

CENTRAL ARKANSAS SAFETY ACTION PLAN

LONOKE COUNTY

Supplemental County Level Plan

November 2024



ACKNOWLEDGMENTS

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Date: **November 20, 2024**

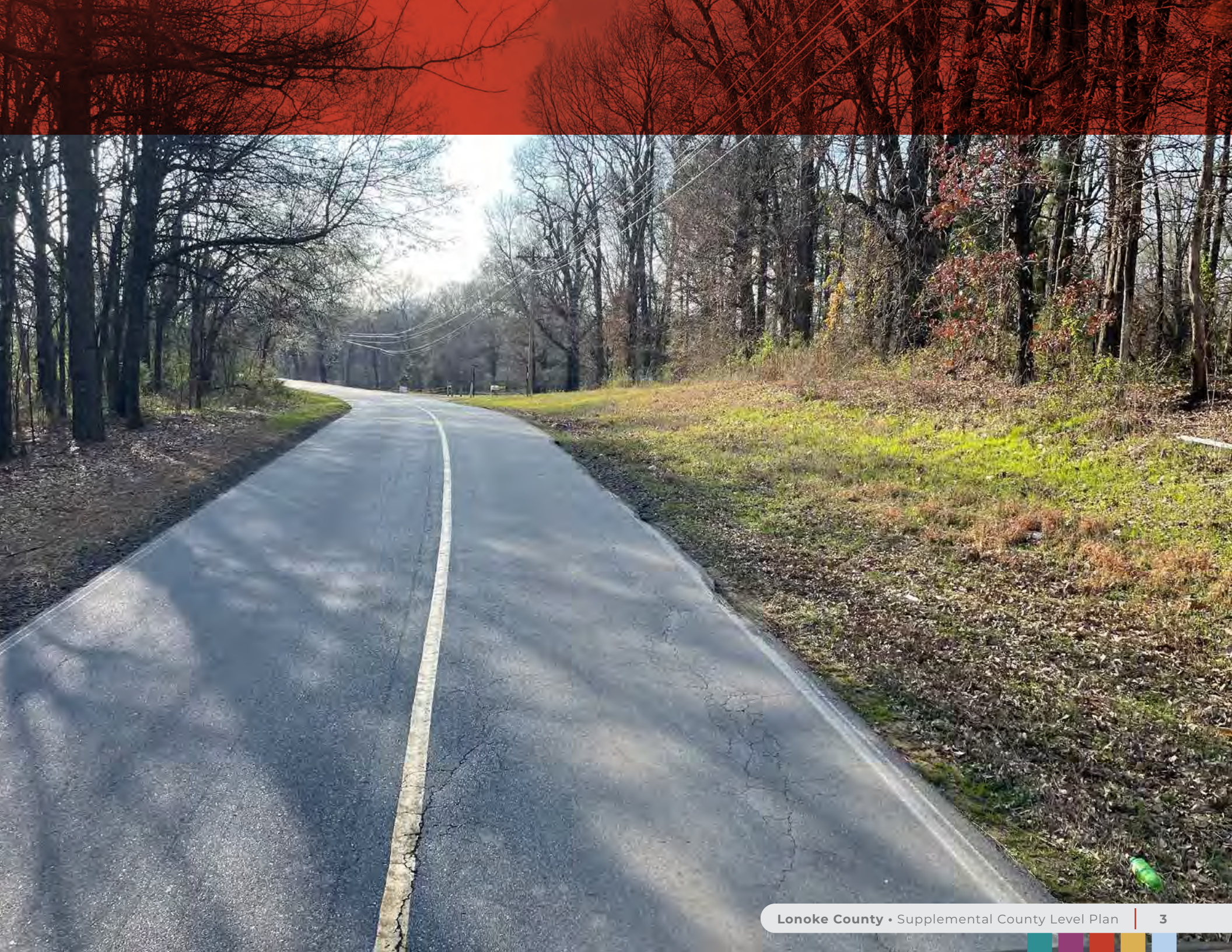
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LIST OF ABBREVIATIONS

ADA	Americans with Disabilities Act	NHTSA	National Highway Traffic Safety Administration
AR	Arkansas	PHB	Pedestrian Hybrid Beacon
ARDOT	Arkansas Department of Transportation	RRFB	Rectangular Rapid Flashing Beacon
ETC	Equitable Transportation Communities	RSA	Road Safety Audit
FHWA	Federal Highway Administration	SAPAC	Safety Action Plan Advisory Committee
HIN	High Injury Network	SHSP	Strategic Highway Safety Plan
GIS	Geographic Information System	SS4A	Safe Streets and Roads for All
KABCO	Injury Severity Scale	TWLT	Two Way Left Turn
	K – Fatal Injury	USDOT	US Department of Transportation
	A – Suspected Serious Injury		
	B – Suspected Minor Injury	VMT	Vehicle Miles Traveled
	C – Possible Injury	VRU	Vulnerable Road User
	O – No Apparent Injury		



1 INTRODUCTION

The purpose of the Lonoke County Supplemental County Level Plan is to address the specific safety needs and projects identified by local stakeholders within Lonoke County. The Supplemental County Level Plan expands on the Central Arkansas Safety Action Plan by focusing on additional segments and intersections located within Lonoke County's High Injury Network (HIN) and High Injury Intersections that were not already addressed in Central Arkansas Safety Action Plan. Unlike the Central Arkansas Safety Action Plan, which considers the entire Central Arkansas Region as a whole and consists of Faulkner, Lonoke, Pulaski, and Saline Counties, this Supplemental County Level Plan focuses exclusively on Lonoke County ("the County"). Its main objectives are to identify projects and implement strategies that can help Lonoke County reduce fatal and serious injury crashes on its roadways, with the ultimate goal of eliminating these crashes all together. This is a crucial step towards achieving the same goal of eliminating fatal and serious injury crashes for the entire Central Arkansas Region. The Central Arkansas Safety Action Plan used a primarily data driven approach to develop regional projects. The Supplemental County Level Plan is also primarily data driven, but relies on input from local agencies to select segments and intersections as a key selection criteria in developing regional projects.

1.1 CENTRAL ARKANSAS SAFETY ACTION PLAN

The Central Arkansas Safety Action Plan was created to determine which corridors have the greatest need for safety improvements and identify projects and strategies to help Central Arkansas reduce fatal and serious injuries on the Region's roadways. The plan was developed by Metroplan and funded through a grant from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) Program. Central Arkansas leaders from the Metroplan Board of Directors committed to a goal of reducing fatal and serious injury crashes in Central Arkansas by 40 percent by the year 2040. The leaders set several interim goals starting with a baseline to be established in 2025 and incremental steps through the year 2050 to get an 80% reduction.

The Central Arkansas Safety Action Plan includes a large public engagement effort. Several engagement methods were used, including both online and in person public engagement, which consisted of an online survey and an interactive mapping activity, open houses, and booths at community events. The project team conducted stakeholder engagement, which included workshops with the Metroplan Board, meetings with the Safety Action Plan Advisory Committee (SAPAC), and stakeholder walk audits. The public and stakeholder engagement efforts were used to identify projects and implement strategies to increase safety in Central Arkansas.

The Central Arkansas Safety Action Plan includes a list of Regional High Injury Network (HIN) segments and High Injury Intersections. The threshold crash per mile value for segments included in the HIN was

two fatal and serious injury crashes per mile or greater from 2018 through 2022. High injury intersections had at least two fatal and serious injury crashes that occurred within 250 feet of the intersection from 2018 through 2022. These segments and intersections were scored and prioritized based on SS4A key objectives to assess the level of need for safety improvements, such as the number of fatal and serious injury crashes, underserved areas, and locations where vulnerable road users such as pedestrians and people on bikes are frequently present. The Central Arkansas Safety Action Plan identifies the 20 highest scoring Regional HIN and 20 highest scoring Regional High Injury Intersections. In addition to the top 20 regionwide segments and intersections, the five highest scoring state route HIN segments and the five highest scoring local roads in each county were identified. Similarly, the five highest scoring intersections of two state routes or a state route and local road, as well as the five highest scoring intersections of two local roads were identified, where applicable.

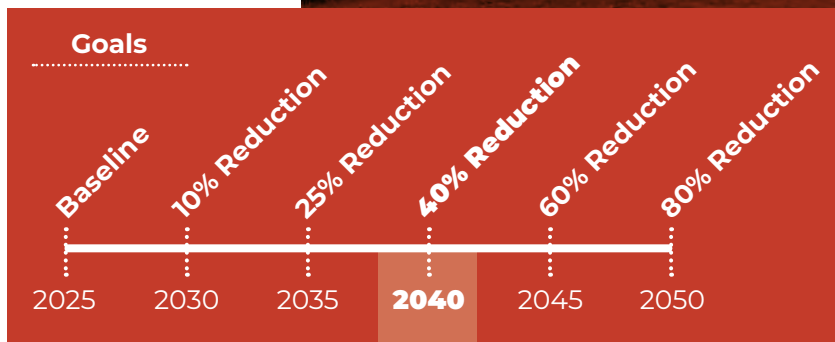
The Central Arkansas Safety Action Plan also includes a Safety Countermeasures Toolbox, made up of countermeasures recommended by the Federal Highway Administration (FHWA), National Highway Transportation Safety Administration (NHTSA), and Arkansas Department of Transportation (ARDOT) that have been historically proven to increase safety on roadways. Countermeasures include changes in roadway geometry, operations, signage, pavement markings, and access management. These countermeasures have a positive impact on reducing fatal and serious injury crashes and may be used on roadways not identified in the Lonoke County Supplemental Plan. The full list of recommended safety

countermeasures can be viewed in Section 5- Safety Countermeasures Toolbox of the Central Arkansas Safety Action Plan.

Ten location-specific projects were developed for the regionwide top 20 segments and top 20 intersections. The ten location-specific projects incorporate the regionwide top 20 segments and top 20 intersections. All but one of the regional projects are in Pulaski County, with the remaining project in Faulkner County. Additional location-specific projects were developed for the highest scoring state route and highest scoring local road in Faulkner, Lonoke, and Saline Counties. These location-specific projects consist of combinations of safety improvements from the Safety Countermeasures Toolbox identified in the Central Arkansas Safety Action Plan that are expected to reduce crashes, particularly fatal and serious injury crashes and crashes involving vulnerable road users, within the vicinity of the project location. To view the regional projects that are in Lonoke County, please refer to the Central Arkansas Safety Action Plan.

The Central Arkansas Safety Action Plan also includes a list of systemic improvements, developed based on the regional crash analysis and roadway network review. The systemic improvements consist of countermeasures that are implemented based on high-risk roadway features correlated with a particular crash type. Proposed policies to support recommended systemic improvements are included to provide guidance on incorporating safety countermeasures in future roadway and transportation projects.

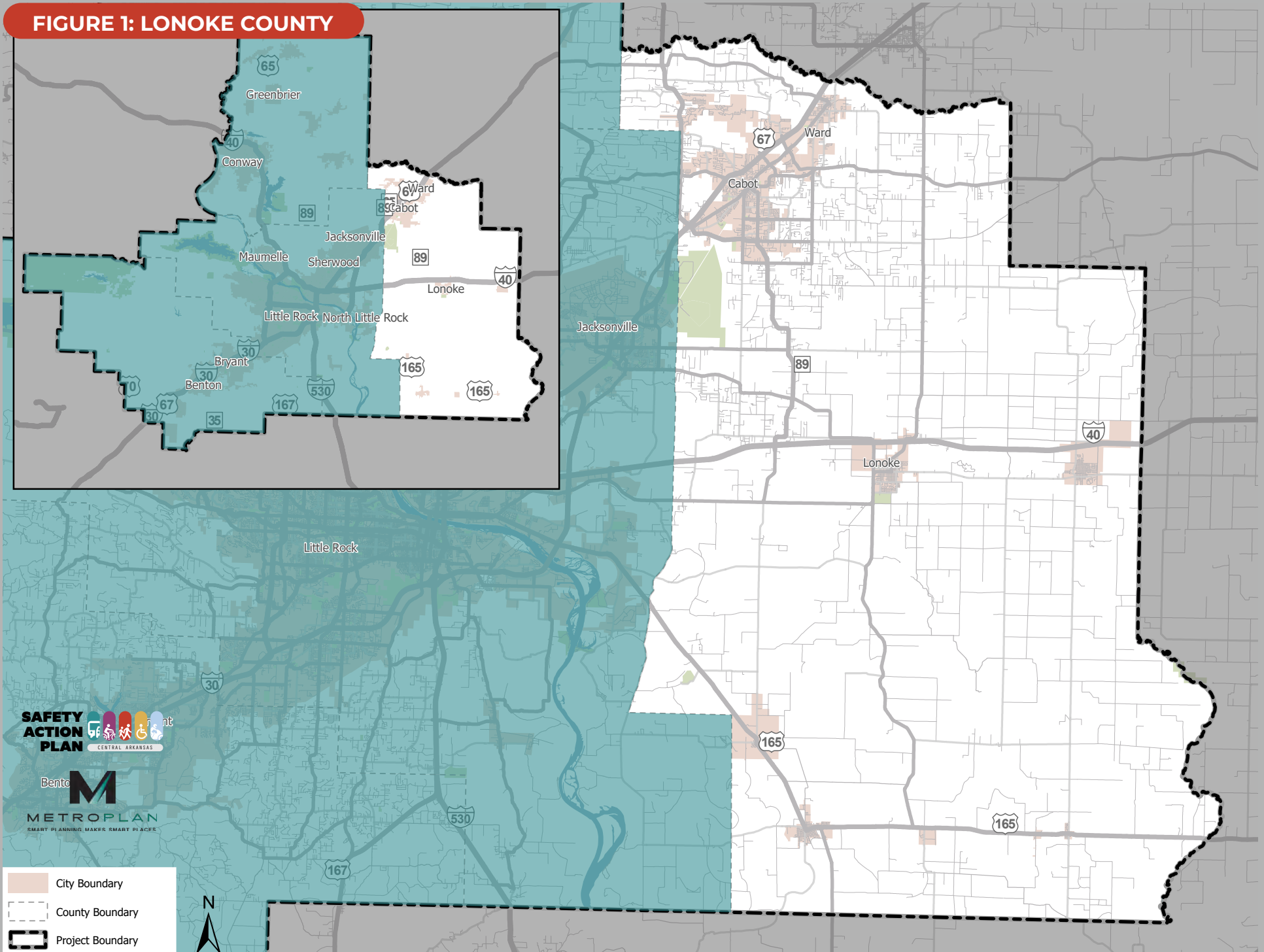
The main objective of this plan is to identify projects and implement strategies that can help Lonoke County reduce fatal and serious injury crashes on its roadways, with the ultimate goal of eliminating these crashes all together.



Our Goal:

40% reduction in fatal and serious injury crashes by 2040

FIGURE 1: LONOKE COUNTY





1.2 LONOKE COUNTY OVERVIEW

Lonoke County, shown in **Figure 1**, is located in the Central Arkansas Region and has an approximate population of 76,000 as of July 2023, according to the US Census Bureau. This population accounts for roughly 10 percent of the total population in the Central Arkansas Region. Lonoke County encompasses approximately one fourth of the Central Arkansas Region and includes the Cities of Austin, Cabot, Carlisle, Coy, England, Keo, Lonoke, and Ward. Lane miles within Lonoke County make up 17 percent of the total lane miles within the Central Arkansas Region.



Lonoke County is located in the Central Arkansas Region and has an approximate population of 76,000 as of July 2023.





Through five years, fatal and serious injury crashes have increased every year until 2022 where in both cases, crashes decreased.

2 CRASH DATA ANALYSIS

A crash analysis was conducted to identify patterns and trends in crash types and common factors contributing to fatal and serious injury crashes within Lonoke County.

2.1 LONOKE COUNTY CRASH DATA

From 2018 to 2022, there were a total of 7,791 reported crashes within Lonoke County, representing six percent of all crashes in the Central Arkansas Region. Of these crashes within Lonoke County, 53 resulted in fatalities and 219 resulted in serious injuries. Through five years, fatal and serious injury crashes have increased every year until 2022 where in both cases, crashes decreased.

Lonoke County By Year

 **54**
Fatal
Crashes
2018-2022

 **219**
Serious Injury
Crashes
2018-2022

Fatal and Serious Injury Crashes By Year

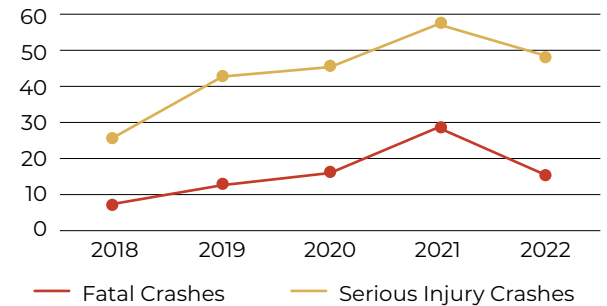
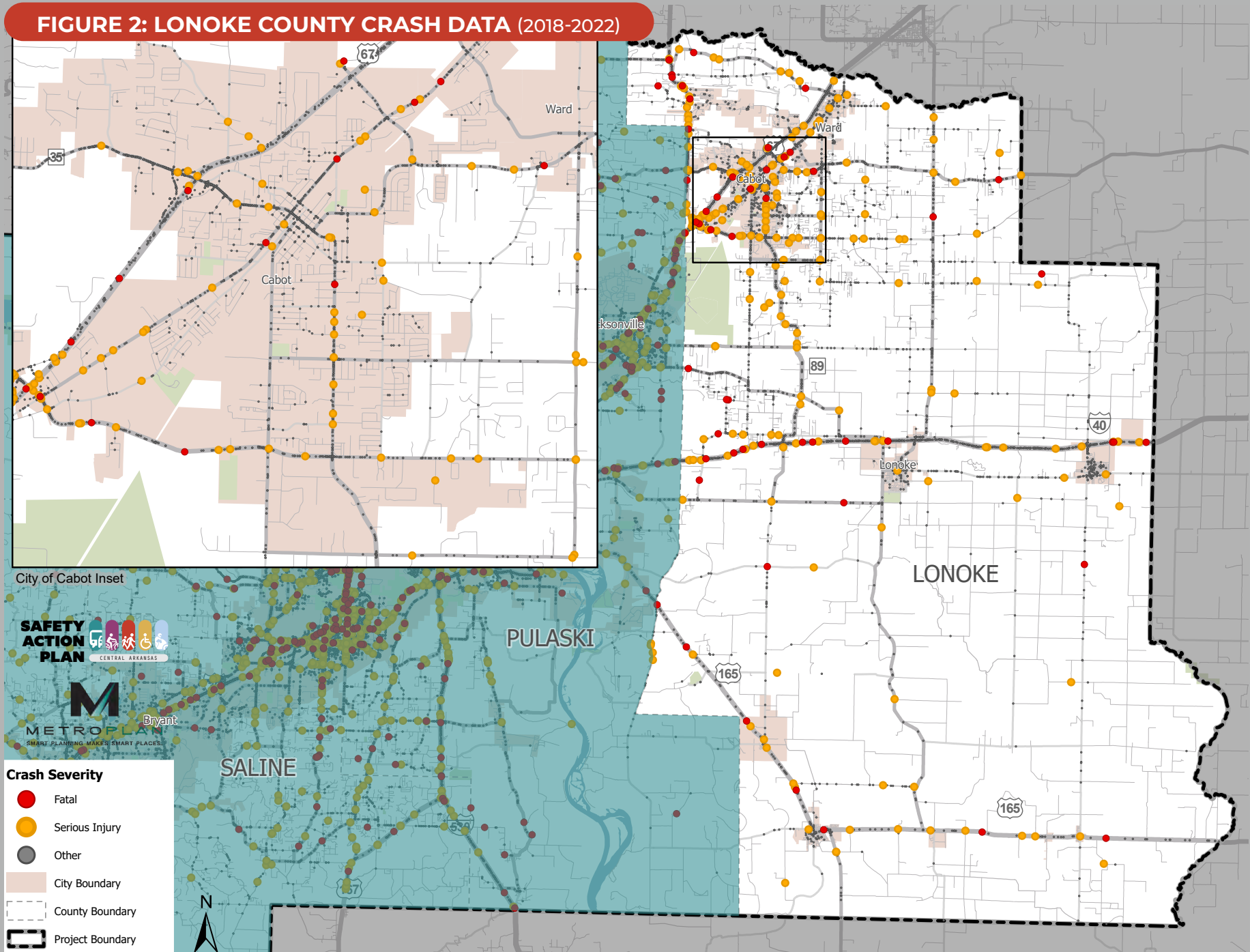
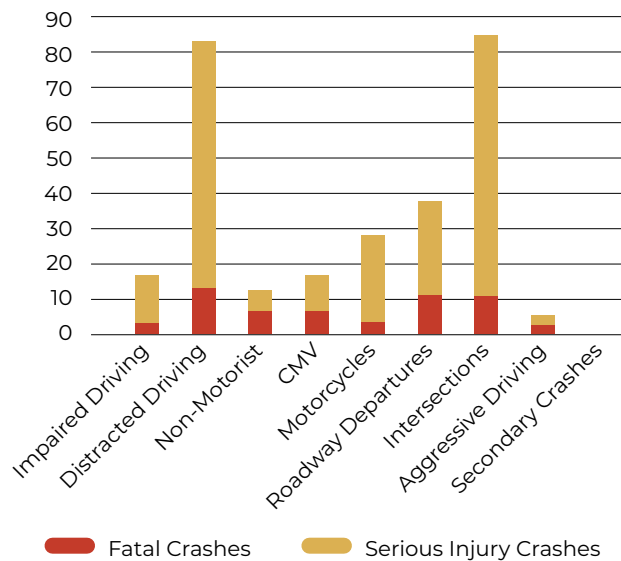


FIGURE 2: LONOKE COUNTY CRASH DATA (2018-2022)



Fatal and Serious Injury Crashes by Arkansas SHSP Focus Area



2.2 ARKANSAS SHSP – LONOKE COUNTY

The Arkansas Strategic Highway Safety Plan (SHSP) identifies focus areas of safety for the State and provides a framework for reducing fatal and serious injury crashes on all public roads. Projects funded by the Highway Safety Improvement Program (HSIP) must reflect the SHSP at a strategic level. The focus areas are crash types and factors that are prominent throughout the State and often lead to fatal and serious injury crashes. Crash data from 2018 through 2022 was filtered to analyze crashes within Lonoke County related to the SHSP focus areas. A summary of the crash data over the last five years for crashes within Lonoke County for each of the SHSP focus areas is provided in **Table 1**.

During the review of Lonoke County's highest SHSP focus areas for fatal and

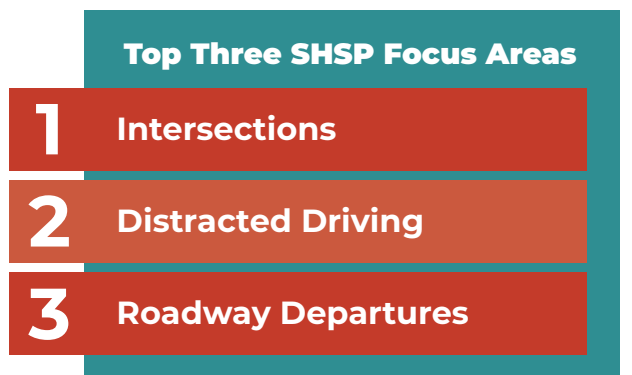
serious injury crashes, it was found that intersection-related, distracted driving, and roadway departure crashes were the top three SHSP focus areas. It is worth noting that intersection-related crashes were identified as the highest priority in Lonoke County, which aligns with the Central Arkansas Region's focus as well. Over the years, intersection-related crashes in Lonoke County have seen an increase, with the exception of a decrease in 2021. Distracted driving crashes rank second in both the Region and Lonoke County as a significant concern for fatal and serious injury incidents. The third highest focus area within Lonoke County is roadway departure crashes. This is consistent with the county's predominantly rural nature, as rural areas tend to experience higher rates of roadway departure crashes.

Between 2018 and 2021, Lonoke County experienced an upward trend in roadway

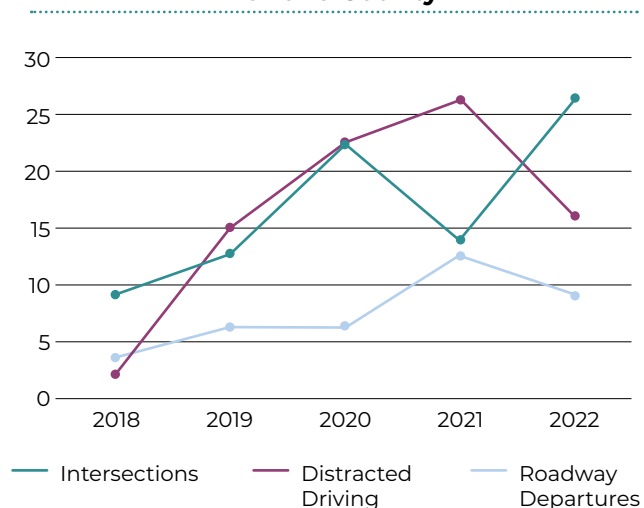
Table 1: SHSP Focus Area Fatal and Serious Injury Crash Summary (2018 - 2022) Lonoke County

SHSP Focus Area	2018	2019	2020	2021	2022	Fatal Crashes	Serious Injury Crashes	Total # of Fatal & Serious Injury Crashes
Impaired Driving	1	1	5	6	4	4	13	17
Distracted Driving	2	15	23	27	16	12	71	83
Non-Motorist	0	2	0	5	4	6	5	11
CMV	3	2	1	6	5	7	10	17
Motorcycles	3	3	6	11	6	3	26	29
Roadway Departures	3	7	7	13	9	11	28	39
Intersections	9	13	23	14	26	11	74	85
Aggressive Driving	0	1	0	3	2	3	3	6
Secondary Crashes	0	0	0	0	0	0	0	0

departure and distracted driving crashes. However, in 2022, there was a decrease in fatal and serious injury crashes. Over the past five years, intersection-related crashes have been on the rise, although there was a decrease in 2021. To ensure the safety of Lonoke County, it is crucial to continue prioritizing safety in targeted and systemic measures that address these SHSP focus areas.



Fatal and Serious Injury Crashes by Top Three Arkansas SHSP Focus Areas - Lonoke County



2.3 LONOKE COUNTY HIGH INJURY NETWORK AND INTERSECTIONS

A Regional High Injury Network (HIN) was developed as part of the Central Arkansas Safety Action Plan. The HIN is made up of one-mile segments with a high frequency of fatal and serious injury crashes. The HIN is a way to identify parts of a roadway network with higher rates of fatal and serious injury crashes. Lonoke County contains 52 Regional HIN segments, accounting for approximately 10 percent of the Regional HIN, shown in **Figure 3**. To reduce fatal and serious injury crashes in Lonoke County, it is important to prioritize targeted countermeasures on the HIN segments, which have the highest number of fatal and serious injury crashes.

A Regional High Injury Intersection set was also established as part of the Central Arkansas Safety Action Plan, **Figure 4** shows high injury intersections within Lonoke County. Lonoke County contains 8 intersections that make up approximately five percent of the Regional High Injury Intersections.

A dashboard was created as a component of the Central Arkansas Safety Action Plan. The dashboard includes crash data statistics, the interactive Regional High Injury Network, and recommended projects for the Region.

The interactive safety dashboard can be found here: [Central Arkansas Safety Dashboard](#)



Equity Overlay

The USDOT Equitable Transportation Communities (ETC) national census tract data helps identify historical underinvestment in disadvantaged communities. This information shows the cumulative burden these communities experience in various areas. The ETC Explorer uses 2020 census tracts and data to analyze five components, each of which have numerous factors that make up their score: Transportation Insecurity, Climate and Disaster Risk Burden, Health Vulnerability, and Social Vulnerability. The overlay of disadvantaged census tracts, shown in **Figure 3** and **Figure 4**, revealed that almost 45 percent of HIN segments and almost 15 percent of High Injury Intersections within Lonoke County fall within a disadvantaged community. Equity is an important component in funding for projects through the USDOT SS4A Implementation Grant Program. Location of a segment or intersection within a disadvantaged census tract is used in this study as part of the scoring to rank segments and intersections when prioritizing projects.

FIGURE 3: HIGH INJURY NETWORK SEGMENTS WITHIN LONOKE COUNTY (2018-2022)

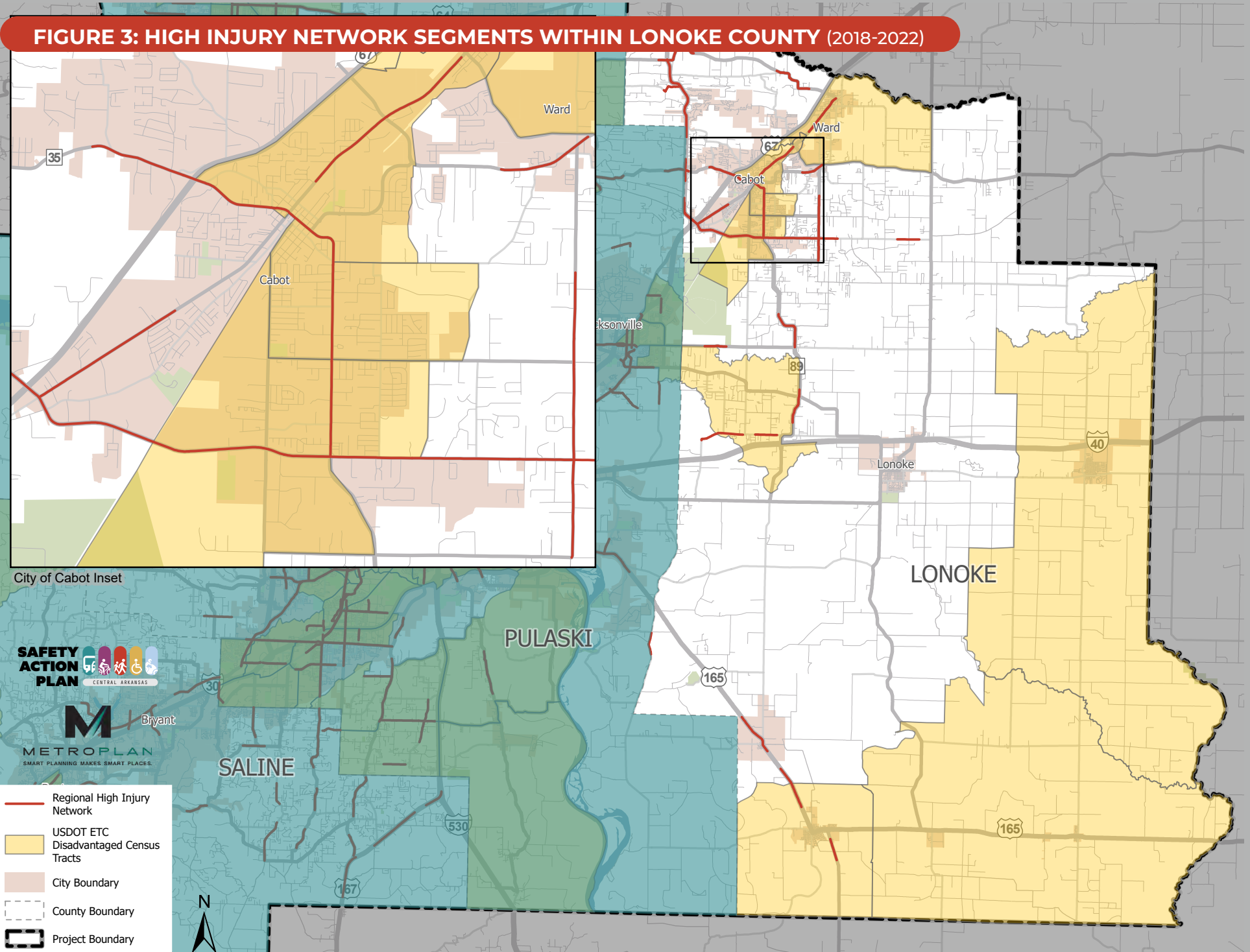
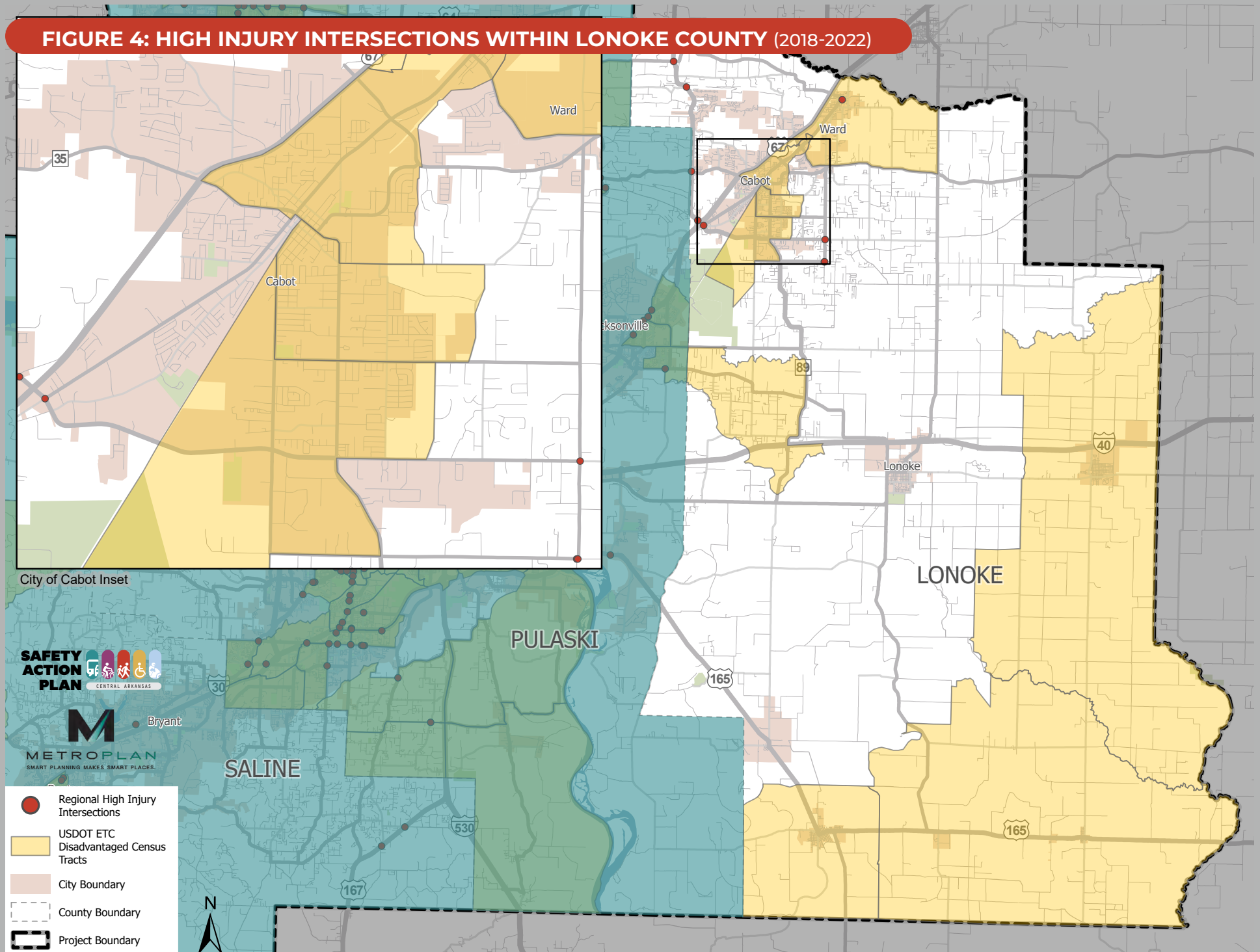


FIGURE 4: HIGH INJURY INTERSECTIONS WITHIN LONOKE COUNTY (2018-2022)







Safety for vulnerable road users, including pedestrians and bicyclists, is another important component in funding for projects through the USDOT SS4A Implementation Grant Program.

Pedestrian and Bicyclist Crash Overlay

To account for crashes involving non-motorized modes of transportation, fatal and serious injury crashes that involved a pedestrian or a bicycle within Lonoke County from 2018 through 2022 were overlayed onto the Regional HIN, as shown in **Figure 5** and **Figure 6**. Of the 52 HIN segments within Lonoke County, 8 segments contained a crash that involved a pedestrian and 5 of them contained a crash that involved a bicyclist. Please note that the lines shown on the HIN maps may represent multiple one-mile segments combined into one line, as pedestrian or bicycle crashes may have occurred along multiple segments of a corridor. Safety for vulnerable road users, including pedestrians and bicyclists, is another important component in funding for projects through the USDOT SS4A Implementation Grant Program. Crashes on a segment or intersection that involved vulnerable road users is used in this study as part of the scoring to rank segments and intersections when prioritizing projects.

FIGURE 5: HIGH INJURY NETWORK WITH FATAL AND SERIOUS INJURY PEDESTRIAN CRASHES (2018-2022)

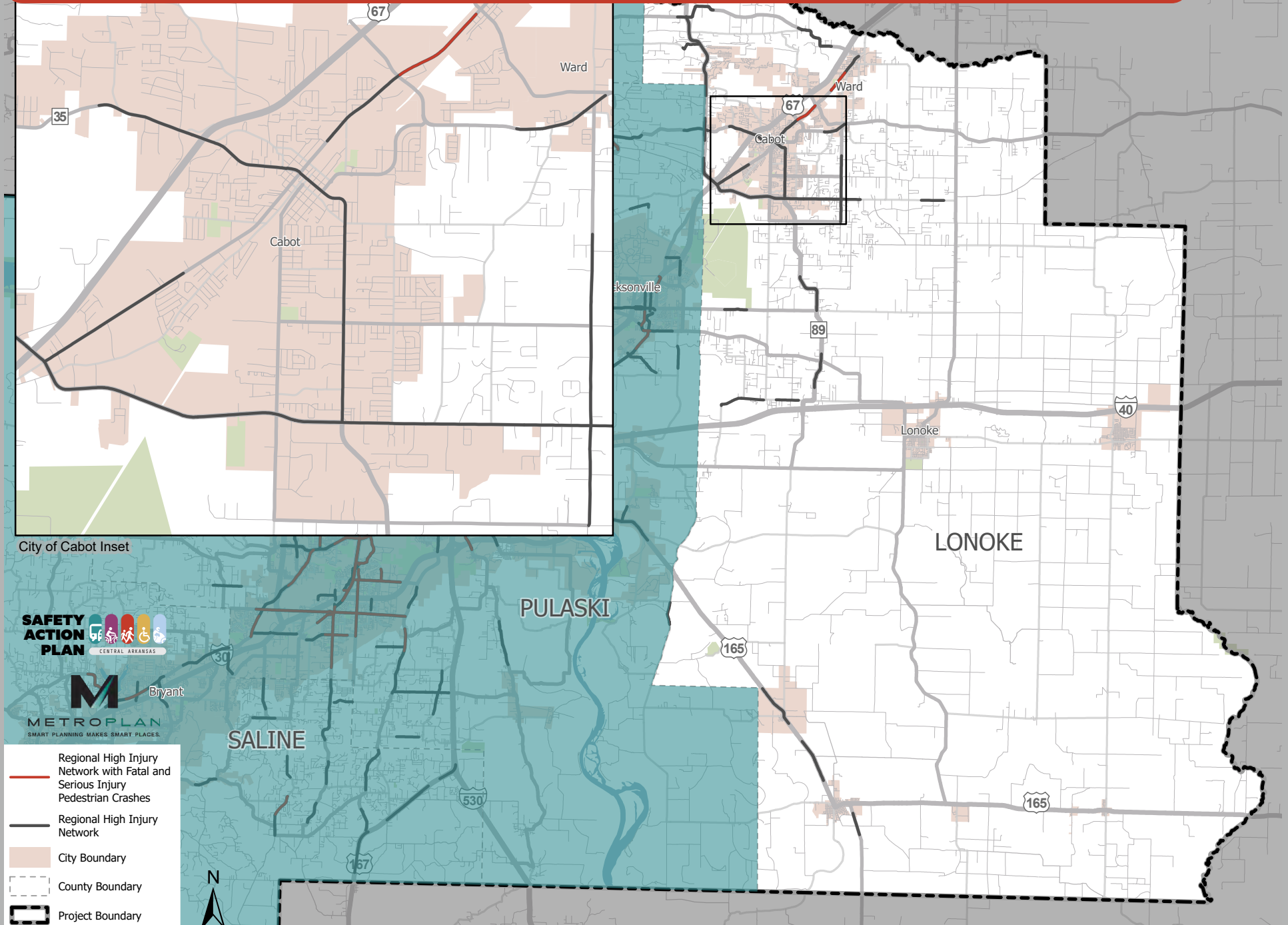
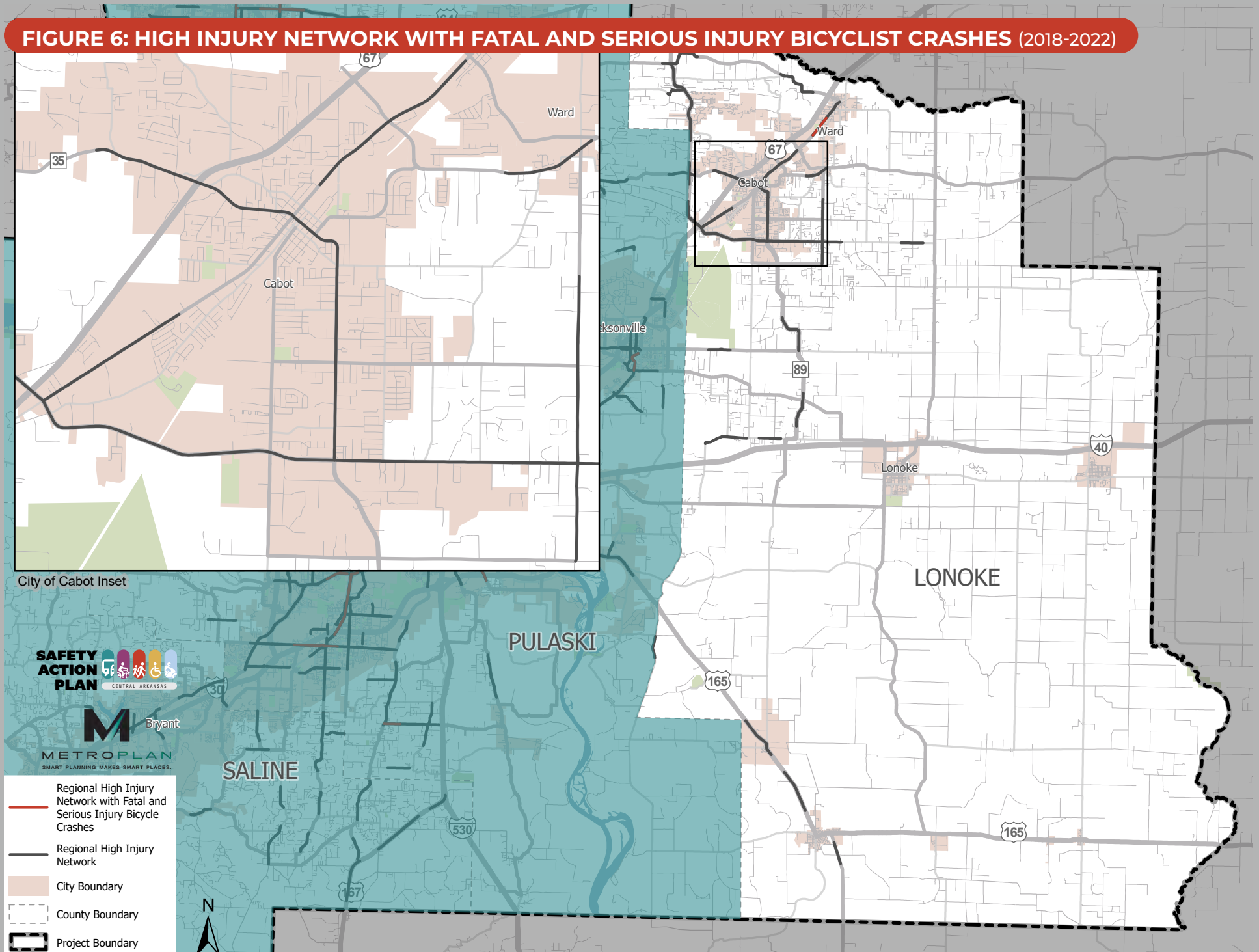


FIGURE 6: HIGH INJURY NETWORK WITH FATAL AND SERIOUS INJURY BICYCLIST CRASHES (2018-2022)



TOP HIGH INJURY NETWORK SEGMENTS AND HIGH INJURY INTERSECTIONS IN EACH CITY WITHIN LONOKE COUNTY

As part of the Central Arkansas Safety Action Plan, high injury segments and intersections were ranked through a needs score. The needs score included the corridor or intersections crash history, equity data, location characteristics, and stakeholder input. Additional detail about the scoring criteria can be found in the Central Arkansas Safety Action Plan.

Table 2 includes the top HIN segment in each city within Lonoke County that had a segment on the HIN. **Table 3** includes the top High Injury Intersection in each city within Lonoke County that had an intersection considered to be a High Injury Intersection. The top segment or intersection in unincorporated Lonoke County is also included in the tables. Segments or intersections that were included in the Central Arkansas Safety Action Plan are identified in the “Top 20 Regional Plan” column. Additional information on these segments and intersections can be found in that plan.

Table 2: Lonoke County Top High Injury Network Segments in Cities with Segments on the High Injury Network

Road Name	Approximate Segment Boundary	City	State Route or Local Road	Top 20 Regional Plan	Total Needs Score	Total Crashes	Total KA Crashes
Lonoke County							
S Pine St (SH 89)	Alexis Dr to Campground Rd	Cabot	State Route	Yes	47.5	114	5
Graham Rd	Sherman Hill Rd to Graham Acres Rd	NA	Local Road	Yes	41.0	9	2
US 165	Central High Rd to Elam St	NA	State Route	No	41.0	11	1
N 2nd St (SH 367)	W Berry Ln to W Hendricks St	Austin	State Route	No	40.0	36	4
W 2nd St (SH 367)	Brewer St to Ten Point Dr	Ward	State Route	No	40.0	38	2
SH 15	Cambridge St to Carl Lee Rd	England	State Route	No	38.5	6	2
US 165	Cotton Rd to SH 15	Keo	State Route	No	16.0	3	2

Table 3: Lonoke County Top High Injury Intersections in Cities with Intersections on the High Injury Intersections

Intersection Name	City	State Route or Local Road	Top 20 Regional Plan	Total Score	Total Crashes	Total KA Crashes
Lonoke County						
Bill Foster Memorial Hwy (SH 5) and S 2nd St (SH 367)	Cabot	Both	No	33.3	195	4
2nd St (SH 367) and Moore St (SH 319)	Ward	Both	No	33.0	19	2
SH 5 and Ballard Rd	NA	Both	No	10.0	16	2

3 LOCATION-SPECIFIC PROJECTS

Location-specific projects were developed for the Lonoke County Supplemental County Level Plan in order to address safety improvements within specific areas. These projects were identified by considering the highest scoring HIN segment within each city in Lonoke County and the highest scoring HIN segment in unincorporated Lonoke County. However, if the County or a city expressed the need for a different segment within their jurisdiction to be prioritized, that location was selected based on the agency's input. The projects listed in **Table 4** were recognized by stakeholders as having the greatest need for safety improvements within their respective jurisdiction.

For each location-specific project identified in **Table 4** that is not already included in the Central Arkansas Safety Action Plan, additional detail has been included on the subsequent pages. Detail includes a crash map of the segment, count of crashes on the segments from 2018 to 2022, and suggested countermeasures. As noted earlier, the full list of countermeasures can be viewed in Section 5 - Safety Countermeasures Toolbox of the Central Arkansas Safety Action Plan.

Table 4: Lonoke County Location-Specific Projects

Road/Intersection Name	Approximate Segment Extents	Fatal Crashes	Serious Injury Crashes	High Injury Network	City	Road Type	Located in Regional Plan	Selection Criteria
Lonoke County								
Pine Street (SH 89)	Rockwood Dr to Bill foster Memorial Hwy	1	12	Yes	Cabot	Local Road	Yes*	HIN Score
Kerr Road (SH 5)	Wayne Ln to Carson Bridge Rd	1	3	Yes	NA	State Route	Yes*	HIN Score
Main Street	S Pine St to Linda Ln	0	1	No	Cabot	Local Road	No	City Recommendation
SH 15	Cambridge St to Carl Lee Rd	0	2	Yes	England	State Route	No	HIN Score
US 165	SH 15 to Cemetery Rd	0	2	Yes	Keo	State Route	No	City Recommendation
US 165	Central High Rd to Elam St	1	1	Yes	NA	State Route	No	HIN Score
N Lincoln Street & SH 38	Intersection Only	0	1	No	Austin	Both	No	City Recommendation
Peyton St & SH 38	Intersection Only	0	0	No	Ward	Both	No	City Recommendation

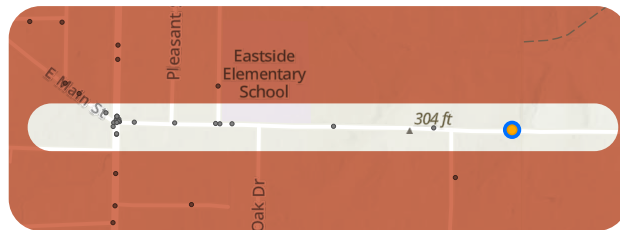
*Additional detail and maps for these location specific projects can be found in the Central Arkansas Safety Action Plan.

Roadway MAIN STREET

Segment: S Pine St to Linda Ln
Jurisdiction: City of Cabot

Countermeasure
Vulnerable Road User
High Visibility Crosswalk Pavement Markings
Add/Improve Sidewalk
Pedestrian Hybrid Beacon (PHB)
Vehicular Countermeasures
Longitudinal Rumble Strips
Clear Shrubs to Improve Sight Distance
Add Advance Warning Signage
Safety Lighting
Add Shoulder

Crash Severity	Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	0	1	0	21



Crash Severity
(2018 - 2022)

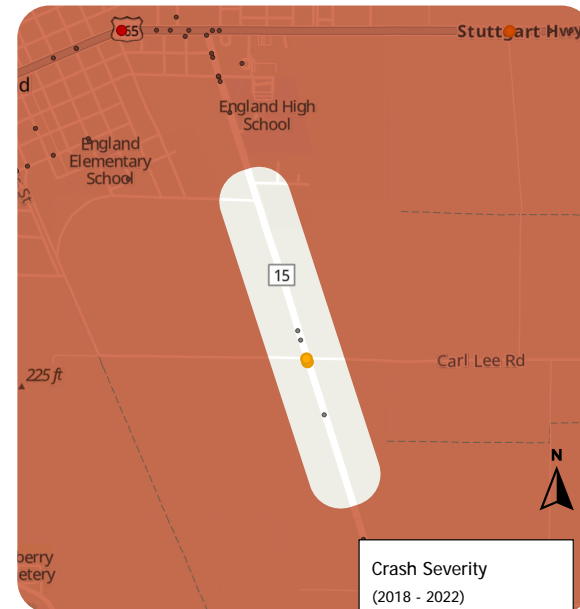
- Fatal
- Serious Injury
- Other
- Crash Involved Ped
- Crash Involved Bike

Roadway SH 15

Segment: Cambridge St to Carl Lee Rd
Jurisdiction: City of England

Countermeasure
Vehicular Countermeasures
Add Pavement Markings
Improve Pavement Conditions
Safety Lighting
Longitudinal Rumble Strips

Crash Severity	Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	0	2	0	6



Crash Severity
(2018 - 2022)

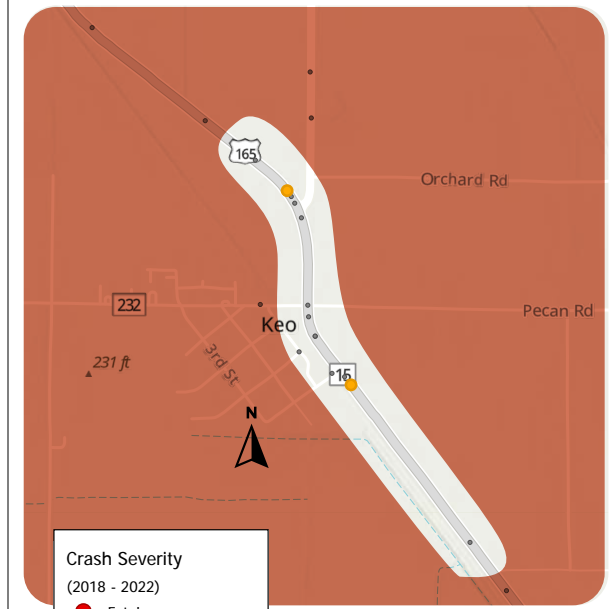
- Fatal
- Serious Injury
- Other
- Crash Involved Ped
- Crash Involved Bike

Roadway US 165

Segment: SH 15 to Cemetery Rd
Jurisdiction: City of Keo

Countermeasure
Vehicular Countermeasures
Transverse Rumble Strips
Add Advance Warning Signage
Safety Lighting
Enhanced Curve Delineation

Crash Severity	Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	0	2	1	12



Crash Severity
(2018 - 2022)

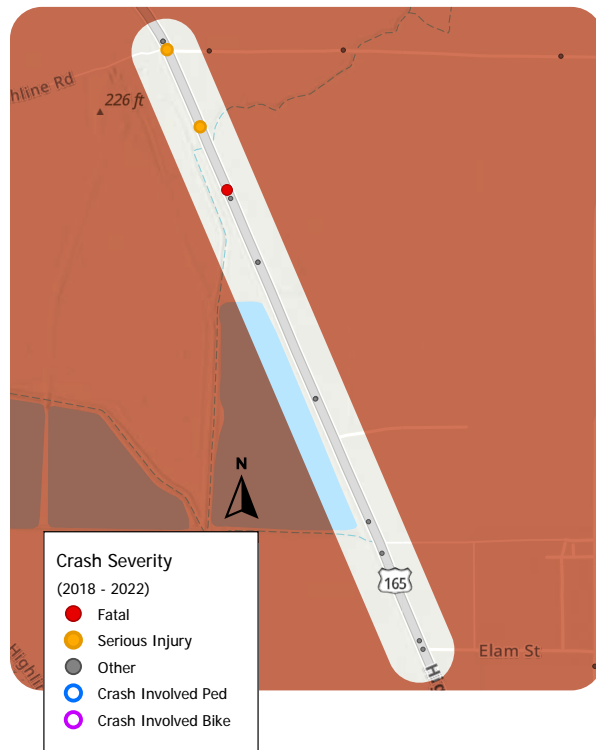
- Fatal
- Serious Injury
- Other
- Crash Involved Ped
- Crash Involved Bike

Roadway US 165

Segment: Central High Rd to Elam St
Jurisdiction: Lonoke County

Countermeasure
Vehicular Countermeasures
Safety Lighting
Guardrail
Conduct Speed Study
Dynamic Speed Display/Feedback Signs and Other Enforcement

Crash Severity				Total for All Crash Severities
Count Within Project Area	1	1	1	9

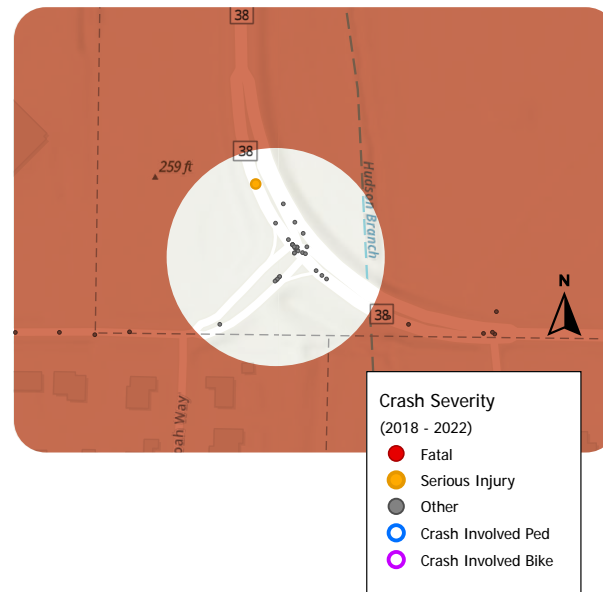


Roadway NORTH LINCOLN STREET & SH 38

Segment: N Lincoln St & SH 38
Jurisdiction: City of Austin

Countermeasure
Vulnerable Road User
High Visibility Crosswalk Pavement Markings
Vehicular Countermeasures
Traffic Signal
Safety Lighting
Enhanced Curve Delineation
Add Advance Warning Signage

Crash Severity				Total for All Crash Severities
Count Within Project Area	0	1	6	37

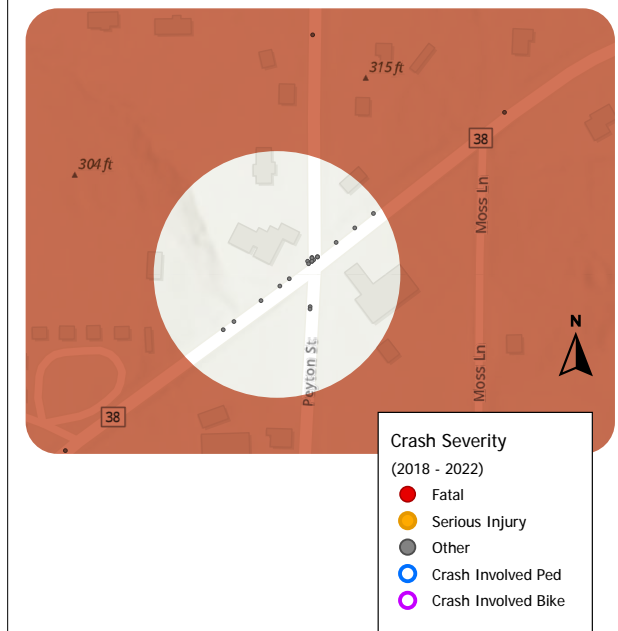


Roadway PEYTON ST & SH 38

Segment: Peyton St & SH 38
Jurisdiction: City of Ward

Countermeasure
Vulnerable Road User
Add Stop Bar and High Visibility Crosswalk Pavement Markings
Sidewalk Buffer
Vehicular Countermeasures
Add/Improve Pavement Markings
Safety Lighting
Add Advance Warning Signage
Add Shoulders

Crash Severity				Total for All Crash Severities
Count Within Project Area	0	0	3	21





SAFETY ACTION PLAN



CENTRAL ARKANSAS

4 by 40

Our Goal:

40% reduction in fatal and serious injury crashes by 2040