



NWA Regional VISION ZERO

Northwest Arkansas Safety Action Plan

May 2023 | DRAFT



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Northwest Arkansas' Vision Zero Plan (NWA Vision Zero Plan) recognizes that one life lost on the streets within the region is too many and that something must change. The Northwest Arkansas Regional Planning Commission (NWAPRC) has developed this Plan and sets a target to eliminate all killed and serious injuries (KSI) crashes that occur on the regional roadway network by 2038. Although the horizon is 15 years from the development of this Plan, action starts now. Traditional safety strategies have not proven to decrease the number of life-altering crashes, highlighted by the increase of fatal crashes in recent years. This Plan emphasizes a shift towards the prioritization of safe, accessible, and equitable mobility for all roadway users and away from the disproportionate focus on moving vehicles efficiently—less delay that often results in higher speeds.



Executive Summary

The purpose of the NWA Vision Zero Plan is to emphasize change related to traffic safety because fatal and serious injury crashes cannot be tolerated. The Plan outlines strategies and actions that should be taken within the next ten years, yet it must not be considered unchangeable. As a living document, this plan must be dynamic to address safety in a region that is experiencing rapid growth. The recommended actions included are meant to be a starting point, not an all-encompassing list. Over time, the actions taken by the NWARPC, member agencies, and partner organizations should measure and report actions that are proving to reduce fatal and serious injuries along with continuing to incorporate safety innovations and opportunities to eliminate traffic fatalities and injuries as time passes.

This Vision Zero Plan is organized into four sections. An overview of each section is provided below to serve as a summary of the NWA Vision Zero Plan in its entirety.

1. A Paradigm Shift

Fatal and serious injury crashes have increased across the nation, the state of Arkansas, and in the Northwest Arkansas Region. In the traditional approach to roadway safety, traffic deaths have been understood as inevitable. This alone is not acceptable and therefore a new approach to safety is needed. This section describes how Vision Zero is grounded in the Safe System Approach that anticipates human mistakes and

ensuring that when collisions occur that they do not result in death or serious injury. A clear understanding of the Principles and Elements of the Safe System Approach is foundational to the NWA Vision Zero Plan and will be instrumental in increasing safety for all roadway users moving forward.

2. Roadway Safety in NWA

Crashes over a 5-year period (2017-2021), resulted 220 people—mothers, fathers, children, grandparents, friends, and coworkers—losing their lives in Northwest Arkansas. An average of 44 people each year; however, 2021 alone was a year that 55 people died in roadway crashes—a 2% increase from the year before. These sobering numbers are part of today’s roadway safety narrative in Northwest Arkansas. This section reviews existing plans, policies, and programs that are already in place that are attempting to increase safety in several communities in the region. It notes opportunities for communities to refine or add policies that can impact safety through capital projects and new development. This section uses crash data to establish a High Injury Network (HIN)—representing the corridors in Northwest Arkansas with the highest number of fatal and serious injury crashes. Along with the HIN, the Vision Zero Plan identifies historically disadvantaged communities, areas of persistent poverty, and locations with varying degrees of social vulnerability to understand where equitable investments can be made to increase safety

Traditional Approach

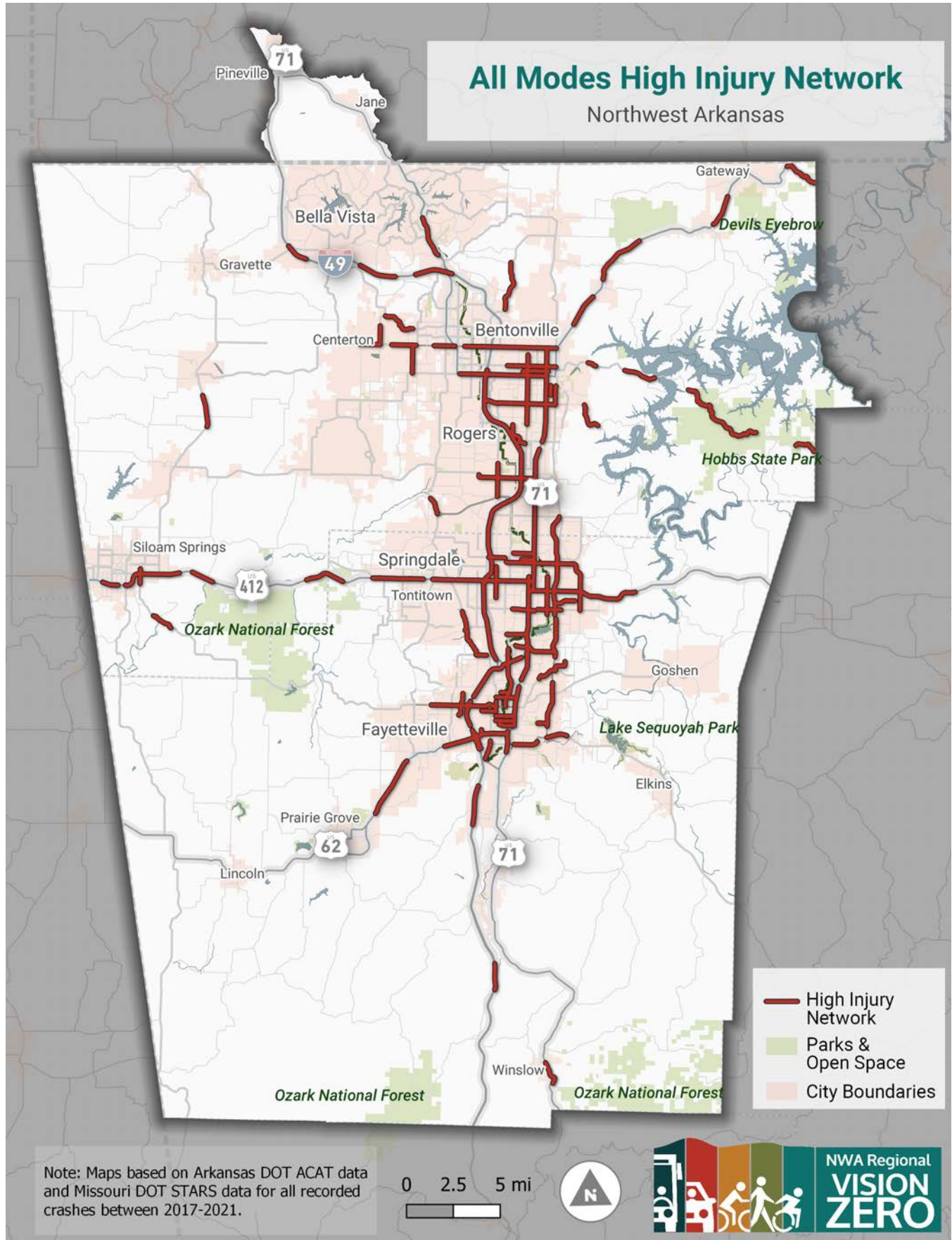
- Traffic deaths are inevitable
- Aims to fix humans
- Expects perfect human behavior
- Prevents collisions
- Exclusively addresses traffic engineering
- Doesn't consider disproportionate impacts

vs.

Vision Zero

- Traffic deaths are preventable
- Changes systems
- Integrates human failure
- Prevents fatal and serious crashes
- Considers the road system as a whole
- Regards road safety as an issue of social equity

High Injury Network Map



3. Community Outreach

Starting a conversation around roadway safety was a key component of the NWA Vision Zero Plan. Information about the current state of safety along with opportunities for feedback were distributed across the region. Online resources were developed that included surveys, an interactive map, and a series of safety webinars. To compliment online engagement opportunities, a “go-to” approach to engagement resulted in tabling and interacting with people at over a dozen existing events. Materials were available in English and Spanish to provide opportunities for people to review and provide input in the most convenient way possible. Additionally, a Regional Working Group provided guidance for the development of the NWA Vision Zero Plan through a series of meetings and listening sessions. Two safety demonstration site walks were included to see and experience how the Safe System Framework is already being used within the region. These site walks allowed municipal staff, local advocates, and elected officials to hear why the decisions made related to safety can have such an enormous impact. Engagement during the Vision Zero Plan development is only the beginning and must be continued at the regional and local levels to see real

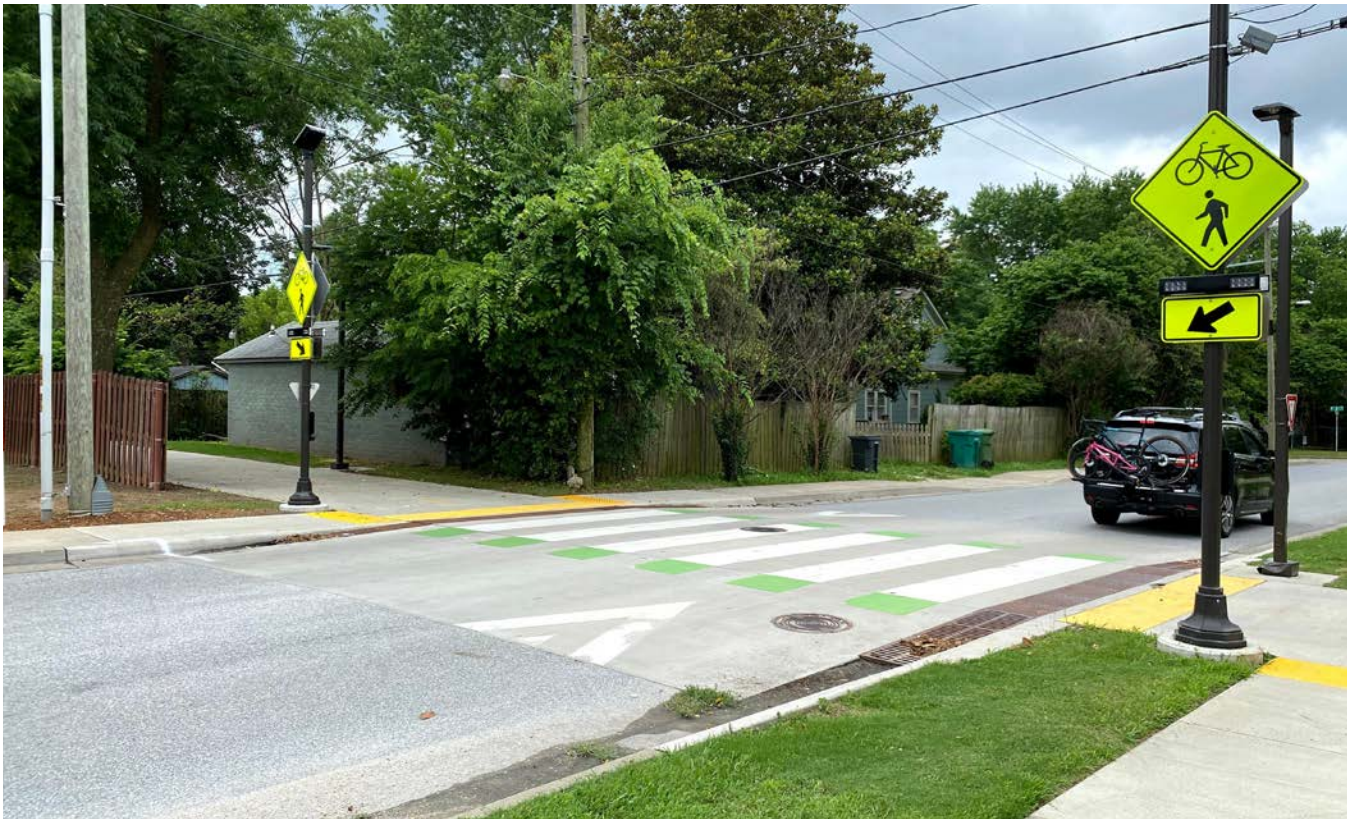
change occur.

4. Goals and Actions

Achieving the goal of zero fatal and serious injury crashes by 2038 will not happen if the status quo is maintained. Roadway safety must be integrated into the work of various agencies and individual departments to see results. This section establishes goals that capture the desires for safety by the Regional Working Group along with a variety of actions that can be taken to change the roadway safety narrative in Northwest Arkansas. Goals include:

- Promote a culture that prioritizes people’s safety
- Reduce conflicts between roadway users
- Establish policies, practices, and programs that focus on safety at all levels
- Slow vehicle speeds

For each action, a timeline, action leader, and supporting partners are noted. Additionally, Elements of the Safe System Approach that align with each action are listed. The actions in this Vision Zero Plan are not intended to be an exhaustive list; rather, they are strategic and can begin to eliminate fatal and serious injury crashes on the transportation network.



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1

A Paradigm Shift

1. A Paradigm Shift

What is a Vision Zero Safety Action Plan?

Every year, people in the NWA Region lose family, friends, neighbors, and colleagues to preventable traffic crashes on our roads. Between 2017 and 2021 1,369 people were killed or seriously injured in crashes in NWA, averaging more than five people every week. Across the state, motor vehicle crashes account for more than twice the number of deaths as homicides.

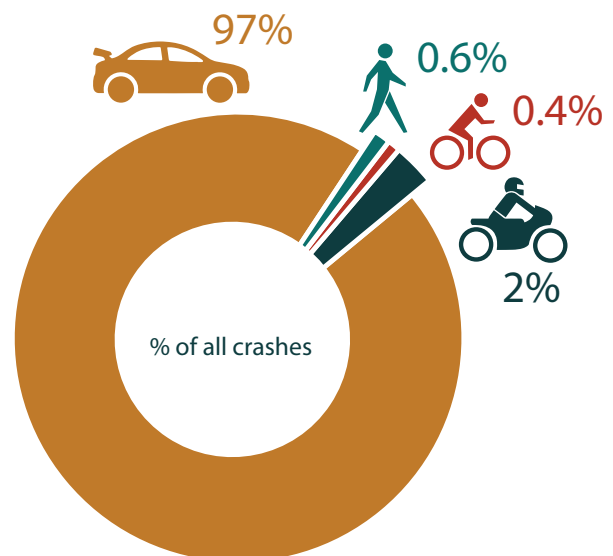
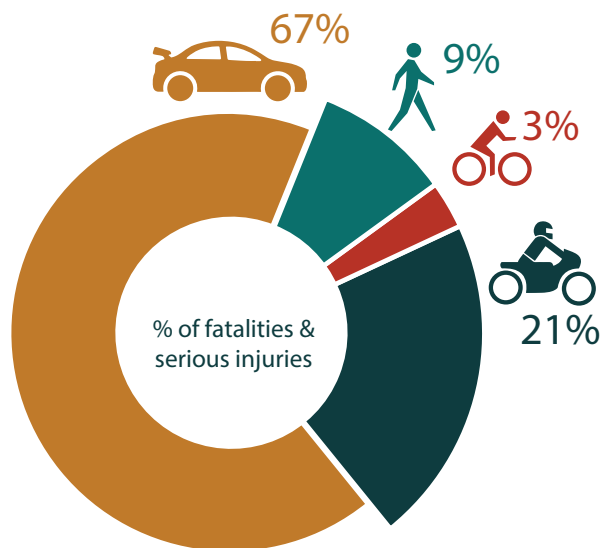
For the last century, our transportation system has been built on the belief that these crashes are accidents – events no one can fully prevent or predict. While no one thinks traffic deaths among friends and family are acceptable, the historical approach to transportation has taken roadway fatalities as an unfortunate inevitability rather than a preventable public health crisis.

Vision Zero is a traffic safety philosophy rooted in the belief that nothing on our roadways is more important than a human life. It represents paradigm shift in the region's approach to road safety beginning with the

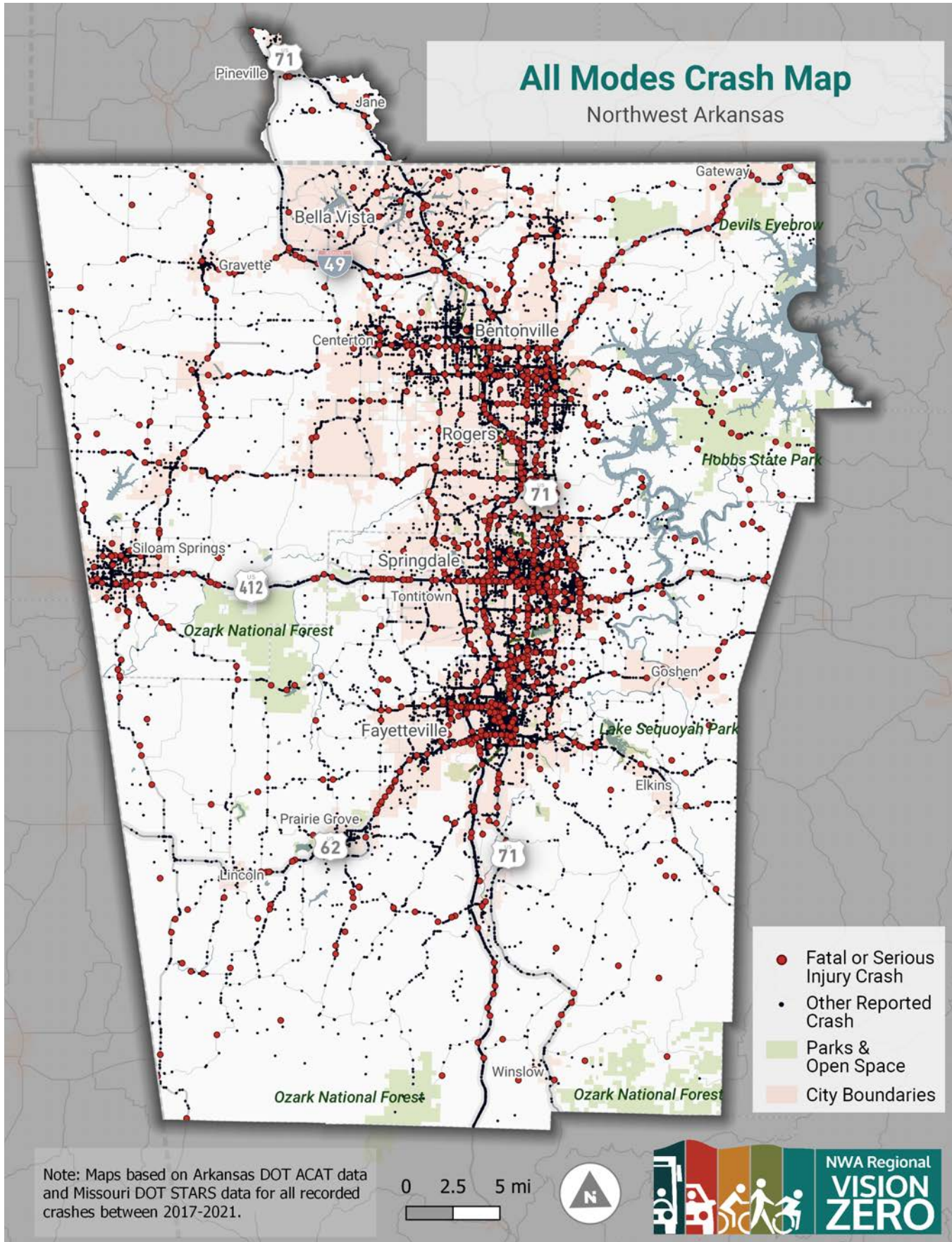
simple idea that traffic deaths and serious injuries are preventable. Since the 1990s Vision Zero has been successfully implemented across Europe and in more than 45 communities in the US-- some of which have now had consecutive years of zero roadway fatalities. Vision Zero lays out a new set of principles for engineering roads, educating travelers, and creating a sense of collective responsibility for ourselves and our fellow travelers.

Vulnerable Users

When a crash occurs, people walking, bicycling, and riding motorcycles are more likely to be killed or seriously injured. Vehicle safety technology has seen significant advancements in the last decades with airbags, anti-lock brakes and lane-awareness sensors all working to protect a driver in a crash. Pedestrians, bicyclists, and motorcyclists however are unprotected and are especially vulnerable to the impact of a crash. In Northwest Arkansas, vulnerable roadway users accounted for only 3% of all roadway crashes but 33% of serious injuries and fatalities.

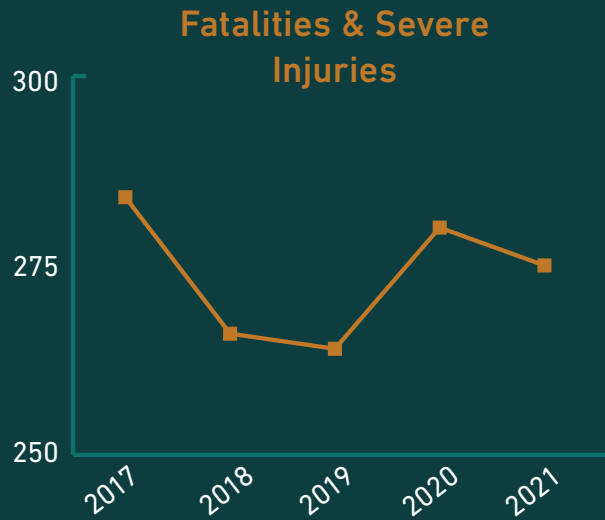
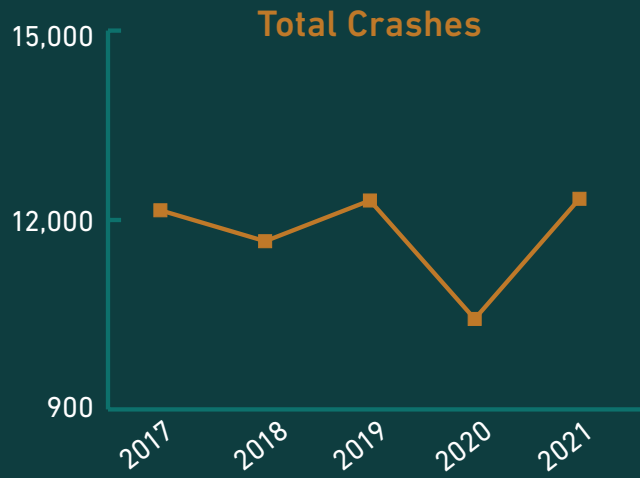


All Modes Crash Map





Between 2017 and 2021
1,369 people
were killed or
seriously injured
in crashes in NWA,
averaging more
than five people
every week.



The Safe System Approach

This Plan is the NWA Region's roadmap to achieving Vision Zero. It is grounded in the Safe System Approach, which aims to eliminate fatal and serious injuries by anticipating human mistakes and minimizing impacts on the human body when crashes do occur.

The six Safe System Principles shown around the outside ring are the fundamental beliefs that the approach is built on.

1. Humans make mistakes

Even the best drivers will inevitably make mistakes that can lead to a crash. How we design and operate our transportation system can ensure these mistakes don't have life altering impacts.

2. Death & serious injuries are preventable

No one likes to get in a fender-bender but this plan will focus on crashes that lead to deaths and serious injuries.

3. Humans are vulnerable

Human bodies can only withstand so much impact from a crash before death or serious injuries occur.

4. Responsibility is shared.

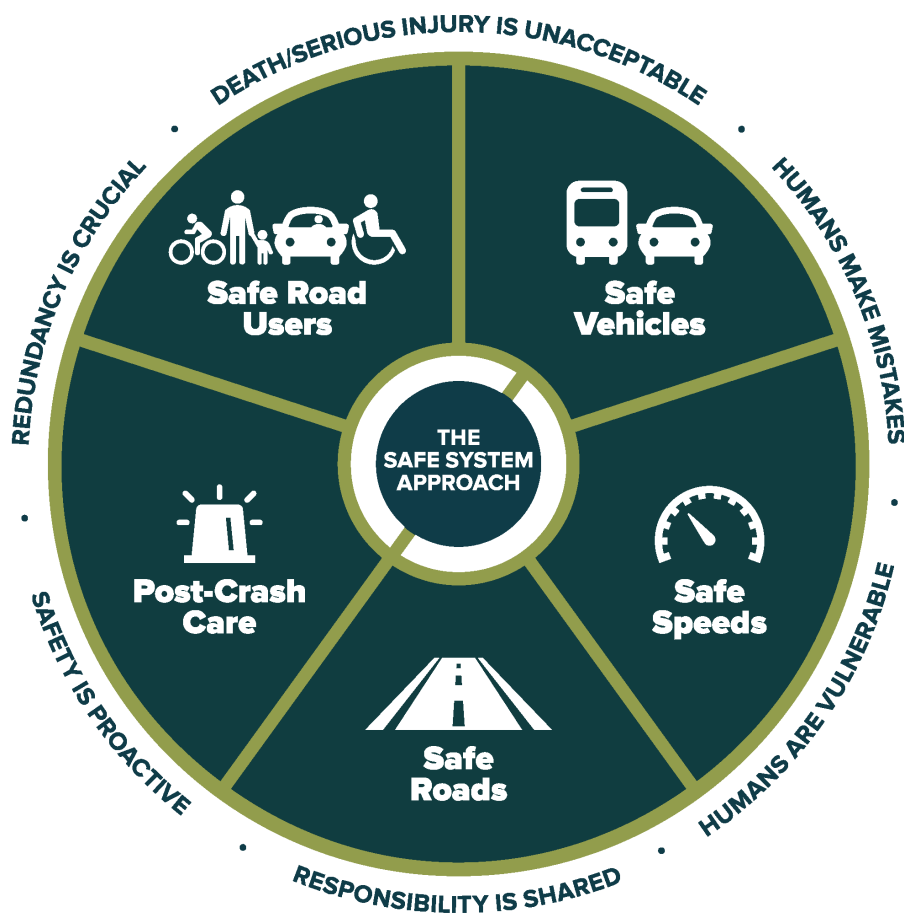
Every part of our transportation system, from elected officials to everyday users, to planners and engineers, has a role to play in vision zero.

5. Safety is Proactive

Rather than waiting for crashes to occur, transportation agencies should seek to proactively identify and address dangerous situations.

6. Redundancy is crucial

Redundancy means making sure every part of the transportation system is safe. This way if one part fails people are still protected.



The Safe System Approach is implemented through five Elements

1. Safe Road Users

Working towards a culture of safety starts with developing a network of civic partners, educating road users and creating personal connections to the community's vision zero efforts.

2. Safe Vehicles

Making vehicles safer can be done through advanced driver assistance systems and by ensuring future technology prioritizes vulnerable roadway users.

3. Safe Speeds

Slower vehicle speeds increase visibility and reaction times for drivers and reduce impact forces when a crash occurs. Moving towards safe speeds can be done through reducing speed limits and through traffic calming and roadway design.

4. Safe Roads

Safer roads come from providing physical separation (like separated bike lanes and sidewalks) as well as designing to accommodate human mistakes.

5. Post-Crash Care

A system-wide approach means working towards safety even after a crash has occurred. This comes from improving emergency response, and traffic incident reporting and management.



The Safe System Framework

ANTICIPATE HUMAN ERROR

SEPARATE USERS IN SPACE

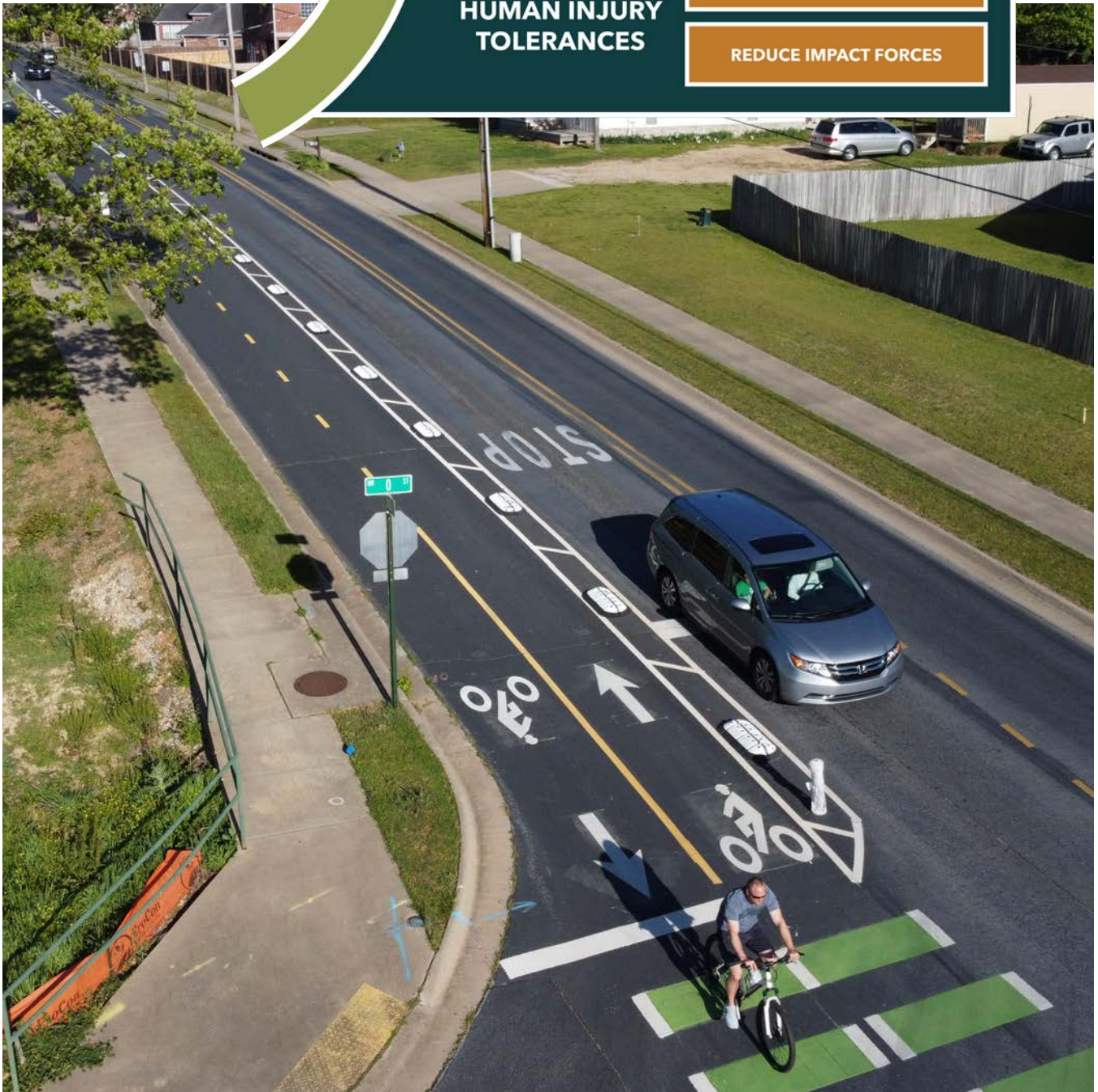
SEPARATE USERS IN TIME

INCREASE ATTENTIVENESS & AWARENESS

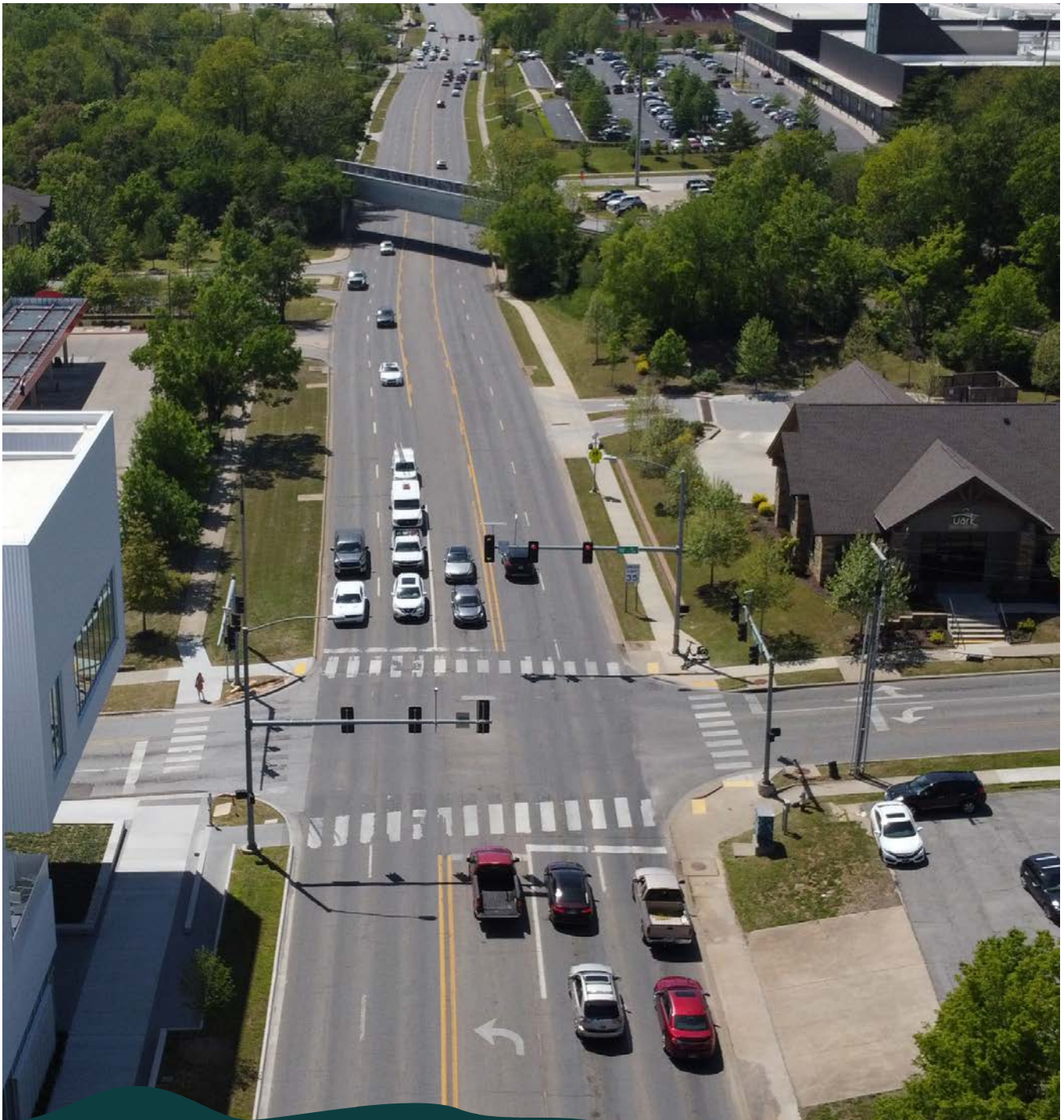
ACCOMMODATE HUMAN INJURY TOLERANCES

REDUCE SPEEDS

REDUCE IMPACT FORCES



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2

Roadway Safety in Northwest Arkansas

2. Roadway Safety in Northwest Arkansas

Plans, Policies, and Programs

In response to rapid population growth and an increase in fatal and serious crashes, Northwest Arkansas has addressed road safety both through targeted interventions and by integrating it into existing planning, policies, programs.

Planning Efforts

Many existing local, regional, and statewide plans have addressed the issue of road safety in some capacity. Examples include transportation plans, bicycle and pedestrian plans, and corridor studies. See Table 1 for a summary of plans reviewed during the development of this Plan.

Local Plans

At the local level, road safety has largely been addressed through transportation plans, bicycle and pedestrian plans, and safe routes to school plans. Many of these plans include recommendations for reducing vehicle speeds on local roads, improving sidewalk and bike lane networks, and increasing driver education and awareness. Recent examples include the [Fayetteville](#)

[Mobility Plan](#), the [Bella Vista Trail and Greenway Master Plan](#), the [Bentonville Bike & Pedestrian Master Plan](#), and the [University of Arkansas Active Transportation Plan](#).

Regional Plans

Regional plans addressing road safety include the [NWA Bike Infrastructure Plan](#), [NWARPC 2045 Metropolitan Transportation Plan](#), and the [NWA Congestion Management Process](#). These plans coordinate efforts across the region and offer insight on emerging trends and funding opportunities, many of which inform this Plan's approach to regional road safety.

Statewide Plans

[Arkansas](#) and [Missouri](#) have both adopted Strategic Highway Safety Plans that provide a statewide framework to eliminate traffic deaths and serious injuries through the Safe System Approach. The plans include strategies to address the top contributing factors to fatal and serious factors. Arkansas also has a statewide [Bicycle and Pedestrian Transportation Plan](#), which includes a focus on bicycle and pedestrian safety.

Regional Plan Highlight: 2019 NWA Bike Infrastructure Plan



The Northwest Arkansas Bike Infrastructure Plan identifies a priority network of bikeways focused on increasing safety and connectivity. It includes corridor concepts designed to make bicycling a safe and accessible travel option for riders of all ages and abilities.

Table 1: Summary Plans Reviewed

Plan Name	Year	Jurisdiction
Bella Vista Trail and Greenway Master Plan	2015	Bella Vista
Bentonville Bike and Pedestrian Master Plan	2021	Bentonville
Fayetteville Active Transportation Plan	2015	Fayetteville
Fayetteville Mobility Plan	2018	Fayetteville
University of Arkansas Transportation Plan	2022	Fayetteville
NWARPC 2045 Metropolitan Transportation Plan	2021	NWA Region
NWA Regional Bicycle and Pedestrian Master Plan	2014	NWA Region
NWA Congestion Management Process	2022	NWA Region
NWA Bike Infrastructure Plan	2019	NWA Region
NWA Regional ITS Architecture and Deployment Plan	2007	NWA Region
NWA Transportation Alternatives Analysis Study	2014	NWA Region
Connect Northwest Arkansas 10-Year Transit Development Plan	2020	NWA Region
Arkansas Bicycle and Pedestrian Transportation Plan	2017	Statewide
ARDOT Strategic Highway Safety Plan (SHSP)	2022	Statewide
Missouri Show-Me Zero	2021	Statewide

Policies

Safe Routes to School

Safe Routes to School (SRTS) programs enable students to safely walk and bicycle for their school commute. SRTS includes planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution around schools.

Complete Streets

Complete Streets policies direct transportation planners and engineers to consistently design the right of way to accommodate all users, including drivers, transit riders, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities. Most local jurisdictions in Northwest Arkansas have not adopted any form of Complete Streets policy. The 2015 [NWA Regional Bicycle and Pedestrian Master Plan](#) identified the adoption of these policies as a catalyst program and provided a sample Complete Streets Resolution designed for NWA communities.

Design Standards

Street design standards have a significant impact on road safety. Context appropriate street design encourages safe behavior and reduces conflicts between users. Existing standards vary across the region, but some include provisions that promote safety. For example, the City of [Bentonville Minimum Standard Specifications](#) for Streets includes a section on Neighborhood Traffic Safety that includes design criteria for various traffic calming devices.

Design Standards Highlight: Fayetteville Minimum Street Design Standards

The [City of Fayetteville Minimum Street Design Standards](#) provide an example of how to prioritize safety for all road users. They include an emphasis on multimodal level of service and reference best practice design guidance such as NACTO's [Don't Give Up at the Intersection](#) and FHWA's [Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations](#).





Traffic Calming Policy Highlight: Springdale Traffic Calming Policy

The City of Springdale has a policy that enables the installation of traffic calming measures such as curb extensions, raised intersections, speed cushions to address speeding and conflicts between people walking and driving. Criteria for installation include observed speeds, sidewalk connectivity, crash history, and the presence of children walking to school.

Traffic Calming

Traffic calming consists of physical design and other measures put in place on existing roads to reduce vehicle speeds and improve safety for pedestrians and bicyclists. Several cities in NWA have implemented traffic calming policies that facilitate the installation of traffic calming on residential streets.

Emergency Response

One component of the Safe System Approach is to streamline emergency response and medical care. Based on discussions from the NWA Active Transportation Committee, Bentonville and Fayetteville have updated their CAD systems and improved GIS data to assist with quicker emergency response on the trail system.

Parking Requirements

Minimum parking requirements for developments present a barrier to the creation of dense, walkable urban environments. The City of Fayetteville abolished its commercial parking minimums citywide in 2015 while retaining downtown parking maximums. This change has enabled new businesses to open using long-disused sites and buildings.

Evaluation of Existing Codes and Ordinances

The table on the following page provides a high-level review of local codes and ordinances for cities with over 2,000 residents.¹ For each element (e.g. building entrances) a score was assigned for each city to indicate the state of policy on that issue, ranging from 1 (Codes / ordinances do not include this element) to 3 (Codes / ordinances include this element and it generally meets best practices). This evaluation was based on the information available to the project and should be viewed as a starting point for where to focus attention with regard to code and ordinance amendments to promote road safety. Some issues, such as speed limits and crosswalk markings, were not included due to the limited presence of local policy on these issues.

¹ Population based on 2021 ACS data. Most cities with fewer than 2,000 residents do not have codes and ordinances addressing road safety through street design or land use, though there are some exceptions, including Highfill, Decatur, and Greenland.

Table 2: Review of local codes & ordinances

City	Population (2021)	Sidewalks / Frontage Improvements	Connectivity / Block Sizes	Mid-Block Access / Crossings	Building Entrances	Parking	Parking Placement	Access Management / Driveways	Complete Streets	Traffic Calming
Fayetteville	95,230	3	3	3	3	3	3	3	2	3
Springdale	89,576	2	1	1	1	1	1	1	1	1
Rogers	71,112	3	1	1	3	1	3	3	2	3
Bentonville	56,734	3	3	2	3	2	3	3	2	3
Bella Vista	30,808	2	2	2	1	1	1	3	1	2
Centerton	19,984	3	1	1	1	1	1	2	1	1
Siloam Springs	17,575	3	3	1	1	1	1	3	1	1
Lowell	10,177	2	3	2	1	2	1	3	1	1
Farmington	8,242	3	2	1	1	1	1	1	1	1
Prairie Grove	7,434									
Pea Ridge	7,140	2	2	2	1	1	1	3	1	1
Cave Springs	5,916	3	2	2	1	2	1	3	1	1
Tontitown	5,633	3	2	2	2	2	1	3	2	3
Gentry	4,000	2	3	2	1	1	1	1	1	1
Elkins	3,743	3	3	1	1	1	1	1	1	1
Gravette	3,647	3	3	1	2	1	3	1	1	2
Johnson	3,631	3	1	1	1	2	1	3	2	1
Little Flock	3,004	1	2	1	1	1	1	1	1	1
Huntsville	2,981	2	2	3	1	1	1	3	1	1
Elm Springs	2,581	2	2	1	3	1	3	1	1	1
West Fork	2,335	3	2	2	1	1	1	2	1	1
Lincoln	2,306	2	3	1	1	2	2	1	1	2
Goshen	2,188	2	2	2	1	1	1	2	1	1

Key:

- 1** Codes / ordinances do not include this element
- 2** Codes / ordinances include this element but it could use improvement
- 3** Codes / ordinances include this element and it generally meets best practices

Laws and Enforcement

Traffic laws and enforcement has been a central piece of Northwest Arkansas' approach to addressing traffic fatalities and serious injuries.

Speed Limits

Addressing speed is a crucial step to making streets safer. Vehicle speed increases both the likelihood of a crash, as well as the severity of the crash. Higher speeds diminish drivers' ability to recognize and avoid potential conflicts and increase the force of impact, increasing the chances of fatalities and serious injuries, particularly for more vulnerable road users. Many streets throughout NWA have relatively high speed limits that do not match the roadway context.

Context Appropriate Speed Limits: University of Arkansas and Residential Areas

Responding to road safety concerns and [new guidance from the National Association of City Transportation Officials \(NACTO\)](#), the City of Fayetteville lowered the default residential speed limit from 25 to 20 mph in 2021. The following year, the University of Arkansas also lowered posted speed limits on most campus streets, including a default campus area speed limit of 20 mph.

Distracted Driving

Since 2009, when Arkansas first banned texting while driving for all drivers, the state has strengthened laws around distracted driving to include a ban on all use of handheld devices for drivers under 18 and in certain areas. In 2021, the State passed a new distracted driving law that prohibits all drivers from holding or using a handheld device while driving, with a few exceptions, such as using a phone in a hands-free mode or in an emergency.

Driving Under the Influence

Arkansas also has strict laws around driving under the influence. In 2015, the State lowered the blood alcohol level (BAC) limit for drivers to 0.08%, which is consistent with recommendations from the National Highway Traffic Safety Administration (NHTSA). Arkansas also mandates ignition interlock devices (IIDs) for certain driving under the influence (DUI) offenders, as a condition of license reinstatement. Washington and Benton Counties have established diversion court programs that offer an alternative to traditional punitive measures, such as jail time, and allows participants to receive treatment, counseling, and other support services to help them overcome their addiction and avoid future DUI offenses. Benton County also has a Driving While Intoxicated (DWI) unit that is responsible for the pro-active detection, investigation and arrest of alcohol and/or drug-impaired drivers.²

Automated Enforcement

Arkansas prohibits the use of unmanned traffic enforcement systems, which includes both red light cameras and speed cameras. Speed cameras are only allowed in school zones or rail crossings and a police officer must be present and issue citation at time and place of violation.³ Red light cameras are not allowed under any circumstances. These legal requirements severely limit the potential use and efficacy of automated enforcement in Northwest Arkansas.

Programs

Bicycle Education

Over the last decade, bicycle education has become a part of the school curriculum in Fayetteville, Springdale, Rogers, and Bentonville. These programs, provided by [NWA Trailblazers](#), help to train the next generation of responsible road users by teaching kids the rules of the road and make bicycling accessible to kids who may not otherwise have the opportunity to ride.

Pilot and Demonstration Projects

Resolution 2016-2 authorized NWARPC to coordinate, manage, and assist with the implementation of bicycle pilot/demonstration projects in various locations to test protected bike lane concepts. NWA Trailblazers has

² Benton County Sherriff's Office. [DWI Unit](#).

³ Governors Highway Safety Association. [Speed and Red Light Cameras: Arkansas](#).

partnered with NWARPC and the Walton Foundation on a series of pilot projects in Bella Vista, Bentonville, Rogers, Springdale, Fayetteville, and Siloam Springs. These projects tested the feasibility of design treatments focused on creating safer streets for all users.

Slow Streets

Local cities have partnered with Trailblazers on the temporary installation of [Slow Streets](#). Through temporary installations of traffic calming materials, Slow Streets create safe, family-friendly routes for people to bike and walk, sometimes for a single day or weekend and sometimes seasonally.



A temporary Slow Street installation in Bentonville

Pilot Project Highlight: Siloam Springs Neighborhood Greenway Pilot Project

Trailblazers worked with the City of Siloam Springs to design and install a [Neighborhood Greenway pilot project](#) from downtown Siloam Springs to the Dogwood Springs Walking trail. A neighborhood greenway is a traffic calmed, slow-speed street that creates a shared space for drivers, bicyclists, and pedestrians. The project rollout included an evaluation of vehicle speeds and volumes, bicycle volumes, and crash data, as well as a post-installation survey to collect public feedback.



Roadway Safety Analysis

Crashes occur because of a variety and often a combination of contributing factors. These factors may include excessive speed, roadway conditions, equipment failure, inexperience, environmental conditions (e.g., weather, lighting, glare), and human behaviors, including distraction, impairment, and not complying with traffic laws. With 1,369 KSI crashes over

a five-year period, the HIN represents the most critical corridors that should be addressed in the region. Crash analysis resulted in numerous findings related to street characteristics and contexts in Northwest Arkansas. The following highlights a few of those findings along with the full HIN map for all modes.

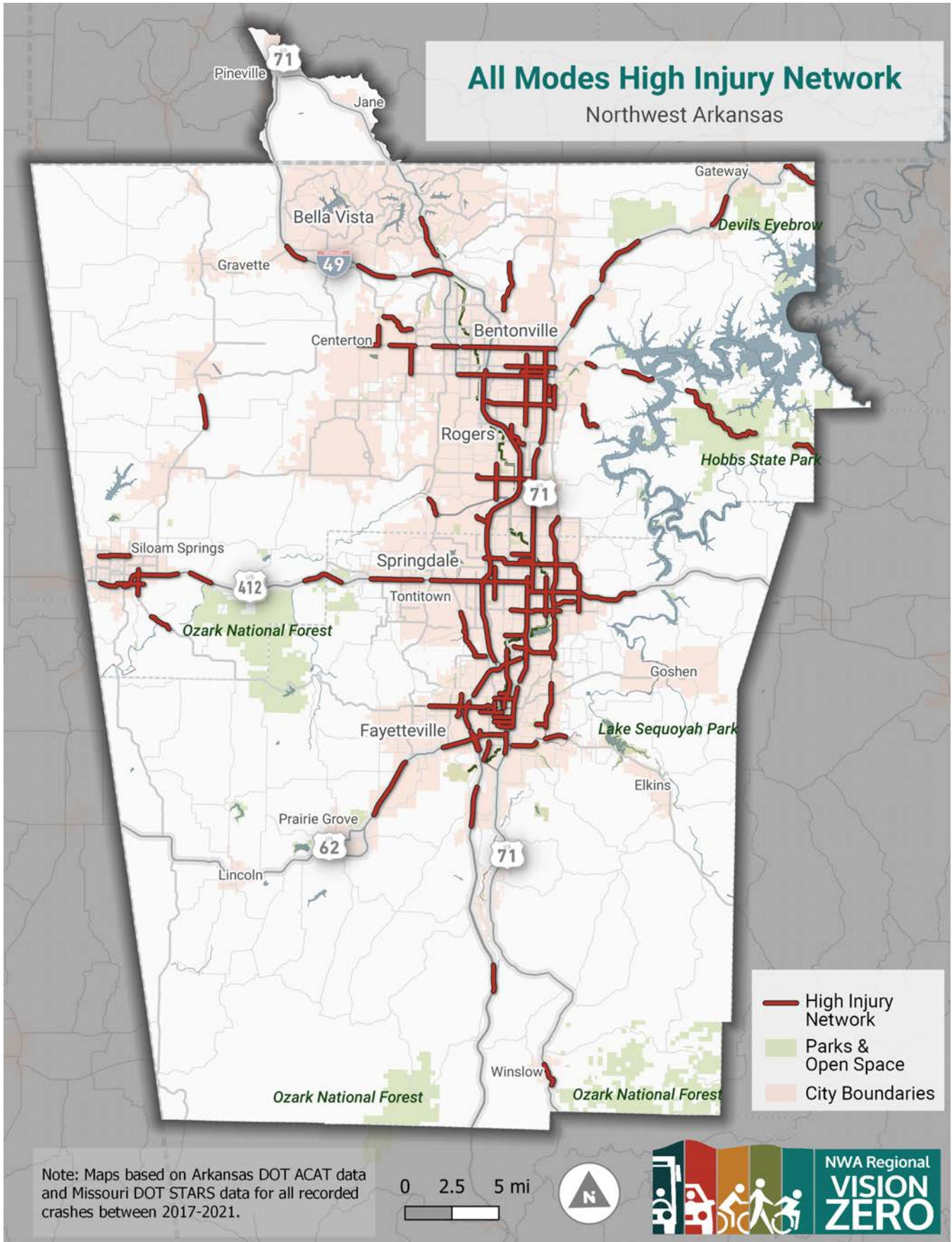


43%

speeding crashes resulted in a fatality or serious injury for vulnerable users



High Injury Network



Equity

Increasing safety across the region cannot succeed without a focus on equity and identifying communities that have disproportionate traffic safety impacts. The transportation system in Northwest Arkansas must work for everyone across the region; therefore, equity is integrated throughout the NWA Vision Zero Plan. Together with the Safe System Approach, recommended actions can address safety for people that have experienced a historical disadvantage, persistent poverty, and/or social vulnerability.

To create a broad characterization of communities that have sociodemographic vulnerabilities and to define the populations this Plan used criteria for Areas of Persistent Poverty, Historically Disadvantaged Communities as identified by the USDOT RAISE Mapping Tool, and the Social Vulnerability Index (SVI) as defined by the Centers for Disease Control and Prevention (CDC) and Agency for Toxic Substances and Disease Registry (ATSDR).

Historically Disadvantaged Communities⁴ refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

- Transportation access disadvantage identifies communities and places that spend more, and take longer, to get where they need to go.
- Health disadvantage identifies communities based on variables associated with adverse health outcomes, disability, as well as environmental exposures.
- Environmental disadvantage identifies communities with disproportionately high levels of certain air pollutants and high potential presence of lead-based paint in housing units.
- Economic disadvantage identifies areas and populations with high poverty, low wealth, lack of local jobs, low homeownership, low educational attainment, and high inequality.
- Resilience disadvantage identifies communities vulnerable to hazards caused by climate change.
- Equity disadvantage identifies communities with a high percentile of persons (age 5+) who speak English “less than well.”

Equity Defined

Equity is a pluralistic concept that centers on the concept of fairness and justice. Any equitable effort should consider and address historical marginalization, disenfranchisement, and disinvestment. The equity analysis for the NWA Vision Zero Plan examined the disproportionate impacts and disparate outcomes for those who have been harmed.

Area of Persistent Poverty⁵ is defined by the USDOT as any County or Census Tract that has consistently had greater than or equal to 20 percent of the population living in poverty over a defined period.

Social Vulnerability⁶ refers to the potential negative effects on communities caused by external stresses on human health. Factors include:

- Socioeconomic status (below 150% poverty, unemployed, housing cost burden, no high school diploma, no health insurance)
- Household characteristics (aged 65 or older, aged 17 or younger, civilian with a disability, single-parent households, English language proficiency)
- Racial and ethnic minority status (Hispanic or Latino (of any race); Black and African American, Not Hispanic or Latino; American Indian and Alaska Native, Not Hispanic or Latino; Asian, Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino; Two or More Races, Not Hispanic or Latino; Other Races, Not Hispanic or Latino)
- Housing type & transportation (multi-unit structures, mobile homes, crowding, no vehicle, group quarters)

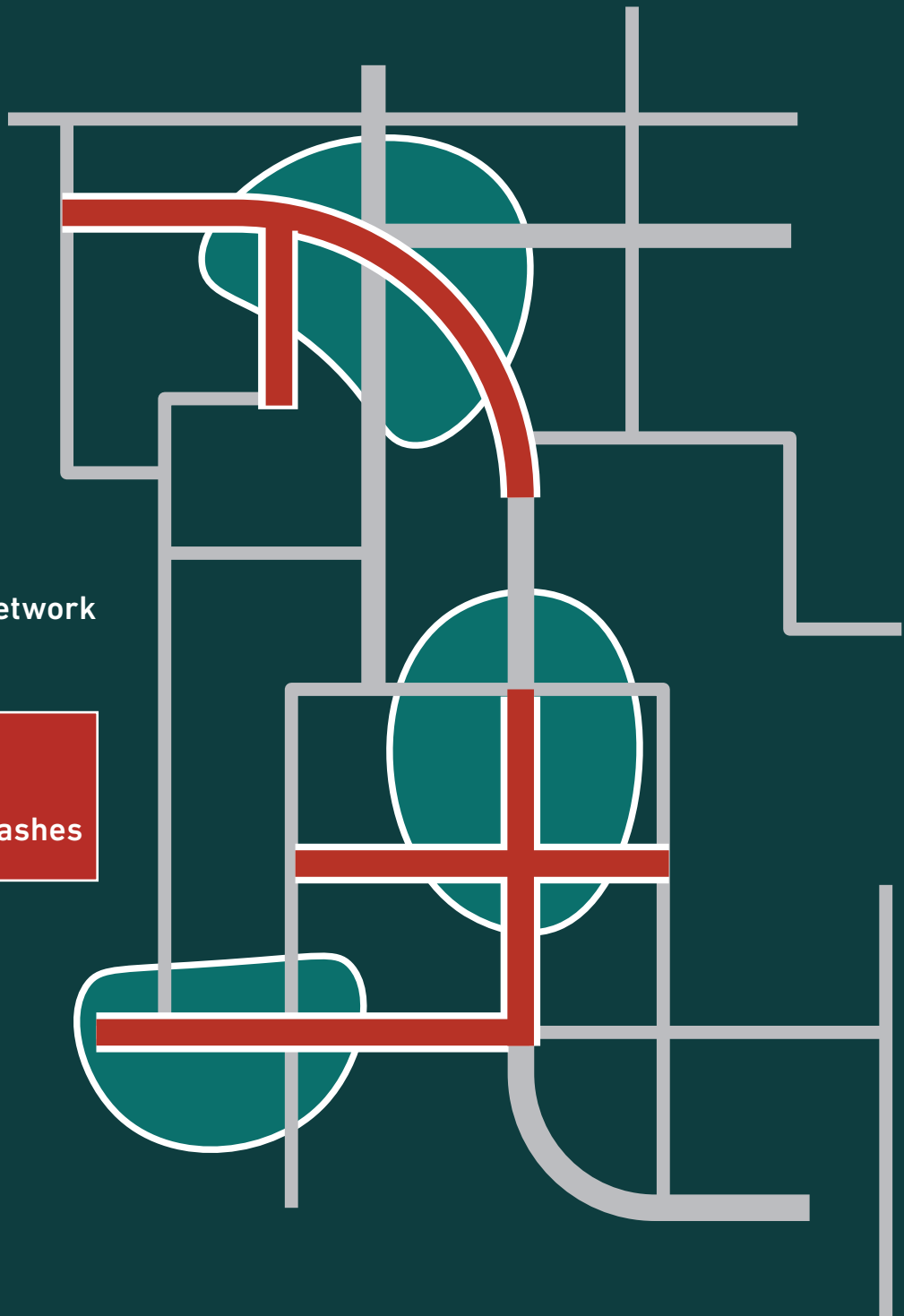
The Vision Zero Plan identified and prioritized investments in communities that have experienced varying degrees of disadvantage. Additionally, recommended actions have been intentionally developed to ensure policing and other enforcement efforts do not create or perpetuate disparities and unintended consequences in communities of color or areas of persistent poverty.



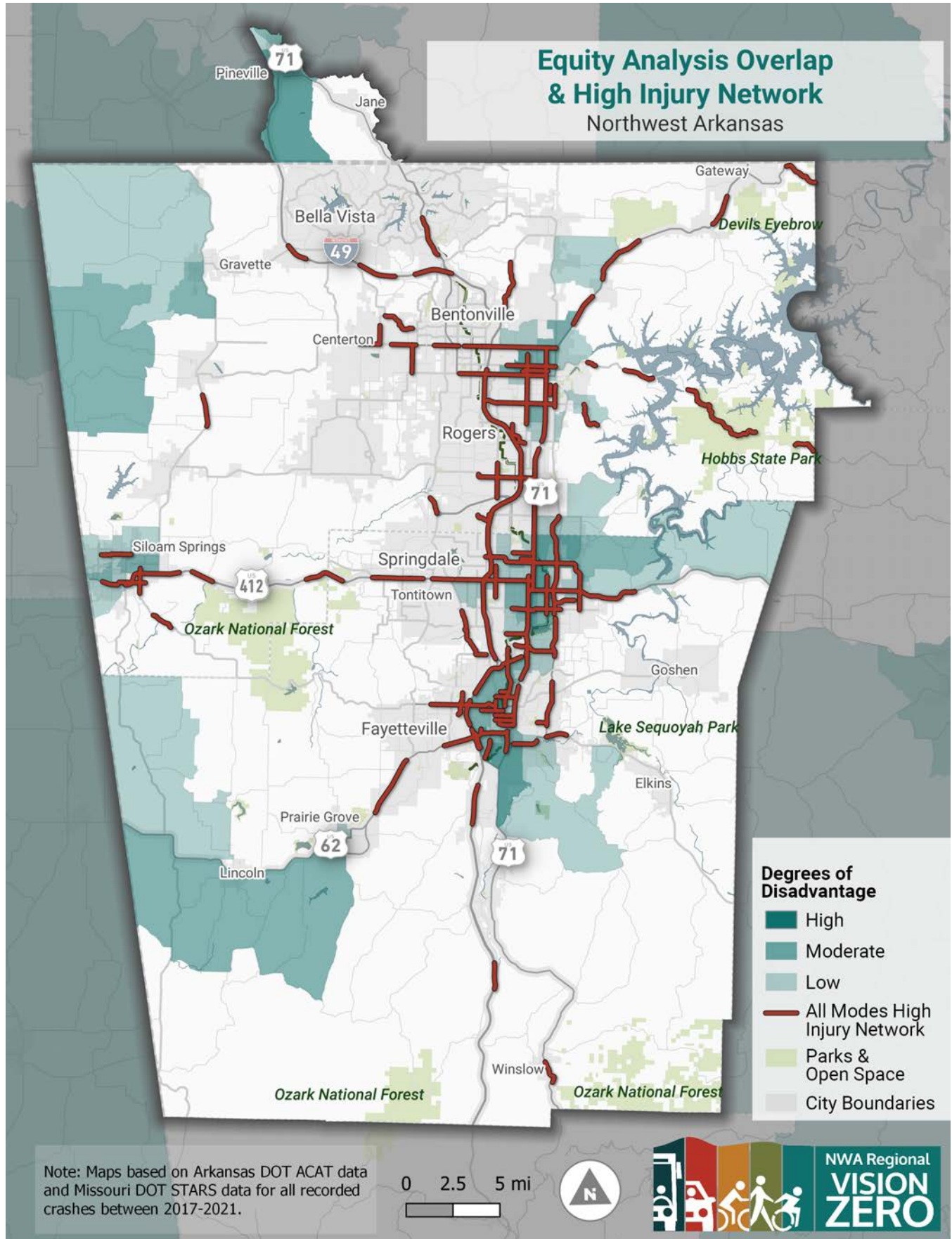
Vulnerable roadway users that live in disadvantaged areas are overrepresented in fatal and serious injury crashes.

6%
of roadway network

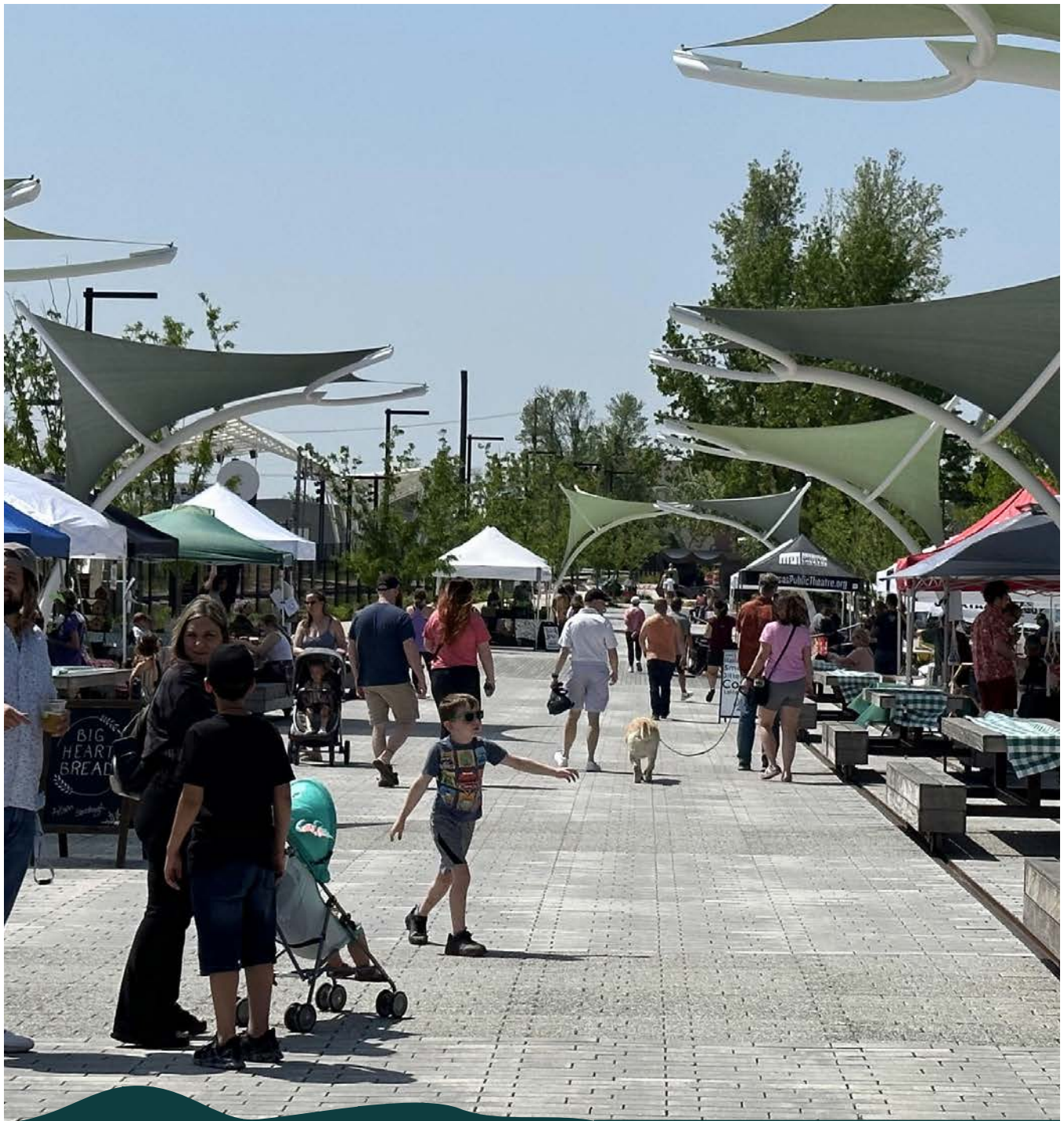
16%
of total KSI crashes



Equity Analysis Overlap and HIN



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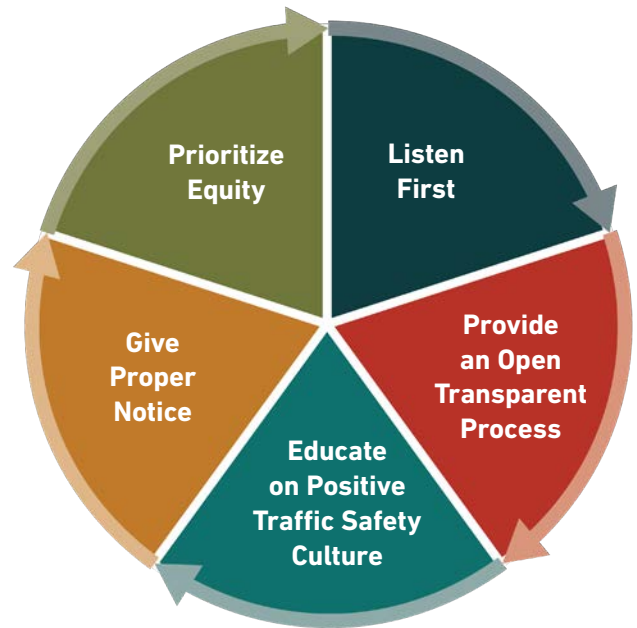
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Community Outreach

3. Community Outreach

The Northwest Arkansas Vision Zero Plan employed a wide range of digital and in-person engagement tools to inform the community and solicit feedback on roadway safety. Communicating the importance of roadway safety during the development of this Plan is an important step in long-lasting efforts to engage and empower people in the region to make changes that save lives. Five key elements were foundational for engagement:

1. **Listen First:** Events and outreach were structured so people could have multiple opportunities and options to share their experiences, interests, and concerns related to safety.
2. **Provide an Open and Transparent Process:** Engagement was accessible to as many members of the community as possible.
3. **Educate on Positive Traffic Safety Culture:** Each engagement event incorporated education components about the personal and community benefits of safety.
4. **Give Proper Notice:** Engagement would provide the community members time to attend one of several events as well as online opportunities for feedback.



5. **Prioritize Equity:** Engagement activities will ensure that input from minority populations and low-income populations are heard and reached out too and provided materials in Spanish.



Source <https://nwa.pressreader.com/article/281878712709691>

Promotion for the Vision Zero Plan relied on digital/ social media, word of mouth, and traditional print media. The Northwest Arkansas Democrat-Gazette for the May 8, 2023 Issue highlighted the Safety Demonstration Site Walk in Fayetteville that took a group of municipal staff, local advocates, and elected officials from across the region on a tour near the intersection of M.L.K. Jr. Boulevard and S. School Avenue (US Business 71) to discuss and see different implemented solutions for safety along with street characteristics that should still be addressed.

Listening Sessions

Scheduled listening sessions with municipal staff provided understanding and background for the state of safety within the region along with past efforts that have increased safety. Each listening session included conversation related to:

- Traffic safety culture,
- Process for project implementation,

- Effective tools already being used,
- Challenges to increasing safety,
- Specific locations where changes should be made, and
- Concerns about staff capacity and/or resources available.

Listening sessions revealed that while ongoing efforts are being made at the local level, there is still a lot of work left to do. Major arterials moving through communities present some of the biggest threats. Simultaneously, there is a need for policies and programs to target speed, distracted driving, and prioritize people walking and bicycling to achieve a safer system as a whole.

Public Interaction

In-person activities are showcased in Table 3. They included a mix of pop ups at various events and safety demonstration site walks around the region.

Table 3: In-Person Engagement Events

Event Name	Date	Community
Bentonville Moves	4/27/2023	Bentonville
Springdale EV Meeting NWARPC	4/28/2023	Springdale
Beaver Watershed LID Smart Growth	4/27/2023	Springdale
Bentonville Safety Project Demo	5/2/2023	Bentonville
Fayetteville Safety Demonstration Project	5/3/2023	Fayetteville
Safe Streets for All Working Group 3 Meeting	5/4/2023	Springdale
Bentonville First Friday	5/5/2023	Bentonville
Lower Ramble	5/5/2023	Fayetteville
First Friday	5/5/2023	Huntsville
Rogers Concert Series	5/5/2023	Rogers
Square 2 Square Ride Bentonville End	5/6/2023	Bentonville
Bentonville Farmers Market	5/6/2023	Bentonville
Coler Noon to Moon	5/6/2023	Bentonville
Rogers Concert Series	5/6/2023	Rogers
Rogers Farmers Market	5/6/2023	Rogers
Square 2 Square (halfway halt)	5/6/2023	Springdale
Farmers Market Springdale	5/6/2023	Springdale

Safety Demonstration Site Walks

Two Safety Project Demonstration Site Walks were held, one in Bentonville and one in Fayetteville, that gave residents, municipal staff, and advocates from around the region the opportunity to walk and talk about infrastructure problems and solutions that local municipalities have. Approximately 40 people attended the two Safety Demonstrations. Bentonville's Safety Demonstration focused on touring the quick build parking protected two-way separated bike lane on SW 8th Street, while the Fayetteville Safety Demonstration focused on examining different pedestrian and bicycle constraints: large state-owned arterials and intersections and a few successful pedestrian crossings for the Razorback Greenway. The demonstrations also allowed advocates and residents to discuss problems they experience and witness along the route.



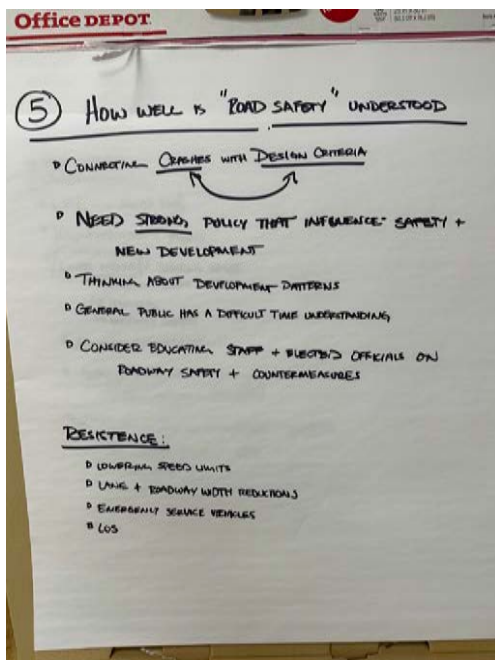
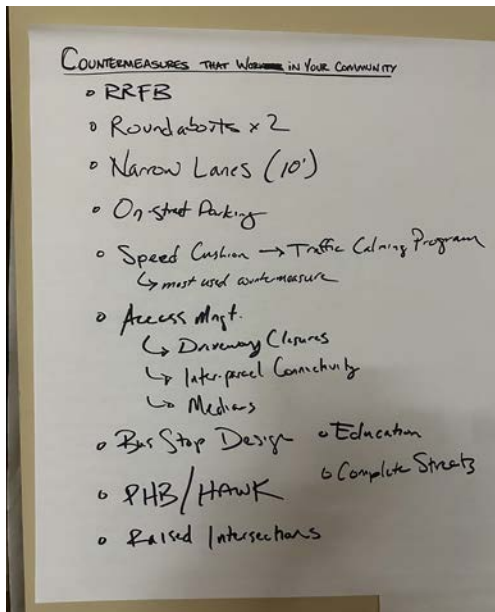
Pop-Up Booths

A go-to approach to engagement led to multiple events with pop-up booths for the NWA Vision Zero Plan throughout the region. The pop-ups included posters showcasing the number of fatalities and serious injury crashes in the region and business cards with QR codes for the public survey. Pop-up booth locations included the Square 2 Square Halfway Halt, Bentonville First Friday, Huntsville First Friday, Rogers Concert Series, Rogers Farmers Market, and the Farmers Market in Springdale. Square 2 Square is a biannual bike ride along the Razorback Regional Greenway for 30 miles between Fayetteville and Bentonville with nearly 2,000 riders, both local and regional, attending. Two events, the Rogers Concert Series and the Springdale Cinco de Mayo Farmers Market, had large Latino and Hispanic attendance which gave the opportunity to engage Spanish speaking residents.



Regional Safety Working Group

The regional safety working group met four times over the course of the NWA Vision Zero Plan development. It consisted of municipal staff, elected officials, regional advocates, and more. A key role of the working group was to discuss safety in the region, to guide recommended actions for policies, programs, and projects. Using the Safe System Approach foundation, the regional working group helped shape the NWA Vision Zero Plan and customize the recommendations that will reduce serious injury and fatal crashes in the region.



Safety Webinar Series

Educating decision-makers and the general public about safety in the region and specifically the Safe System Approach was an important role of engagement for the NWA Vision Zero Plan. Safety Webinars were developed to serve as a lasting resource to explain how addressing safety should emphasize the characteristics of the roadways that are leading to the lives being lost and that a system approach should be both reactive—implementing solutions along the High Injury Network—and proactive—deploying safety countermeasures to reduce risk. The Safety Webinar Series was recorded and was posted to the project website to allow for on-demand listening.



Safety Vocabulary

- **Crashes** not accidents
- **KSI** – Killed or Serious Injury Crashes
- **Proven Safety Countermeasure** - an action designed to reduce the frequency and/or the severity of crashes
- **Systemic Safety** – applying changes to a system based on risk and not just crash history



Road Diet/Roadway Reconfiguration

	PROACTIVE	REACTIVE	Expected Crash Reduction	Relative Cost
Safety Focus Area	Pedestrian/Bicycle Speed Management	Disturbance Mid-block Multiple Threat/Trapped Bicycle Right Hook Vehicle Striking Bicycle	19-47% of all crashes	\$

Athens, GA



*Speed Management benefits by eliminating speed differentials
** With the addition of separated bike lanes

Public Feedback

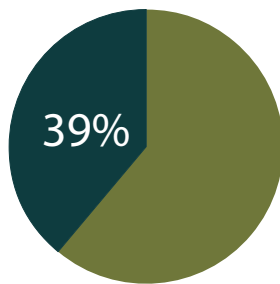
Digital tools included an online survey and map. Participants that provided feedback on the interactive map were asked to identify:

- Locations where they feel unsafe
- Locations where they feel safe
- Places where a roadway improvement could be made

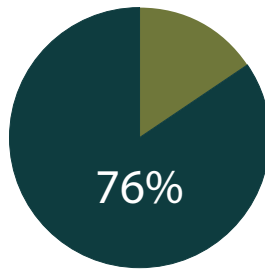
Most people who commented live in the eastern part of the region, yet most of the points are shown in the larger, more dense areas of Fayetteville and Bentonville. Overall, 316 people responded to the survey placing over 600 points on the interactive map.

When asked what the major issues are affecting your safety on the roadways in Northwest Arkansas, community members responded that distracted driving, lack of sidewalks and/or continuous sidewalks, and people driving too fast were the top three major issues.

When asked how you typically get around Northwest Arkansas, most respondents drove, walked, or rode their bike. When asked how often they bike or walk, 39% walked or biked daily and 76% walked or biked at least once a week.



Walk or bike daily

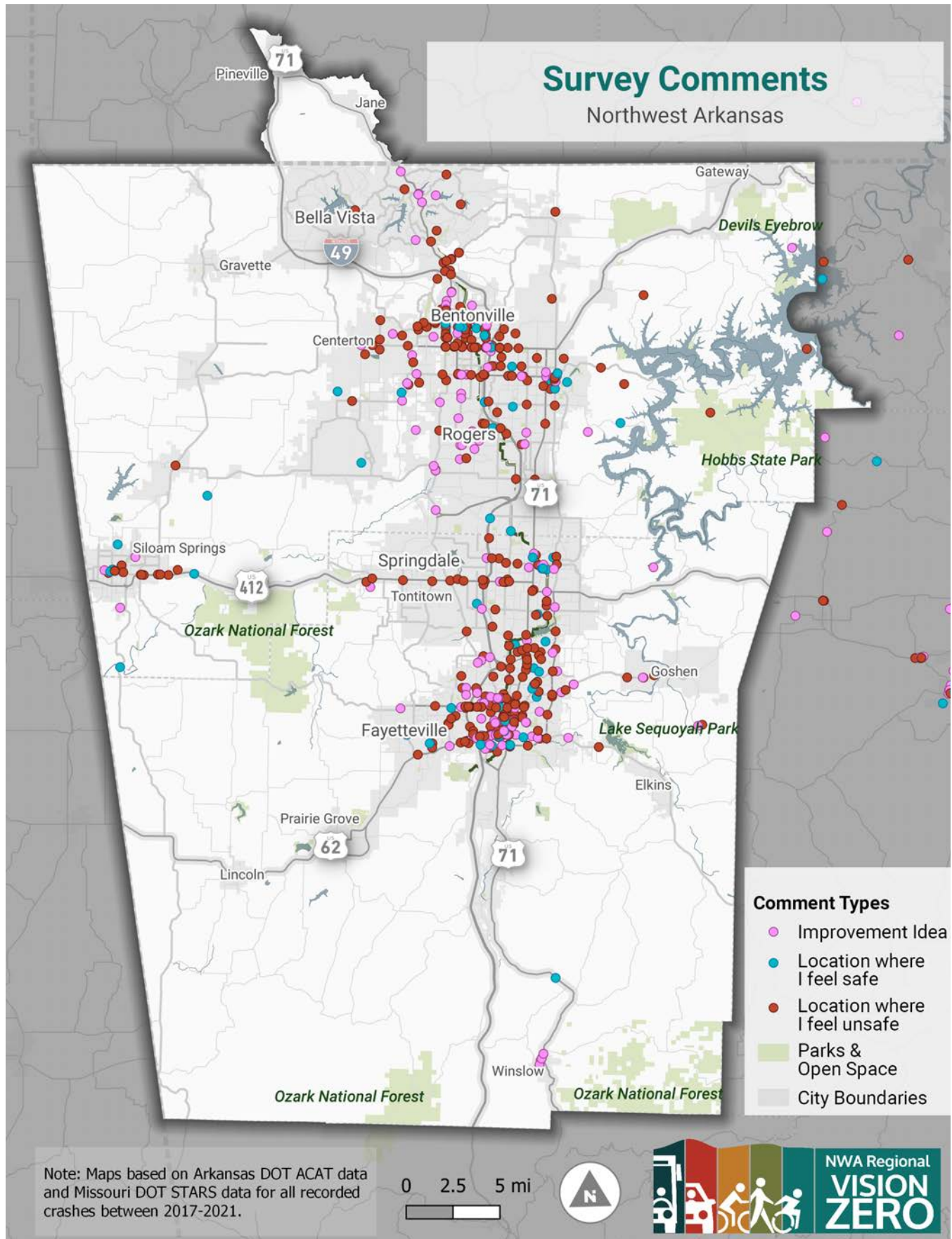


Walk or bike at least once a week

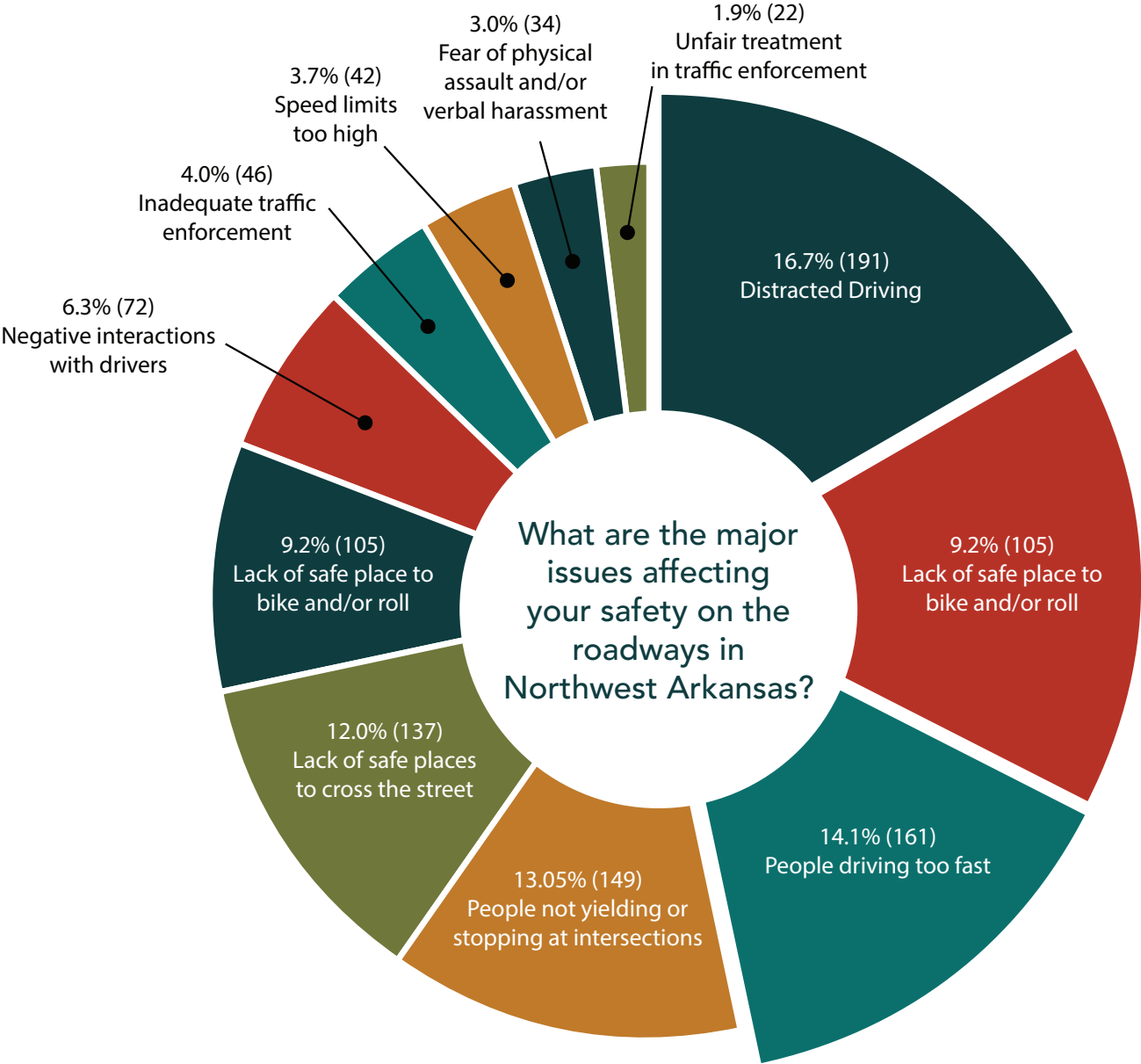
How do you typically get around NWA?



Interactive Map Comments

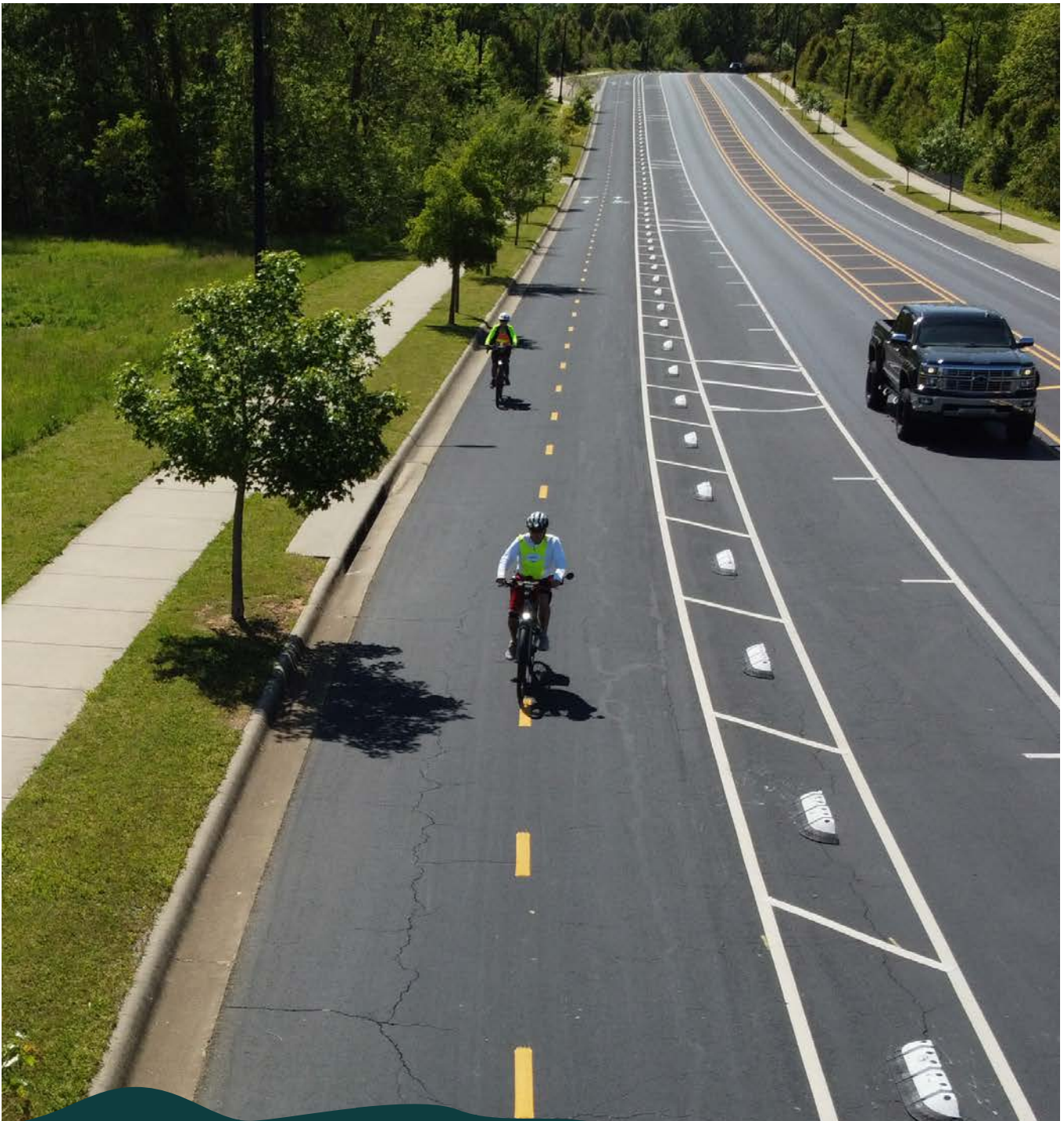


Public Survey Results





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4

Goals and Actions

4. Goals and Actions

Goals

The mission of Vision Zero—to Save Lives—requires changing how we design and operate our transportation system. The Safe System Approach is the foundation for this change that prioritizes human life above everything else. Through this Plan’s analysis, a High Injury Network has been established based on severity of crashes, roadway characteristics, individual behaviors, and unsafe speeds which highlights corridors where fatal and serious crashes are overrepresented on the regional roadway network.

This plan establishes four goals for addressing roadway safety and implementing Vision Zero in Northwest Arkansas:

-  **1. Promote a culture that prioritizes people’s safety**
-  **2. Reduce conflicts between roadway users**
-  **3. Establish policies, practices, and programs that focus on safety at all levels**
-  **4. Slow vehicle speeds**



Actions

Achieving goals is not always quick or easy. Effective implementation comes from coordinating various agencies and people to take action focused on safety. The staffs of agencies and their partners must have clear tasks. Institutions must have proper incentives and authority to implement their mission.

Each goal is supported by actions that are assigned lead agencies and timeframes. By breaking overarching goals into specific actions this Plan builds a comprehensive set of efforts that together will implement Vision Zero and save lives.



What you'll see here...

- A.** Action items, Each action item is a discrete, specific effort that can be advanced by a Vision Zero partner.
- B.** Timeframe, Action items are assigned general timeframes to help action leaders prioritize their efforts. Although the timeframes note a number of years, these timeframes align with the level of effort for completing these actions. Timeframes include:
 - a. Immediate: 0-2 years;
 - b. Short: 2-5 years; or
 - c. Medium-Long: 5-10 years.
- C.** Safe System Elements, Individual actions support one or more elements of the Safe System Approach. Those elements include:
 - a. Safer Road Users
 - b. Safer Roads
 - c. Safer Speeds
 - d. Safer Vehicles
 - e. Post-Crash Care.
- D.** Action Leader and Supporting Partners, Each action item is led by an action leader and supported by various agency partners.

	A	B	C	D	
	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
A.1	Prioritize Vision Zero Investments in Areas with High Social Vulnerability	Medium	Safer Roads	NWARPC	
A.2	Increase Frequency, Speed, and Service Area for Public Transportation	Medium	Safer People	Transit Agency	Member Agency
A.3	Work with Media Partners to Report Traffic Crashes More Accurately, to Avoid Victim Blaming, and Report Crashes in the Context of Vision Zero	Medium	Safer People	NWARPC	Member Agency
A.4	Partner with Youth Organizations to Create Peer-To-Peer Anti-Distraction Messaging Campaigns	Short	Safer People	Member Agency	



1

**Promote a culture
that prioritizes
people's safety**



Ongoing communication along with projects that put safety first is critical to culture change. Culture is more than messaging; it is a set of behaviors and a way of life that values the safety of fellow roadway users by every person during every trip.

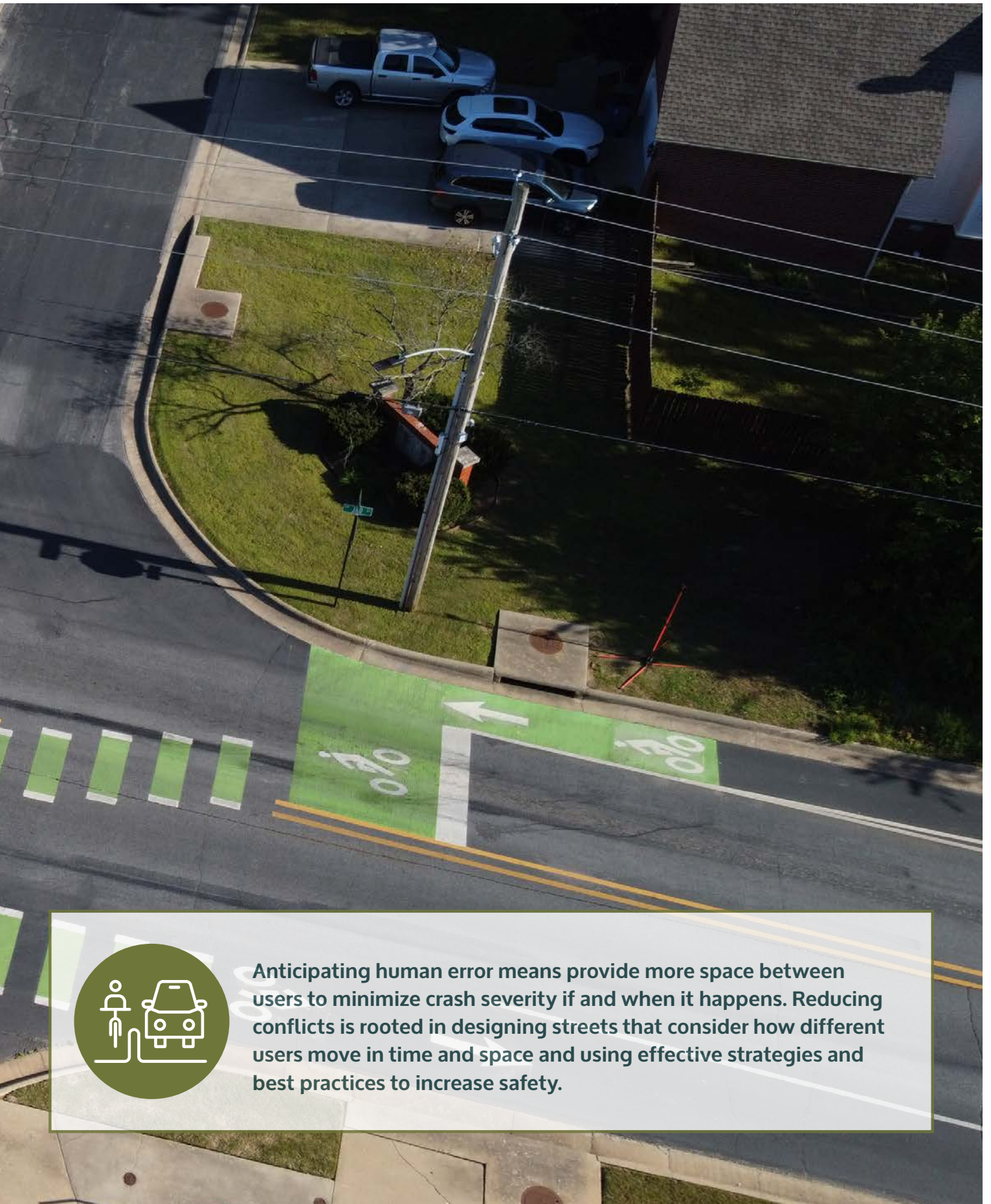
	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
A.1	Prioritize Vision Zero investments in areas with high social vulnerability	Medium-Long	Safer Roads	NWARPC	
A.2	Increase Frequency, Speed, and Service Area for Public Transportation	Medium-Long	Safer Users	Transit Agency	Member Agency
A.3	Work with Media Partners to Report Traffic Crashes More Accurately, to Avoid Victim Blaming, and Report Crashes in the Context of Vision Zero	Medium-Long	Safer Users	NWARPC	Member Agency
A.4	Partner with Youth Organizations to Create Peer-To-Peer Anti-Distracted Messaging Campaigns	Short	Safer Users	Member Agency	
A.5	Enhance Training for Law Enforcement Personnel Responsible for Crash Reporting to Address the Unique Attributes Required to Accurately Report Crash Circumstances Involving People Walking and Bicycling	Medium-Long	Safer Users	Member Agency	
A.6	Support DUI/DWI Court Programs that Focus on Education and Treatment over Punishment	Medium-Long	Safer Users	Member Agency	
A.7	Promote TDM, and Street Design Policies that Reduce Vehicle Miles Travelled and Automobile Dependence	Short	Safe Roads; Safer Users	NWARPC	Member Agency
A.8	Promote Street Networks and Land Use Patterns that Reduce Trip Distances and Automobile Dependence	Short	Safe Roads; Safer Users	NWARPC	Member Agency
A.9	Develop a Region-Wide Safety Campaign to Share Information with the Community about Traffic Safety for All Modes	Short	Safer Users	NWARPC	Member Agency
A.10	Encourage large employers of truckers to put speed governors on trucks	Medium-Long	Safer Vehicles; Safer Users	NWARPC	
A.11	Install pedestrian-scale lighting where trails are present	Medium-Long	Safer Roads	Member Agency	

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
A.12	Install lighting on all arterial roadways	Medium-Long	Safer Roads	ARDOT, Member Agency	NWARPC
A.13	Conduct roadway safety audits after every fatality	Short	Safer Users, Safer Roads	NWARPC	
A.14	Implement a micro sidewalk gap program	Immediate	Safer Users	NWARPC	
A.15	Conduct ongoing safety campaigns and events with the community - community safety advisory team (religious leaders, community centers, rec centers)	Medium-Long	Safer Users	NWARPC	Member Agency
A.16	Analyze growth areas adjacent to HIN	Medium-Long	Safer Roads	NWARPC	
A.17	Conduct economic and equity analysis	Medium-Long	Safer Users	NWARPC	
A.18	Conduct analysis of inequities within native populations	Short	Safer Users	NWARPC	



2

Reduce conflicts
between roadway
users



Anticipating human error means provide more space between users to minimize crash severity if and when it happens. Reducing conflicts is rooted in designing streets that consider how different users move in time and space and using effective strategies and best practices to increase safety.

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
B.1	Reduce Distances Between Crossings along State Highways	Medium-Long	Safer Roads	ARDOT	NWARPC, Member Agency
B.2	Implement Road Diets along the High Injury Network	Medium-Long	Safer Roads	NWARPC	
B.3	Close Gaps in Bicycle and Pedestrian Networks	Medium-Long	Safer Roads	NWARPC	
B.4	Close all slip lanes	Medium-Long	Safer Roads	Member Agency	
B.5	Implement leading pedestrian intervals at all signalized intersections	Short	Safer Roads	ARDOT, Member Agency	
B.6	Implement pedestrian recall on all permissive and through phases	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.7	No right-turns on red on the HIN or high pedestrian routes	Short	Safer Roads	ARDOT, Member Agency	
B.8	Access management to combine driveways to adjacent properties OR building medians to restrict left turns near driveways and intersections	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.9	Install or retrofit countdown ped heads	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.10	Implement pedestrian friendly cycle lengths, maximum 3' per second of walking speed	Short	Safer Roads	ARDOT, Member Agency	
B.11	Eliminate of dual center turn lanes on arterials	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.12	Protected left turn signal phasing, eliminate both yield and flashing yellow	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.13	Standardize crosswalk design standards including ladder spacing and widths	Short	Safer Roads	NWARPC, ARDOT	Member Agency

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
B.14	Review crosswalk spacings and distance of crossings (include pedestrian refuge islands)	Short	Safer Roads	ARDOT, Member Agency	
B.15	Shared path or separated/raised/protected facilities for bicycle routes on roadways with speeds above 35 mph	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.16	Edge and center line treatment with bicycle-friendly rumble strips	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.17	Implement a sidewalk gap program to fill short segments outside of development process	Short	Safer Roads	ARDOT, Member Agency	
B.18	Identifying walking zones for schools, recreation centers, and other community identified priorities for connectivity	Medium-Long	Safer Roads	ARDOT, Member Agency	School Board
B.19	Overpass or tunnel for trail crossing with 55 mph+ vehicle speeds	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.20	Daylighting intersections and urban town centers	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.21	Convert front-in angle parking to back-in angle or parallel parking in downtown areas	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.22	Provide buffers to sidewalks	Medium-Long	Safer Roads	ARDOT, Member Agency	
B.23	Assess bicycle and pedestrian projects to increase separation	Short	Safer Roads	NWARPC	Member Agency



3

**Establish policies,
practices, and
programs that focus on
safety at all levels**



Accomplishing zero fatal and serious injury crashes requires changes at every level. Policy sets the stages for daily decisions to change and can influence practices, programs, and mindsets that are essential for the Safe System Approach to be effective.

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
C.1	Adopt Complete Streets Policies	Immediate	Safer speeds; Safer Users; Safer Roads	NWARPC, Member Agency, ARDOT	
C.2	Address Safety within Routine Facility Maintenance	Medium-Long	Safer speeds; Safer Roads	ARDOT, Member Agency	
C.3	Identify and Implement Road Safety Improvements Through Routine Resurfacing	Medium-Long	Safer speeds; Safer Roads	ARDOT, Member Agency	
C.4	Develop a Multimodal Safety Toolbox that identifies strategies available to address safety concerns for all modes	Short	Safer speeds; Safer Roads	NWARPC	
C.5	Establish a Multi-Disciplinary Crash Response Team to evaluate and address fatal and serious injury crashes and crash locations	Short	Safer speeds; Safer Roads	NWARPC	ARDOT, Member Agency
C.6	Adopt Specifications for Incorporating Safety Features in New Fleet Vehicle Purchases and Retrofit Existing Vehicles	Short	Safer Roads	NWARPC	Member Agency
C.7	Advocate for Changes to State Law to Expand the Use of Automated Traffic Enforcement (ATE)	Short	Safer speeds; Safer Users; Safer Roads	NWARPC	
C.8	Establish zero tolerance policies and incentive programs to reduce and eliminate speeding	Immediate	Safer speeds; Safer Users; Safer Roads	Member Agency, Police Department	
C.9	Conduct roadway safety audits after every fatality	Immediate	Safer Roads	NWARPC, ARDOT	Member Agency
C.10	Consider alternatives primary access to schools on arterials or HIN for future school sites	Medium-Long	Safer Roads	School Board	Member Agency
C.11	Conduct crash analysis by type of vehicle due to semis and large trucks with trailers on roads	Short	Safer Roads	NWARPC	ARDOT, Member Agency

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
C.12	Conduct analysis of crashes on curves and hills in region	Short	Safer Roads	NWARPC	ARDOT, Member Agency
C.13	Conduct analysis of crashes related to dual center turn lane and commercial access management on arterials	Short	Safer Roads	NWARPC	ARDOT, Member Agency
C.14	Compare crashes within new greenfield development, housing, and commercial	Short	Safer Roads	NWARPC	Member Agency
C.15	Analyze before and after crash trends along recent roadway projects	Medium-Long	Safer Roads	NWARPC, ARDOT	



4

Slow Vehicle Speeds



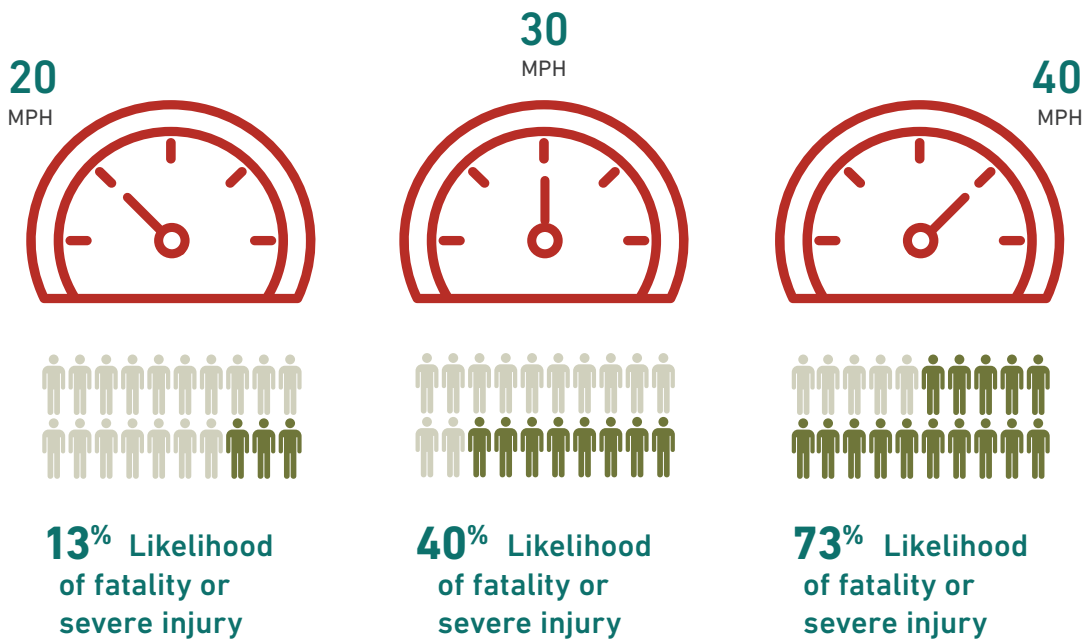
**SPEED
LIMIT
45**

R2-1



Speed is at the heart of fatal and serious injury crashes. Getting people to drive slower will take more than just a lower a speed limit. Reducing vehicle speeds will require several tools and strategies to work together for the safety of all roadway users.

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
D.1	Review Speed Limits on the High Injury Network	Medium-Long	Safer speeds; Safer Users; Safer Roads	NWARPC	Member Agency, ARDOT
D.2	Reduce speed limits on local streets to 20 mph	Short	Safer speeds; Safer Users; Safer Roads	Member Agency	
D.3	Conduct a special speed study in local jurisdictions for blanket speed limit reduction	Short	Safer speeds; Safer Users; Safer Roads	NWARPC, Member Agency	
D.4	Engage state legislature to change laws related to speed limit setting	Short	Safer speeds; Safer Users; Safer Roads	NWARPC, Member Agency	
D.5	Adjust signal timing and signage for speed limit on arterials	Short	Safer speeds; Safer Users; Safer Roads	Member Agency, ARDOT	
D.6	Tighten turning radii, include truck aprons on freight routes	Medium-Long	Safer speeds; Safer Users; Safer Roads	Member Agency, ARDOT	
D.7	Post nighttime speed limits	Immediate	Safer speeds; Safer Users; Safer Roads	Member Agency, ARDOT	



Data Citation: Tefft, B.C. (2011). *Impact Speed and a Pedestrian's Risk of Severe Injury or Death* (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety.



Acknowledgements

The creation of the NWA Vision Zero Plan would not have been possible without the dedication of numerous NWARPC staff, municipal staff from member agencies, elected officials, and community partners.

This effort was lead by the NWARPC, in partnership with the Regional Working Group.

TO BE UPDATED

Name, Title

Name, Title

Name, Title



Safety Action Plan