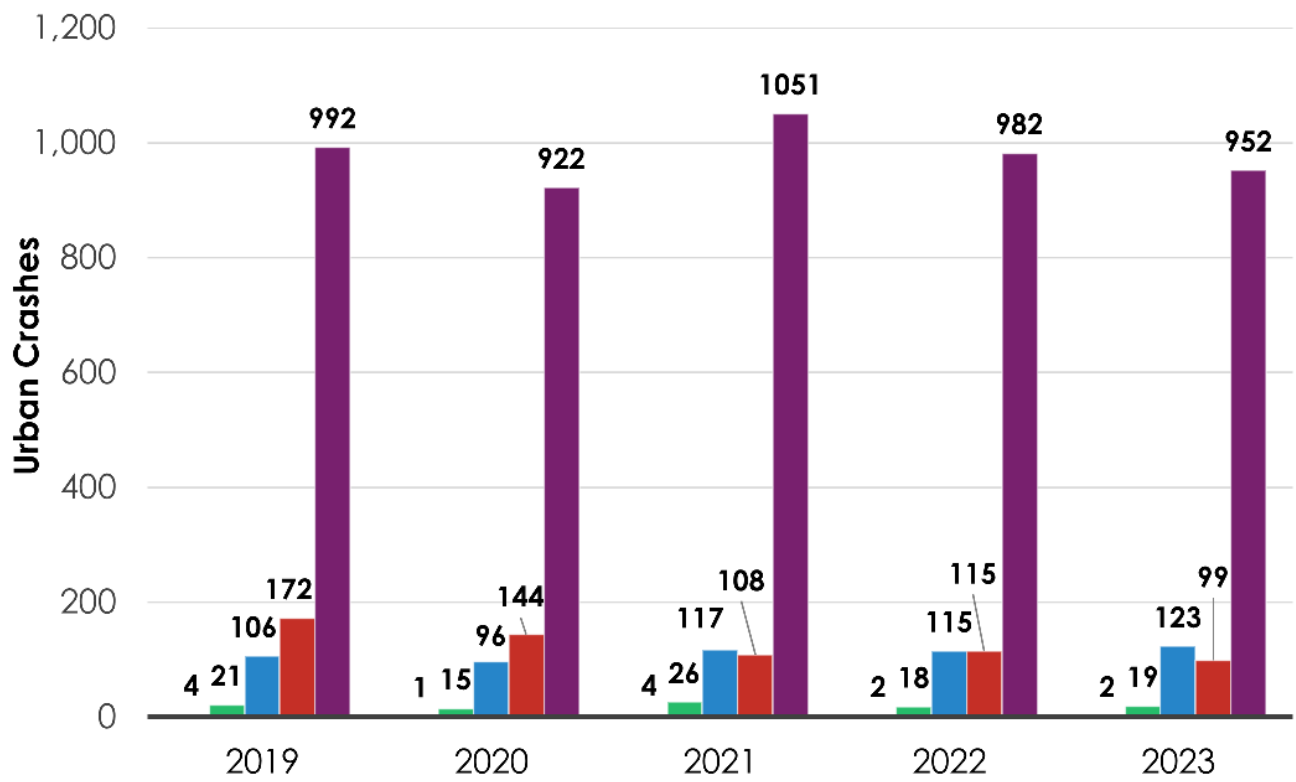
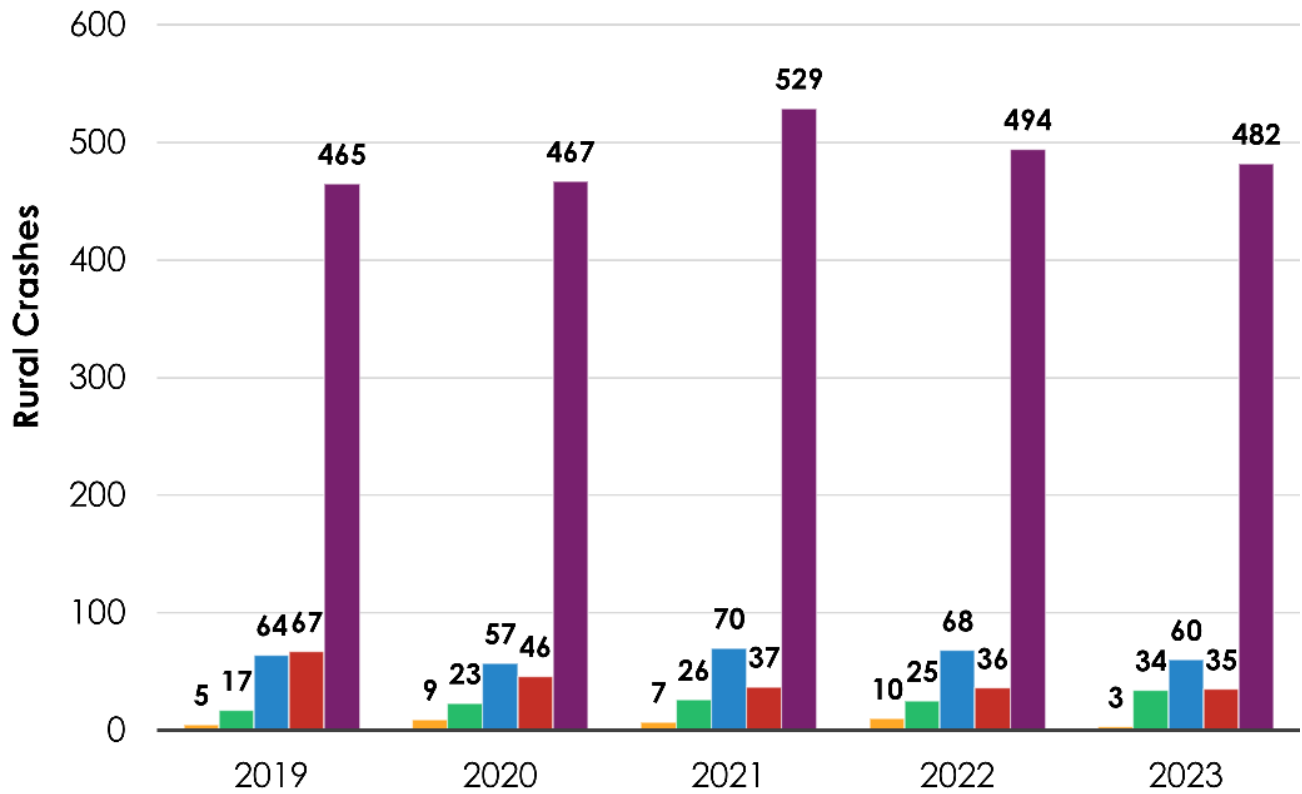
Urban		Rural	
1.	Left Turns	1.	Single Vehicle
2.	Side Impact	2.	Negotiating a Curve
3.	Vulnerable Road Users	3.	Overturn / Rollover
4.	Single Vehicle	4.	Fixed Object / Roadway Departure
5.	Intersections	5.	Vulnerable Road Users

Each of the top crash trends identified for urban and rural environments in Elmore County is summarized in the following pages. For each crash trend, the analysis includes the total number of crashes, the percentage of all crashes classified under that crash trend category, the percentage of fatal and serious injury (KA) crashes associated with the trend, and the percentage of crashes within that category that involved vulnerable road users (VRUs).

These metrics are accompanied by a brief narrative describing the nature of the crash type and its relevance to the roadway context, a summary of the most common contributing circumstances, and a set of proven safety countermeasures with documented crash reduction factors and relative cost ranges. Crash reduction factors are defined as the percentage of crash reduction that is expected after the implementation of a specific countermeasure.



Elmore County Crashes



■ Fatal
 ■ Suspected Serious Injury
 ■ Non-Incapacitating Injury
 ■ Possible Injury
 ■ PDO

Figure 4.5 — Elmore County Crashes



Urban Crash Trends

The analysis of the incorporated areas within Elmore County identified the leading trends present in urbanized environments, or in areas exhibiting urban-like characteristics. For this study, the incorporated jurisdictions included in the analysis were Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka.



1. Left Turn Maneuvers at Intersections or Driveways

Left-turn crashes at intersections are a common issue due to challenges like capacity constraints, gap acceptance, and numerous conflict points. In urban areas, these crashes frequently occur at signalized intersections. Countermeasures can include implementing flashing yellow arrow (FYA) operations for protected-permissive left turns, reducing conflicts and improving flow. At unsignalized intersections, low-cost countermeasures such as upgrading traffic control devices and adding left-turn or bypass lanes can enhance safety as well. Corridor-wide improvements that implement indirect left-turn operations may be an appropriate systemic safety countermeasure along with some additional systemic solutions such as raised medians or roundabout corridors. These measures collectively target the complexity of left-turn maneuvers and support more reliable, efficient traffic operations.

Total Crashes

1,087

17% of all crashes

Total KA

23

41% of all Fatal and Serious Injury crashes

Total VRU Involved

1

5% of all VRU involved crashes

Top Contributing Circumstances:

- Failed to Yield Right-of-Way Making Left or U-Turn
- Failed to Yield Right-of-Way from Stop Sign
- Failed to Yield Right-of-Way from Traffic Signal

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Implementing the flashing yellow arrow operation	16 - 25%	\$ - \$\$
Implementing corridor improvements consisting of indirect left-turn operations	22 - 54%	\$\$\$
Road diets and road reconfiguration	19 - 49%	\$\$



2. Side Impacts at Intersections

Side impacts at intersections and driveways require targeted systemic safety applications. For unsignalized intersections, low-cost countermeasures such as oversized, doubled up “Stop Ahead” and STOP signs, retroreflective sheeting on signposts, properly placed stop bars, and removal of sight obstructions (such as vegetation or parked vehicles) are effective. Additional measures include double arrow warning signs at T-intersections. At signalized intersections, systemic improvements like backplates with retroreflective borders, additional signal heads, overhead street name signs, and removing unwarranted signals may also enhance safety. Corridor-wide strategies, such as converting two-way left-turn lanes to raised medians, implementing reduced conflict U-turns, or establishing roundabout corridors, offer comprehensive solutions to minimize side impact incidents effectively. These measures enhance visibility, operational clarity, and conflict points to improve safety.

Total Crashes

1,392

22% of all crashes

Total KA

25

22% of all Fatal and Serious Injury crashes

Total VRU Involved

2

10% of all VRU involved crashes

Top Contributing Circumstances:

- Failed to Yield Right-of-Way Making Left or U-Turn
- Failed to Yield Right-of-Way from Stop Sign
- Ran Stop Sign

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
For unsignalized intersections, the implementation of multiple low-cost countermeasures	10 - 27%	\$ - \$\$
For signalized intersections, the implementation of multiple low-cost countermeasures	15 - 50%	\$ - \$\$\$
Implementing corridor improvements consisting of indirect left-turn operations	22 - 54%	\$\$ - \$\$\$



3. Vulnerable Road Users

Pedestrian crashes often occur away from intersections, and bicyclist crashes are common along roadway segments. To improve pedestrian safety, enhancing crosswalk visibility at intersections and midblock crossings is key. Countermeasures include improving stopping sight distance, adding advance yield markings and signs, installing raised medians, crosswalks, and installing rectangular rapid flashing beacons or pedestrian hybrid beacons. At signalized intersections, providing pedestrian signal indications and implementing leading pedestrian intervals are effective strategies. The Smart Channel right-turn design can also improve the safety of the intersection overall for both VRUs and drivers. Systemically, implementing walkways, sidewalks, paths for pedestrians, and bicycle lanes for bicyclists reduces VRU crashes significantly. Bicycle lanes can also reduce motor-vehicle crashes and lower vehicle speeds when applied, benefiting both pedestrians and cyclists.



Top Contributing Circumstances:

- Unseen Object / Person / Vehicle
- Improper Crossing
- Pedestrian Under the Influence

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Crosswalk enhancements	7 - 57%	\$ - \$\$\$
Pedestrian indications and leading pedestrian intervals	19%	\$ - \$\$
Provide walkways, sidewalks, and paths for pedestrians and bicycle lanes for bicyclists	2 - 59%	\$ - \$\$\$



4. Single Vehicle

Systemic applications that improve safety include enhanced signing and road markings, which help motorists understand changes in the roadway, such as alignment shifts or intersections. Adding enhanced roadway delineation and lighting, such as post-mounted delineators and street or intersection lighting, further guides motorists. In rural-like areas of the city, centerline and edge line rumble strips are proven countermeasures, alerting drivers when they leave their travel lane. The cut-in rumble strip is the most effective, while rolled-in rumble strips can be used when the pavement thickness is inadequate, though they are less common. Other options include audible pavement markings and thermoplastic or ceramic disks embedded in the striping, offering a comparable vibratory and audible effect.

Total Crashes

1,500

48% of all crashes

Total KA

102

64% of all Fatal and Serious Injury crashes

Total VRU Involved

11

84% of all VRU involved crashes

Top Contributing Circumstances:

- Ran off Road
- Driving too Fast for Conditions
- DUI

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Application of enhanced signing and road markings	7 - 28%	\$ - \$\$
Enhanced roadway delineation and lighting	13 - 38%	\$\$ - \$\$\$
Delineation of horizontal curves	8 - 30%	\$



5. Intersections

Intersection crashes typically occur at locations where multiple traffic movements intersect, increasing the likelihood of conflicts between vehicles, pedestrians, and bicyclists. These crashes are often related to turning movements, limited sight distance, unclear right of way, and higher vehicle speeds. To improve intersection safety, reducing conflict points and improving driver awareness are critical. Countermeasures include improving stopping sight distance, enhancing pavement markings and signing, optimizing signal timing and phasing, and providing protected left turn phases where appropriate. Geometric improvements such as reducing curb radii, adding channelization, installing raised medians, and providing refuge islands can help slow turning vehicles and improve safety for all users. At signalized intersections, installing pedestrian signal indications, improving signal visibility, and implementing leading pedestrian intervals are effective strategies. Systemically, applying access management, speed management, and context sensitive intersection improvements along corridors can significantly reduce the frequency and severity of intersection crashes for all roadway users.

Total Crashes

1,532

24% of all crashes

Total KA

21

19% of all Fatal and Serious Injury crashes

Total VRU Involved

2

10% of all VRU involved crashes

Top Contributing Circumstances:

- Failed to Yield Right-of-Way Making Left or U-Turn
- Ran off Road
- Failed to Yield Right-of-Way from Stop Sign

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Multiple low-cost countermeasures at unsignalized intersections	10 - 27%	\$ - \$\$
Multiple low-cost countermeasures at signalized intersections	15 - 50%	\$ - \$\$\$
Implementing corridor improvements consisting of indirect left-turn operations	22 - 54%	\$\$ - \$\$\$



Rural Crash Trends

The analysis of the unincorporated areas within Elmore County identified the leading trends present in rural environments.



1. Single Vehicle

Single-vehicle crashes are the most predominant type of crash in the study area and fortunately have many available safety countermeasures. Systemic applications that improve safety include enhanced signing and road markings, which help motorists understand changes in the roadway, such as alignment shifts or intersections. Adding enhanced roadway delineation and lighting, such as post-mounted delineators and street or intersection lighting, further guides motorists. In rural-like areas of the city, centerline and edge line rumble strips are proven countermeasures, alerting drivers when they leave their travel lane. The cut-in rumble strip is the most effective, while rolled-in rumble strips can be used when the pavement thickness is inadequate, though they are less common. Other options include audible pavement markings and thermoplastic or ceramic disks embedded in the striping, offering a comparable vibratory and audible effect.

Total Crashes

848

27% of all crashes

Total KA

44

28% of all Fatal and Serious Injury crashes

Total VRU Involved

5

38% of all VRU involved crashes

Top Contributing Circumstances:

- Driving Under the Influence (DUI)
- Over speed limit
- Ran off Road

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Application of enhanced signing and road markings	7 - 28%	\$ - \$\$
Enhanced roadway delineation and lighting	13 - 38%	\$\$ - \$\$\$
Centerline and edge line rumble strips	5 - 56%	\$ - \$\$



2. Negotiating a Curve

One of the most common types of crashes in rural counties in Alabama occurs when drivers negotiate curves. Several factors may contribute to crashes at locations where the road alignment changes. There are many safety countermeasures available to address these situations. One of the most effective and widely used safety countermeasures is using signage and pavement markings to better delineate the change in the horizontal alignment ahead. Enhanced delineation of rural roadways improves driver awareness and guidance and enables the driver to anticipate and navigate curves, particularly during nighttime or inclement weather conditions. High Friction Surface Treatments are pavement solutions that significantly and immediately decrease the number of crashes related to friction-related issues. This type of treatment is particularly designed to improve the frictional properties of a road's surface, thereby reducing the likelihood of head-on or lane departure crashes. The treatment involves the application of a thin layer composed of high-quality durable aggregates bound together using specialized polymer resin, this innovative combination increases the coefficient of friction on the road surface and improves the longevity and resilience of the treatment against wear and other environmental factors.

Total Crashes

406

13% of all crashes

Total KA

45

28% of all Fatal and Serious Injury crashes

Total VRU Involved

1

88% of all VRU involved crashes

Top Contributing Circumstances:

- Over speed limit
- DUI
- Driving too Fast for Conditions
- Over Correcting

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Delineation of the horizontal curve	8 - 30%	\$
Provide edge lines	11%	\$
Implement high friction surface treatments	Dry: 20% Wet: 39%	\$\$



3. Overturn / Rollover

Overturn or rollover crashes are prevalent on rural roads due to higher travel speeds, limited roadside recovery areas, and the presence of steep slopes or ditches. A combination of roadway design improvements, driver alert systems, and roadside safety enhancements is essential to mitigate these crashes. One of the most effective strategies is the installation of shoulder and edge line rumble strips, which alert drivers when they begin to drift off the roadway, allowing for corrective action before a departure occurs. Widened and stabilized shoulders provide additional recovery space, reducing the likelihood of abrupt steering maneuvers that can lead to rollovers. Clear zone improvements help prevent vehicles from tipping and overturning after leaving the roadway. Clear zone improvements can include removal or relocation of fixed objects, flattening roadside slopes, and providing slope-paved headwalls on pipe ends. On curves, enhanced signage, chevron alignment indicators, and advisory speed plaques improve driver awareness and reduce excessive speed. High friction surface treatments on curves and grades can also help maintain vehicle control, especially in wet conditions. For larger vehicles superelevation adjustments on curves can further reduce the potential for crashes. Additionally, barrier systems such as guardrails may be installed in high-crash-potential areas to prevent vehicles from entering roadside areas.

Total Crashes

164

17% of all crashes

Total KA

36

35% of all Fatal and Serious Injury crashes

Total VRU Involved

0

0% of all VRU involved crashes

Top Contributing Circumstances:

- DUI
- Over speed limit
- Driving too Fast for Conditions
- Ran off Road

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Rumble Strips	Center Line: 8 - 39% Edge Line: 11 - 13%	\$
Improving road shoulder	Stabilized: 15% Paved: 25%	\$\$
Clear zone with slope flattening	22 - 44%	\$\$\$



4. Fixed Objects/Roadway Departure

Roadway Departure/Fixed Object crashes are common and have many available safety countermeasures. Systemic applications that improve safety include enhanced signing and road markings, which help motorists understand changes in the roadway, such as alignment shifts or intersections. Adding enhanced roadway delineation and lighting, such as post-mounted delineators and street or intersection lighting, further guides motorists. In areas of the city with rural characteristics, centerline and edge-line rumble strips are effective countermeasures, warning drivers when they leave their travel lane. The cut-in rumble strip is the most effective, while rolled-in rumble strips can be used when the pavement thickness is inadequate, though they are less common. Other options include audible pavement markings and thermoplastic or ceramic disks placed within the striping, which provide a similar effect but without the vibratory or loud sound of rumble strips.

Total Crashes

948

30% of all crashes

Total KA

50

31% of all Fatal and Serious Injury crashes

Total VRU Involved

0

0% of all VRU involved crashes

Top Contributing Circumstances:

- DUI
- Over speed limit
- Ran off Road

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Centerline and edge line rumble strips with edge line striping	8 - 39%	\$
Improving the roadside shoulder	20 - 25%	\$\$
Clear zone improvements	22 - 44%	\$\$\$



5. Vulnerable Road Users

Pedestrian crashes are more common than bicyclist crashes, but systemic safety countermeasures for VRUs generally address both. Pedestrian crashes often occur away from intersections and bicyclist crashes are common along roadway segments. To improve pedestrian safety, enhancing crosswalk visibility at intersections and midblock crossings is key. Countermeasures include improving stopping sight distance, adding advance yield markings and signs, installing raised medians, crosswalks, and installing rectangular rapid flashing beacons or pedestrian hybrid beacons. At signalized intersections, providing pedestrian signal indications and implementing leading pedestrian intervals are effective strategies. The Smart Channel right-turn design can also improve the safety of the intersection for both VRUs and drivers. Systemically, implementing walkways, sidewalks, paths for pedestrians, and bicycle lanes for bicyclists reduces VRU crashes significantly. Bicycle lanes also reduce motor-vehicle crashes and lower vehicle speeds when applied, benefiting both pedestrians and cyclists.



Top Contributing Circumstances:

- Improper Crossing
- Unseen Object / Person / Vehicle
- Over speed limit
- Misjudged Stopping Distance

Safety Countermeasure	Crash Reduction Factor	Estimated Cost
Provide walkways, sidewalks, and paths for pedestrians and bicycle lanes for bicyclists	2 - 59%	\$ - \$\$\$
Crosswalk enhancements	7 - 57%	\$ - \$\$\$
Designated bicycle routes along with signing and markings	Unknown	\$

High Injury Network

The crash database uses the KABCO Crash Severity Designation, a scale recommended as best practice for individual injury reporting under the Model Minimum Uniform Crash Criteria (MMUCC) developed by the National Highway Traffic Safety Administration (NHTSA).

In Alabama, the KABCO scale is applied during field data collection for crash incidents. The severity of a crash is based on the greatest severity of injury occurring in the crash.

- **K** – Fatal Injury;
- **A** – Suspected Serious Injury;
- **B** – Non-Incapacitating Injury;
- **C** – Possible Injury;
- **O** – Property Damage Only
- **U** – Unknown

Crashes in Elmore County were mapped using a technique called High Injury Network (HIN). The development of the HIN involved assigning an Equivalent Property Damage Only (EPDO) score to each crash. This score is based on the collision's severity and is used to standardize the crash severity to a comparable level. The EPDO method assigns a value to each crash based on the KABCO injury severity scale and associated comprehensive crash cost. The crash cost is based on research conducted by the Federal Highway Administration (FHWA), which develops national crash costs for use as default crash unit values.

This process enabled a data-driven approach to analyze the road network for effective prioritization in safety improvement strategies across the study area. **The purpose of the score is to prioritize projects based on the combination of crash frequency and severity.**

Table 4.2 — Costs Based on Crash Severity

Crash Severity	Crashes	Crash Cost	Total Cost	Crash Severity	Weighted Average Costs	Weighted Score*
K	47	\$ 12,500,000	\$ 575,000,000	KA	\$ 3,150,025	630.0
A	224	\$ 1,188,200	\$ 266,156,800			
B	876	\$ 233,800	\$ 204,808,800	B	\$ 233,800	46.8
C	859	\$ 111,700	\$ 95,50,300	C	\$ 111,700	22.3
O	7,336	\$ 5,000	\$ 36,680,000	O	\$ 5,000	1.0
U	145	\$ 217,600	\$ 31,552,000	U	\$ 217,600	43.5

* Weighted Score Equivalent to a Property Damage Only Crash

Safety Analysis and Countermeasure Selection

When evaluating safety countermeasures, there are two key aspects to consider when studying crash data:

Frequency	Severity
Determines how likely and frequent a crash is to occur	Categorizes the potential impact of the crash if it does occur

Developing and documenting a complete list of countermeasures regardless of any immediate or circumstantial constraints is advisable as some of the safety projects become feasible or funding opportunities arise.

The table below illustrates how to use frequency and severity to prioritize locations for treatment. For example, a location with a low crash frequency and minor injury severity level would be considered a low priority for intervention. In contrast, a location with frequent crashes resulting in serious or fatal injuries would be classified as the highest priority for treatment.

Table 4.3 — Frequency and Crash Severity

Frequency of Crashes	Enhanced Crash Severity Level			
	Possible / Minor Injury	Moderate Injury	Serious Injury	Fatal
Frequent	Middle-High	High	Highest	Highest
Occasional	Middle	Middle-High	High	Highest
Infrequent	Low	Middle	Middle-High	High
Rare	Lowest	Low	Middle	Middle-High

The High Injury Network presents locations that have been screened for both severity and frequency. Selecting locations from these maps is a way to ensure that these locations have been prioritized through a data driven process that takes both frequency and severity into consideration.

High Injury Network mapping was also developed for the top crash rural trends in the County.

A threshold was established using aggregate EPDO scores, and only locations with EPDO values above the 80th percentile were included in the High Injury Network. This approach ensures that the HIN focuses on the most critical locations with the greatest potential for safety improvements.

Figure 4.6 — Elmore County High Injury Network

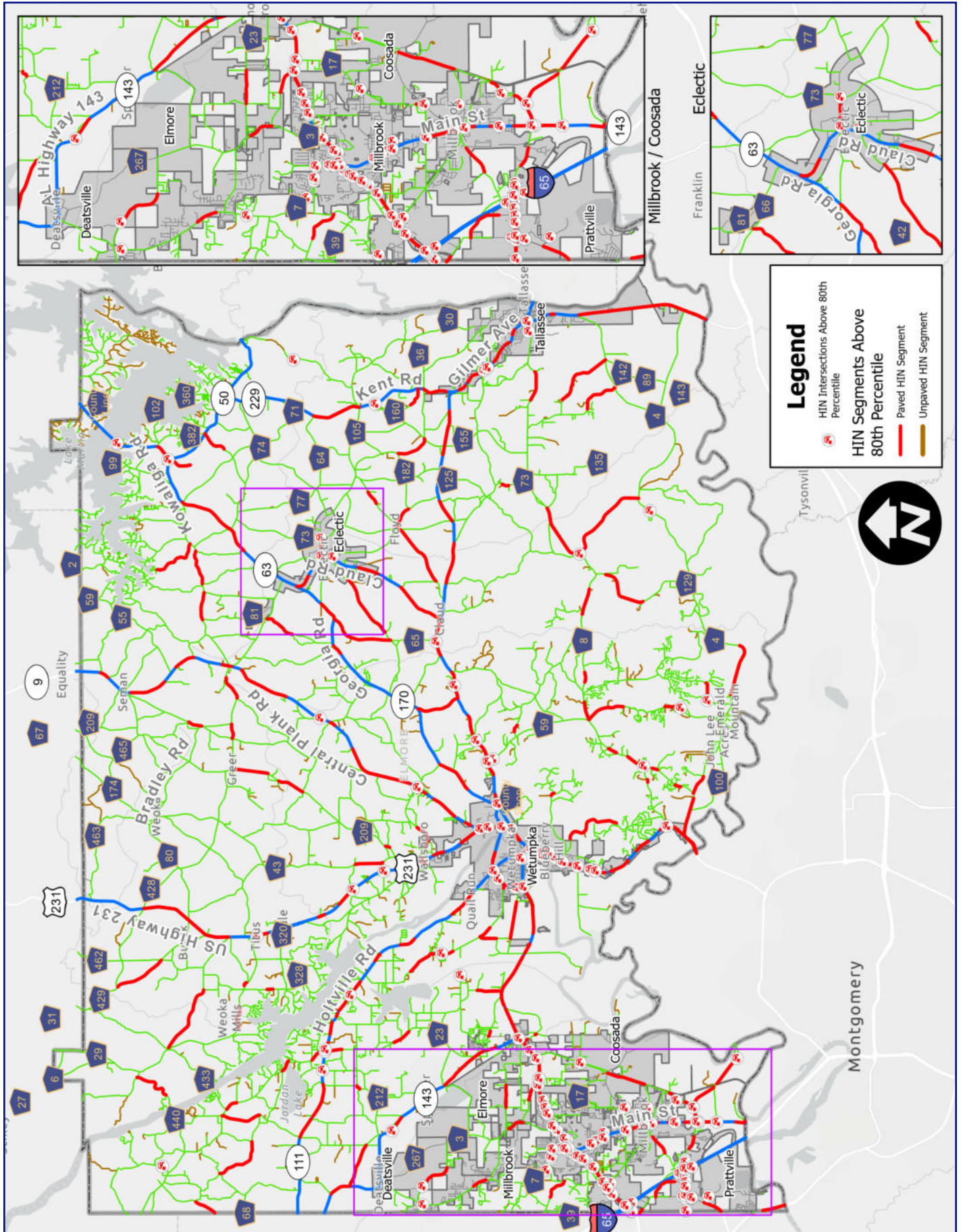


Figure 4.8 — Negotiating A Curve Crashes High Injury Network

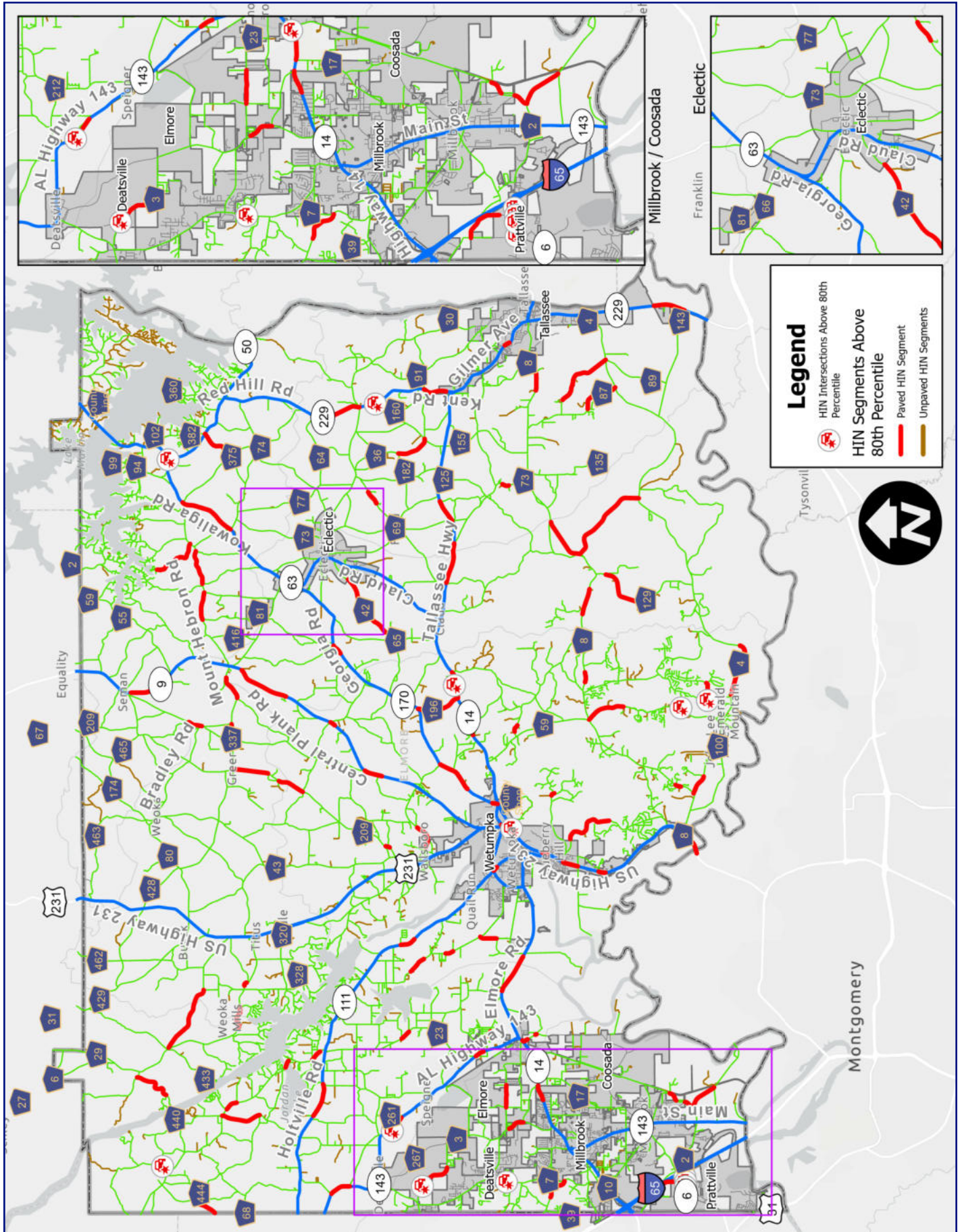
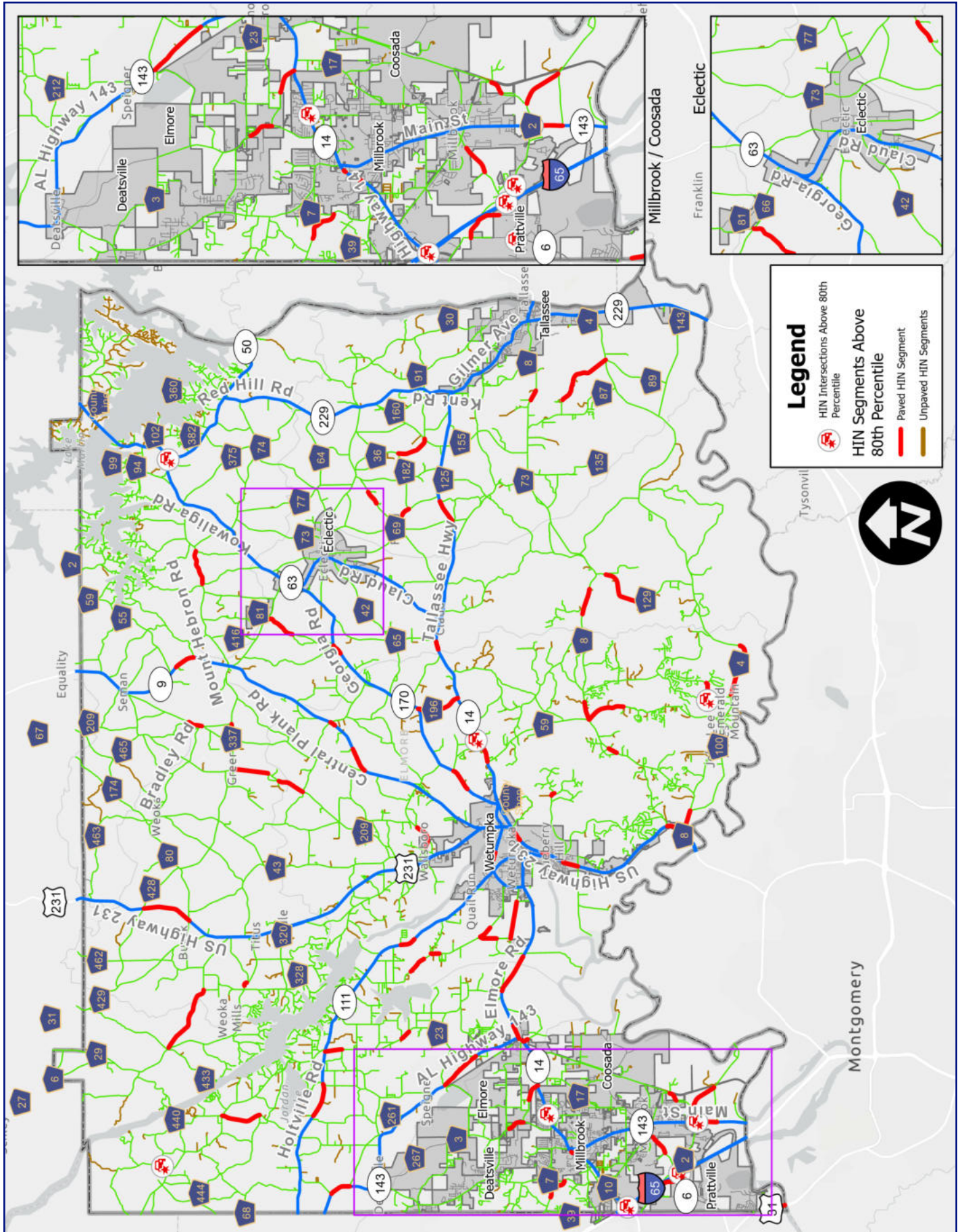


Figure 4.9 — Overtun / Rollover Crashes High Injury Network



05

Public Engagement

Public Involvement

Engagement with local communities, multidisciplinary stakeholders, and residents across Elmore County played a critical role in determining the focus of this Safety Action Plan. The goals of the plan were shaped through a collaborative process that incorporated conversations and feedback from the community, stakeholder dialogue, and supporting data and evidence. Continued strategic collaboration will be essential to ensure the plan's successful implementation.

To enhance coordinated efforts across Elmore County, a set of public involvement goals were established to reinforce and expand the existing collaborative network.

Public Involvement Goals:



1. Increase recognition, engagement, and acceptance of the importance of transportation safety.

Use branding and consistent messaging to help citizens recognize and respond to outreach efforts and build acceptance of transportation safety as a shared responsibility of all community members in Elmore County.



2. Build trust in the community for decisions developed in the Safety Action Plan process.

Use data-driven analysis and transparent communications to build trust among citizens in the legitimacy of the Safety Action Plan process and its recommendations.



3. Encourage community collaboration through information sharing and education.

Conduct collaborative workshops with stakeholders to share detailed technical data, gather feedback, and encourage consensus-based decision making. Use surveys and pop-up engagements at community events to share information and gather public input.



4. Establish communication channels and build a following for ongoing messaging and education about transportation safety.

Develop and post safety-related content on the County's social media platforms and website to build followers, disseminate educational resources, and improve the transportation safety culture in Elmore County.



5. Incorporate community knowledge into the Safety Action Plan's analysis and recommendations.

Gather insights from a public survey and community engagement feedback to enhance and refine the data-driven safety analysis and recommendations.

These goals were accomplished through the following tasks:

Branding

A project logo and branding standards were developed for print and social media.

Project Webpage

A [project webpage](#) was created to provide details on the SS4A program, the County's crash statistics and trends, and a link to the survey.

Safety Action Task Force

A task force was assembled with a broad, multidisciplinary team. Three task force meetings were held throughout the life of the project, and the task force members helped review, engage, and include community specific feedback on the Safety Action Plan.

Broad Public Outreach

Engagement with the public was conducted through a community survey centered around road safety concerns. The survey was distributed both online and at in-person settings, such as the project website, community events, social media platforms, meetings, and promotional materials and advertisements. The survey was posted on the project website and shared regularly through social media posts and via postcards at several public engagement events, resulting in 684 survey responses. This outreach strategy aimed to capture local knowledge to help identify areas of concern, behavioral patterns, and safety challenges—ensuring that final recommendations reflected both data-driven analysis and community priorities.



Safety Concerns

- Possible Traffic Signals needed at several locations throughout the County
- Speeding Issues
- Sidewalks and Shared-Use Paths near Developing Neighborhoods
- Overgrown Vegetation causing sight distance issues



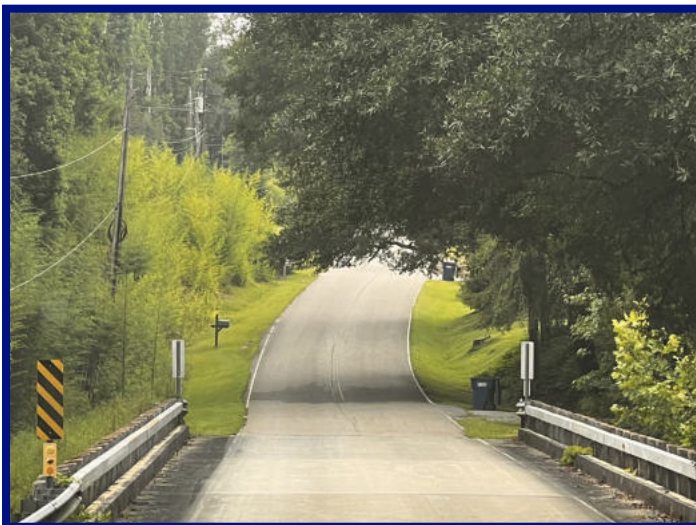
Capacity Issues

- Lane Widening
- Turn Lanes
- Access Management



Maintenance

- Potholes
- Pavement Maintenance
- Overgrown Vegetation



Sight Distance Issues from Overgrown Vegetation



Elmore County SS4A Website

Public Engagement Events

To maximize impact and efficiency, public engagement activities were strategically coordinated with local organizations already hosting community-focused events, reinforcing strong partnerships across Elmore County. Partner organizations that hosted events included the City of Millbrook, the City of Wetumpka, and First United Methodist Church.



Mardi Gras Parade and Festival March 1, 2025

The Wetumpka Mardi Gras Festival was a family-friendly event that hosted over 15,000 attendees, fostering a strong sense of community engagement across the region. This event was a great opportunity to not only introduce the project to the Elmore County community but, also, to distribute survey postcards.

Millbrook Mayfest May 17, 2025

Millbrook's annual Mayfest, held at Village Green Park, was a vibrant, family-friendly spring celebration that supports local culture, small businesses, and community engagement. The 2025 event featured over 50 vendors, food trucks, live music, children's activities, and themed entertainment.



Prime Timers Focus Group – Millbrook First United Methodist Church September 8, 2025

The Prime Timers is the senior adult ministry of Millbrook First United Methodist Church. During the September 2025 meeting, the Prime Timers participated in a focus group discussion as part of the Safe Streets and Roads for All Safety Action Plan for Elmore County. A brief overview of the SS4A program was presented to introduce the purpose of the study. Following the presentation, attendees were invited to complete a paper version of the community safety survey, sharing their personal experiences and concerns related to local roadway safety.

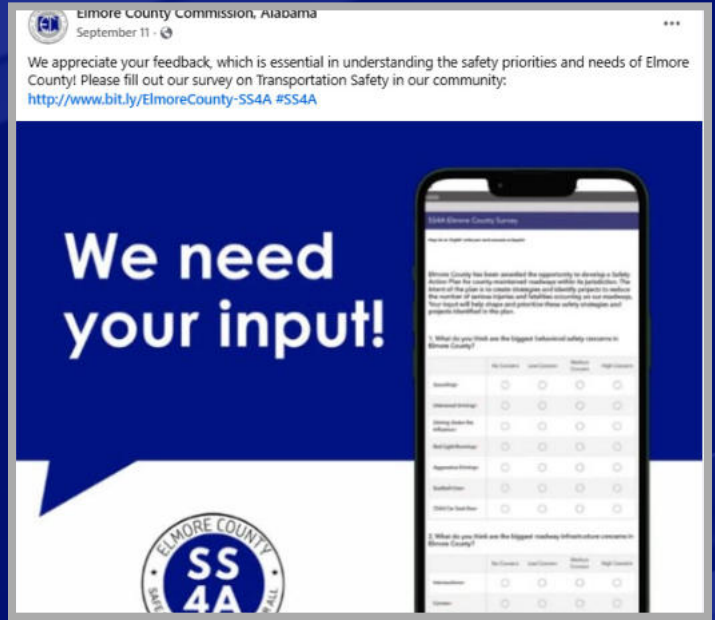
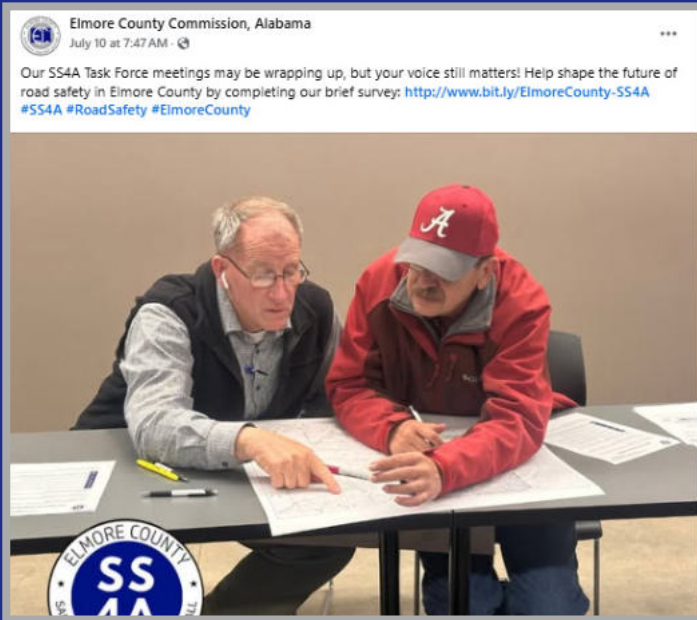


OLDER DRIVERS (65+) WERE INVOLVED IN

- **20.3%** of all crashes.
- **19.6%** of KA crashes.
- **53%** of KA intersection crashes.

Online Outreach

Online outreach promoted a digital platform to educate Elmore County residents about the Safe Streets for All program, communicate local crash statistics and trends, and engage the community by providing access to an online survey to gather input about roadway safety concerns on county-maintained roadways.



Community Engagement at a glance



684

Online Public Survey Comments



3

Community Events

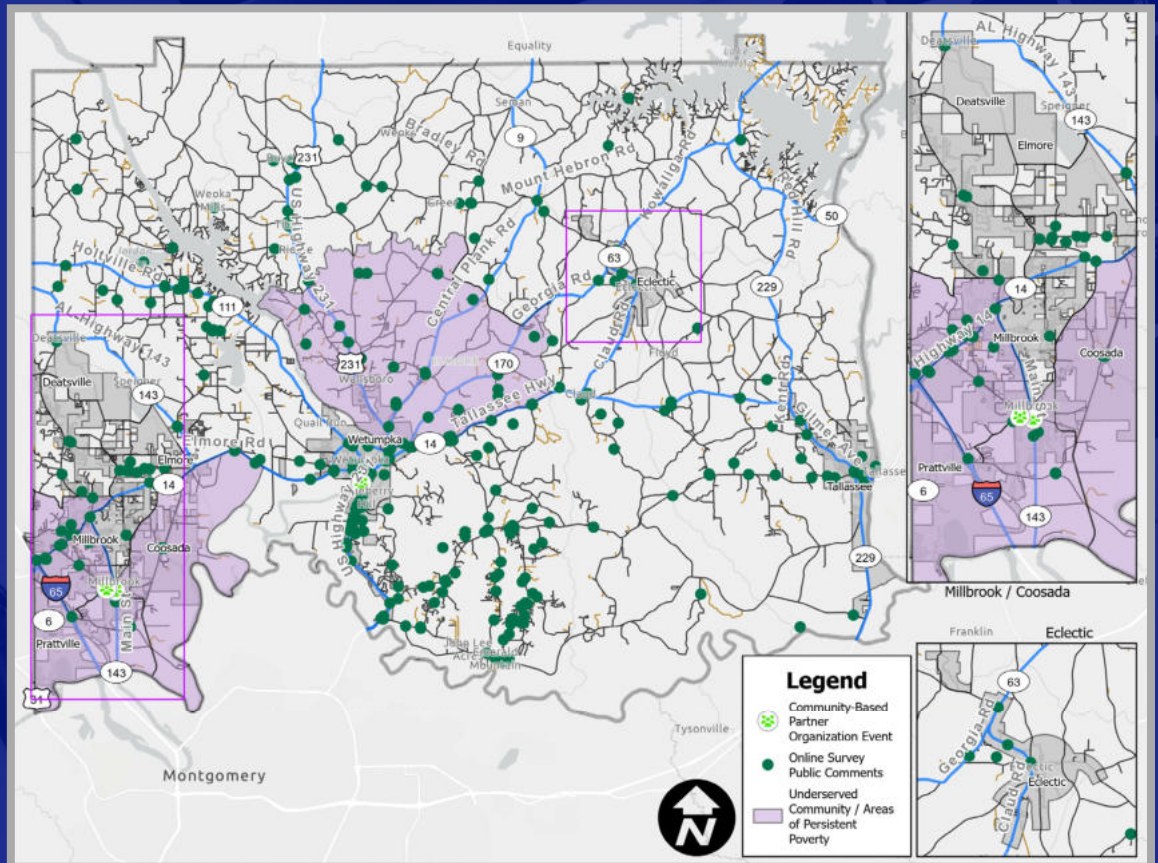


Figure 5.1 — Community Engagement

Task Force Meetings

1

Task Force Meeting #1 January 14, 2025

Goal:

- Present an overview of the Safety Action Plan and its objectives, introduce the Safe System Approach, and gather feedback on public engagement opportunities within each community. Review existing standards and practices and begin identifying long-term safety priorities and needs.

2

Task Force Meeting #2 April 8, 2025

Goal:

- Share updates on public engagement activities and preliminary survey findings. Facilitate a prioritization exercise to identify key factors that influence safety-related project selection. Introduce crash trends identified through the crash data analysis and present the High Injury Network methodology.

3

Task Force Meeting #3 August 6, 2025

Goal:

- Provide an update on field review observations and obtain input on potential strategies and solutions as the plan is refined and appropriate countermeasure recommendations are developed.



Public Feedback

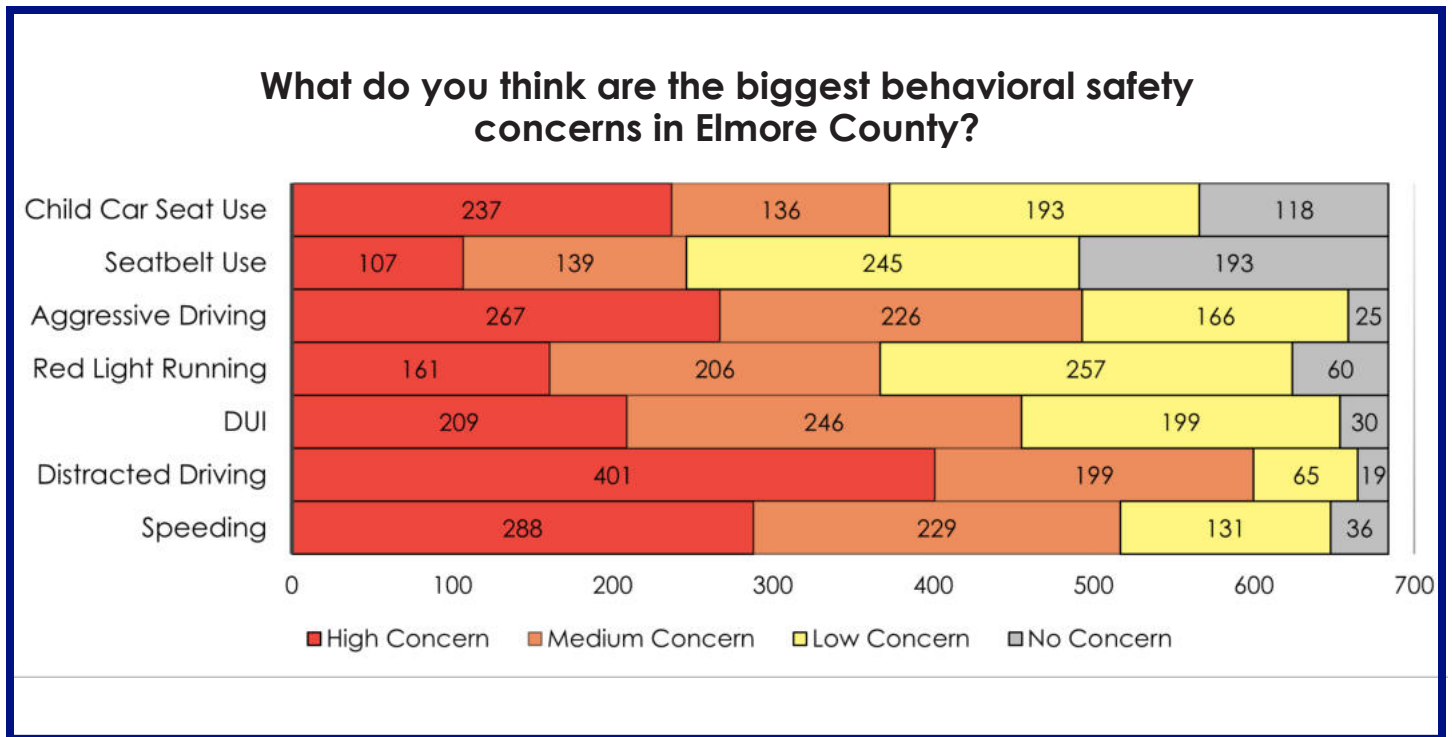


Figure 5.2 — Public Behavioral Safety Concerns in Elmore County

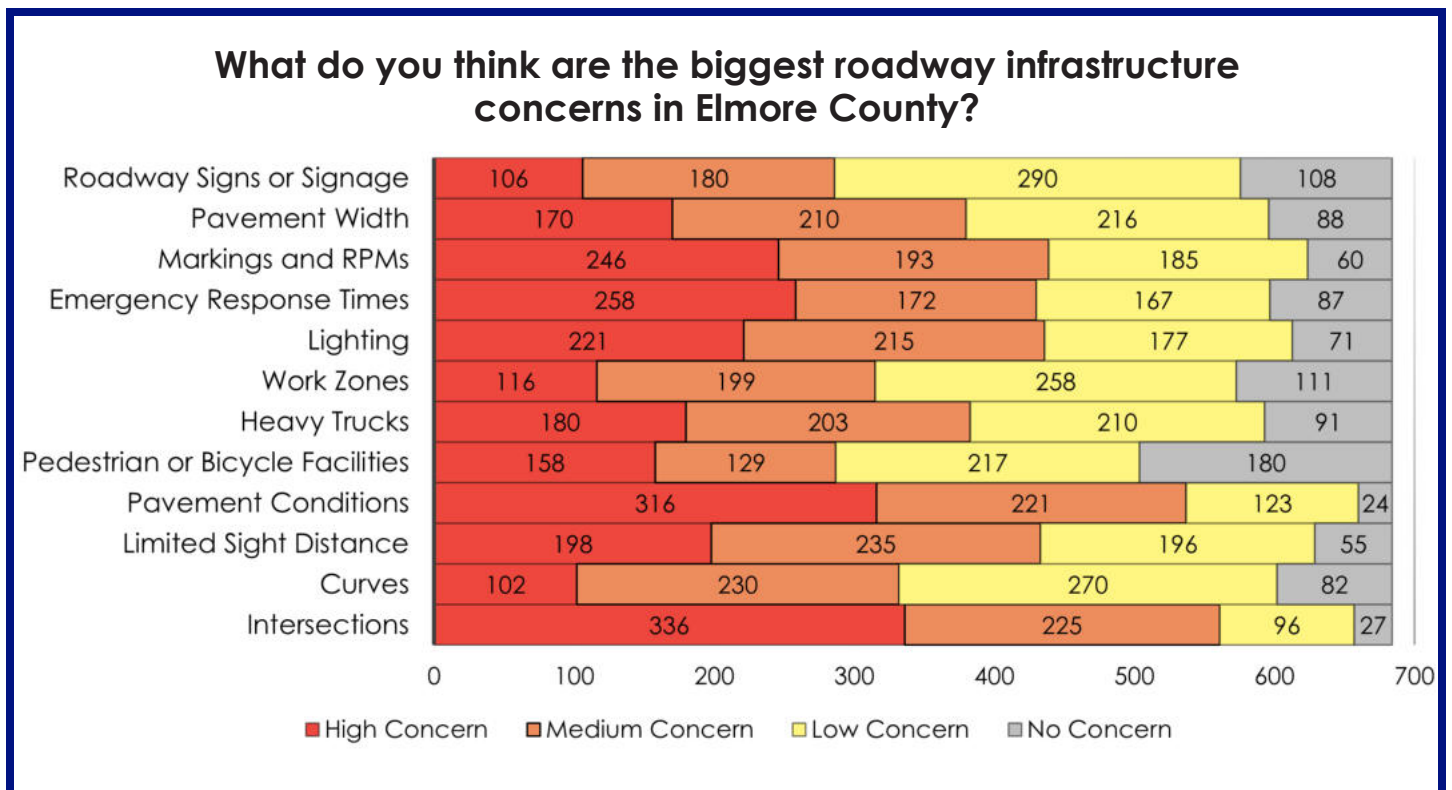


Figure 5.3 — Public Roadway Infrastructure Concerns in Elmore County

06

Equity Considerations

Underserved Community/Areas of Persistent Poverty

The Safety Action Plan was developed with a focus on equitable strategies to reduce the number of fatal and serious injury crashes. Underserved census tracts were identified using the SS4A Identifying Underserved Communities Tool. The SS4A Underserved Communities Tool's definition is consistent with the definition of an Area of Persistent Poverty (AoPP) in the Infrastructure Investment and Jobs Act (IIJA, 49 USC 6702(a)(1)).

For the purposes of this report and the guidance provided in the Notice of Funding Opportunity (NOFO) issued on March 28, 2025; the definition of Areas of Persistent Poverty and Underserved Community is as follows:

Areas of Persistent Poverty (AoPP) are defined as:

- Any County that has consistently had greater than or equal to 20 percent of the population living in poverty during the 30-year period preceding November 15, 2021, as measured by the 1990 and 2000 decennial census and the most recent annual Small Area Income Poverty Estimates as estimated by the Bureau of the Census.
- Any census tract with a poverty rate of at least 20 percent as measured by the 2014 – 2018 5-year data series available from the American Community Survey of the Bureau of the Census
- Any territory or possession of the United States.

Underserved Community will use the same definition as Areas of Persistent Poverty for the purposes of this report.

An equity analysis was conducted to identify potential disparities in roadway safety outcomes across underserved communities illustrated in Figure 6.1. This analysis incorporated roadway centerline mileage, census tract boundaries, crash severity data, and the defined criteria used to identify underserved communities. This approach enhances the understanding of any localized transportation safety disadvantages and risks experienced by Elmore County's underserved communities.

Table 6.1 summarizes key demographic and roadway safety indicators for both underserved and non-underserved communities in Elmore County. This table presents a comparative overview of population, roadway centerline mileage, crash outcomes, and crash rates per 100,000 population across underserved and non-underserved census tracts within the County.

Additional demographic and socioeconomic data for Elmore County was considered and evaluated to further understand where the underserved communities are located to ensure that recommended improvements are implemented in the communities that need them the most. Figures 6.2 – 6.5 demonstrate the distribution of median age, median household income, percentage of minority population and percentage of households with no vehicle in each census tract of the County.

Table 6.1 — Underserved Community Equity Analysis

	Elmore County	Non-Underserved Communities		Underserved Communities	
Total Population	89,724	68,587	76%	21,137	24%
Centerline Miles	2,003	1,532	76%	471	24%
Total Crashes	8,969	7,768	87%	1,201	13%
Resulting Fatalities	53	44	83%	9	17%
Resulting Serious Injuries	255	189	74%	66	26%
Fatality Rate per 100k population	12	13		9	
Serious Injury Rate per 100K Population	57	55		62	

The equity comparison of Elmore County indicates that underserved communities account for 24% of the County's population and 24% of the centerline mileage, illustrating comparable exposure to the roadway network relative to population size. Non-underserved communities contain the majority of the population and roadway centerline miles, at 76% each. Non-underserved communities also account for a higher percentage of fatal, serious injuries, and total crashes.

Crash outcomes in Elmore County vary by severity. While underserved communities account for only 13% of total crashes, they experience a higher share of severe outcomes, including 17% of fatalities and 26% of serious injuries. In contrast, non-underserved communities account for 87% of crashes, but a lower proportional percentage of serious injuries relative to their population and roadway mileage.

Although the annualized fatality rate per 100,000 population is slightly higher in non-underserved communities (13%) compared to underserved communities (9%), the serious injury rate per 100,000 population is slightly higher in underserved communities (62%) compared to non-underserved communities (55%). This illustrates that fatal crashes are more evenly distributed across the County and may be influenced by other behavioral and infrastructural conditions that are more common outside of the underserved communities. However, serious injury rates are higher in underserved communities (62%) compared to non-underserved communities (55%) indicates that while crashes in underserved areas may be less likely to result in fatalities, they are more likely to result in serious injuries. This pattern may be associated with differences in roadway design and operational characteristics, including but not limited to access management, lighting, multimodal activity and the presence of vulnerable road users. Overall, this indicates that underserved communities may experience a serious injury relative even though those communities have less of the population and centerline miles. This analysis supports the prioritization of safety strategies that address crash severity, survivability, and improved roadway design and operational conditions in the underserved communities of Elmore County.

Figure 6.1 — Elmore County Underserved Communities/Areas of Persistent Poverty

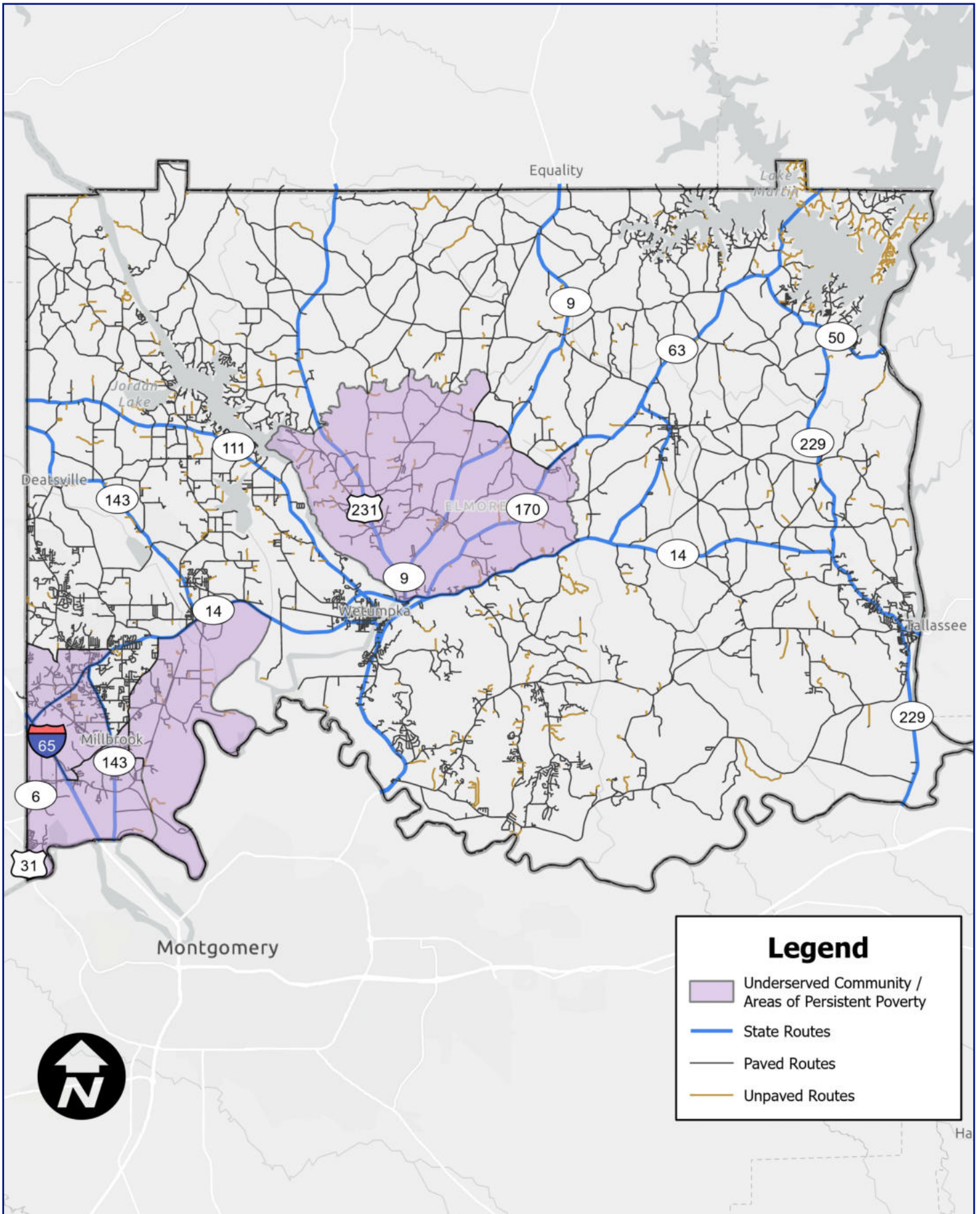
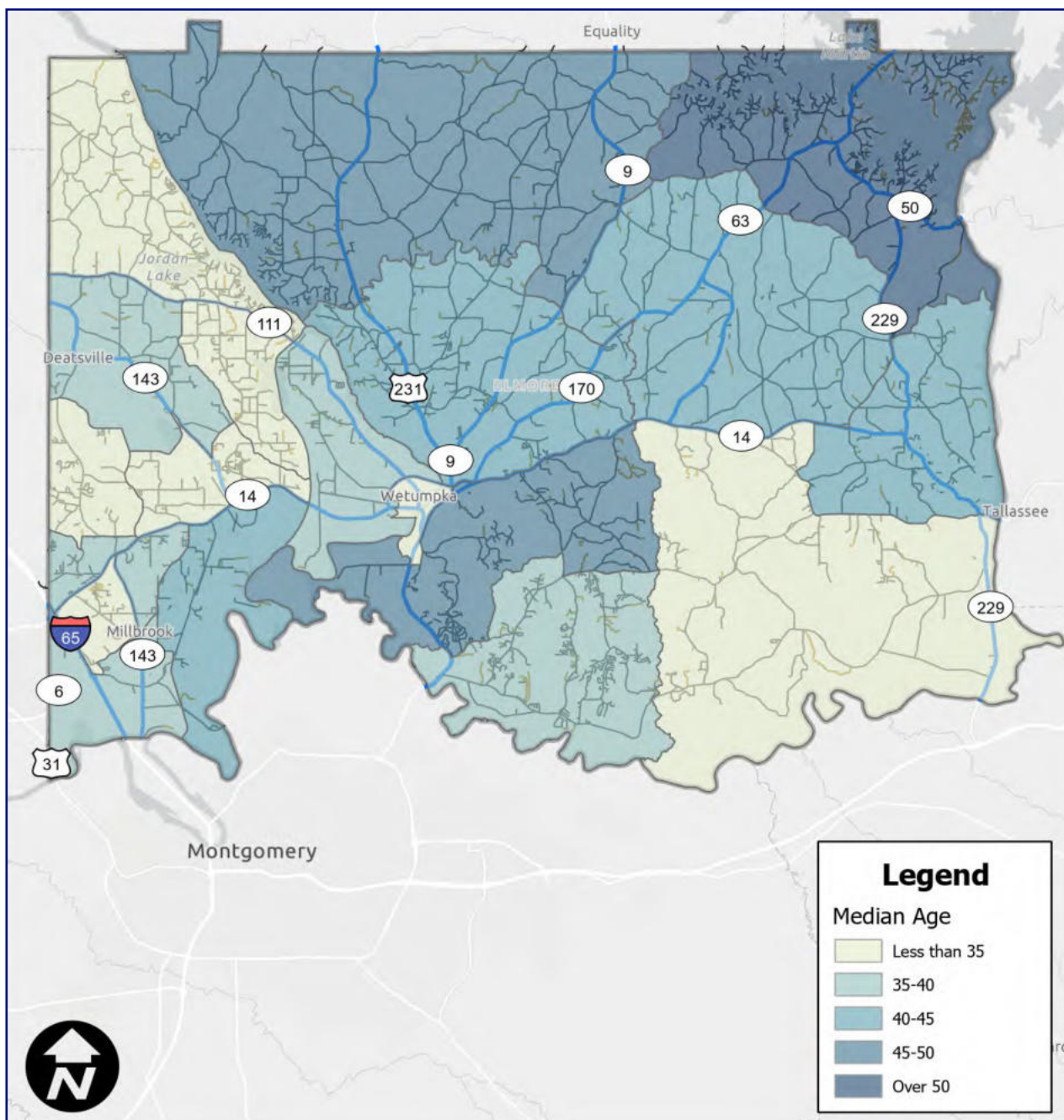


Figure 6.2 — Median Age in Elmore County



As shown in Figure 6.2, areas with higher median ages (45-50 and over 50) are primarily concentrated in the northern, northeastern, and southcentral areas of the County. Areas with higher concentrations of older residents may experience increased vulnerability to traffic safety outcomes because roadways serving older populations often lack design features that mitigate crash forces or accommodate slower reaction times. Research shows that older adults tend to experience more severe outcomes when involved in crashes, due to increased physical fragility and longer recovery times. Although this map does not show crash locations, the concentration of older populations in these census tracts highlight the importance of prioritizing safety countermeasures that reduce crash severity and improve roadway design strategies that better accommodate human error and physical vulnerability.

Figure 6.3 — Median Household Income in Elmore County

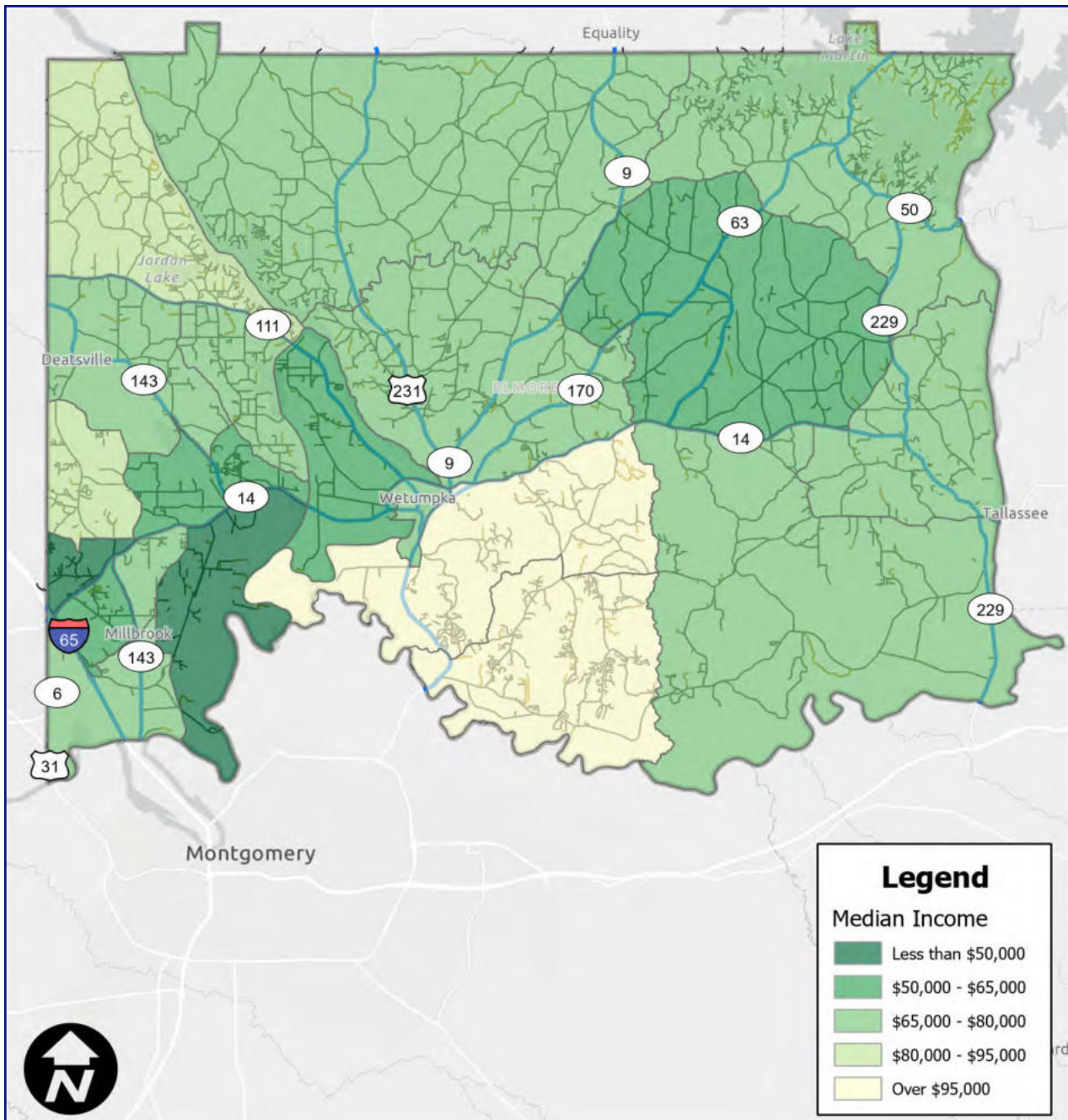
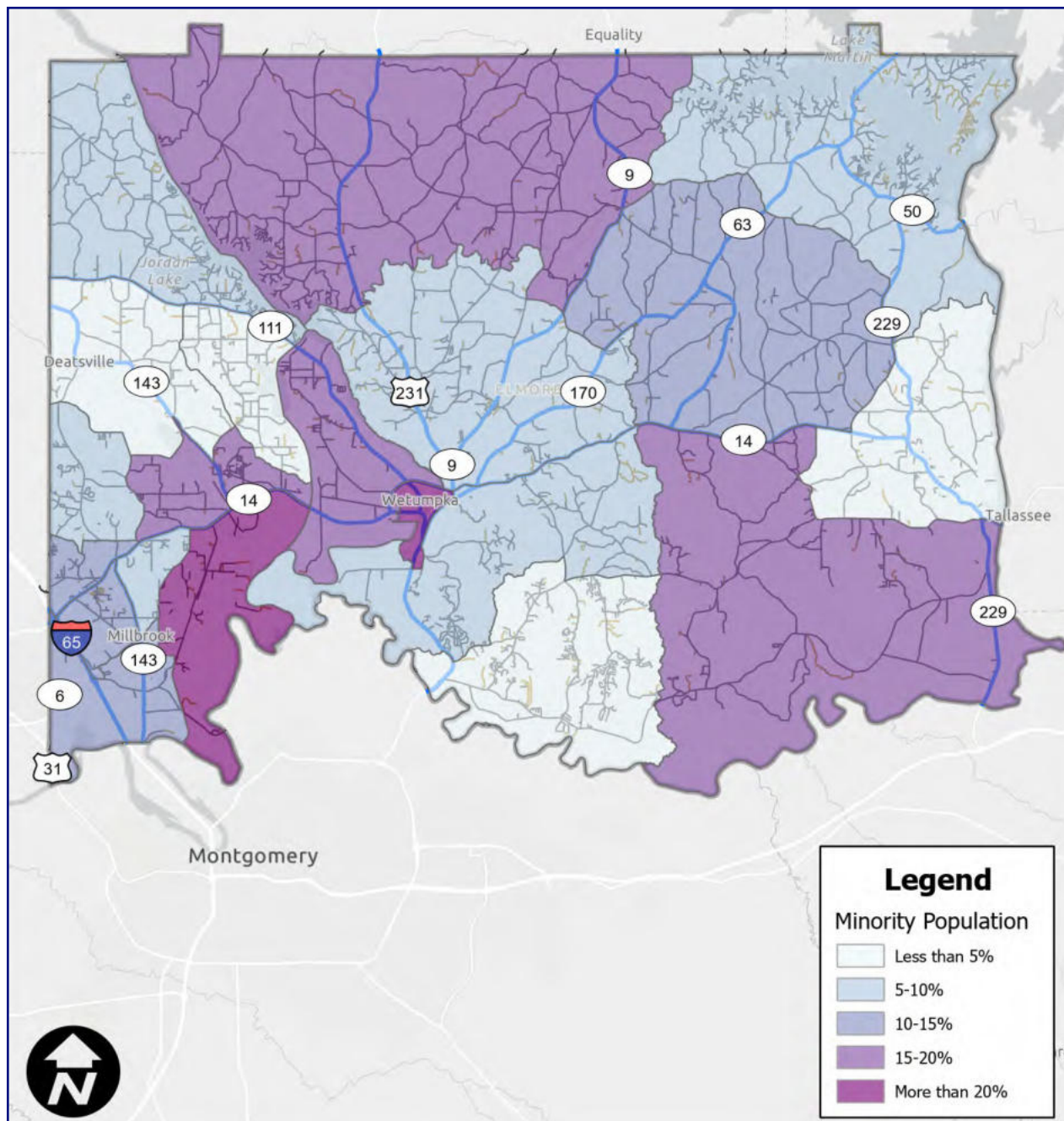


Figure 6.3 represents the Household Median Income across census tracts in Elmore County. A review of this economic metric indicates that the southwestern and some of the western areas of the County have lower median incomes, commonly below \$50,000 or within the \$50,000–\$65,000 range. Lower-income communities often experience transportation safety disadvantages, including limited access to reliable vehicles, fewer transportation alternatives, older roadway infrastructure with deferred maintenance schedules and, in many cases, limited access to a vehicle at all. Individuals without reliable transportation may be forced to walk along roadways that are often designed to prioritize motor vehicle travel. These designs typically have limited accommodation for pedestrians, bicyclists, and other vulnerable road users, such as lighting, sidewalks, marked crossings, and shared-use lanes. When combined with roadway infrastructure that may experience deferred maintenance, these factors contribute to increased exposure and elevated risk of severe crash outcomes for lower-income residents.

Figure 6.4 — Minority Population Percentage in Elmore County



Minority population data is used to help identify communities that often face historical underinvestment in transportation infrastructure, which can result in fewer roadways that are designed to adequately support vulnerable users. According to the U.S. Census Bureau, minority populations, shown in Figure 6.4, include all groups of individuals who identify as a race or ethnicity other than non-Hispanic White. The highest concentration of minority population (more than 20%) is in the southwestern area of the County, while the second highest concentration (15% - 20%) is in the southeastern portion and the northern sections. Minority populations in rural counties can experience conditions that elevate roadway safety risks. In some communities, minority households may experience lower levels of vehicle access and may rely more heavily on walking, bicycling or shared transportation to meet daily needs. In areas without adequate infrastructure to accommodate pedestrians and bicyclists, such as sidewalks, lighting, safe crossings, or shared-use lanes, these vulnerable road users experience increased exposure to traffic and the likelihood of being involved in a severe crash. Socioeconomic disparities can further compound these vulnerabilities, making equitable safety improvements particularly important in minority communities.

Figure 6.5 — Percentage of Households with No Vehicle in Elmore County

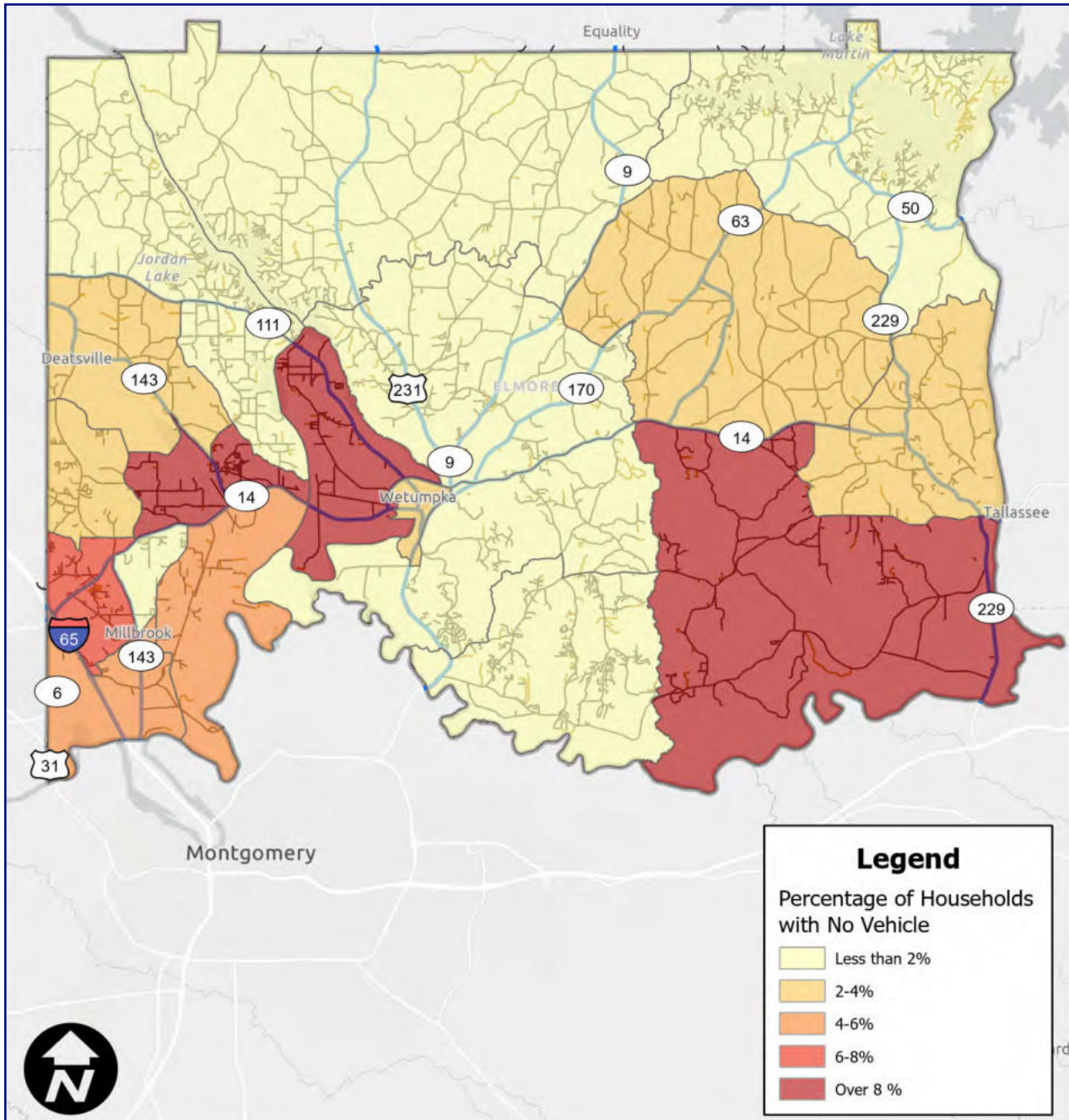


Figure 6.5 depicts the percentage of households with no vehicle in Elmore County. The southwestern and southeastern sections of Elmore County demonstrate the highest concentration of households that do not have access to a vehicle. This means many residents depend more heavily on walking, bicycling, or other shared ride options, which increases their exposure to traffic conflicts, particularly in communities that were historically designed to prioritize vehicles over other modes of transportation. In a rural area with limited pedestrian and bicyclist infrastructure, this lack of vehicle access can heighten safety risks for vulnerable road users.

07

Project Selection & Countermeasures

The initial site selection was guided by the High Injury Network (HIN), which identifies locations with above-average equivalent property damage only (EPDO) scores and includes sites with fatal or serious injury (KA) crashes. Subsequently, the High Injury Network sites and segments were classified into two distinct groups.

- Roads recommended for **systemic safety countermeasures implementation**.
- **Site-specific locations**, such as intersections or short road segments, that highlight the need for further attention through the implementation of targeted safety countermeasures.

Within the Systemic and Site-Specific Safety categories, a weighted scoring scheme was employed to prioritize locations based on factors that both measure and influence crash frequency and severity: EPDO score, average annual daily traffic (AADT), truck percentage, functional classification, paved or unpaved, and number of travel lanes. The ranked Systemic and Spot-Safety project lists were segmented into three implementation time horizons:

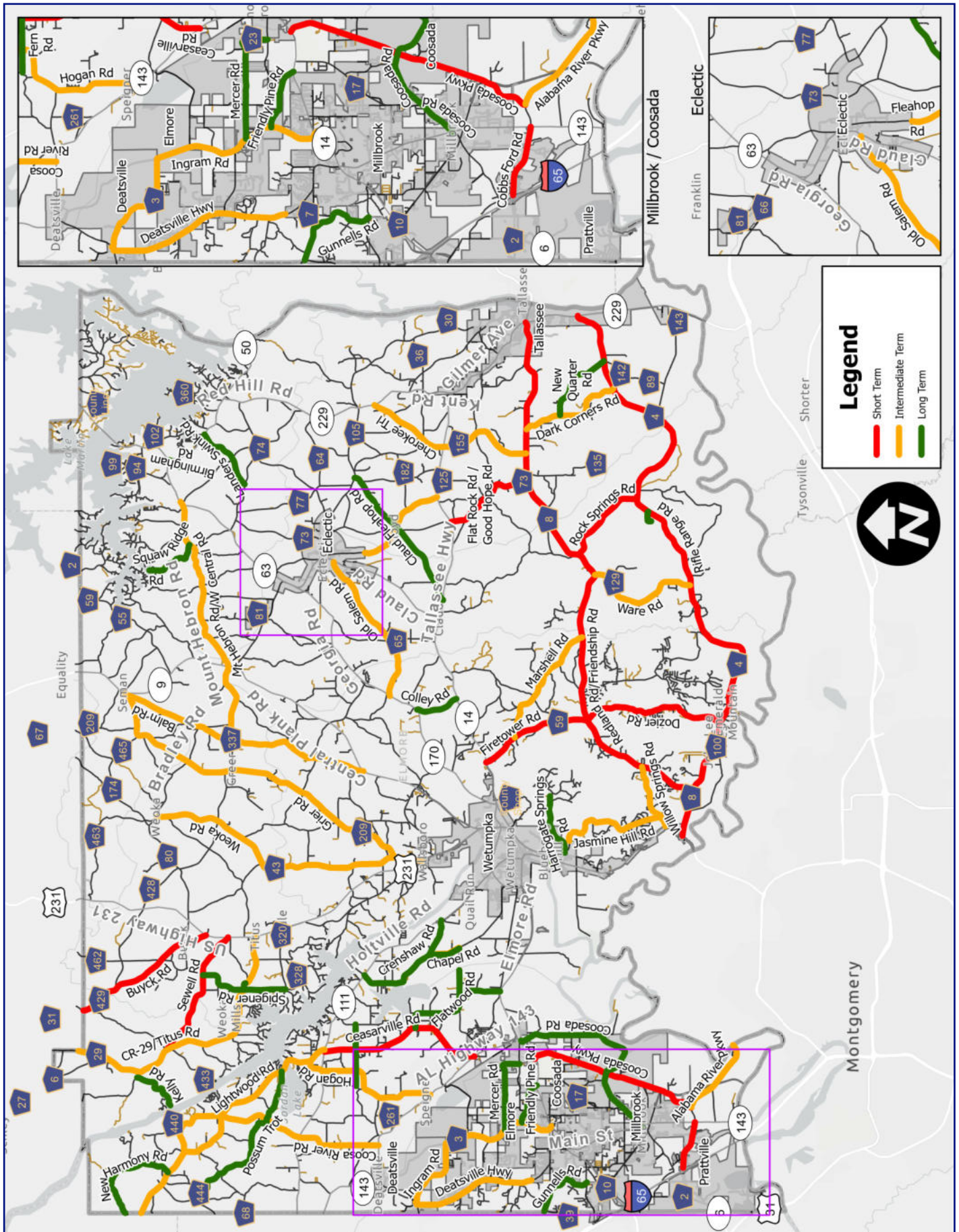
- **Short-Term** – sites identified for the first phase of action based on overall evaluation of site conditions and characteristics.
- **Intermediate-Term** – sites selected for action following the short-term locations, reflecting a moderate need for improvements.
- **Long-Term** – sites planned for action in the final phase, addressed after completion of short- and intermediate-term sites.

Projects were selected for the Safety Action Plan through a data-driven methodology aligned with the priorities established by the Safety Action Task Force.

Table 7.1 — Safety Task Force Priorities for Selecting Safety Projects

Rank	Criteria
1	<p>Number of fatal and serious injury crashes</p> <p>Prioritize areas with a high frequency of fatal and serious injury crashes. The objective is to focus on routes where the most severe crashes take place.</p>
2	<p>Location is on the High-Injury Network</p> <p>This network includes roadways on which a disproportionate number of crashes of weighted severity occurred. Prioritizing projects on these routes helps focus resources on locations with documented safety factors.</p>
3	<p>Project Cost Range</p> <p>Certain safety enhancements can have a substantial impact but involve significant expenditure, such as the construction of a roundabout. Conversely, some measures may be relatively inexpensive yet still deliver meaningful benefits, for example, the installation of new signage or markings. Given the emphasis on cost, the County should maintain a strong focus on fiscal responsibility, initially prioritizing low-cost initiatives that demonstrate a positive return on investment.</p>
4	<p>Constructability</p> <p>Evaluates the practicality of project implementation considering factors such as right-of-way restrictions, utility conflicts, and environmental considerations. Projects that are simpler to construct are likely to be completed more rapidly and with fewer impediments.</p>
5	<p>Involvement of Pedestrians and Bicyclists</p> <p>The focus is on areas where pedestrians and bicyclists are often involved in crashes. Vulnerable road users face a greater likelihood of serious injury or fatality; therefore, prioritizing these locations can improve safety for non-motorized travelers.</p>
6	<p>Located in an Underserved / Persistent Poverty Area</p> <p>These areas generally receive less funding for safety enhancements and infrastructure, often leading to more frequent and severe crashes. Prioritizing these locations directs resources to communities with the greatest need for critical safety improvements.</p>

Figure 7.1 — Systemic Routes



Short-term Systemic and Site-specific project lists are provided in Tables 7.2 and 7.3. Intermediate and Long-term projects are included in the Appendix. All project sites were selected from the High Injury Network.

Each list contains the following information:

Route	Name or designation of the roadway segment where the project is located.
Termini	The beginning and ending points of the roadway segment under consideration.
KA Crashes	Total number of fatal and serious injury (K and A) crashes that occurred within the project limits during the analysis period.
Total Crashes	Total number of reported crashes of all severities within the project limits during the analysis period.
Public Engagement	Identifies whether the project location was mentioned or prioritized through the public engagement process, including the community survey.
Underserved Community	Indicates whether the project location falls within the boundaries of an identified Underserved Community.
Focus Areas	Describes the type of crashes that were found to have occurred at these sites.
List of Potential Countermeasures	Safety treatments or strategies indicated the crash patterns and safety issues identified at the site.
Strategies for Initial Consideration	Countermeasures indicated from cross sectional characteristics. A detailed road safety assessment is recommended to develop specific safety improvement plans
Cost Estimate	Approximate level of resources required to implement the recommended safety countermeasures, categorized as follows:

Key for Countermeasure Cost Estimates



Requires extensive new facilities, staff, equipment, or publicity, or makes heavy demands on current resources.



Requires some additional staff time, equipment, facilities, and/or publicity.



Can be implemented with current staff, perhaps with training; limited costs for equipment, facilities, and publicity.

Systemic Countermeasures

Local and rural road owners rely on crash data to identify and treat safety concerns. The traditional approach to safety has been focused on addressing specific locations based on crash history. The systemic approach acknowledges that crash frequency at specific locations alone is not always sufficient to determine which countermeasures to implement and where to implement them.

One thing that we understand about crashes is that they are random and rare occurrences, and that fatal and serious injury crashes are even more random and even more rare. Therefore, only focusing on remedying “spot locations” where severe crashes have already occurred would be a reactive approach to safety.

This is often true on low-volume local and rural roadways where crash frequencies are lower and crash data are sometimes sparse or incomplete. Systemic implementation of safety countermeasures helps to address the most serious crash types on the entire road system, not just at specific high-crash or high-severity spot locations.

The systemic safety approach is a two-pronged effort to reduce crashes and serious injuries on the roadways. This approach offers a means to:

1. Identify crash types and the location-related factors that contribute to the highest number of fatal and serious injury crashes of each type, and
2. Widely implement low-cost countermeasures over several locations with similar crash characteristics and/or similar roadway features. Typically, systemic safety improvements are low-cost, require little maintenance, have documented crash reductions, and address specific crash types or crash risk factors.

Benefits of Systemic Safety Approach








The application of the systemic safety approach offers the following benefits:

- Systemic safety improvements can reduce overall fatal and severe crashes of certain types within a jurisdiction more effectively than applying safety improvements at a small number of spot locations.
- The approach allows the agency to adapt for all levels of data availability and can help prioritize data collection needs.
- Countermeasures implemented systemically are typically low-cost improvements.
- Systemic safety improvements help agencies broaden their safety efforts and consider other risk factors in addition to crash history when identifying locations for potential safety improvement.
- Systemic safety improvements can be incorporated into planning, design, and maintenance policies, defended in tort liability cases, and used to develop a multi-year program of projects.
- The approach can bolster public confidence because it allows the agency to implement a proactive safety program.

Systemic safety improvements can be promoted for future use in written policies, guidelines and practices, it can be implemented through explicit roadway safety improvement projects and included in capital projects as well as ongoing maintenance activities.

Key for Priority Project Tables

Focus Areas:

-  **Single-Vehicle**
-  **Negotiating a Curve**
-  **Overturn/Rollover**
-  **Head-On**
-  **Fixed Object/Roadway Departure**
-  **Vulnerable Road Users**
-  **Intersection**

Safety Countermeasures:
















-  **Bike Ped Facility Improvements**
-  **Capacity Improvements**
-  **Clear Zone** - Includes: guardrail, median barriers, fixed object removal, and vegetation management.
-  **Flashing Beacons**
-  **Friction Management**
-  **Lighting**
-  **Pavement Markings**
-  **Restrict Passing Zones**
-  **Roundabouts**
-  **Roundabouts Feasibility Study**
-  **Rumble Strips / Stripes**
-  **Sight Distance**
-  **Signage** - Includes: chevrons, curve warning signs, and advance warning signs.
-  **Speed Management** - Includes: Reduced speeds and traffic calming.
-  **Widening** - Includes: widened lanes or shoulders.

Table 7.2 — Short Term Priority Projects for Systemic Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Strategies for Initial Consideration	Cost Estimate
Short	Redland Rd / Friendship Rd	SR-9 (US-231)	AL-14	7	113	X		▲ ■ ● ◆ ☆	▲ ● ◆ ☆ + □ ☆ ◇ ○	□ ◇ ○	\$\$\$
Short	Coosada Pkwy	Alabama River Pkwy	AL-14	1	31		X	▲ ■ ● +	● ★ ◆ ☆ + ☾ □ ○ ☆ ◇	● ☆ +	\$\$
Short	Cobbs Ford Rd (in Millbrook)	I-65	AL-143	2	54		X	▲ ● +	● ★ ◆ ☆ + ☾ □ ○ ☆ ◇	☆ □ ☆	\$\$
Short	Rifle Range Rd	Redland Rd	AL-229	6	111			▲ ■ ● ◆	● ◆ + □ ☆ ◇	● + ◇	\$\$\$
Short	Ceasarville Rd	AL-143	AL-111	2	43			▲ ■ ● ◆	● ◆ + □ ☆ ◇	● + ◇	\$\$
Short	Dozier Rd	Rifle Range Rd	Redland Rd	2	30	X		▲ ■ ◆ +	● ★ ◆ ☆ + ☾ ○ ☆ ◇	○ ☆ ◇	\$\$
Short	Firetower Rd	Redland Rd	AL-14	1	45			▲ ◆	▲ ● + ☆ ◇ ◇	▲ ◆ ☆	\$\$
Short	Buyck Rd	AL-21 (US-231)	County Line	1	4			▲ ◆	● + □ ☆ ◇	● + ☆	\$\$
Short	Rock Springs Rd	Redland Rd	Rifle Range Rd	1	6			▲ ◆	● + □ ☆ ◇	● + ☆	\$\$
Short	Sewell Rd	Grays Ferry Rd	SR-21 (US-231)	1	9			▲ ■ ●	● ◆ + □ ☆ ◇	□ ☆ ◇	\$\$
Short	Flat Rock Rd / Good Hope Rd	Friendship Rd	AL-14	1	6			■	◆ + ☆ ◇	◆ ☆ ◇	\$

Systemic Countermeasures

Potential countermeasures for the chosen projects were selected based on SSA findings, crash trends, community input, task force suggestions, and the FHWA's Proven Safety Countermeasures initiative (PSCi). The PSCi offers a set of proven strategies that effectively reduce roadway fatalities and serious injuries. Implementing these projects can contribute to fulfilling the Safe Roads goal of the SSA.

Typical Countermeasures for Systemic Projects

Countermeasures should be systematically implemented, considering intersection traffic control, corridor features, and crash trends. These improvements can be executed as standalone projects or integrated into project development along the intersections and corridor. The recommendations are as follows:

1. Single Vehicle
2. Negotiating a Curve
3. Overturn / Rollover
4. Fixed Object / Roadway Departure
5. Vulnerable Road Users (Pedestrians & Cyclists)

Countermeasure recommendations are detailed for each Focus Area on the following pages.

1. Single Vehicle

Lane and Shoulder Treatments

- High-visibility striping and reflective pavement markers
- Edge line and centerline rumble strips
- Widened shoulders and SafetyEdgeSM

Roadside Safety

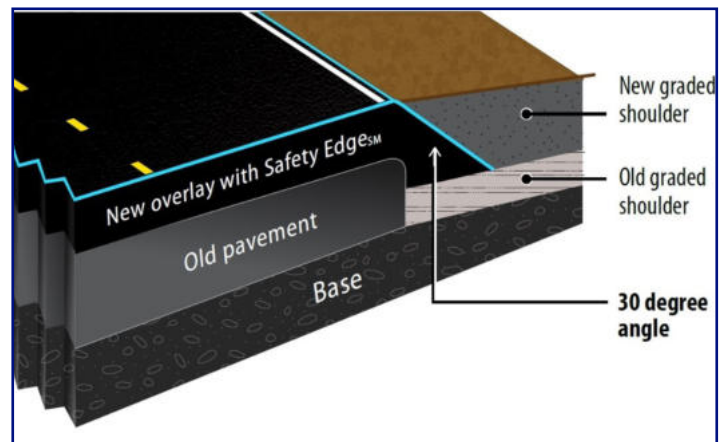
- Maintain clear zones and remove fixed objects
- Install guardrails or crash cushions where warranted

Curve and Surface Enhancements

- Manual on Uniform Traffic Control Devices (MUTCD) compliant curve warning signs, chevrons, and advisory speed plaques
- High-friction surface treatments on curves

Behavioral Measures

- Public education campaigns
- Targeted enforcement for speed and impairment



Cross-section view of an overlay with the SafetyEdgeSM. Source: FHWA

2. Negotiating a Curve

Signage and Delineation

- MUTCD-compliant curve warning signs, chevrons, and advisory speed plaques
- Retroreflective sign upgrades and proper placement

Geometric Improvements

- Superelevation adjustments
- Lane widening or curve widening where feasible

Surface Treatments

- High-friction surface applications

Visibility

- Enhanced pavement markings and delineators



Chevron signs with retroreflective strips on sign posts installed along a curve. Source: FHWA

3. Overturn / Rollover

Geometric Design

- Superelevation and curve widening
- Adequate lane and shoulder width

Roadside Safety

- Clear zones free of hazards

Surface and Warning Systems

- High-friction surfaces
- Truck rollover warning signs and dynamic curve speed feedback



Clear zone provided on the outside of the curve. Source: FHWA

4. Fixed Object / Roadway Departure

Lane and Shoulder Treatments

- Edge-line and centerline rumble strips
- SafetyEdgeSM

Roadside Safety

- Maintain clear zones
- Install guardrails, barriers, or crash cushions where warranted

Visibility and Delineation

- Enhanced curve delineation and roadway lighting

Traffic Management

- Speed management and traffic calming
- Raised medians or curb extensions where appropriate



Rumble Strip

5. Vulnerable Road Users (Pedestrians & Cyclists)

Crossing Enhancements

- High-visibility crosswalks and lighting
- Pedestrian refuge islands and curb extensions
- Hybrid beacons and warning signs

Signal Timing

- Leading pedestrian intervals

Bicycle Facilities

- Protected bike lanes and buffer zones

Speed Management

- Traffic calming measures to reduce vehicle speeds



*Photo Credit: Michael Ronkin
Source: FHWA*

Figure 7.2 — Site Specific Routes

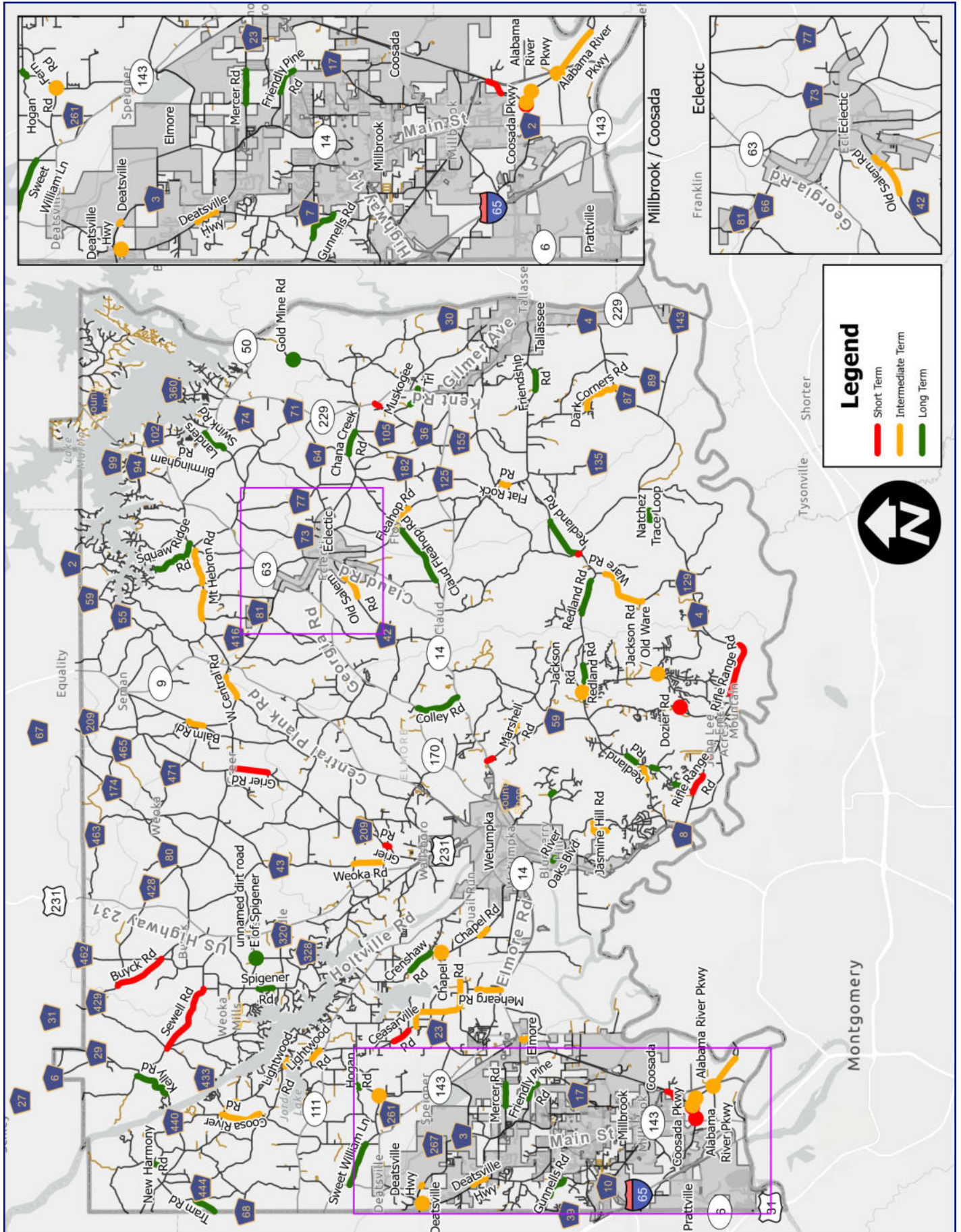


Table 7.3 — Short Term Priority Projects for Site Specific Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Strategies for Initial Consideration	Cost Estimate
Short	Coosada Pkwy	Caroline Dr	Prattville Jct Rd	1	9		X	▲ ■ ●	● ◆ + □ ☆ ◡	□ ☆ ◡	\$
Short	Intersection	Coosada Pkwy	Alabama River Pkwy	1	45		X	+	★ ◆ + ☾ ○ ☆	◆ + ☆	\$\$
Short	Rifle Range Rd	Redland Rd	Neva J Ranch Rd (Lucy's Trail - Google Map)	2	21	X		▲ ■ ●	● ◆ + □ ☆ ◡	□ ☆ ◡	\$
Short	Rifle Range Rd	Valley Dr	Unnamed Dirt Road	2	10			▲ ■ ● ◆	● ◆ + □ ☆ ◡	□ ☆ ◡	\$\$
Short	Grier Rd	Old Grier Rd	W Central Rd	2	5	X		▲ ●	● ◆ + □ ☆ ◡	□ ☆ ◡	\$
Short	Intersection	Alabama River Pkwy	Unnamed Road E of SR-143	0	1		X	▲ ● +	● ★ ◆ ◆ + ☾ □ ○ ☆ ◡	★ + ☆	\$
Short	Rifle Range Rd	Hillwood Ln	Morgan Trace Rd	1	1			▲ ◆	● ◆ + □ ☆ ◡	● + ☆	\$
Short	Cesarville Rd	Norris Rd	Atkin Hill Rd	1	3			▲ ◆	● + □ ☆ ◡	● + ☆	\$
Short	Cesarville Rd	Nancy Ln	Atkin Hill Rd	1	4			▲ ■ ●	● ◆ + □ ☆ ◡	□ ☆ ◡	\$
Short	Intersection	Dozier Rd	Woodhaven Trl	1	1			▲ ■ ◆ +	● ★ ◆ ◆ + ☾ □ ○ ☆ ◡	● ○ ☆	\$\$
Short	Firetower Rd	Bond Dr	AL-14	1	13	X		▲ ◆	▲ ● ◆ + ☆ ◡	▲ ◆ ☆	\$
Short	Rock Springs Rd	Redland Rd	Chalk Hill Rd	1	1			▲ ◆	● + □ ☆ ◡	● + ☆	\$
Short	Cherokee Trl	Arrowleaf Trl	AL-229	1	2			▲ ◆	● + □ ☆ ◡	● + ☆	\$
Short	Grier Rd	Old Gin Rd	Grier Ln	1	1	X	X	▲ ■ ◆	● ◆ + □ ☆ ◡	□ ☆ ◡	\$
Short	Buyck Rd	Providence Rd	Jackson Trace Rd	1	2			▲ ◆	● + □ ☆ ◡	● + ☆	\$\$
Short	Sewell Rd	Grays Ferry Rd	Cooper Rd	1	3			▲ ■ ●	● ◆ + □ ☆ ◡	□ ☆ ◡	\$\$

See Page 52 for Key Legend

Road Safety Assessments

Road Safety Assessments (RSAs) are proactive approaches designed to improve transportation safety for everyone using the roads. Various agencies nationwide have implemented RSA programs customized to their particular requirements to lower crash rates and their severity. "Road Safety Assessment" means a systematic evaluation of an existing roadway or a proposed project's safety performance, carried out by an independent, multidisciplinary team.

The goal of the Road Safety Assessment is to:

1. Identify potential safety concerns for road users,
2. Consider all practical strategies to eliminate or address those concerns, and
3. Assess potential impacts on safety.

RSA programs are structured in various ways. Some adopt a "site-specific improvement" method, targeting locations with a history of high crash frequency or severe outcomes. Others implement a system-wide or systemic approach, addressing broader safety challenges across entire networks. For example, the installation of guardrails or cable wire barriers in highway medians can reduce head-on collisions on interstates. Jurisdictions that integrate both spot-focused and system-wide assessments tend to achieve the greatest safety benefits.

Elmore County established a prioritized list of sites using a robust methodology that integrated results from the High Injury Network analysis, traffic volumes, functional classification, heavy vehicle percentages, and input from both the public and the task force. RSAs were performed at locations where the County could feasibly implement short-term (1–3 years) safety improvements.

Figure 7.3 highlights the road segments assessed through RSAs. After this figure, each site is described with field observations and a targeted set of recommended safety countermeasures to address identified issues. More detailed cost estimates and supporting photographs are available in the appendix.

The cost estimates for the site-specific projects consist of the 2026 cost of construction, mobilization, construction engineering and inspection, and preliminary engineering. Right-of-way, Utilities, and Inflation are not included. A 30% construction contingency was applied to each estimate. These cost estimates are the engineer's opinion of probable cost and do not guarantee that proposals, bids, or actual cost will not vary from engineer's opinion of probable cost.

Priority County Site Specific Projects

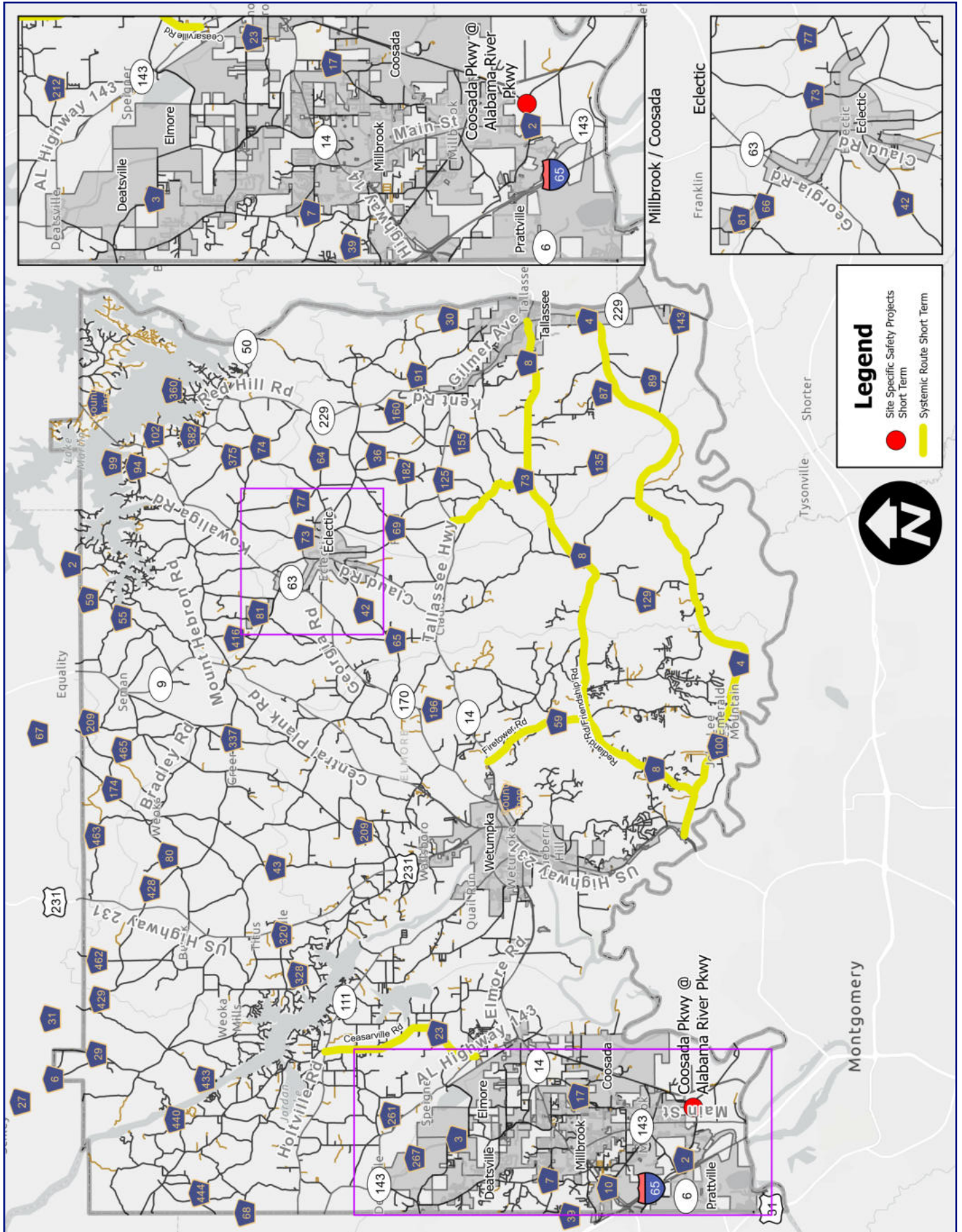
The County Route Site Specific Projects were further prioritized to identify the top 3 in each category that are intended to make progress over the next three years, subject to available resources and conditions.

Below is a list with planning-level cost estimates and preliminary recommended countermeasures:

1. **Redland Road** — From SR-9 (US-231) to AL-14
2. **Rifle Range Road** — From Redland Road to AL-229
3. **Ceaserville Road** — From AL-143 to AL-111
4. **Firetower Road** — From Redland Road to AL-14
5. **Flat Rock Road / Good Hope Road** — From Friendship Road to AL-14
6. **Coosada Parkway and Alabama River Parkway** (Intersection)

These routes and countermeasures are detailed on the following pages.

Figure 7.3 — Road Safety Assessments in Elmore County



1. Redland Road — From SR-9 (US-231) to AL-14

Length: 22 miles

Total Crashes: 113

KA Crashes: 7

Observations:

- Multiple locations exhibit pavement edge and shoulder drop-offs in both eastbound and westbound directions.
- Off-tracking is evident at several curves and intersections, particularly east of Price Road, Ware Road, and along Friendship Road.
- Pavement and striping conditions are poor in several segments, especially east of Scholar Road and at key intersections.
- Several warning and regulatory signs are blocked, outdated, missing, or lack retroreflectivity.
- Raised pavement markers are missing or in poor condition throughout the corridor.
- Sight distance is limited at certain curves and approaches, including the northwest curve near Friendship Road.
- Residential and school areas lack adequate safety features such as proper signage, delineation, and guardrail protection.
- Insufficient roadway lighting in multiple areas.
- Intersections such as Friendship Road, Dark Corners, Chalk Hill Road/Rock Springs Road, and Alabama 14 require improved traffic control and warning devices.

AADT: 11,000

High Injury Network: Yes

Underserved Community: Yes

Observations (Continued):

- Guardrail end treatments require updating at multiple locations.
- Drainage structures lack adequate protection in some areas.
- Extra pavement width from unfinished development has resulted in undefined travel lanes.
- Passing zones are present in areas where geometry and visibility may not support safe passing maneuvers.
- Bicycle and farm equipment warning signage is present but inconsistently applied.
- Pavement legends and advance warning signage are missing or need updating at several intersections.

Recommendations:

- Rumble Stripes
- Shoulder widening throughout entire route
- Lighting
- Guardrail and Guardrail delineation
- Signing
- Pavement Markings
- Raised Pavement Markers

Cost Estimate: \$3,170,000

Focus Areas	List of Safety Countermeasures
Single Vehicle	<ul style="list-style-type: none"> • Install guardrails near steep slopes and fixed objects • Widen shoulders and improve pavement conditions • Use high-visibility signs and curve warnings • Maintain clear zones and trim roadside vegetation
Negotiating a Curve	<ul style="list-style-type: none"> • Add chevron alignment signs and curve warnings • Enhance curve geometry and night visibility • Lane and shoulder widening in curves
Overturn / Rollover	<ul style="list-style-type: none"> • Widen shoulders and travel lanes • Flatten slopes and remove roadside objects • Reduce speed limits on curves and grades • Add centerline and edge line rumble strips
Fixed Object / Roadway Departure	<ul style="list-style-type: none"> • Remove or shield fixed objects • Improve signage and pavement markings • Add guardrails or breakaway supports • Add centerline and edge line rumble strips
Vulnerable Road Users	<ul style="list-style-type: none"> • Provide paved shoulders, bike lanes, or sidewalks • Install crosswalks with warning signs/lights • Lower speed limits in pedestrian zones

2. Rifle Range Road — From Redland Road to AL-229

Length: 20.3 miles
Total Crashes: 111
KA Crashes: 6

AADT: 6,300
High Injury Network: Yes
Underserved Community: No

Observations:

- Warning signage is inconsistent and in some cases does not match roadway geometry.
- Heavy truck activity and commercial operations contribute to increased turning and access movements.
- Guardrail systems and end treatments require a corridor-wide review.
- School zones lack clearly defined boundaries and adequate signage.
- Farm equipment regularly uses the roadway, creating mixed traffic conditions.
- Pavement edge and shoulder deficiencies are present within curves.
- Bicycle activity is reported but signage and accommodations are limited.
- Passing zones exist in areas with complex geometry or limited sight distance.
- Roadside development and land use generate additional conflict points along the corridor.

Recommendations:

- Rumble Stripes
- Shoulder widening throughout entire route
- Guardrail and Guardrail delineation
- Signing
- Pavement Markings
- Raised Pavement Markers

Cost Estimate: \$2,920,000

Focus Areas	List of Safety Countermeasures
Single Vehicle	<ul style="list-style-type: none"> • Install guardrails near steep slopes and fixed objects • Widen shoulders and improve pavement conditions • Use high-visibility signs and curve warnings • Maintain clear zones and trim roadside vegetation
Negotiating a Curve	<ul style="list-style-type: none"> • Add chevron alignment signs and curve warnings • Enhance curve geometry and night visibility • Lane and shoulder widening in curves
Overturn / Rollover	<ul style="list-style-type: none"> • Widen shoulders and travel lanes • Flatten slopes and remove roadside objects • Reduce speed limits on curves and grades • Add centerline and edge line rumble strips
Fixed Object / Roadway Departure	<ul style="list-style-type: none"> • Remove or shield fixed objects • Improve signage and pavement markings • Add guardrails or breakaway supports • Add centerline and edge line rumble strips

3. Ceaserville Road — From AL-143 to AL-111

Length: 5.7 miles
Total Crashes: 43
KA Crashes: 2

AADT: 4,100
High Injury Network: Yes
Underserved Community: No

Observations:

- Roadway segments lack adequate shoulder width.
- Curve and intersection warning signage is present but inconsistent or outdated.
- Sight distance is limited at several vertical and horizontal curves.
- Vegetation overgrowth is obstructing driver visibility along portions of the roadway.
- Off-tracking is evident within curves.
- Heavy equipment and large vehicles regularly use the roadway.
- Passing zones exist where available sight distance may be inadequate.
- Guardrail systems and end treatments require evaluation for compliance with current standards.
- Stop ahead and stop control signage requires review and updating.
- Some school-related warning signage has been removed or is missing.
- Wildlife warning signage is present but not consistently applied.
- Intersection signing and lane control signage require improvement and clearer placement.

Recommendations:

- Rumble Stripes
- Guardrail delineation
- Signing
- Pavement Markings

Cost Estimate: \$270,000

Focus Areas	List of Safety Countermeasures
Single Vehicle	<ul style="list-style-type: none"> • Install guardrails near steep slopes and fixed objects • Widen shoulders and improve pavement conditions • Use high-visibility signs and curve warnings • Maintain clear zones and trim roadside vegetation
Negotiating a Curve	<ul style="list-style-type: none"> • Add chevron alignment signs and curve warnings • Enhance curve geometry and night visibility • Lane and shoulder widening in curves
Overturn / Rollover	<ul style="list-style-type: none"> • Widen shoulders and travel lanes • Flatten slopes and remove roadside objects • Reduce speed limits on curves and grades • Add centerline and edge line rumble strips
Fixed Object / Roadway Departure	<ul style="list-style-type: none"> • Remove or shield fixed objects • Improve signage and pavement markings • Add guardrails or breakaway supports • Add centerline and edge line rumble strips

4. Firetower Road — From Redland Road to AL-14

Length: 3.9 miles
Total Crashes: 45
KA Crashes: 1

AADT: 4,700
High Injury Network: Yes
Underserved Community: Yes

Observations:

- The corridor exhibits widespread limited sight distance and visibility issues, particularly at blind spots, curves, and vertical crest locations.
- Speeding behavior was observed along Firetower Road.
- Lighting is insufficient at the roundabout intersection.
- Multiple access points and intersections were noted, including the Dollar General driveway, church right-in/right-out access, Marshall Road intersection, and Jug Factory area.
- Signage conditions vary along the corridor, including advisory speed signage, Stop Ahead with flashing beacon, and the removal of a Hidden Entrance sign.
- A fatality memorial marker is present along the route.
- Guardrail end treatments are present throughout the corridor with varying conditions.
- Lane delineation through curves and intersections is limited in some areas.

Recommendations:

- Rumble Stripes
- Lighting
- Guardrail and Guardrail delineation
- Signing
- Warning Signs with Flashing Beacons
- Pavement Markings
- Raised Pavement Markers

Cost Estimate: \$451,000

Focus Areas	List of Safety Countermeasures
Single Vehicle	<ul style="list-style-type: none"> • Install guardrails near steep slopes and fixed objects • Widen shoulders and improve pavement conditions • Use high-visibility signs and curve warnings • Maintain clear zones and trim roadside vegetation
Vulnerable Road Users	<ul style="list-style-type: none"> • Provide paved shoulders, bike lanes, or sidewalks • Install crosswalks with warning signs/lights • Lower speed limits in pedestrian zones

5. Flat Rock Road / Good Hope Road — From Friendship Road to AL-14

Length: 3.1 miles

Total Crashes: 6

KA Crashes: 1

AADT: 1,100

High Injury Network: Yes

Underserved Community: No

Observations:

- Pavement edge drop-offs are present along portions of the roadway.
- Curves near the church are not signed.
- Areas with slope drop-offs are adjacent to the roadway.
- Posts and roadside features have limited visibility, especially at night.
- Northbound travel shows limited roadway warning features along curves.
- The Redland Road / Friendship Road intersection shows pavement slippage or subgrade issues in the westbound direction.
- The Redland Road / Friendship Road intersection includes factors of concern such as a blind curve intersection and high traffic volumes.
- Several intersections along the corridor are perceived as hazardous due to speeding, and geometric and visibility constraints.

Recommendations:

- Rumble Stripes
- Guardrail and Guardrail delineation
- Signing
- Pavement Markings
- Raised Pavement Markers

Cost Estimate: \$307,000

Focus Areas	List of Safety Countermeasures
Negotiating a Curve	<ul style="list-style-type: none"> • Add chevron alignment signs and curve warnings • Enhance curve geometry and night visibility • Lane and shoulder widening in curves

6. Coosada Parkway and Alabama River Parkway (Intersection)

Total Crashes: 45

KA Crashes: 1

AADT: 6,600

High Injury Network: Yes

Underserved Community: Yes

Observations:

- The Prattville Junction intersection is offset and located within an S-curve section of the roadway.
- Alabama River Parkway has a posted speed of 60 mph.
- The roadway has been recently resurfaced.
- Oversized signs are present along the corridor.
- Lane delineation is limited in certain areas, including the left-turn movement onto Coosada Parkway.
- The final curve along the corridor lacks enhanced curve guidance features.
- Public reports that there is a lack of adequate lighting in dark conditions at the intersection.

Recommendations:

- Lighting
- Guardrail delineation
- Signing
- Pavement Markings
- Raised Pavement Markers

Cost Estimate: \$291,000

Focus Areas	List of Safety Countermeasures
Intersection Related	<ul style="list-style-type: none"> • Improve signage, lighting, and sight distance • Add stop signs, roundabouts, or flashing beacons • Use advance warning signs and pavement markings

08

Policy and Process Changes

Infrastructure projects alone will not be sufficient to achieve the goals of this Safety Action Plan. Long-term success depends on fostering a stronger safety culture; one that is demonstrated through the actions of community members and leaders and reflected in policies and decision-making that prioritize a safer and more reliable transportation system.

With this objective in mind, an evaluation of existing policies and planning documents was conducted to assess the County's current practices and to identify opportunities for improvement. This review serves as a benchmark of Elmore County's existing state of practice and helps ensure that future policy and process recommendations are aligned with proven strategies and statewide and national guidance.

The following background planning and policy documents were reviewed as part of these efforts:

- Alabama Strategic Highway Safety Plan
- Vulnerable Road User Safety Assessment
- ALDOT Access Management Manual
- Alabama Department of Transportation Procedural Guidelines for Local Public Agency Projects
- Elmore County Subdivision and Land Development Regulations
- Elmore County Access Management Policy
- Montgomery Metropolitan Planning Organization Access Management Policy
- FHWA's Noteworthy Practices Guide - National Roadway Safety Awards 2013
- Safe Routes to School Local Policy Guide
- Institute of Transportation Engineers' Safe Routes to School Briefing Sheets



Proposed policy and process changes for Elmore County are recommended as follows:

1. Safety Data & Performance Management

Annually review crash data across the County and track safety performance measures as defined in the Safety Action Plan (e.g. fatalities, serious injuries, VRU-involved crashes).

2. Sign Inventory & Maintenance Management

Assess and operationalize internal practices related to inventory and condition assessment of signing, striping, guardrail, and other roadside safety devices. The inventory and continuous assessment on all regulatory and warning signage on county-maintained roads can be used to guide budgeting and maintenance activities.

3. Subdivision Regulations

Modify regulations to require protection on side-drain pipe ends inside the clear zone.

4. Bicycle and Pedestrian Master Plan

Inventory existing bicycle and pedestrian infrastructure, assess needs, identify and prioritize potential projects for implementation, develop supporting policies to require bicycle and pedestrian infrastructure in new developments.

5. Alternative Intersection Design Considerations

Encourage alternative intersection design practices and enforce best practices for driveway access. Update the County's Access Management Policy to incorporate guidance on alternative intersection design options (roundabouts, RCUTs, etc.) and other access management techniques associated with better safety performance.

6. Functionally Classified Roadway Horizontal Curve Signing Plan

Consider implementing a five-to-seven-year horizontal curve program to address signing curves along routes. The plan further recommends signing horizontal curves that meet MUTCD warrants, regardless of traffic volume, along functionally classified roadways as identified on the latest ALDOT Highway Functional Classification map for Elmore County. This signing would include horizontal curves where the speed differential between the posted speed limit and the advisory curve speed exceeds 10 mph (or 5 mph for unpaved roadways) or crash history indicates a greater crash potential, as identified in the previous paragraphs. The use of advance warning signs, supplemented with chevrons, large arrows, or delineators, will be standardized to enhance curve visibility and guide drivers effectively. A systematic evaluation process, incorporating ball-bank indicator tests and curve radius measurements, will help identify warranted curves.

This proactive measure ensures consistent safety improvements across all arterial and collector functionally classified roadways, addressing potential crashes before they contribute to crash statistics and promoting uniformity in driver expectations and roadway safety. Additionally, where feasible, unexpected roadway conditions may be identified, and where a horizontal curve is involved, curve warning devices may be implemented regardless of warranting criteria.

09

Performance Evaluations

Tracking Performance

Elmore County and its Safety Action Plan Task Force are committed to making substantial progress toward the goal of zero traffic fatalities and serious injuries. The Safety Action Plan has established a goal of achieving a 5% per year reduction in fatal and serious injuries by the year 2045. Ongoing monitoring will be necessary to assess and support the effectiveness of the Action Plan.

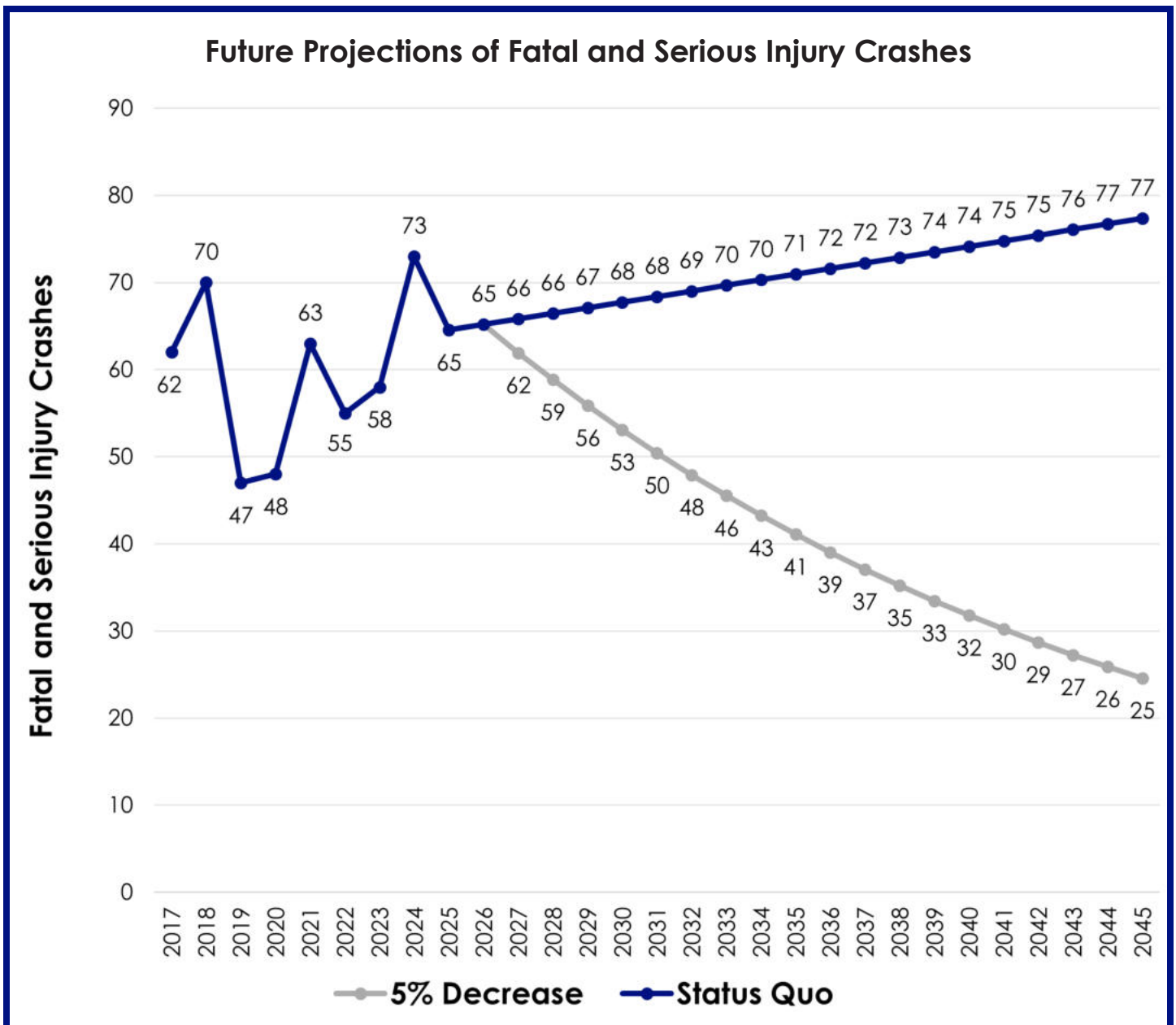


Figure 9.1 — Future Projections of Fatal and Serious Injury Crashes

Monitoring Progress

A Safety Action Committee will be established to evaluate and monitor the Action Plan. The Safety Action Committee will be responsible for monitoring performance metrics and reporting progress annually to the County's standing committees. The progress report will show performance metrics for each year since inception and will also track action items completed in the prior year.

In addition to monitoring performance metrics on an annual basis, the Safety Action Plan Task Force will update the HIN mapping for the County every five years. The HIN maps will be used to prioritize future transportation projects within the jurisdiction of Elmore County.

Table 9.1 — Performance Metrics Crash Data (2019-2023)

Severity	All Roads	County Maintained
Fatalities		
Total 5-year	47	18
Average per year	9	4
Serious Injuries		
Total 5-year	224	92
Average per year	45	18
Non-Incapacitating Injuries		
Total 5-year	876	282
Average per year	175	56
Possible Injuries		
Total 5-year	859	230
Average per year	172	46
Property Damage Only		
Total 5-year	7,481	2,125
Average per year	1,496	425



Transportation Funding Programs

Multiple funding sources, listed below, are currently available for implementing transportation safety improvements.

ATRIP-II	Alabama Transportation Rehabilitation and Improvement Program 2	Created in 2019 by the Rebuild Alabama Act, this program is administered by ALDOT. Eligible projects include transportation projects that improve any state-maintained highway system. Projects with a primary focus on local roads are not eligible.
AoPP	Areas of Persistent Poverty Program	AoPP funds projects that provide access to transit in disadvantaged communities, including safety improvements.
BUILD	Better Utilizing Investments to Leverage Development	BUILD provides grants for surface transportation infrastructure projects with significant local or regional impact
CRP	Carbon Reduction Program	Provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide emissions from on-road highway sources.
CMAQ	Congestion Mitigation and Air Quality Improvement Program	Provides funds to States for transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards.
FTA	Federal Transit Administration Capital Funds	FTA funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.
HRRR	High Risk Rural Roads	The HRRR program focuses on improving safety on rural major or minor collectors and local roads with significant safety risks, as defined by each State's Strategic Highway Safety Plan. A Special Rule requires States to allocate funds to HRRRs if rural road fatality rates increase on these specific roadway facilities.

HSIP	Highway Safety Improvement Program	HSIP is a core Federal-aid program to reduce traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.
INFRA	Infrastructure For Rebuilding America	INFRA grants fund multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas.
LRSI	Local Road Safety Initiative	The LRSI program provides funding to cities and counties for safety projects on locally owned public roads, targeting locations with significant safety risks in alignment with Alabama's Strategic Highway Safety Plan. Eligible projects focus on reducing fatal and serious injury lane departure and run-off-road crashes, prioritized by their potential to prevent crashes, mitigate crash occurrence, and minimize crash severity.
NHPP	National Highway Performance Program	Provides support for the condition and performance of the National Highway System for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.
PROTECT	Promoting Resilient Operations for Transformative, Efficient, and Cost Saving Transportation	Used to help make surface transportation more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, community resilience and evacuation routes, and at-risk costal infrastructure.

RHCP	Railway-Highway Crossings Program (Section 130)	The Railway-Highway Crossings (Section 130) Program provides funds for the elimination of hazards at railway-highway crossings.
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Rebuild Alabama Act		Provides the opportunity for cities and counties to partner with the State on larger projects where adequate local funding may not be available. There is not a specified or required match for local governments to take on, but any funds that local governments can leverage to team with ALDOT to fund a project could play a role in the decision-making process.
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RCP	Reconnecting Communities and Neighborhoods	RCP (formerly known as Reconnecting Communities Pilot Program) has been combined with Neighborhood Access and Equity (NAE) into Reconnecting Communities and Neighborhoods (RCN) program in 2023-2024. Planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities.
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RTP	Recreational Trails Program	A federal competitive grant program administered by the Alabama Department of Economic and Community Affairs (ADECA). Permissible uses include development of urban trail linkages, development of trailside and trailhead facilities, acquisition of easement for trail use, and construction of new trails.
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SRTS	Safe Routes to School Program	SRTS provides funding for projects that improve safety for students going to school.
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SS4A

Safe Streets and Roads for All

Authorized through FY26, it provides two grant categories suitable for implementing safety improvements for those agencies that have a complete Safety Action Plan:

SS4A Demonstration Grants are for testing temporary safety improvement projects or strategies to determine future uses and benefits.

SS4A Implementation Grants provide federal funds to execute projects and strategies outlined in a Safety Action Plan to address data-driven safety concerns. Eligible projects and strategies can be aimed at infrastructure, behavioral, or operational improvement actions.

STBG

Surface Transportation Block Grant Program

Provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

TAP

Transportation Alternatives Program

TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.



ROAD
CLOSED
AHEAD

A.

Appendix

Intermediate and Long-Term Priority Projects

Key

Focus Areas:

- ▲ *Single-Vehicle*
- *Negotiating a Curve*
- *Overturn/Rollover*
- ★ *Head-On*
- ◆ *Fixed Object/Roadway Departure*
- ⬠ *Vulnerable Road Users*
- +
- *Mixed Crash Patterns*

Safety Countermeasures:

- ▲ *Bike Ped Facility Improvements*
- *Capacity Improvements*
- *Clear Zone* - Includes: guardrail, median barriers, fixed object removal, and vegetation management.
- ★ *Flashing Beacons*
- ◆ *Friction Management*
- ⬠ *Lighting*
- +
- *Restrict Passing Zones*
- ☾ *Roundabouts*
- △ *Roundabouts Feasibility Study*
- *Rumble Strips / Stripes*
- *Sight Distance*
- ☆ *Signage* - Includes: chevrons, curve warning signs, and advance warning signs.
- ◇ *Speed Management* - Includes: Reduced speeds and traffic calming.
- ⬠ *Widening* - Includes: widened lanes or shoulders.

Table A1 — Intermediate and Long-Term Priority Projects for Systemic Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Mid	Grier Rd	Weoka Rd	Balm Rd	3	33	X	X	▲ ■ ● ◆	● ◆ + □ ☆ Pentagon	\$\$\$
Mid	Cherokee Trl	Friendship Rd	AL-229	1	12			▲ ◆	● + ☆ Pentagon	\$\$
Mid	Alabama River Pkwy	AL-143	County Line	4	38		X	▲ ■ ◆ +	● ★ ◆ Pentagon + ☾ ○ ☆ Pentagon	\$\$
Mid	Deatsville Hwy	Millbrook City Limit	AL-143	3	26	X	X	▲ ● ◆ +	● ★ ◆ Pentagon + ☾ □ ○ ☆ Pentagon	\$\$
Mid	Ingram Rd	AL-14	Deatsville Hwy	2	4		X	▲ ■ ◆	● ◆ + ☆ Pentagon	\$\$
Mid	Chapel Rd	Cotton Lakes Blvd	Canal Ln	1	4			▲ ●	● ◆ □ ☆ Pentagon	\$
Mid	Jasmine Hill Rd	SR-9 (US-231)	Wetumpka City Limit	1	24			▲ Pentagon	▲ ● ☆ Pentagon	\$\$
Mid	Willow Springs Rd	Jasmine Hill Rd	Redland Rd	1	11			▲	● ☆ Pentagon	\$
Mid	Dark Corners Rd	Rifle Range Rd	Friendship Rd	1	10			▲ ■	● ◆ ☆ Pentagon	\$\$
Mid	Marshell Rd	Redland Rd	Firetower Rd	1	4			▲ ■	● ◆ ☆ Pentagon	\$\$
Mid	Ware Rd	Rifle Range Rd	Redland Rd	1	5			▲ ■ ●	● ◆ □ ☆ Pentagon	\$\$
Mid	Fleahop Rd	AL-14	Eclectic City Limit	1	5			▲ ◆	● + ☆ Pentagon	\$\$
Mid	Old Salem Rd	SR-170	AL-63	1	5	X	X	▲ ■	● ◆ ☆ Pentagon	\$\$
Mid	Weoka Rd	AL-21 (US-231)	Bradley Rd	1	18		X	▲	● ☆ Pentagon	\$\$
Mid	Hogan Rd	AL-143	Lightwood Rd	1	10			▲ ◆ +	● ★ ◆ Pentagon + ☾ ○ ☆ Pentagon	\$\$

Table A1 — Intermediate and Long-Term Priority Projects for Systemic Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Mid	Coosa River Rd	AL-143	Janie Rd	1	16	X		▲ ■ ●	● ◆ □ ☆ ○	\$\$
Mid	Lightwood Rd	AL-111	County Line	4	40			▲ ■ ◆ ▲	● ◆ ● + ☆ ◇ ○	\$\$\$
Mid	CR-29 / Titus Rd	AL-21 (US-231)	County Line	1	11			▲ ■ ◆	● ◆ + ☆ ○	\$\$\$
Mid	Balm Rd	AL-9(Central Plank Rd)	AL-9 (Central Plank Rd)	1	22		X	▲ ■ ●	● ◆ □ ☆ ○	\$\$\$
Mid	Mt Hebron Rd / W Central Rd	Jackson Trace Rd	AL-63	3	39			▲ ■ ◆	● ◆ + ☆ ○	\$\$\$
Long	Birmingham Rd	AL-229	Dead End	1	1			▲ ◆	● + ☆ ○	\$
Long	Friendly Pine Rd	Ingram Rd	AL-14	1	12			▲ ◆	● + ☆ ○	\$
Long	Coosada Rd	Coosada Pkwy	Lucky Town Rd	1	5		X	▲ ■ ●	● ◆ □ ☆ ○	\$\$
Long	Mehearg Rd	AL-14	Flatwood Rd	1	3			▲ ◆	● + ☆ ○	\$
Long	Flatwood Rd	Ceasarville Rd	Dead End	1	9			▲ ◆ +	● ★ ◆ ● + ☾ ○ ☆ ○	\$\$
Long	Chapel Rd	Canal Ln	Crenshaw Rd	1	12			▲ +	● ★ ● + ☾ ○ ☆ ○	\$
Long	Possum Trot	Johnson Rd	Laney Ln	1	1			★	+ □ ☆ ○	\$\$
Long	Squaw Ridge Rd	Mt Hebron Rd	Dead End	1	1			▲ ■ ◆	● ◆ + ☆ ○	\$
Long	Unnamed Dirt Road E of Speigner	Titus Rd	Titus Rd	1	2			▲ ■ ●	● ◆ □ ☆ ○	\$
Long	Crenshaw Rd	AL-111	AL-111	1	19			▲ ◆	● + ☆	\$\$

Table A1 — Intermediate and Long-Term Priority Projects for Systemic Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Long	Fern Rd	Carpenter Rd	Atkin Hill Rd	1	8			▲ ■ ◆	● ◆ + ☆ ◡	\$
Long	Speigner Rd	Jones Corner Rd	Sewell Rd	1	5			▲ ◆	● + ☆ ◡	\$
Long	New Quarter Rd	Dark Corners Rd	Dead End	1	4			—	+ ☆	\$\$
Long	Mercer Rd	Ingram Rd	Politic Rd	1	5			▲ ■ ◆	● ◆ + ☆ ◡	\$
Long	Harrogate Springs Rd	Jasmine Hill Rd	Wildwood Ln	1	3	X		▲ ■ ●	● ◆ □ ☆ ◡	\$
Long	Gunnells Rd	Old Prattville Rd	Old Prattville Rd	1	3		X	▲ ■ ●	● ◆ □ ☆ ◡	\$
Long	Claud Fleahop Rd	AL-14	Chana Creek Rd	1	2			▲ ◆	● + ☆ ◡	\$\$
Long	Colley Rd	AL-14	AL-170	1	3		X	▲ ●	● ◆ □ ☆ ◡	\$
Long	Landers Swink Rd	E Cotton Rd	AL-229	1	2			▲ ■ ◆	● ◆ + ☆ ◡	\$
Long	New Harmony Rd	Lightwood Rd	Lightwood Rd	1	2			▲ ■ ●	● ◆ □ ☆ ◡	\$\$
Long	Kelly Rd	Blueberry Hill Rd	Dead End	1	1			▲ ■ ◆	● ◆ + ☆ ◡	\$
Long	Natchez Trace Loop	Rifle Range Rd	Indian Ln	1	1			+	★ ◡ + ☾ ○ ☆	\$
Long	River Oaks Blvd (@ Casino Driveway)	Unknown	Unknown	1	5			▲ ◆	● + ☆ ◡	\$

Table A2 — Intermediate and Long-Term Priority Projects for Site Specific Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Mid	Ingram Rd	Unpaved Driveway	Dogwood Trl	1	1	X		▲ ■ ◆	● ◆ + □ ☆ ○	
Mid	Mt Hebron Rd	Middle Rd	Union Rd	2	5			▲ ◆	● + □ ☆ ○	
Mid	Alabama River Pkwy	Cypress Ln	Near River Forrest Ct	1	8		X	▲ ◆	● + □ ☆ ○	
Mid	Intersection	Alabama River Pkwy	Jackson Lake Rd E	1	3		X	▲ ■ ◆ +	● ★ ◆ ♠ + ☾ □ ○ ☆ ○	
Mid	Intersection	Unnamed Road E of AL-143	Alabama River Pkwy	0	1		X	+	★ ♠ + ☾ ○ ☆	
Mid	Coosada Rd	Unnamed Road N of Gill Rd	Lucky Town Rd	1	1		X	■ ●	● ◆ □ ☆ ○	
Mid	Deatsville Hwy	Brookshire Dr	Rose Ln / Green Ct	1	3			▲ ◆	● + □ ☆ ○	
Mid	Deatsville Hwy	Rose Ln	Short Rd	1	2			●	● ◆ □ ☆	
Mid	Intersection	Deatsville Hwy	Foxwood Ct	1	1			▲ ●	● ★ ◆ ♠ + ☾ □ ○ ☆ ○	
Mid	Mehearg Rd	White Rd	Flatwood Spur	1	2			▲ ◆	● + □ ☆ ○	
Mid	Flatwood Rd	Dead End		1	14			▲ ◆ +	● ★ ◆ ♠ + ☾ □ ○ ☆ ○	
Mid	Chapel Rd	Lower Crenshaw Dr	McCain Rd	1	3			▲ ◆	● + □ ☆ ○	
Mid	Jasmine Hill Rd	Unknown	Jasmine Hollow Rd	1	11			▲ ♠	▲ ● ♠ ☆ ◆ ○	
Mid	Willow Springs Rd	Willow Bend Dr	Cabin Rd	0	3			▲	● ☆ ○	
Mid	Dark Corners Rd	Rifle Range Rd	Ben Taylor Dr	1	3			▲ ■	● ◆ ☆ ○	
Mid	Marshall Rd	Valley View Ct	Pearl Dr	1	1			▲ ■	● ◆ ☆ ○	
Mid	Ware Rd	Simmons Cir	Osborne Ln	1	2			▲ ■ ●	● ◆ □ ☆ ○	

Table A2 — Intermediate and Long-Term Priority Projects for Site Specific Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Mid	Flat Rock Rd	Strawberry Ln	Tank Ln	1	2			■	◆ ☆ ◻	
Mid	Fleahop Rd	Old Barn Rd	Claud Fleahop Rd	1	2			▲ ◆	● + ◻ ☆ ◻	
Mid	Old Salem Rd	Townsend Creek Rd	Brookley Dr	0	2			▲ ■	● ◆ ☆ ◻	
Mid	Weoka Rd	Noah's Rd	Unnamed S of Copeland Rd	1	5	X	X	▲	● ☆ ◻	
Mid	Intersection	Chapel Rd	Hert Dr	1	2			+	★ ◻ + ☾ ○ ☆	
Mid	Intersection	Hogan Rd	Cold Springs Rd	1	1			▲ ◆ +	● ★ ◆ ◻ + ☾ ◻ ○ ☆ ◻	
Mid	Coosa River Rd	Craigs Av	Lightwood Rd	1	3			▲ ■ ●	● ◆ ◻ ☆ ◻	
Mid	Lightwood Rd	Lewis Rd	Blackberry Rd	1	4			▲ ◻	▲ ● ◻ ☆ ◻	
Mid	Lightwood Rd	Willie Holt Rd	Old Ferry Rd	1	2			▲ ■ ◆	● ◆ + ◻ ☆ ◻	
Mid	Lightwood Rd	Blackwells Rd	Laney Ln	1	3			▲ ■ ◆	● ◆ + ◻ ☆ ◻	
Mid	Titus Rd (Coosa County Rd 29 - Google Maps)	Jordan Lake Rd	Edwards Cook Rd	1	1			▲ ■ ◆	● ◆ + ◻ ☆ ◻	
Mid	Balm Rd	Bradley Rd	Mann Cir	1	1			▲ ■ ●	● ◆ ◻ ☆ ◻	
Mid	W Central Rd	Mt Zion Rd	Mann Rd	1	2			▲ ■ ◆	● ◆ + ◻ ☆ ◻	
Mid	Mt Hebron Rd	Old Avant Rd	Hunters Rd	1	5			◆	● + ◻ ☆	
Mid	Intersection	Jackson Rd / Old Ware	at Mitchell Creek Rd	0	3					
Mid	Intersection	Jackson Rd	at Redland Rd	0	1					

Table A2 — Intermediate and Long-Term Priority Projects for Site Specific Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Long	Redland Rd	Home Place Rd	High Ridge Rd	1	1			▲◆	●+□☆◇	
Long	Redland Rd	Redland Bluff Rd	Seth Johnson Dr	1	2			▲●	●◆□☆◇	
Long	Redland Rd	Mary Charles Ln	Starr Dr	1	4			▲◆	▲●◆☆◇◇	
Long	Friendship Rd	Quail Dr	Unpaved Road W of Indian Trl	1	6			▲■◆	●◆+□☆◇	
Long	Tram Rd	County line	Johnson Rd	0	2			◆	●+□☆	
Long	Chana Creek Rd	Runt Odaniel Rd	Atkins Rd	0	4			◆	▲◆☆◇◇	
Long	Redland Rd	Hidden Forest Spur	Unnamed Road W of Ware	0	4			▲◆	●+□☆◇	
Long	Redland Rd	Rock Springs Rd	Wallahatchee Rd	2	7			■●	●◆□☆◇	
Long	Redland Rd	Still Pines Ct	Scholars Dr	1	6			▲■◆	●◆+□☆◇	
Long	Birmingham Rd	AL-229	Dead End	1	3			▲◆	●+□☆◇	
Long	Muskogee Trl	AL-229	Baker Holw	1	1			▲●	●◆□☆◇	
Long	Intersection	Gold Mine Rd	Tom Britt Ln	1	1			▲◆+	●★◆◆+☾□○ ☆◇	
Long	Sweet William Ln	AL-143	Coosa River Rd	1	2			▲◆	●+□☆◇	
Long	Squaw Ridge Rd	Mount Hebron Rd	Fawn Dr	1	1			▲■◆	●◆+□☆◇	
Long	Friendly Pine Rd	Henderson Ln	AL-14	1	7	X		▲◆	●+□☆◇	
Long	Unnamed Dirt Road E of Speigner	Titus Rd	Titus Rd	0	2			▲■●	●◆□☆◇	

Table A2 — Intermediate and Long-Term Priority Projects for Site Specific Routes

Priority Timeline	Route	Begin Termini	Ending Termini	KA Crashes	Total Crashes	Mentioned in Survey	Underserved Community	Focus Areas	List of Potential Countermeasures	Cost Estimate
Long	Mercer Rd	Harris Rd	Bryant Rd	1	3			▲ ■ ◆	● ◆ + □ ☆ ◡	
Long	Harrogate Springs Rd	Wildwood Ln	Fairlewood Dr	1	3			▲ ■ ●	● ◆ □ ☆ ◡	
Long	Gunnells Rd	Payson Rd	Unnamed E of Ross	1	2		X	▲ ■ ●	● ◆ □ ☆ ◡	
Long	Claud Fleahop Rd	Mullins Rd	Fleahop Rd	1	2			▲ ◆	● + □ ☆ ◡	
Long	Colley Rd	AL-14	AL-170	1	4	X	X	▲ ●	● ◆ □ ☆ ◡	
Long	Crenshaw Rd	Earle Ln	Unnamed Near Hillard Ln	1	3			▲ ■ ◆	● ◆ + □ ☆ ◡	
Long	Fern Rd	Carpenter Rd	Ebenezer Dr	1	2			▲ ■ ◆	● ◆ + □ ☆ ◡	
Long	Speigner Rd	Joes Fish Camp Rd	Woodland Creek Trl	1	2			▲ ◆	● + □ ☆ ◡	
Long	Landers Swink Rd	Hobbs Rd	AL-229 (Red Hill Road - Google Maps)	1	3			▲ ■ ◆	● ◆ + □ ☆ ◡	
Long	New Harmony Rd	Guy Rd	Geddie Loop Rd	1	1			▲ ■ ●	● ◆ □ ☆ ◡	
Long	Kelly Rd	Blueberry Hill Rd	Welona Creek Rd	1	1			▲ ■ ◆	● ◆ + □ ☆ ◡	
Long	Intersection	Natchez Trace Loop	Rifle Range Rd	1	1			+	★ ◡ + ☾ ○ ☆	
Long	Crenshaw Rd	Chapel Rd	Earle Ln	0	5			▲ ◆	● + □ ☆ ◡	
Long	River Oaks Blvd	AL-143	Unknown E of AL-143	0	6			▲ ◆	● + □ ☆ ◡	



SAIN
ASSOCIATES