Vulnerable Road User Assessment

Local Consultation Meeting

presented to
Little Rock Stakeholders

presented by
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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)
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

- Literature Review
- Corridor Assessment & Equity Analysis
- First Round of Local Consultation
- Second Round of Local Consultation
- Safety Assessment Report
- Submit to FHWA by mid-November

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.
Safety Trends & Initial Findings
Statewide Safety Trends

Non-Motorist KAs per Year

Non-Motorist KAs by Location*

Top 5 Counties
1. Pulaski 30%
2. Washington 70%
3. Benton
4. Garland
5. Sebastian

Non-Motorist KAs by Pedestrian Action

- Crossing Roadway 42%
- In Roadway (Other) 23%
- Traveling Along Roadway (With Traffic) 17%
- Adjacent to Roadway 10%
- Traveling Along Roadway (Against Traffic) 5%
- Other 3%

*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

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

<table>
<thead>
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<th>#</th>
<th>Name</th>
<th>MPO</th>
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<tbody>
<tr>
<td>1</td>
<td>Main St</td>
<td>Metroplan</td>
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<tr>
<td>2</td>
<td>Cumberland St</td>
<td>Metroplan</td>
</tr>
<tr>
<td>3</td>
<td>Grand Ave</td>
<td>Frontier MPO</td>
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<td>4</td>
<td>N Locust St</td>
<td>Metroplan</td>
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<tr>
<td>5</td>
<td>N Greenwood Ave</td>
<td>Frontier MPO</td>
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<td>Union St</td>
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<td>Spring St</td>
<td>Tri-Lakes MPO</td>
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<td>Northwest Arkansas RPC</td>
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<td>9</td>
<td>S Main St</td>
<td>Northeast Arkansas RTPC</td>
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<tr>
<td>10</td>
<td>Malvern Ave</td>
<td>Tri-Lakes MPO</td>
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</tbody>
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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

Non-Motorist KAs per Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatality</th>
<th>Suspected Serious Injury</th>
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<tbody>
<tr>
<td>2017</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>2018</td>
<td>26</td>
<td>19</td>
</tr>
<tr>
<td>2019</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>2020</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>2021</td>
<td>26</td>
<td>43</td>
</tr>
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34% of fatal or suspected serious injury non-motorist crashes in the state are in the Little Rock MPO

Justice 40 Areas

<table>
<thead>
<tr>
<th>Area</th>
<th># of Corridors</th>
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<tbody>
<tr>
<td>Climate Change</td>
<td>1 / 8</td>
</tr>
<tr>
<td>Energy</td>
<td>4 / 8</td>
</tr>
<tr>
<td>Health</td>
<td>7 / 8</td>
</tr>
<tr>
<td>Housing</td>
<td>6 / 8</td>
</tr>
<tr>
<td>Legacy Pollution</td>
<td>3 / 8</td>
</tr>
<tr>
<td>Transportation*</td>
<td>3 / 8</td>
</tr>
<tr>
<td>Water &amp; Wastewater</td>
<td>1 / 8</td>
</tr>
<tr>
<td>Workforce Development</td>
<td>5 / 8</td>
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</tbody>
</table>

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

Contact Information

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