CENTRAL ARKANSAS SAFETY ACTION PLAN FAULKNER COUNTY

Supplemental County Level Plan

November 2024









ACKNOWLEDGMENTS

The information provided in this document is intended to be used for informational purposes only. No expressed or implied warranties are made by Metroplan, Kimley-Horn, Traffic Engineering Consultants, Crafton Tull, and Laneshift concerning the accuracy, completeness, reliability, and usability of this information. Further investigation such as field verification, site condition assessments, engineering analysis, and design are necessary prior to implementing any of the guidance contained herein.

This report was funded in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

Notice of Nondiscrimination Metroplan complies with all civil rights provisions of the federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, Metroplan does not discriminate on the basis of race, sex, color, age, national origin, religion, disability, or income status, in admission or access to and treatment in Metroplan's programs and activities, as well as Metroplan's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding Metroplan's nondiscrimination policies may be addressed to Sydney Dozier, Title VI/ADA/504 Coordinator, 501 West Markham Street, Suite B, Little Rock, AR 72201, (501) 372-3300, or the following e-mail address:

sdozier@metroplan.org

(Hearing and speech impaired may dial 711.)

This notice is available upon request from the Title VI/ADA/504 Coordinator in large print, audiotape or braille.

Adopted by the Metroplan Board of Directors

Date: **November 20, 2024**Resolution: **24-13**

TABLE OF CONTENTS

List of Abbreviations	.2
1 Introduction	4
1.1 Central Arkansas Safety Action Plan	
1.2 Faulkner County Overview	
2 Crash Data Analysis	8
2.1 Faulkner County Crash Data	
2.2 Arkansas SHSP – Faulkner County	
2.3 Faulkner County High Injury Network And Intersections	
3 Location-Specific Projects	19

LIST OF ABBREVIATIONS

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



1 INTRODUCTION

The purpose of the Faulkner County Supplemental County Level Plan is to address the specific safety needs and projects identified by local stakeholders within Faulkner County. The Supplemental County Level Plan expands on the Central Arkansas Safety Action Plan by focusing on additional segments and intersections located within Faulker 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 Faulkner County ("the County"). Its main objectives are to identify projects and implement strategies that can help Faulkner 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 iniury 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. Similarity, 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 Faulkner 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.

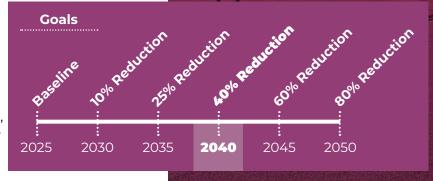
Ten location-specific projects were developed for the regionwide top 20 segments and top 20 intersections. The ten location-specific projects incorporate the regionwide top 20 segments and top 20 intersections. All but one of the regional projects are in Pulaski County, with the remaining project in 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 Faulkner 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.

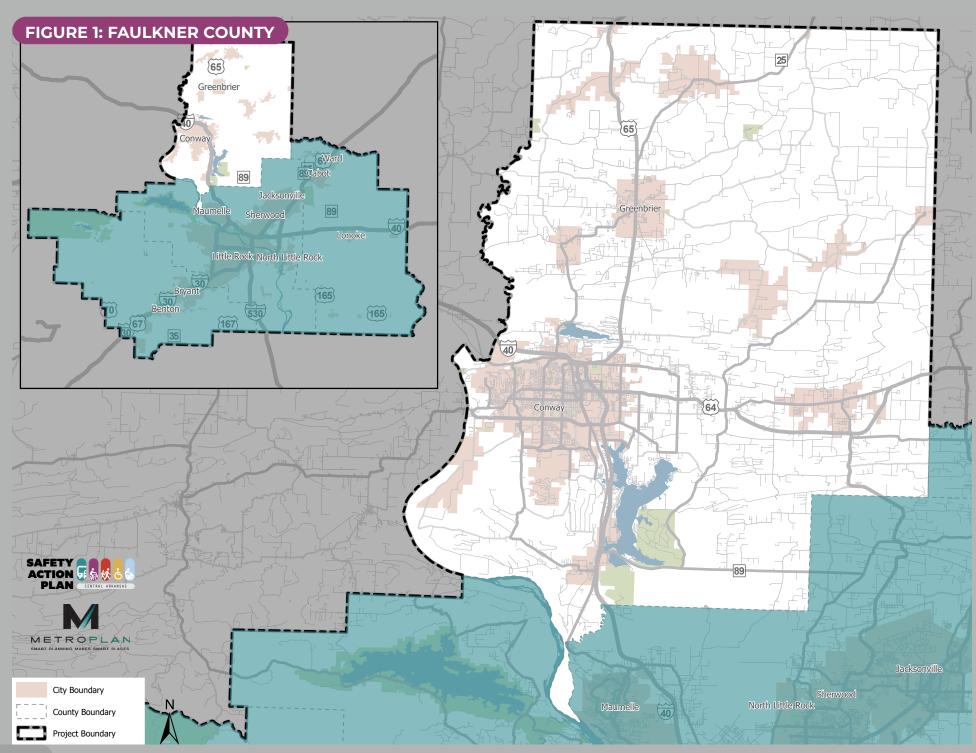
The main objective of this plan is to identify projects and implement strategies that can help Faulkner County reduce fatal and serious injury crashes on its roadways, with the ultimate goal of eliminating these crashes all together.





Our Goal:

40% reduction in fatal and serious injury crashes by 2040





1.2 FAULKNER COUNTY OVERVIEW

Faulkner County, shown in **Figure 1**, is located in the Central Arkansas Region and has an approximate population of 130,000 as of July 2023, according to the US Census Bureau. This population accounts for roughly 17 percent of the total population in the Central Arkansas Region. Faulkner County encompasses approximately one fourth of the Central Arkansas Region and includes the Cities of Conway, Greenbrier, Guy, Holland, Mayflower, Quitman, Vilonia, and Wooster. Lane miles within Faulkner County make up 19 percent of the total lane miles within the Central Arkansas Region.



130,000 as of July 2023.



Fatal crashes
within Faulkner
County saw a
decline in 2019
but otherwise
have stayed in the
range of 17 to 19
crashes per year.

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 Faulkner County.

2.1 FAULKNER COUNTY CRASH DATA

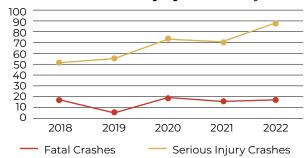
From 2018 to 2022, there were over 16 thousand reported crashes within Faulkner County, representing nearly 15 percent of all crashes in the Central Arkansas Region. Of these crashes, 77 resulted in fatalities and 339 resulted in serious injuries. Fatal crashes within Faulkner County saw a decline in 2019 but otherwise have stayed in the range of 17 to 19 crashes per year. Serious injury crashes have seen an increase in crashes each year except 2021.

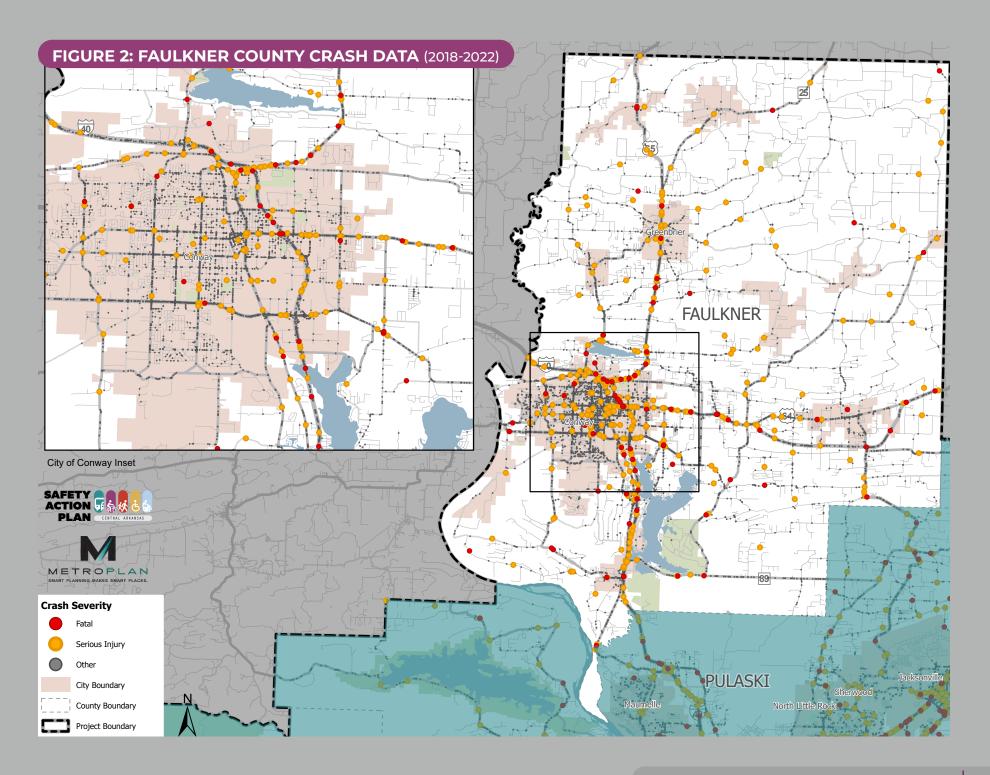
Faulkner County By Year



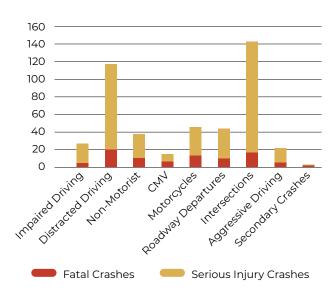


Fatal and Serious Injury Crashes By Year





Fatal and Serious Injury Crashes by Arkansas SHSP Focus Area



2.2 ARKANSAS SHSP - FAULKNER 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 Faulkner County related to the SHSP focus areas. A summary of the crash data over the last five years for crashes within Faulkner County for each of the SHSP focus areas is provided in **Table 1**.

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

serious iniury crashes, it was determined that intersection-related, distracted driving, and motorcycle crashes ranked as the top three SHSP focus areas. Intersection related crashes being the highest SHSP focus area aligns with the Central Arkansas Region top SHSP focus area. Within Faulkner County, intersection related crashes have increased every year besides a constant period from 2020 to 2021. Distracted driving crashes are the second highest SHSP focus area for fatal and serious injury crashes in both the Region and Faulkner County. The third highest SHSP focus area within Faulkner County was motorcycle crashes. Motorcycle crashes within Faulkner County have seen a gradual rise over the five-year period, except for a slight decrease in 2019.

The increasing trends observed in the top three SHSP focus areas in Faulkner County over the past five years are a matter

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

SHSP Focus Area	2018	2019	2020	2021	2022	Fatal Crashes	Serious Injury Crashes	Total # of Fatal & Serious Injury Crashes
Impaired Driving	4	6	8	6	2	4	22	26
Distracted Driving	15	19	24	23	36	20	97	117
Non-Motorist	7	6	11	5	9	12	26	38
CMV	3	1	5	1	4	6	8	14
Motorcycles	6	4	11	11	12	11	33	44
Roadway Departures	6	6	9	5	16	9	33	42
Intersections	17	23	33	33	36	18	124	142
Aggressive Driving	3	2	6	6	5	5	17	22
Secondary Crashes	0	0	0	2	0	1	1	2

of concern. This is not in line with the regional goal of reducing fatal and serious injury crashes by 40 percent by 2040 and ultimately reaching zero. It is important for Faulkner County to continue to prioritize safety and invest in targeted and systemic countermeasures that can address these SHSP focus areas.

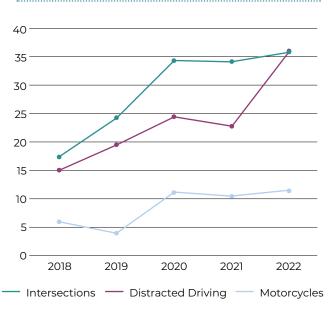
Top Three SHSP Focus Areas

Intersections

Distracted Driving

Motorcycles

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



2.3 FAULKNER 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. The Central Arkansas HIN consists of about 19 percent of the functionally classed roadway miles within the Central Arkansas Region that are not interstates, freeways, or expressways. These roadways account for approximately 77 percent of fatal and serious injury crashes that did not occur on interstates, freeways, or expressways from 2018 through 2022. Faulkner County contains 81 Regional HIN segments, accounting for approximately 15 percent of the Regional HIN, shown in Figure 3. To reduce fatal and serious injury crashes in Faulkner County, it is important to prioritize targeted countermeasures on the HIN segments. which have the highest number of fatal and serious injury crashes.

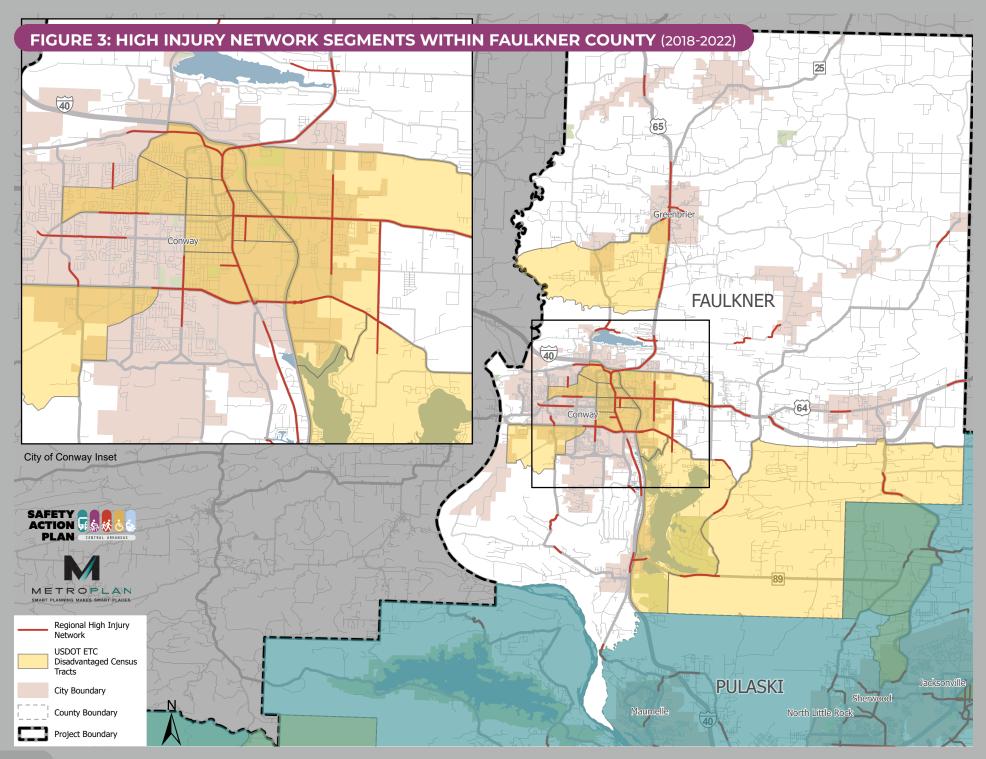
A Regional High Injury Intersection set was also established as part of the Central Arkansas Safety Action Plan, **Figure 4** shows high injury intersections within Faulkner County. Faulkner County contains 27 intersections that make up approximately 19 percent of the Regional High Injury Intersections.

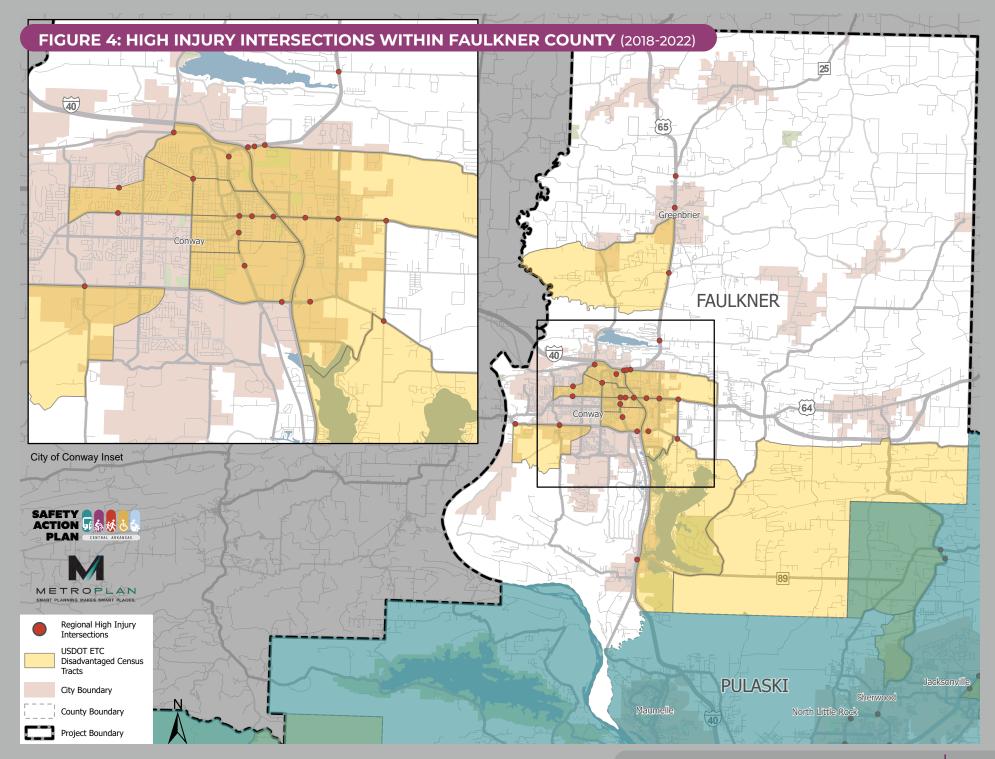
Equity Overlay

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 60 percent of HIN segments and almost 90 percent of HII within Faulkner 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.

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



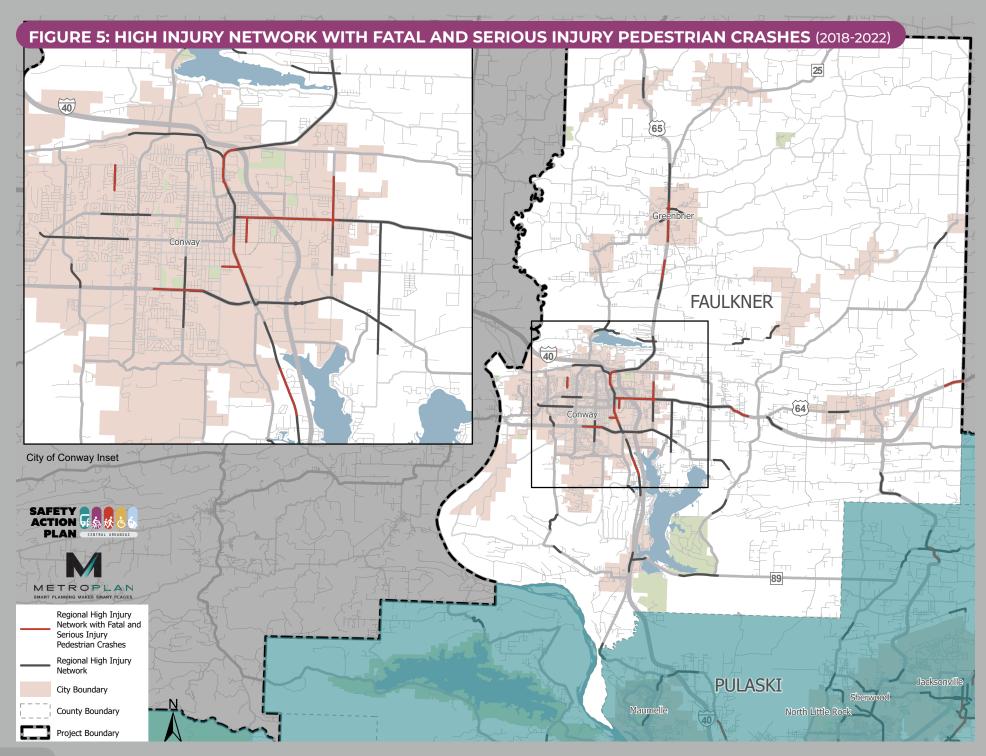


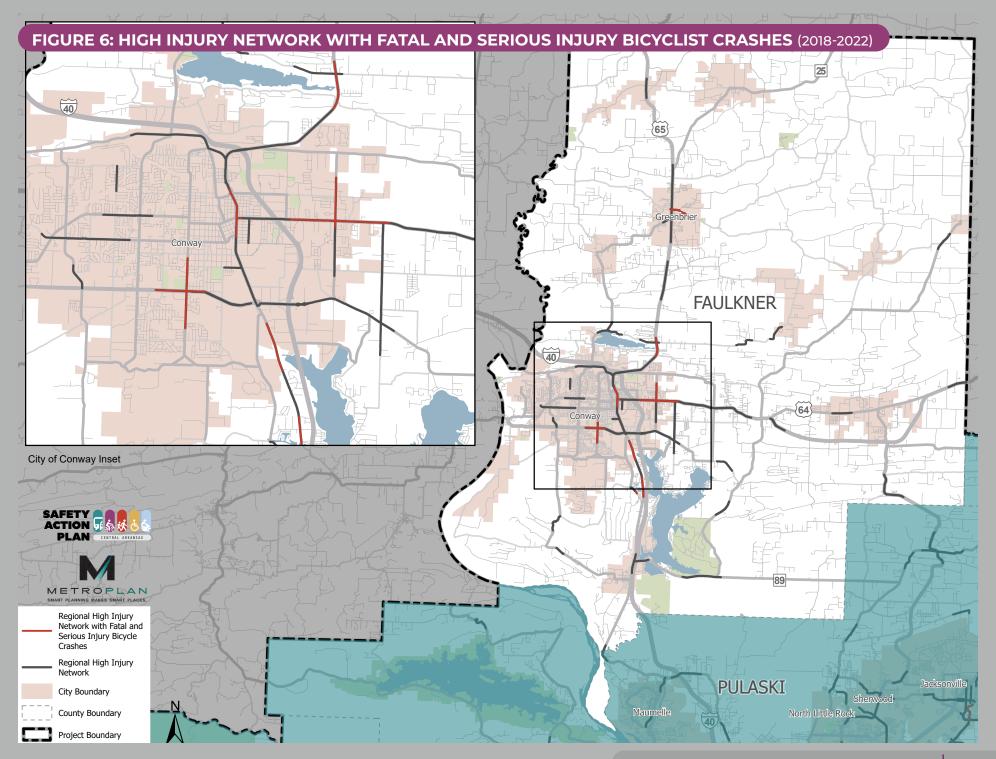




Pedestrian and Bicyclist Crash Overlay

To account for crashes involving nonmotorized modes of transportation, fatal and serious injury crashes that involved a pedestrian or a bicycle within Faulkner County from 2018 through 2022 were overlayed onto the Regional HIN, as shown in Figure 5 and Figure 6. Of the 81 HIN segments within Faulkner County, 27 segments contained a crash that involved a pedestrian and 26 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.





TOP HIGH INJURY NETWORK SEGMENTS AND HIGH INJURY INTERSECTIONS IN EACH CITY WITHIN FAULKNER 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 Faulkner County that had a segment on the HIN. **Table 3** includes the top High Injury Intersection in each city within Faulkner County that had an intersection considered to be a High Injury Intersection. The top segment or intersection in unincorporated Faulkner 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: Faulkner 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
		Faulkner Cou	nty				
E Oak St (US 64)	Bill Dean Dr to Bradley Cir	Conway	State Route	Yes	75.0	587	11
S Broadview (US 65)	Magnolia Dr to Business Park Dr	Greenbrier	State Route	No	59.5	269	9
Donaghey Ave	South Blvd to Dave Ward Dr	Conway	Local Road	Yes	54.0	241	3
US 65	Compassion Ln to Elliott Rd/SH 287	NA	State Route	No	47.0	132	5
Skunk Hollow Rd	Odom Rd to SH 286	NA	Local Road	No	44.0	20	4
SH 89	SH 365 to Crafton St	Mayflower	State Route	No	32.5	48	3
Acklin Gap Rd	Spring Meadows Dr to Happy Hills Rd	Holland	Local Road	No	16.0	7	2
US 65	Solomon Grove Rd to Pontiac Ln	Twin Groves	State Route	No	16.0	13	2
US 64	Coker Rd to Marshall Rd	Vilonia	State Route	No	11.5	22	3

Table 3: Faulkner 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
Faulkner County						
Elsinger Blvd and E Oak St (US 64)	Conway	Both	Yes	75.5	162	6
S Broadview St (US 65) and Green Valley Dr/Church St (SH 25)	Greenbriar	Both	No	57.0	66	4
Skunk Hollow Rd and SH 286	NA	Both	No	40.1	21	4
SH 89 and SH 365	Mayflower	State Route	No	33.5	20	2

3 LOCATION-SPECIFIC PROJECTS

Location-specific projects were developed for the Faulkner 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 Faulkner County and the highest scoring HIN segment in unincorporated Faulkner County. However, if a city of the County expressed the need for a different segment within their jurisdiction to be prioritized, that segment 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 jurisdictions.

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: Faulkner 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
			Faulkner	County				
E Oak St (US 64)	Bill Dean to Bradley Cir	2	20	Yes	Conway	State Route	Yes*	HIN Score
Donaghey Avenue	Bruce St to Moix Blvd	0	3	Yes	Conway	Local Road	Yes*	HIN Score
Acklin Gap Rd	Spring Meadows Dr to Happy Hills Rd	0	2	Yes	Holland	Local Road	No	HIN Score
SH 89	SH 365 to Crafton St	0	3	Yes	Mayflower	State Route	No	HIN Score
South Broadview St (US 65)	Magnolia Dr to Business Park Dr	0	9	Yes	Greenbriar	State Route	No	HIN Score
US 65	Solomon Grove Rd to Pontiac Ln	2	0	Yes	Twin Groves	State Route	No	HIN Score
US 65	Compassion Ln to Elliott Rd/SH 287	2	3	Yes	NA	State Route	No	HIN Score
Hwy 107 & Hwy 64	Intersection Only	1	0	No	Vilonia	State Route	No	City Recommendation

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

Roadway ACKLIN GAP ROAD

Segment: Spring Meadows Dr to Happy Hills Rd Jurisdiction: City of Holland

Countermeasure

Vehicular Countermeasures

Enhanced Curve Delineation

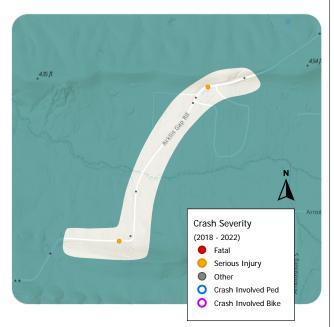
Add/Improve Pavement Markings

Add Shoulder

Longitudinal Rumble Strips

Add Advance Warning Signage

Crash Severity Serious Minor All Crash Injury Injury Count Within Project Area O 2 1 7



Roadway SH 89

Segment: SH 365 to Crafton St Jurisdiction: City of Mayflower

Countermeasure

Vulnerable Road User

Add/Improve Sidewalk

Vehicular Countermeasures

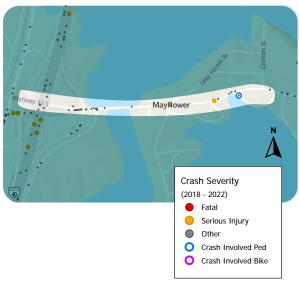
Enhanced Curve Delineation

Add/Improve Pavement Markings

Safety Lighting

Add Shoulder

Crash Severity	A Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	0	3	5	48



Roadway SOUTH BROADVIEW STREET (US 65)

Segment: Magnolia Dr to Business
Park Dr
Jurisdiction: City of Greenbriar

Countermeasure

Vulnerable Road User

Sidewalk Buffer

High Visibility Crosswalk Pavement Markings

Vehicular Countermeasures

Access Management (Accompanied by removal of or conversion of TWLTL to dedicated left-turn lane)

Add/Improve Pavement Markings

Safety Lighting

Retroreflective Backplates

Add Shoulder

Crash Severity	A Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	0	9	14	269



Roadway US 65

Segment: Solomon Grove Rd to Pontiac Ln
Jurisdiction: City of Twin Groves

Countermeasure

Vehicular Countermeasures

Transverse Rumble Strips

Add Raised Median

Safety Lighting

Crash Severity	A	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	2	0	0	13



Roadway US 65

Segment: Compassion Ln to Elliot Rd/SH 287 Jurisdiction: Faulkner County

Countermeasure

Vulnerable Road User

Add Sidewalk

High Visibility Crosswalk Pavement Markings

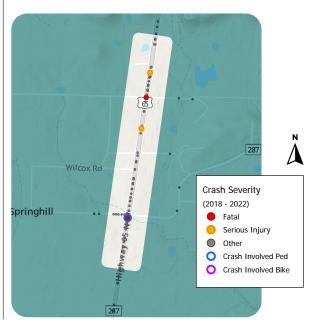
Vehicular Countermeasures

Safety Lighting

Retroreflective Backplates

Access Management (Accompanied by removal of or conversion of TWLTL to dedicated left-turn lane)

Crash Severity	A Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	2	3	6	132



Roadway US 64 AND SH 107

Segment: US 64 and SH 107 Jurisdiction: City of Vilonia

Countermeasure

Vehicular Countermeasures

Transverse Rumble Strips

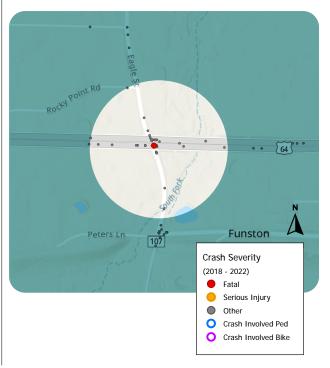
Add/Improve Pavement Markings

Safety Lighting

Retroreflective Backplates

Add Advance Warning Signage

Crash Severity	A Fatal	Serious Injury	Minor Injury	Total for All Crash Severities
Count Within Project Area	1	0	4	45









Our Goal:

40% reduction in fatal and serious injury crashes by 2040