CENTRAL ARKANSAS SAFETY ACTION PLAN

SALINE COUNTY

Supplemental County Level Plan

November 2024









ACKNOWLEDGMENTS

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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.

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Adopted by the Metroplan Board of Directors

Date: November 20, 2024

Resolution: 24-13

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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 |
| ETC | Equitable Transportation | | Flashing Beacon |
| | 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 |
| | System | SS4A | Safe Streets and Roads |
| KABCO | Injury Severity Scale | | for All |
| | K – Fatal Injury | TWLT | Two Way Left Turn |
| | A – Suspected Serious Injury B – Suspected Minor Injury | USDOT | US Department of Transportation |
| | C – Possible Injury | VMT | Vehicle Miles Traveled |
| | O – No Apparent Injury | VRU | Vulnerable Road User |



1 INTRODUCTION

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

Goals

2025

2030

are in Saline 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 Saline County reduce fatal and serious injury crashes on its roadways, with the ultimate goal of eliminating these crashes all together.



2045

ko% Reduction

25% Reduction

2040

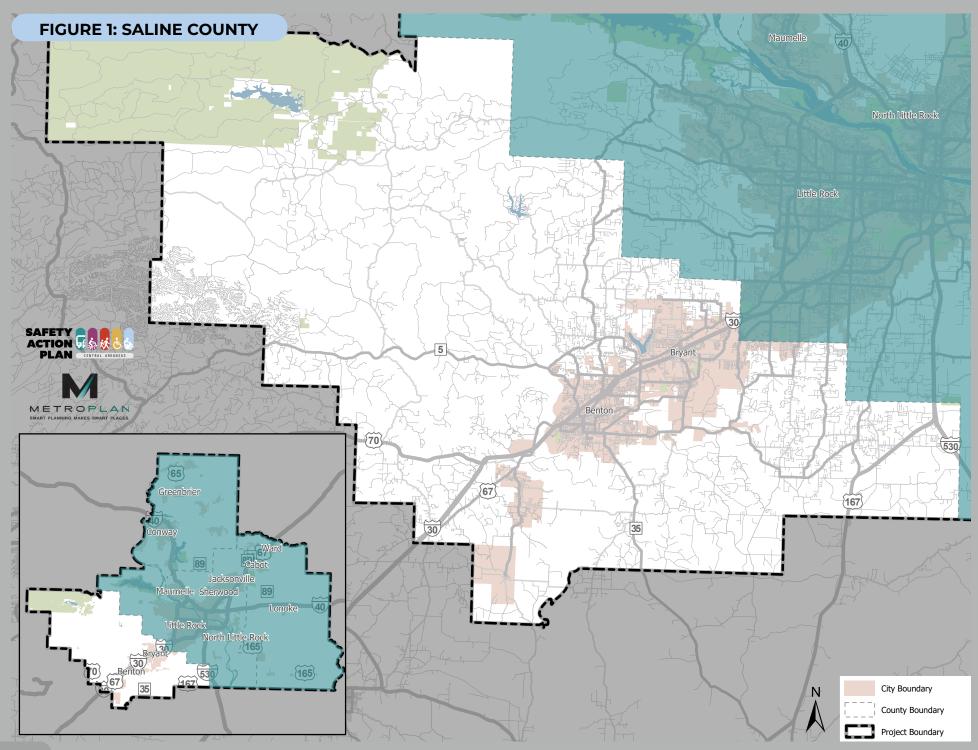
2035

60% Reduction

2050

Our Goal:

40% reduction in fatal and serious injury crashes by 2040





1.2 SALINE COUNTY OVERVIEW

Saline 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. Saline County encompasses approximately one fourth of the Central Arkansas Region and includes the Cities of Alexander, Bauxite, Benton, Bryant, Haskell, and Shannon Hills. Lane miles within Saline County make up 24 percent of the total lane miles within the Central Arkansas Region.



an approximate population of 130,000 as of July 2023.





there were over 14,000 reported crashes within Saline County, representing nearly 12 percent of all crashes in the Central Arkansas Region.

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 Saline County.

2.1 SALINE COUNTY CRASH DATA

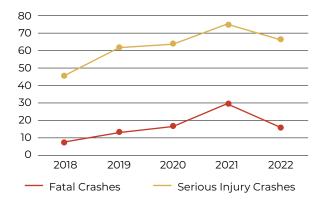
From 2018 to 2022, there were over 14,000 reported crashes within Saline County, representing nearly 12 percent of all crashes in the Central Arkansas Region. From 2018 to 2021, there was a continuous increase in fatal and serious injury crashes. However, in 2022, there was a decrease in both fatal and serious injuries.

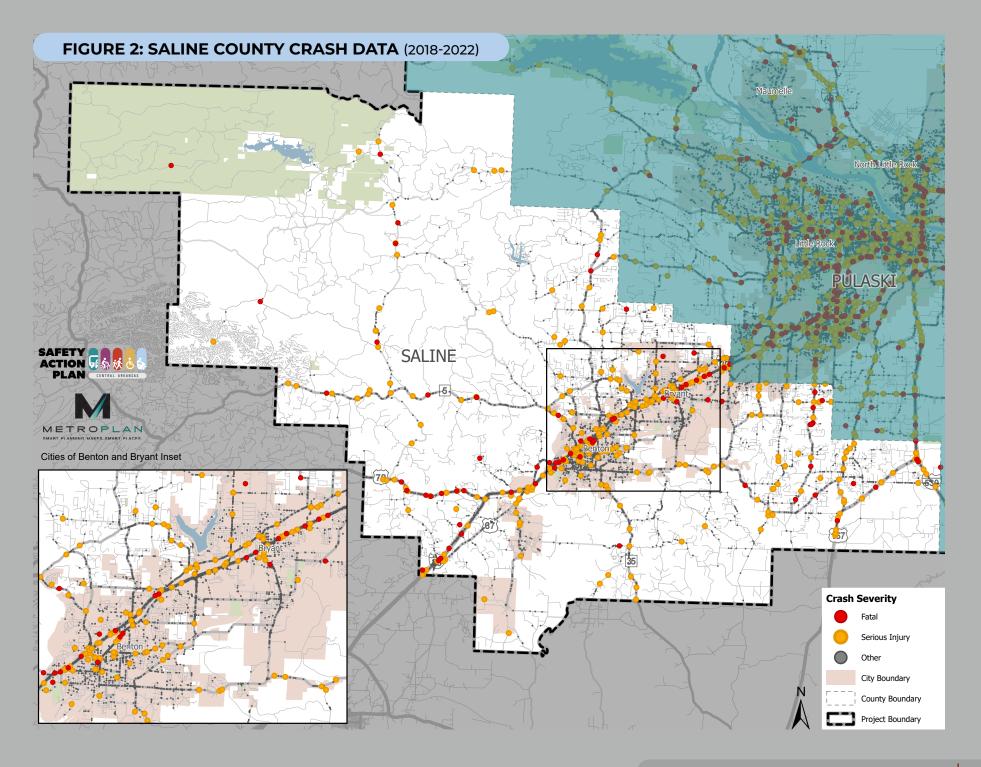
Saline County By Year



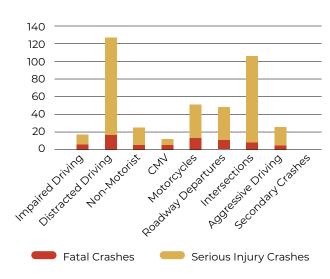


Fatal and Serious Injury Crashes By Year





Fatal and Serious Injury Crashes by Arkansas SHSP Focus Area



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

During the review of Saline County's highest SHSP focus areas for fatal and serious injury

crashes, it was found that distracted driving, intersection-related, and motorcycle crashes were the top three SHSP focus areas. These SHSP focus areas also rank among the top five focus areas for the Central Arkansas Region. From 2018 to 2022, there has been a consistent increasing trend in distracted driving, intersection-related, and motorcycle crashes within Saline County, with a spike in 2021.

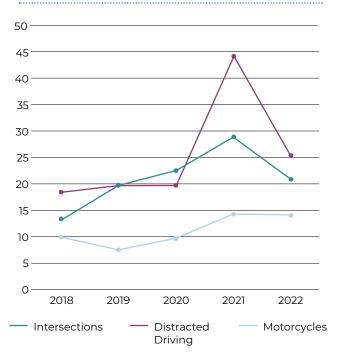
The trends for the top three SHSP focus areas in Saline County over the past five years are a cause for concern, as all of them show an increasing trend. This is not in line with the regional goal of reducing fatal and serious injury crashes by 40 percent by 2040 and ultimately reaching zero. It is important for Saline County to continue to prioritize safety and invest in targeted and systemic countermeasures that can address these SHSP focus areas.

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

| SHSP Focus Area | 2018 | 2019 | 2020 | 2021 | 2022 | Fatal Crashes | Serious Injury Crashes | Total # of Fatal & Serious Injury Crashes |
|--------------------|------|------|------|------|------|---------------|---------------------------|--|
| Impaired Driving | 1 | 4 | 3 | 8 | 2 | 5 | 13 | 18 |
| Distracted Driving | 18 | 20 | 20 | 44 | 26 | 18 | 110 | 128 |
| Non-Motorist | 1 | 7 | 7 | 6 | 4 | 6 | 19 | 25 |
| CMV | 2 | 3 | 2 | 2 | 3 | 5 | 7 | 12 |
| Motorcycles | 10 | 7 | 9 | 13 | 13 | 14 | 38 | 52 |
| Roadway Departures | 5 | 10 | 8 | 10 | 16 | 11 | 38 | 49 |
| Intersections | 13 | 20 | 22 | 28 | 21 | 8 | 96 | 104 |
| Aggressive Driving | 4 | 6 | 8 | 5 | 3 | 4 | 22 | 26 |
| Secondary Crashes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Top Three SHSP Focus Areas Distracted Driving Intersections Motorcycles

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



2.3 SALINE 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. Saline County contains 61 Regional HIN segments, accounting for approximately 11 percent of the Regional HIN, shown in Figure 3. To reduce fatal and serious injury crashes in Saline County, it is important to prioritize targeted countermeasures on the HIN segments. which have the highest number of fatal and serious injury crashes.

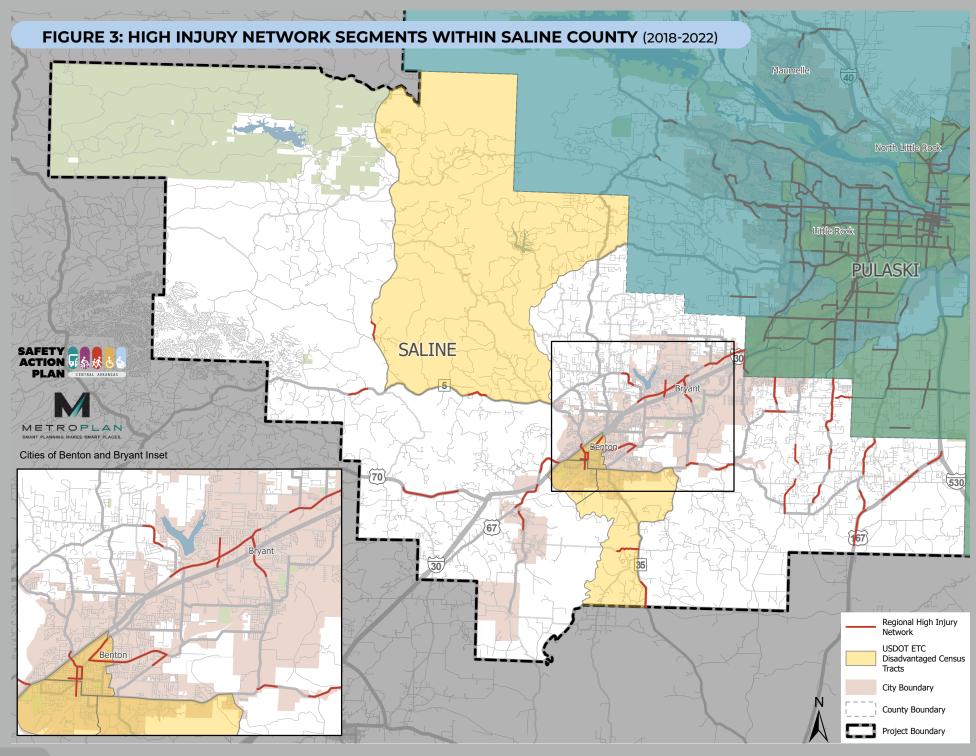
A Regional High Injury Intersection set was also established as part of the Central Arkansas Safety Action Plan, **Figure 4** shows high injury intersections within Saline County. Saline County contains 10 intersections that make up approximately 7 percent of the Regional High Injury Intersections.

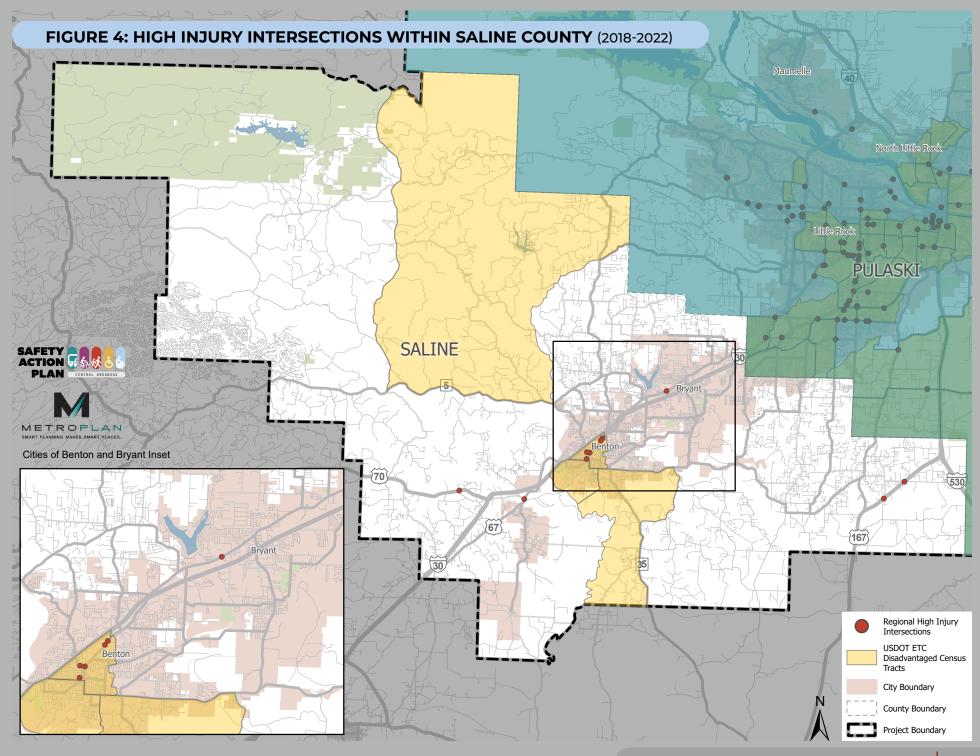
Equity Overlay

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 20 percent of HIN segments and almost 50 percent of HII within Saline 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.

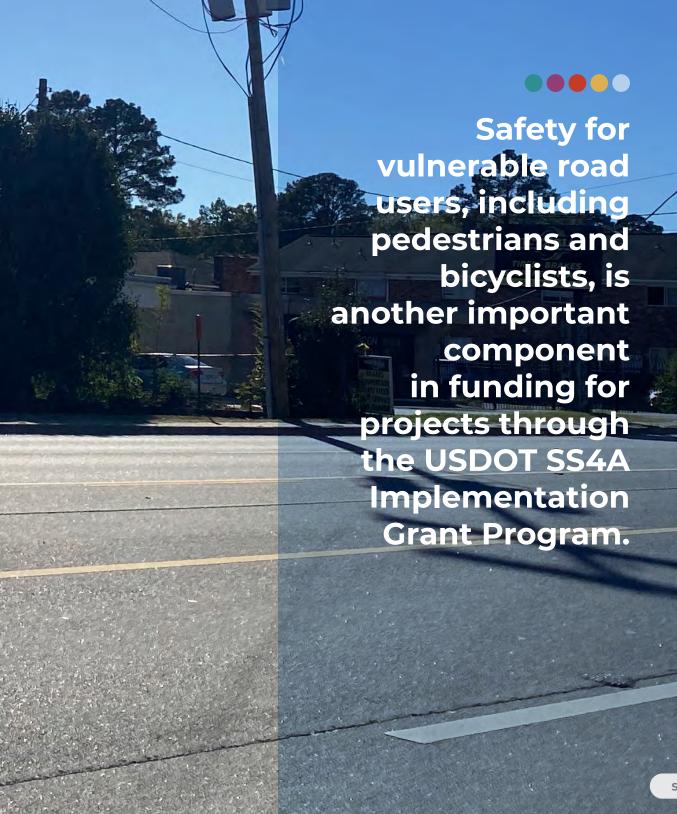
A dashboard was created as a component of the Central Arkansas Safety Action Plan. The dashboard includes crash data statistics, the interactive Regional High Injury Network, and recommended projects for the Region.

The interactive safety dashboard can be found here: Central Arkansas Safety Dashboard



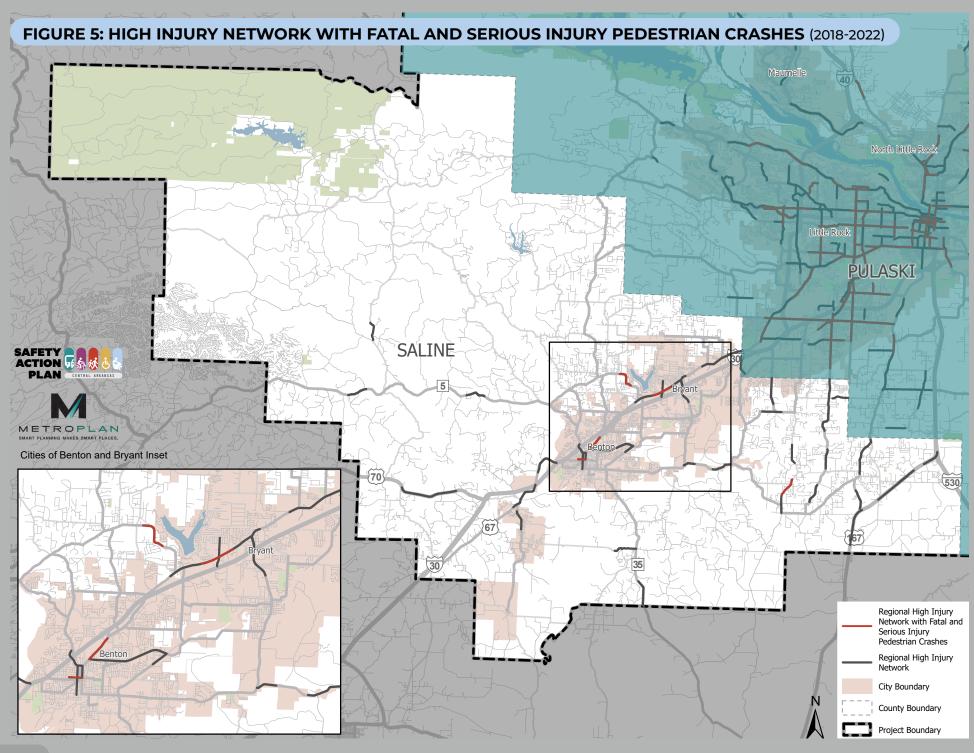


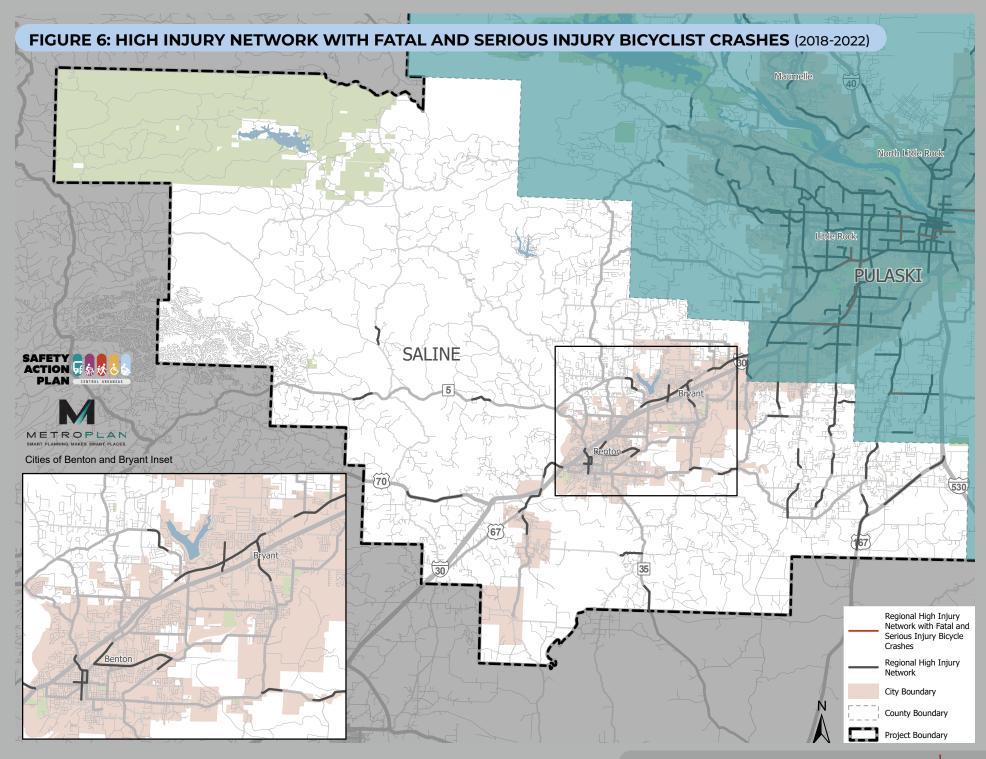




Pedestrian and Bicyclist Crash Overlay

To account for crashes involving nonmotorized modes of transportation, fatal and serious injury crashes that involved a pedestrian or a bicycle within Saline County from 2018 through 2022 were overlayed onto the Regional HIN, as shown in Figure 5 and Figure 6. Of the 61 HIN segments within Saline County, 11 segments contained a crash that involved a pedestrian and 4 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 SALINE 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 Saline County that had a segment on the HIN. **Table 3** includes the top High Injury Intersection in each city within Saline County that had an intersection considered to be a High Injury Intersection. The top segment or intersection in unincorporated Saline 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: Saline 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 |
|-------------------------------------|-----------------------------------|------------------|------------------------------|----------------------------|-------------------------|------------------|---------------------|
| | S | Saline County | | | | | |
| W Carpenter St/N East St (SH 35) | Kenwood Rd to E Sevier St | Benton | State Route | Yes | 57.5 | 307 | 8 |
| Military Rd | Old Congo Rd to Alcoa Rd | Benton | Local Road | Yes | 55.5 | 338 | 7 |
| SH 5 | Whiteway Dr to Private Logging Rd | NA | State Route | No | 44.0 | 13 | 3 |
| Friendship Rd | Friendship Rd to SH 35 | NA | Local Road | No | 41.0 | 3 | 1 |
| N Reynolds Rd (SH 183) | Commerce St to Brown Ln | Bryant | State Route | No | 24.5 | 454 | 4 |
| Sardis Rd | Mount Olive Rd to Alexander Rd | Bauxite | Local Road | No | 19.0 | 18 | 3 |
| US 67 | Rose Ln to Harmony Village Dr | Haskell | State Route | No | 17.0 | 96 | 3 |
| Vimy Ridge Rd | County Line Rd to Loganberry Dr | Shannon Hills | Local Road | No | 9.5 | 9 | 2 |

Table 3: Saline 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 | |
|---|--------|---------------------------|-------------------------|----------------|------------------|---------------------|--|
| Saline County | | | | | | | |
| N Market St and W Carpenter St (SH 35) | Benton | Both | No | 50.0 | 36 | 4 | |
| Springhill Rd and SH 5 | Bryant | Both | No | 23.5 | 97 | 3 | |
| US 167 (NB & SB) and Woodson Lateral Rd | NA | Both | No | 13.5 | 27 | 3 | |

3 LOCATION-SPECIFIC PROJECTS

Location-specific projects were developed for the Saline 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 Saline County and the highest scoring HIN segment in unincorporated Saline 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 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: Saline 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 | |
|---------------------------|--------------------------------------|------------------|------------------------------|------------------------|------------------|----------------|-----------------------------------|------------------------|--|
| | Saline County | | | | | | | | |
| Carpenter St/East St | Kenwood Rd to North St | 0 | 8 | Yes | Benton | State Route | Yes* | HIN Score | |
| Military Rd | Old Congo Rd to Alcoa Blvd | 2 | 5 | Yes | Benton | Local Road | Yes* | HIN Score | |
| Bryant Pkwy | Raymar Rd to Shobe Rd | 0 | 0 | No | Bryant | Local Road | No | City Recommendation | |
| SH 5 | Whiteway Dr to Private Logging Rd | 2 | 1 | Yes | NA | State Route | No | HIN Score | |
| SH 183 | Harp Dr to Tom Rd | 0 | 3 | No | Bauxite | State Route | No | City Recommendation | |
| US 67 | Rose Ln to Harmony Village Dr | 0 | 3 | Yes | Haskell | State Route | No | HIN Score | |
| Vimy Ridge Rd | County Line Rd to Loganberry Dr | 0 | 2 | Yes | Shannon Hills | Local Road | No | HIN Score | |
| Military Rd & SH 5 | Intersection Only | 0 | 1 | No | Benton | 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 BRYANT PARKWAY

Segment: Raymar Rd to Shobe Rd Jurisdiction: City of Bryant

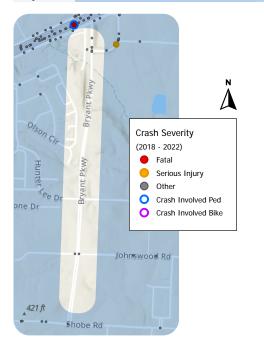
Countermeasure

Vehicular Countermeasures

Add Advance Warning Signage

Safety Lighting

| Crash Severity | A Fatal | Serious Injury | Minor Injury | Total for All Crash Severities |
|------------------------------|----------------|-------------------|-----------------|--------------------------------------|
| Count Within Project Area | 0 | 0 | 0 | 8 |



Roadway SH 5

Segment: Whiteway Dr to Private Logging Rd

Jurisdiction: Saline County

Countermeasure

Vehicular Countermeasures

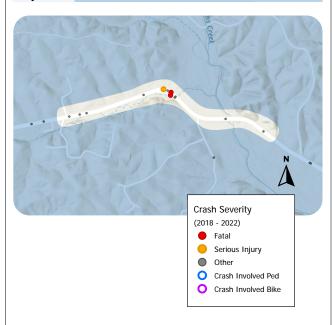
Add Advance Warning Signage

Safety Lighting

Enhanced Curve Delineation

Median Longitudinal Rumble Strips

| Crash Severity | Fatal | Serious Injury | Minor Injury | Total for All Crash Severities |
|------------------------------|-------|-------------------|-----------------|--------------------------------------|
| Count Within Project Area | 2 | 1 | 3 | 13 |



Roadway SH 183

Segment: Harp Dr to Tom Rd Jurisdiction: City of Bauxite

Countermeasure

Vulnerable Road User

High Visibility Crosswalk Pavement Markings

Vehicular Countermeasures

Add Shoulder

Add Advance Warning Signage

Enhanced Curve Delineation

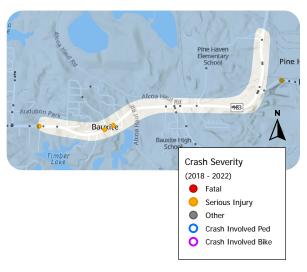
Install Right Turn Lane (Entrance to Bauxite High School)

Conduct Speed Study

Longitudinal Rumble Strips

Safety Lighting

| Crash Severity | Fatal | Serious Injury | Minor Injury | Total for All Crash Severities |
|------------------------------|-------|-------------------|-----------------|--------------------------------------|
| Count Within Project Area | 0 | 3 | 4 | 28 |



Roadway US 67

Segment: Rose Ln to Harmony Village Dr Jurisdiction: City of Haskell

Countermeasure

Vehicular Countermeasures

Add/Improve Pavement Markings

Safety Lighting

Add Advance Warning Signage

Retroreflective Backplates

Enhanced Curve Delineation

Conduct Speed Study

| Crash Severity | Fatal | Serious Injury | Minor Injury | Total for All Crash Severities |
|------------------------------|-------|-------------------|-----------------|--------------------------------------|
| Count Within Project Area | 0 | 3 | 7 | 96 |



Roadway VIMY RIDGE ROAD

Segment: County Line Rd to
Loganberry Dr
Jurisdiction: City of Shannon Hills

Countermeasure

Vehicular Countermeasures

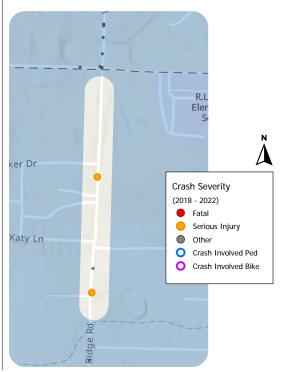
Add/Improve Pavement Markings

Safety Lighting

Add Advance Warning Signage

Add Shoulders

| Crash Severity | Fatal | Serious Injury | Minor Injury | Total for All Crash Severities |
|------------------------------|-------|-------------------|-----------------|--------------------------------------|
| Count Within Project Area | 0 | 2 | 1 | 9 |



Roadway MILITARY ROAD & SH 5

Segment: Military Rd & SH 5
Jurisdiction: City of Benton

Countermeasure

Vulnerable Road User

High Visibility Crosswalk Pavement Markings

Sidewalk Buffer

Vehicular Countermeasures

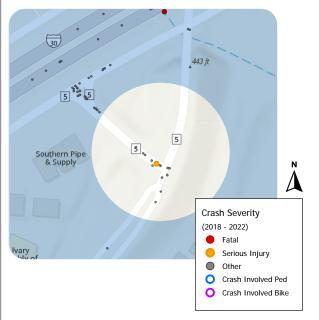
Conduct Signal Warrant

Add/Improve Pavement Markings

Safety Lighting

Add Advance Warning Signage











Our Goal:

40% reduction in fatal and serious injury crashes by 2040