

Vulnerable Road User Assessment

Local Consultation Meeting

presented to

Little Rock Stakeholders

presented by

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AGENDA

Vulnerable Road User Assessment (VRU) ***Background & Process***

Arkansas ***VRU Safety Trends***

Initial ***Findings***

Stakeholder ***Input & Insight***

Introductory Questions

- » Which best describes your organization/agency? (State, City, County, Others)
- » Which of the 4E's do you most closely align with? (Engineering, Education, Enforcement, and Emergency Response)

**TOWARD
ZERO
DEATHS**



One is too many.

Vulnerable Road User Assessment: Background & Process

Today's Meeting Goals

- » Share statewide and regional VRU trends
- » Discuss the existing AR SHSP Non-Motorist Focus Area strategies and actions with the agencies
- » Introduce the high-risk area analysis, receive local insights and challenges to addressing the safety concerns, and discuss potential solutions
- » Offer the opportunity for agency representatives to provide new information on VRU safety



Overview

Develop initial Vulnerable Road User (VRU) Safety Assessment as required by USDOT as part of the HSIP (23 U.S.C. 148(1))

Assess AR's safety performance with respect to VRUs

Prepare State plan to improve VRU safety by November 15, 2023

What is a VRU?

- » A **nonmotorist** with a FARS person attribute code for:
 - Pedestrian
 - Bicyclist
 - Other cyclist
 - Person on personal conveyance
- » An **injured person** that is equivalent to a pedestrian or pedalcyclist as defined in ANSI D16.1-2007



Requirements

- » **Data-driven process** to identify areas of high-risk
- » **Quantitative analysis** must include the following:
 - Data such as location, roadway functional classification, design speed, speed limit, and time of day.
 - Consider the demographics of the locations of fatalities and serious injuries, including race, ethnicity, income, and age; and
 - Based on data, identifies high-risk areas
- » **Consultation with local governments**, MPOs, and regional planning organizations that represent high-risk areas
- » Must include a **program of projects or strategies** to reduce safety risks

Project Schedule

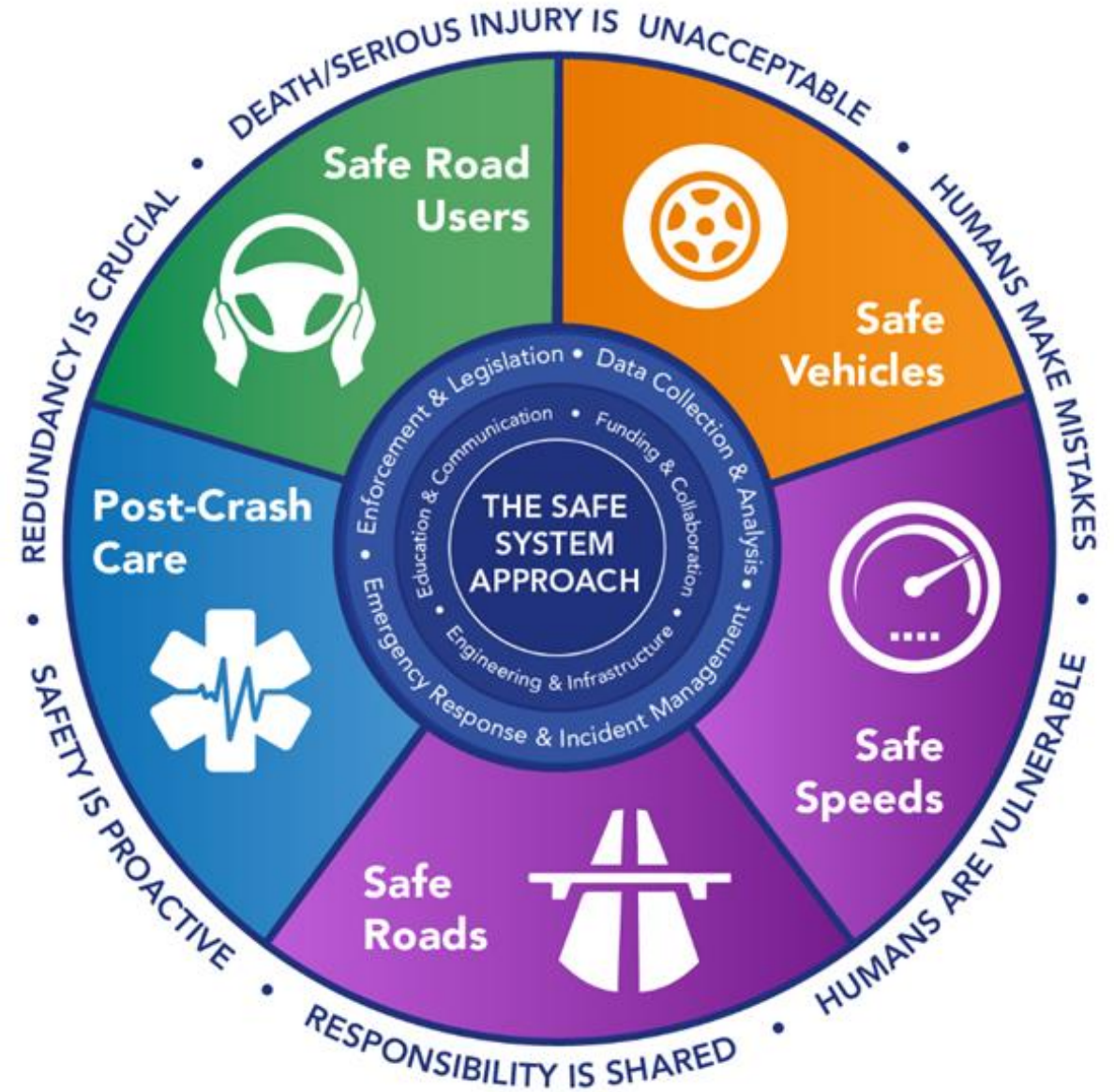


TODAY

Safe System Approach

ONE DEATH ON OUR ROADWAYS IS TOO MANY

SSA considers the safety of all road users, especially VRUs (such as **bicyclists and pedestrians**) who are most vulnerable to death or serious injuries in the case of a crash.



AR SHSP – Nonmotorized Users

- » Continue to improve statewide **infrastructure and design** to protect non-motorists.
 - i.e., Improve existing bicycle and pedestrian accommodation on state highways and local roads following the most current AASHTO guidance.
- » Continue to **implement countermeasures, programs, and policies** to protect non-motorists.
 - i.e., Design and implement pedestrian safety zone program in high crash areas.
- » Focus **education efforts** aimed at safety and awareness of laws regarding non-motorist traffic.
 - i.e., Educate law enforcement on accurately identifying non-motorized crashes on the crash report.

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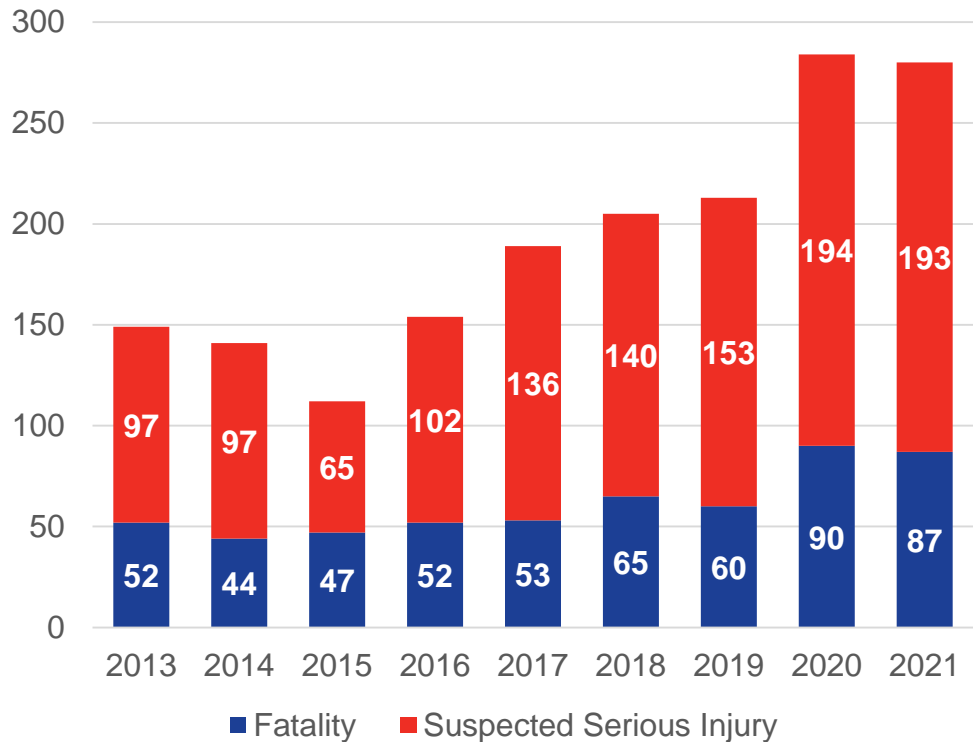


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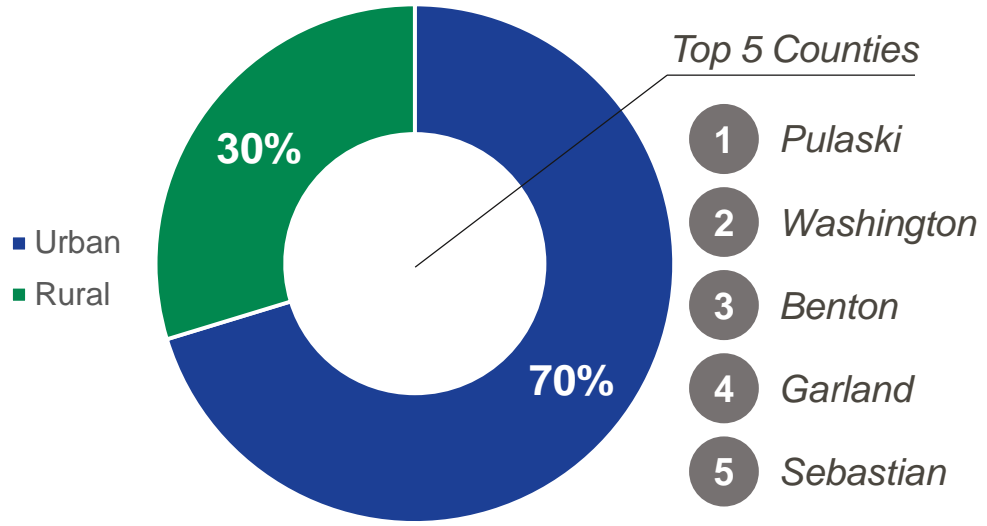
Safety Trends & Initial Findings

Statewide Safety Trends

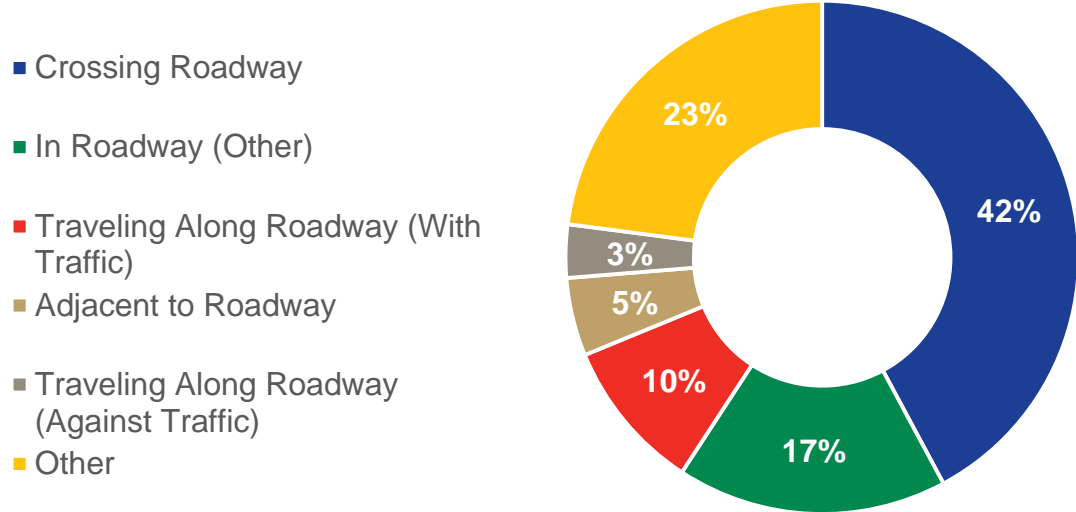
Non-Motorist KAs per Year



*Non-Motorist KAs by Location**



Non-Motorist KAs by Pedestrian Action



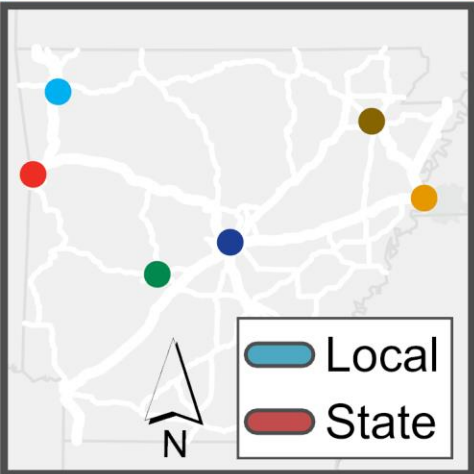
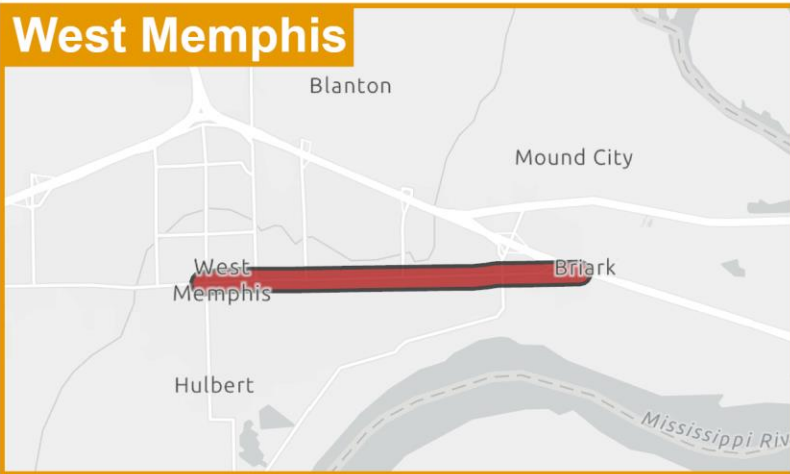
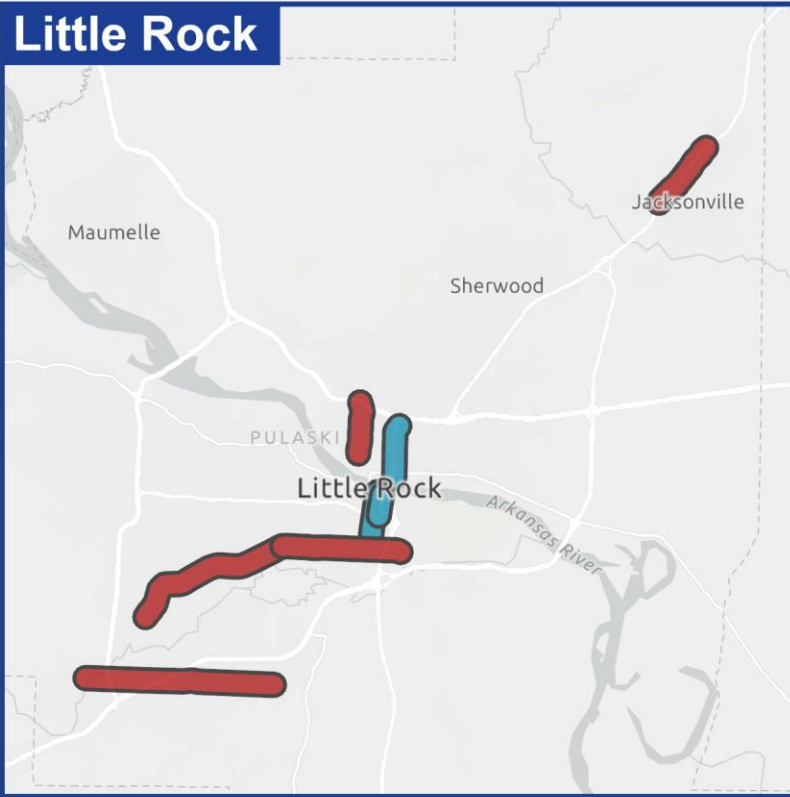
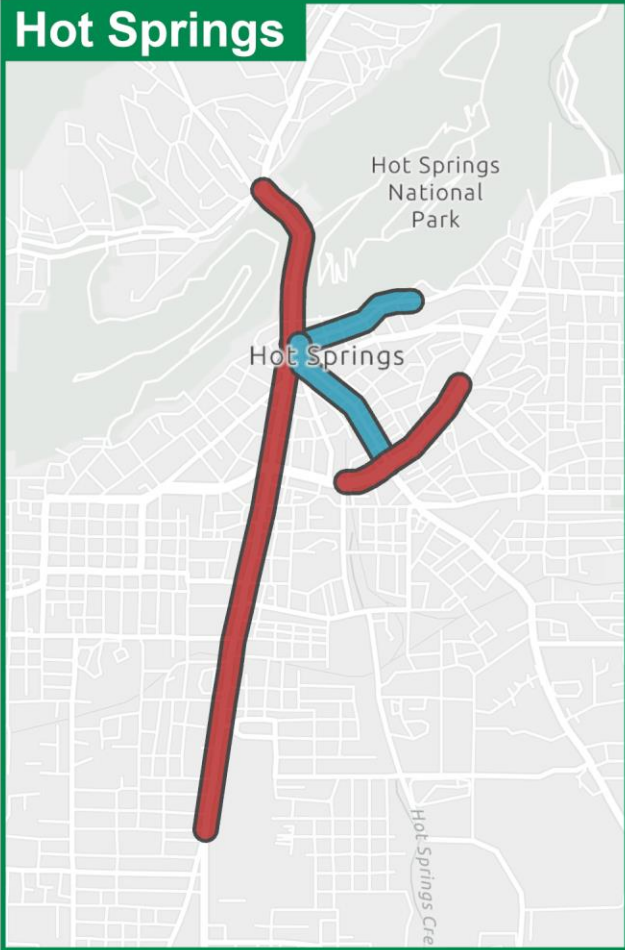
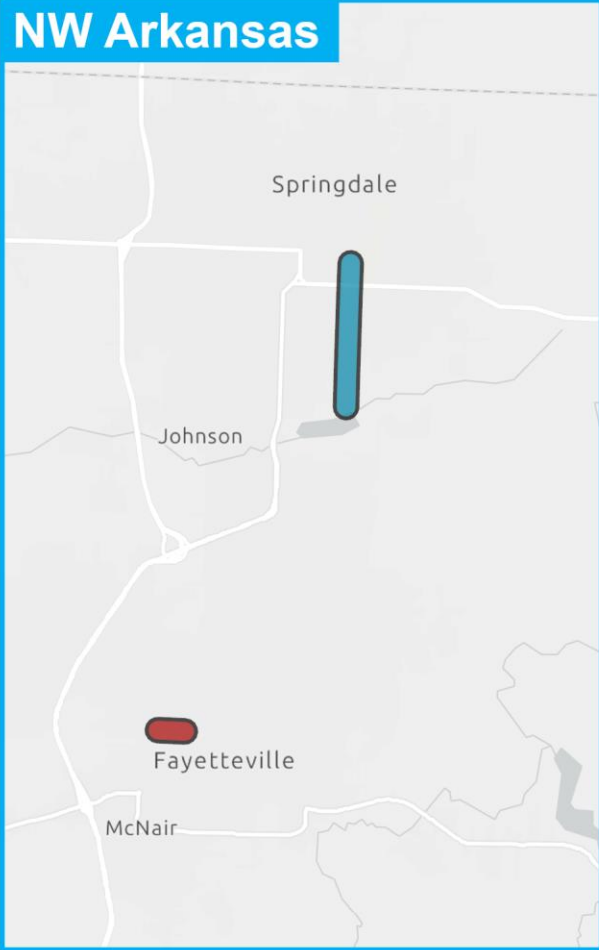
*Urban boundaries equivalent to U.S. Census Urbanized Area Boundaries

Corridor Identification Process

- » Conducted a sliding window analysis using crash data 5 years of crash data (2017-2021)
- » Looked at segments with an AADT at least 5,000 vehicles per day
- » Used all crashes involving Vulnerable Road Users and weighted for severity
- » Gave an equal weight to raw crash numbers and crashes per VMT
- » Top 10 state-maintained corridors and top 10 locally-maintained corridors
- » Each corridor is within an identified [Justice40](#) area

Draft Identified Corridors

Also available [here](#)



Draft Identified Corridors

State-Maintained

#	Name	MPO
1	AR-338 (Baseline Rd)	Metroplan
2	I-30 Business (Asher Ave)	Metroplan
3	AR-141 (N Main St)	Northeast Arkansas RTPC
4	AR-7 (Central Ave)	Tri-Lakes MPO
5	US-67 (T.P. White Dr)	Metroplan
6	I-30 Business (Roosevelt Rd)	Metroplan
7	W Maple St	Northwest Arkansas RPC
8	US-70 (E Broadway Ave)	West Memphis MPO
9	US-70 Business (Grand Ave)	Tri-Lakes MPO
10	AR-365 (Pike Ave)	Metroplan

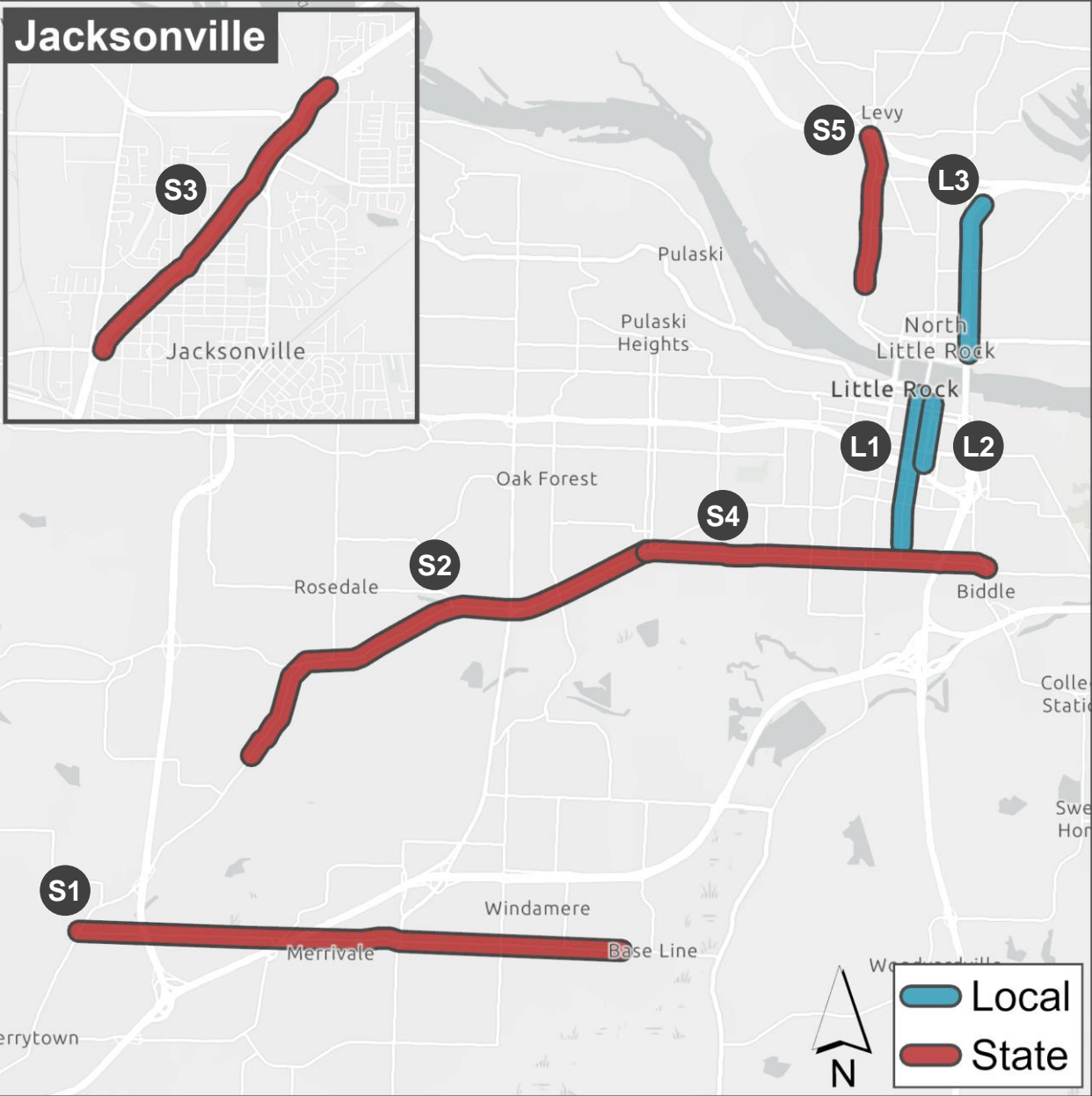
Locally-Maintained

#	Name	MPO
1	Main St	Metroplan
2	Cumberland St	Metroplan
3	Grand Ave	Frontier MPO
4	N Locust St	Metroplan
5	N Greenwood Ave	Frontier MPO
6	Union St	Northeast Arkansas RTPC
7	Spring St	Tri-Lakes MPO
8	S Powell St	Northwest Arkansas RPC
9	S Main St	Northeast Arkansas RTPC
10	Malvern Ave	Tri-Lakes MPO

Little Rock

- S1** AR-338 (Baseline Rd)
- S2** I-30 Business (Asher Ave)
- S3** US-67 (T.P. White Dr)
- S4** I-30 Business (Roosevelt Rd)
- S5** AR-365 (Pike Ave)

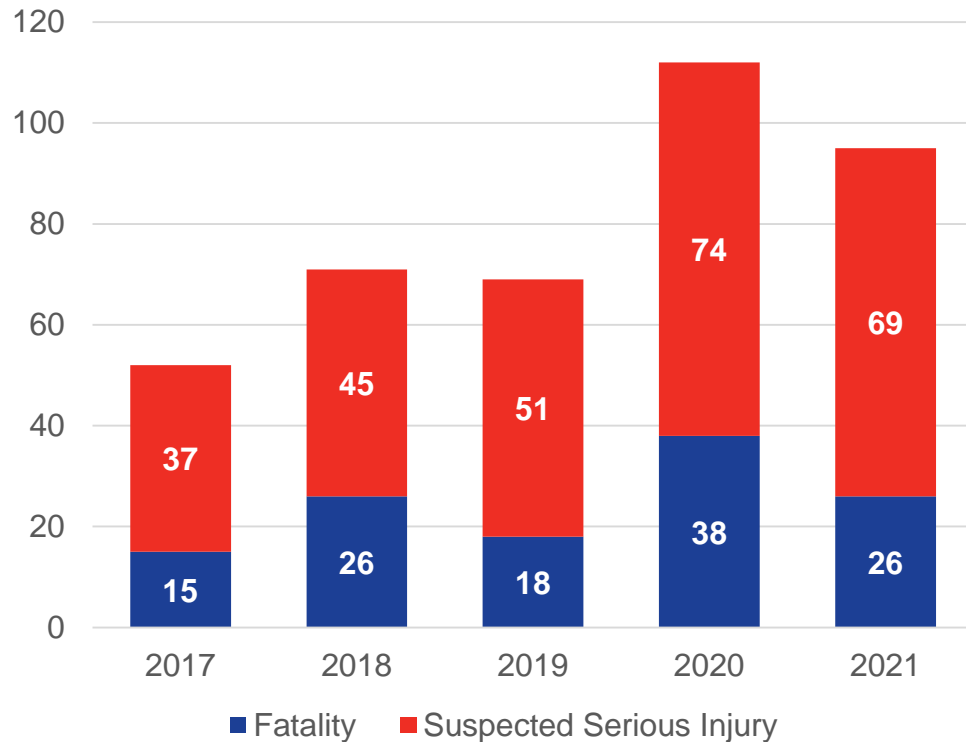
- L1** Main St
- L2** Cumberland St
- L3** N Locust St



Little Rock

34% of fatal or suspected serious injury non-motorist crashes in the state are in the Little Rock MPO

Non-Motorist KAs per Year



Justice 40 Areas	# of Corridors
Climate Change	1 / 8
Energy	4 / 8
Health	7 / 8
Housing	6 / 8
Legacy Pollution	3 / 8
Transportation*	3 / 8
Water & Wastewater	1 / 8
Workforce Development	5 / 8

*Transportation EJ40 area does not directly overlap with vulnerable road users

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Stakeholder Input & Insight

Feedback

- » Do these locations make sense to you? What about them makes them a priority?
- » Are there other locations that may have similar risk factors?
- » Are there any safety solutions or plans in the works for these locations?
 - » 2020 Ped-Bike Crash Analysis noted a study was completed on Pike Ave and counter measures were forthcoming
- » What solutions would you recommend for these locations?
- » What strategies/initiatives can be used to improve the safety of VRUs in disadvantaged communities? This includes the following:
 - » Low-income population
 - » Disabled users
 - » Children
 - » Older people
 - » Non-white population
 - » Non-English speakers
 - » Zero-vehicle households
- » How can we improve collaborations with other safety stakeholders?

Highlighted Route (1): Main Street

- » Local Road in Downtown
- » Commercial and Residential Land-use
- » Speed Limit: 25 mph
- » ROW: ~80 ft

Characteristics:

- » Lots of driveways
- » Crosswalks present
- » Bike Lanes present but not protected
- » E-scooters dockless stations provided but no dedicated bike lane
- » Curb Extensions provided at certain locations

[1220 Main St - Google Maps](#)



Highlighted Route (2): I-30 Business (Roosevelt Rd)

- » State Road
- » Commercial, Industrial, Residential Land-use
- » Speed Limit: 35 mph
- » ROW: ~60ft

Characteristics:

- » Crosswalks present but in poor condition
- » No Bike Lanes



[2918 I-30BUS - Google Maps](#)

CS Project Contacts

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