CITY OF SPRINGDALE
Committee Agenda
Monday, July 31st, 2023
Tiered Training Room (2nd Floor)
201 Spring Street, Springdale, AR 72764
Meetings begin at 5:30p.m.

1. ***A Discussion*** on the Veterans Memorial Project. Presented by Jim Reed.

Finance Committee by Chairwoman Amelia Williams

2. ***A Resolution*** accepting a grant from the Arkansas State Airport Aid Funds for the Springdale Municipal Airport. Presented by James Smith, Public Works Director. Pgs. 1-16

3. ***A Resolution*** to waive competitive bidding for the purchase of airport tower equipment for the Springdale Municipal Airport. Presented by James Smith, Public Works Director. Pgs. 17-18

4. ***A Resolution*** authorizing the execution of a construction contract for Dean's Trail Phase 3A. Presented by Ben Peters, Engineering Director. Pgs. 19-22

5. ***A Resolution*** authorizing the execution of a Professional Services contract for Bluff Cemetery expansion. Presented by Ben Peters, Engineering Director. Pgs. 23-32

Police and Fire Committee by Chairman Brian Powell

6. ***A Resolution*** amending the 2023 budget of the City of Springdale Police Department. Presented by Frank Gamble, Police Chief. Pgs. 33-35

Ordinance Committee by Chairman Mike Overton

7. ***An Ordinance*** amending Chapter 18 of the Code of Ordinances of the City of Springdale, Arkansas; and declaring an emergency. Presented by Ernest Cate, City Attorney. Pgs. 36-40

Committee of the Whole

8. ***A Resolution*** to adopt a Comprehensive Safety Action Plan and Vision Zero Policy. Presented by Ryan Carr, Engineering Department. Pgs. 41-113

9. ***A Resolution*** authorizing the execution of a temporary construction easement agreement on property owned by the City of Springdale, Arkansas. Presented by Ernest Cate, City Attorney. Pgs. 114-115

10. ***A Resolution*** to revise the Flood Damage Prevention Code for Springdale in order to mitigate flood related risk to mechanical and electrical equipment. Presented by Katie Hollingshead, Engineering Department. Pgs. 116-143

RESOLUTION NO._____

A RESOLUTION ACCEPTING A GRANT FROM THE ARKANSAS STATE AIRPORT AID FUNDS FOR THE SPRINGDALE MUNICIPAL AIRPORT

WHEREAS, the Springdale Municipal Airport desires to replace tower radios and recorders for controlling aircraft traffic, and

WHEREAS, the Springdale Municipal Airport applied for a grant from the Arkansas Department of Aeronautics, and

WHEREAS, a grant in the amount of $150,000 has been award to the airport to be used toward new tower radios and recorders for controlling aircraft traffic, and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that Council approves the acceptance of the State Airport Aid Funds through the Arkansas Department of Aeronautics in the amount of $150,000 to be used toward the purchase of new tower radios and recorders.

PASSED AND APPROVED this 8th day of August, 2023.

_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED AS TO FORM:

_____
Ernest B. Cate, City Attorney

SPRINGDALE
WE'RE MAKING IT HAPPEN

DEPARTMENT FUNDING REQUEST

Department: Airport	Date: 7-18-2023
Point of Contact: James Smith	Amount Requested: $ 0
Date to be Presented to Committee: 7 / 31 /2023	
Brief Description of Funding Request: State Grant	
Funding Source: (General Fund, Special Fund, etc.)	

IS IT BUDGETED?

YES ☐	**NO** ☒
$0 - $34,999 No Council approval needed	☐ $0 - $4,999
Request to waive bidding? ☐ Buy Board ☐ Sole Source	☐ $5,000 - $34,999 Requires **3** Quotes
Signature:	☐ $35,000+ Requires Bid
Please attach supplemental information	Request to waive bidding? ☐ Buy Board ☐ Sole Source

SPRINGDALE
WE'RE MAKING IT HAPPEN

Springdale Municipal Airport
201 Spring Street
Springdale, AR 72764
(479) 750-8585 ♦ Fax: (479) 750-8504

February 28, 2023

Mr. Jerry Chism
Director, Arkansas Department of Aeronautics
2315 Crisp Drive
Hangar No. 8
Little Rock, Arkansas 72202

Re: Springdale Municipal Airport
ASG Tower Upgrades (ADA 90/10)
Application for State Airport Aid

Dear Jerry:

Springdale Municipal airport continues to see an upward trend in Aircraft traffic cementing itself as a staple of Northwest Arkansas' Aviation. The air traffic control tower is essential for accommodating over 60,000 annual operations and is staffed 15 hours a day.

As you may know, the Tower at ASG utilizes second-hand communications equipment from the 1950's. Multiple attempts have been made over the last decade to repair and refurbish the equipment to extend its useful life. However, repairing the equipment is no longer feasible due to scarcity of replacement parts. Recently, one of the radio frequencies failed, creating an operational hazard if the backup frequency were to fail as well. The technology of radio communication equipment has greatly improved over the last 70 years with the onset of computer and microchip technology. By replacing the equipment with a newer system, the airport could provide a safe airspace for its pilots for decades to come.

We are deeply appreciative of your ongoing assistance to the airport and respectfully request this $150,000 grant for the construction of the required Radio equipment improvements. As always, we look forward to collaborating with you on this project, and many more to come.

Please call Greg Thomas with Garver if you have any questions or concerns.

Sincerely,

James Smith
Director of Public Works
Springdale Municipal Airport

Attachments: State Airport Aid Application
Estimated Project Budget

State Airport Aid Application Instruction Page

The following instructions are provided to assist in applying for State Airport Aid funds.

A cover letter is required from the sponsor. The letter should explain the need for the airport project in your community and the effect improvements will have on economic growth in your area of the state. A preliminary set of plans, specifications, and cost estimates must accompany the application as well as bid results if bid quotes are required. A Construction Quantities and Cost Sheet is included in the application for this purpose. A Daily Report Sheet is also included in the application for In-Kind Services reporting. This report sheet must be filled out for each day of In-Kind Services billed to the project. Two complete copies are to be mailed to the Arkansas Department of Aeronautics, 2315 Crisp Drive – Hangar #8, Little Rock, AR. 72202.

Applications are accepted each working day of the month. Applications received after the last day of each month will be considered the next funding cycle. Applications will be reviewed during a 30-day waiting period after receipt by the Department. (Example: Applications received after the last working day of January will be acted on at the March meeting of the Commission.) Applications may be sent by FAX with hard copy to follow by mail. (FAX number is 501-378-0820)

Upon receipt of your application, you will be contacted by our office for an on-site review of the project. You will be notified by mail of the date, time, and place of the meeting in which your request will be brought before the Aeronautics Commission. You are encouraged to attend the meeting to address questions concerning your proposal. You will be notified by mail of the results of your request by the Aeronautics Commission.

Upon approval of a State Airport Aid grant, funds may be disbursed upon request when one-half of the total project (50%) is completed and documented (Partial Payment). Upon 100% completion of the project, a letter requesting final payment, submission of proper documentation, and inspection of the project, the remainder of state funds will be disbursed.

If you have any questions concerning the grant process or grant accounting procedures, please feel free to contact our office at (501) 376-6781

State Airport Aid Application – Page 1

The City/County of Washington, herein called "Sponsor", hereby makes application to the Arkansas Department of Aeronautics for State funds pursuant to Act 733 of 1977, for the purpose of aiding in financing a project for the development of a municipal airport located in the city of Springdale Arkansas, Washington county.

Date of Request: February 28, 2023

Name of Airport: Springdale Municipal Airport (ASG)

Name and address of ~~City/County~~ Commission sponsoring request:
Springdale Municipal Airport Commission
201 Spring Street
Springdale, AR 72764

Phone Number: 479-750-8585
Fax Number:

Person to Contact about project:
James Smith, Airport Manager
201 Spring Street
Springdale, AR 72764
Phone Number: 479-750-8585
Cell Number: 479-601-4273
Fax Number: 479-750-8504

Name and address of Engineering Firm (if applicable):
Garver
2049 E. Joyce Blvd.
Suite 400
Fayetteville, AR 72703

Contact Person: Greg Thomas

Phone/Fax Number: 479-287-4609

Describe the work to be accomplished: This project will consist of the replacement of necessary ATCT equipment to ensure the longevity of the Tower.

State and Local Project Costs:
Please indicate:

- ◇ 50-50% Match
- ◇ 80-20% Match
- ◆ 90-10% Match
- ◇ 100%

Total Cost of Project $213,500.00
Local Share/Funds $63,500.00
Local Share/In-Kind
State Share $150,000.00

Federal AIP Projects:
AIP Number: N/A

- ◇ 95-5% Match
- ◇ 90-10% Match

Total Cost of Project:
Federal Share:
State Share:
Local Share:

7-1-18

State Airport Aid Application – Page 2

Provide the information listed below as it applies to your project:

Funding:

Source of Funds: Arkansas Department of Aeronautics (90%), City of Springdale (10%)

Source of In-Kind Services: N/A

Estimated starting date of project: 04/01/2023

Estimated completion date of project: 08/31/2023

Project will be for: New Airport **Existing Airport**

Is land to be leased or purchased? N/A

Description of land and cost per acre: N/A

Provide the Federal AIP Grant Number (if applicable): N/A

State Legislators for your area:

State Senator: Clint Penzo

State Representative: DeAnna Hodges

7-1-18

The sponsor agrees to furnish the Arkansas Department of Aeronautics a copy of the legal instrument affecting use of the property for an airport. In application for a new landing site or expansion of existing facility, the FAA Form 7480-1, *Notice of Landing Area Proposal*, must be approved by the FAA before review for grant can be made by the State. Applications for hangar construction or renovation funds must include a signed lease agreement. This agreement must be in compliance with all FAA grant assurances. The application must be based on bids and include a calculated return on investment.

No land, hangars, or buildings purchased with State Grant funds may be sold or disposed of without State Aeronautics Commission prior approval. All requests for sale or disposal of property will be considered on an individual case basis. No hangar (funded by a grant from the Department of Aeronautics) shall be used for non-aviation purposes without State Aeronautics Commission prior approval. All requests for non-aviation use will be considered on a case-by-case basis. Failure to receive prior approval from A.D.A. concerning land and/or building use could result in the commission requesting grant refund from the Sponsor. Additionally, all hgr/building grant applications must include proof of insurance coverage.

No airport accepting State Grant funding may issue an Exclusive Rights lease.

All applications for navigational aids (such as NDB or ILS) must have FAA site approval before a state grant can be approved.

All Grant applications involving Federal Airport Improvement Program (AIP) funding must be accompanied by the approved FAA grant agreement with grant number assigned.

If this project is approved by the Arkansas Department of Aeronautics, and is accepted by the sponsor, it is agreed that all developments and construction shall meet standard FAA construction practices as outlined in the specifications of this agreement. Runways, Taxiways, Parking Ramps, etc. shall have a base and a thickness that will accommodate the weight of aircraft expected to operate at this airport.

All grant applicants (City and/or County) are totally responsible for compliance with all Federal, State, County, and City laws, Statutes, Ordinances, Rules, Regulations, and Executive Orders concerning contracts and purchases for which this grant is approved and issued.

It is understood and agreed that the sponsor shall start this project immediately upon award of grant. It is also agreed that this project shall be completed within one year from the date of acceptance of this grant by the Arkansas Department of Aeronautics. Applications for extension will be entertained if circumstances beyond the sponsor's control occur. Amendment requests are to be made only under extraordinary circumstances.

Funds will be disbursed according to Department procedures and final inspection of completed project (See payment instruction page). *Payment of grant funds are contingent upon the Department's annual appropriation*.

IN WITNESS WHEREOF, the sponsor has caused this Application for State Airport Aid to be duly executed in its name, this 28th day of February, 2023.

Sprindgale Municipal Airport
Name of Sponsor

Authorized Signature

Director of Public Works
Title

7-1-18

SPRINGDALE MUNICIPAL AIRPORT
ASG TOWER UPGRADES
ENGINEER'S ESTIMATE OF PROBABLE COST

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	Engineer's Estimate of Probable Cost UNIT PRICE	AMOUNT
1	-	VOICE LOGGING RECORDER, INSTALLED	LS	1	$25,000.00	$25,000.00
2	-	VOICE COMMUNICATIONS CONTROL SYSTEM, INSTALLED	LS	1	$150,000.00	$150,000.00
					Total Engineer's Estimate	$175,000.00

ADMINISTRATION (ADVERTISEMENT)	**$1,000.00**
CONSTRUCTION CONTINGENCY (10%)	**$17,500.00**
ENGINEERING, BIDDING, & CONSTRUCTION PHASE SERVICES	**$20,000.00**
TOTAL ESTIMATED PROJECT COST	**$213,500.00**

PROJECT FUNDING (FAA 90-10 Grant)	
FAA 90-10	$150,000.00
CITY OF SPRINGDALE (REMAINDER)	$63,500.00
TOTAL PROJECT FUNDING	**$213,500.00**

GARVER

James Smith

From: Kay Groce <Kay.Groce@arkansas.gov>
Sent: Wednesday, March 15, 2023 4:46 PM
To: jSmith@SpringdaleAR.gov
Cc: clint.penzo@arkansashouse.org; deanna.hodges@arkansashouse.org
Subject: Springdale Municipal Airport Grant Request Approved by Arkansas Aeronautics Commission
Attachments: Springdale.pdf

Good Afternoon—

Springdale Municipal Airport Grant Request was approved by the Arkansas Aeronautics Commission.

For more details, glide through the attached letter!

Fly the State of Arkansas,

Kay Groce
Arkansas Division of Aeronautics
EXECUTIVE ASSISTANT TO THE DIRECTOR
O: 501.376.6781
kay.groce@Arkansas.gov
fly.Arkansas.gov


```
__!__
\-----( )-----/
```

Hugh McDonald
SECRETARY OF COMMERCE

Jerry Chism
DIRECTOR
DIVISION OF AERONAUTICS

March 15, 2023

SPRINGDALE MUNICIPAL AIRPORT
ATTN: James Smith
Airport Director
201 Spring Street
Springdale, AR 72764
jSmith@SpringdaleAR.gov

Dear Mr. Smith:

During the March 15, 2023 meeting of the Arkansas Aeronautics Commission, a 90-10% Grant Request was approved for Springdale Municipal Airport. The request approved provides funding in the amount of $150,000.00 for replacement of necessary Air Traffic Control equipment

This grant has been assigned Grant #4128-23 for identification purposes. When corresponding with our office regarding this project, please be sure to use this number. Contact us immediately if you will not be able to complete the project for amount approved. ***The Commission will not be responsible for any additional project costs unless this Agency has received notification in advance.***

The Commission has asked that we call your attention to Page Three (3) of your Application for State Airport Aid. ***This project should be started immediately and completed within one year.*** To avoid cancellation of the grant, notify us if circumstances beyond your control prevent completion within the allotted time.

Payment of this grant will be made upon completion of your project. Please remember that grant funds are contingent upon the Division's appropriation for the fiscal year. Request payment of this grant in writing and include your documentation for the project at that time.

Sincerely,

Jerry Chism, Director

cc: State Senator Clint Penzo; State Representative DeAnna Hodges

JC:kg

Arkansas Department of Commerce
Division of Aeronautics
Clinton National Airport/Adams Field
2315 Crisp Drive • Hangar 8
Little Rock, Arkansas 72202
FLY.ARKANSAS.GOV

James Smith

From: Tom Nichols RSI <tnichols@remotesys.com>
Sent: Tuesday, May 9, 2023 11:58 AM
To: James Smith
Subject: Re[10]: Tower equipment

I'm still waiting on the radio quote and the tech specs to see if it will work with your existing controller. I pinged them again this morning.

TN

Tom Nichols
Remote Systems Integration, LLC
RSINet, LLC
www.remotesys.com

------ Original Message ------
From "James Smith" <jsmith@springdalear.gov>
To "Tom Nichols RSI" <tnichols@remotesys.com>; "Michael Sparks" <MSparks@ci2.com>
Date 5/8/2023 10:59:18 AM
Subject RE: Re[8]: Tower equipment

Good morning Tom, any luck working up a bid for the tower radio?

Thank you,

James Smith
Public Works Director
Airport Director

Item	Qty	Price	Total
Springdale ATCT systems upgrade			
Valid until August 30, 2023			
Voice switch			
Jotron RRCS			
Switch w 2 controller positions	1		$28,221.00
Plantronics H31CD headset	5	88	$440.00
Walker Handsets	3	100	$300.00
Radio systems			
Jotron VHF Transceiver s TWR & GND	2	8000	$16,000.00
Jotron VHF Transmitter AWOS / ATIS		4000	$4,000.00
24 Port switch	1	413	$413.00
Interference filters (If needed)	3	800	$2,400.00
Antennas			
Taco D5076 VHF	2	457	$914.00
Lightning protection per antenna	2	94	$188.00
Support			
Voice recorder			$6,500.00
ATIS incl switch			$23,950.00
KVM extender	1	700	$700.00
GPS Master clock		800	$800.00
Clock Displays	2	1000	$2,000.00
Power / Infrastructure			
Power strips	2	50	$100.00

APC Smart UPS 3000VA		2	1200	$2,400.00
Cable and connectors				
LMR-400 FT cable		500	2.39	$1,195.00
LMR-400 connectors		10	11	$110.00
Misc Hardware			500	$500.00
Networking hardware and supplies			500	$500.00
Services				
Installation / Testing/ Commissioning	Flat rate		10000	$10,000.00
Jotron project management (Not to exceed)			13268	$13,268.00
				$114,899.00

DBT Transportation Services, LLC
2655 Crescent Drive
Suite A-1
Lafayette CO 80026

TRANSPORTATION SERVICES

Original

SALES QUOTATION

Document Number	Document Date	Page
2681661	**01/11/2022**	**1/3**

Customer No.

ARSPRIKASG72764

Your Reference

Payment Terms

Net 30

Springdale Municipal Airport
802 Airport Ave

Springdale AR 72764

Your Contact

Mike Trosclair

303-330-7883

mtrosclair@dbttranserv.com

Delivery Address

Springdale Municipal Airport
802 Airport Ave

Springdale AR 72764

Currency: **$**

	Description	Quantity	UoM	Price	Total
001	**Liberty STAR System, 2 Positions (Voice Communication Control System - VCCS)** Item Code: NAVAID Parts	**1**		**78,224.0000**	**$78,224.00**
002	**Liberty STAR Spares** Item Code: NAVAID Parts	**1**		**31,637.0000**	**$31,637.00**
003	**Includes the Following Items:** **Communication Processor (COP) Module (1QF) & PC104 Kit** **Digital Audio Processor (DAP) Module (Radio & TEL Interface w/o x-Connect Cables)** **QCOL Module (TEL Interface, w/o x-Connect Cables)** **Ethernet Switch - 1U (24-Port 10/100)** **Power Supply Module (+5VDC/29A, +12VDC/4A & -12VDC/1A (115/230VAC))** **IEI 12" Monitor (600cd/m2)** **2U Compact Position Equipment (w/PC & PS)** **PAC Module (High-Speed)** **Position SPKR - DESKTOP (w/Vol CTRL)** **Jackbox & Cable** **Headset** **Handset & Cradle** **PTT Footswitch w/Cable**				
004	**Liberty STAR Support Services (On-Call Technical Support)** Item Code: 3rd Party Services Navaid	**1**		**4,471.0000**	**$4,471.00**
005	**Jotron TR-7750 VHF/AM Multimode Transceiver** Item Code: NAVAID Parts	**2**		**8,927.0000**	**$17,854.00**

Subtotal: **132,186.00**

DBT Transportation Services, LLC
2655 Crescent Drive
Suite A-1
Lafayette CO 80026

TRANSPORTATION SERVICES

Original

SALES QUOTATION

Document Number	Document Date	Page
2681661	**01/11/2022**	**2/3**

Currency: **$**

Subtotal: **132,186.00**

	Description	Quantity	UoM	Price	Total
006	**TACO VHF Air Traffic Control Civil Aviation MULDIPOL™ Antennas** Item Code: NAVAID Parts	**2**		**594.0000**	**$1,188.00**
007	**Coax Cable, ANDFSJ1-50 1/4" Superflex Coax** Item Code: NAVAID Parts	**200**		**2.4900**	**$498.00**
008	**Service days (Five Days for Equipment Installation - 2 Technicians)** Item Code: Servday - T&M APS w/Contract	**10**		**1,500.0000**	**$15,000.00**
009	**Freight will be included in the invoice at time of shipment.**				

Tax Details

Tax Code	Tax %	Net	Tax
EX	0.00	19,540.00	0.00

Quotation Subtotal:	**$ 148,872.00**
Total Before Tax:	**$ 148,872.00**
Total Tax Amount:	**$ 0.00**
Total Amount:	**$ 148,872.00**

Additional Expenses Shipping Type: **UPS GND**

Quotation Valid Until: 02/11/2022

DBT Transportation Services, LLC
2655 Crescent Drive
Suite A-1
Lafayette CO 80026

TRANSPORTATION SERVICES

Original

SALES QUOTATION

Document Number	Document Date	Page
2681661	**01/11/2022**	**3/3**

Currency: **$**

PURCHASER'S ACCEPTANCE

This Quotation is deemed accepted when Purchaser returns the acknowledgement copy of this Quotation with a valid Purchase Order Number (when applicable).

The DBT Transportation Services Standard Terms of Sales are incorporated herein by reference .

Purchaser: _____
Billing Address: _____
_____

E-Mail Address: _____

Signature: _____
Title _____

Purchase Order No: _____

Ship to Address: _____
_____
_____

RESOLUTION NO. _____

A RESOLUTION TO WAIVE COMPETITIVE BIDDING FOR THE PURCHASE OF AIRPORT TOWER EQUIPMENT FOR THE SPRINGDALE MUNICIPAL AIRPORT.

WHEREAS, the Springdale Municipal Airport is in need of purchasing radio and recorder equipment for air traffic control purposes, and

WHEREAS, the City of Springdale received a grant from the Arkansas Department of Aeronautics in the amount of $150,000, and

WHEREAS, federal guidelines require us to purchase the equipment from specific manufacturers, and

WHEREAS, it is necessary to spend the grant funds within a specific time frame, and

WHEREAS, the Springdale Municipal Airport requests to purchase the radio and recording equipment from Remote Systems Integration, LLC for a total of $114,899.00;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that:

Section 1. The Mayor is hereby authorized to execute any contracts related to the purchase of the aforementioned radio and recording equipment from Remote Systems Integration, LLC in the amount of $114,899.00, to be paid from the Airport Fund.

Section 2: That competitive bidding is not deemed feasible or practical because of the exceptional situation previously set out herein and therefore competitive bidding is hereby waived under Ark. Code Ann. §14-58-104.

PASSED AND APPROVED this _____ day of _____, 2023.

_____
Doug Sprouse, MAYOR

ATTEST:

_____
Denise Pearce, CITY CLERK

APPROVED:

_____
Ernest B. Cate, CITY ATTORNEY

SPRINGDALE
WE'RE MAKING IT HAPPEN

DEPARTMENT FUNDING REQUEST

Department: Airport	Date: 7-18-2023
Point of Contact: James Smith	Amount Requested: $ 114,899.00
Date to be Presented to Committee: 7 / 31 /2023	
Brief Description of Funding Request: Replace the Tower's radio & recorder for controlling aircraft traffic	
Funding Source: (General Fund, Special Fund, etc.) Airport budget	

IS IT BUDGETED?

YES ☐	**NO** ☒
$0 - $34,999 No Council approval needed	☐ $0 - $4,999
Request to waive bidding? ☐ Buy Board ☐ Sole Source	☐ $5,000 - $34,999 Requires **3** Quotes
Signature:	☒ $35,000+ Requires Bid
Please attach supplemental information	Request to waive bidding? ☐ Buy Board ☒ Sole Source

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE EXECUTION OF A CONSTRUCTION CONTRACT FOR DEAN'S TRAIL PHASE 3A

WHEREAS, sealed bids were received on July 11 at 2:00 p.m. for the construction of phase 3A of Dean's Trail; and

WHEREAS, two bids were received with Emery Sapp & Sons, Inc. being the low bidder for this project at $5,415,081.19;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that

Section 1. The Mayor and City Clerk are hereby authorized to execute a contract with Emery Sapp & Sons, Inc. for construction of phase 3A of Dean's Trail for $5,415,081.19 to be paid for out of the Street Fund.

Section 2. The Mayor is authorized to approve construction change orders as long as the cumulative total of the change orders does not exceed 10% of the original contract price.

PASSED AND APPROVED this 8th day of August, 2023.

_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED AS TO FORM:

_____
Ernest B. Cate, City Attorney

4300 South J.B. Hunt Drive
Suite 240
Rogers, AR 72758

TEL 479.257.9188

www.GarverUSA.com

July 19, 2023

Ryan Carr, PE, CFM
Deputy Director of Engineering Operations
City of Springdale
128 Spring St.
Springdale, AR 72764

Re: City of Springdale
Dean's Trail Phase 3
ARDOT Job No. 040809
City Job No. ST-1802
Recommendation of Award

Dear Ryan:

Bids were received for the "Dean's Trail Ph. 3" project in the online bid interface at 2:00 p.m. on July 11, 2023. The bids have been checked for accuracy and for compliance with the contract documents. A tabulation of the bids received is enclosed with this letter.

A total of 2 bids were received on the project. Emery Sapp & Sons, Inc. submitted the low bid for the project in the amount of $5,415,081.19. The Engineer's Opinion of Probable Cost was $5,692,548.80.

We believe that the bid submitted by Emery Sapp & Sons, Inc. represents a good value for the City of Springdale. We recommend that the construction contract for "Dean's Trail Ph. 3" be awarded to Emery Sapp & Sons, Inc.

Please call me if you have any questions.

Sincerely,

GARVER, LLC

Luke Freedle
Digitally Signed 07/19/2023

Luke Freedle, P.E.

Attachments: Bid Tabulation

CITY OF SPRINGDALE
DEAN'S TRAIL PH. 3A (TAP) (S)
HWY. 412 TO DON TYSON PKWY. - F.A.P NO. TAPF-9399(26)
BID TABULATION
July 11th, 2023 - 2:00 p.m.

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	Engineer's Estimate of Probable Cost UNIT PRICE	Engineer's Estimate of Probable Cost AMOUNT	Emery Sapp & Sons, Inc. UNIT PRICE	Emery Sapp & Sons, Inc. AMOUNT	Benchmark Construction Company of NWA UNIT PRICE	Benchmark Construction Company of NWA AMOUNT
1	111	Roadway Construction Control	LS	1	$50,000.00	$50,000.00	$41,420.00	$41,420.00	$43,734.00	$43,734.00
2	112	Trench and Excavation Safety Systems	LS	1	$10,000.00	$10,000.00	$7,020.00	$7,020.00	$37,955.00	$37,955.00
3	201	Clearing and Grubbing	LS	1	$50,000.00	$50,000.00	$28,330.00	$28,330.00	$212,390.00	$212,390.00
4	202	Undercut and Backfill	CY	7,300	$40.00	$292,000.00	$65.76	$480,048.00	$26.06	$190,238.00
5	202	Rock Excavation	CY	100	$200.00	$20,000.00	$127.00	$12,700.00	$250.00	$25,000.00
6	SS&202	Unclassified Excavation (Plan Quantity)	CY	4,386	$30.00	$131,580.00	$10.45	$45,833.70	$16.99	$74,518.14
7	SS&202	Embankment (Plan Quantity)	CY	5,727	$25.00	$143,175.00	$39.60	$226,789.20	$20.39	$116,773.53
8	203	Subgrade Preparation (Plan Quantity)	SY	11,358	$5.00	$56,790.00	$1.30	$14,765.40	$4.60	$52,246.80
9	SS&204	4" Topsoil Placement (Yard Areas)	SY	43,389	$5.70	$247,317.30	$4.81	$208,701.09	$5.48	$237,771.72
10	205	Undercut and Stone Backfill	Ton	500	$65.00	$32,500.00	$66.44	$33,220.00	$75.00	$37,500.00
11	301	18" Class III R.C. Pipe	LF	27	$185.00	$4,995.00	$64.50	$1,741.50	$160.74	$4,339.98
12	301	24" Class III R.C. Pipe	LF	92	$200.00	$18,400.00	$160.00	$14,720.00	$170.00	$15,640.00
13	301	36" Class III R.C. Pipe	LF	188	$215.00	$40,420.00	$188.40	$35,419.20	$262.87	$49,419.56
14	301	54" Class III R.C. Pipe	LF	57	$300.00	$17,100.00	$346.40	$19,744.80	$356.67	$20,330.19
15	301	18" R.C. Flared End Section	EA	2	$1,500.00	$3,000.00	$1,179.00	$2,358.00	$1,785.00	$3,570.00
16	301	24" R.C. Flared End Section	EA	6	$2,000.00	$12,000.00	$1,440.00	$8,640.00	$2,243.33	$13,459.98
17	301	36" R.C. Flared End Section	EA	10	$3,000.00	$30,000.00	$2,740.00	$27,400.00	$4,476.00	$44,760.00
18	SS&301	54" R.C. Flared End Section, Salvage and Reinstall	EA	1	$1,500.00	$1,500.00	$995.00	$995.00	$5,090.00	$5,090.00
19	303	12'x4' Pre-Cast Concrete Box Culvert	LF	188	$1,500.00	$282,000.00	$1,368.50	$257,278.00	$2,272.61	$427,250.68
20	303	8'x8' Pre-Cast Concrete Box Culvert	LF	185	$1,750.00	$323,750.00	$1,244.00	$230,140.00	$2,048.22	$378,920.70
21	303	Wingwalls & Appurtenances (4 Barrel 12'x4' @ STA 147+98.50)	LS	1	$100,000.00	$100,000.00	$66,533.00	$66,533.00	$101,030.00	$101,030.00
22	303	Wingwalls & Appurtenances (4 Barrel 12'x4' @ STA 164+85.10)	LS	1	$100,000.00	$100,000.00	$41,608.70	$41,608.70	$78,364.00	$78,364.00
23	303	Wingwalls & Appurtenances (5 Barrel 8'x8' @ STA 201+27.50)	LS	1	$150,000.00	$150,000.00	$77,603.00	$77,603.00	$140,144.00	$140,144.00
24	305	Erosion Control Fabric	SY	250	$35.00	$8,750.00	$9.91	$2,477.50	$9.49	$2,372.50
25	SS&306	Rip Rap (18" Thick) (D50=5")	SY	234	$60.00	$14,040.00	$56.20	$13,150.80	$69.11	$16,171.74
26	SS&306	Rip Rap (24" Thick) (D50=10")	SY	1,094	$90.00	$98,460.00	$76.30	$83,472.20	$81.29	$88,931.26
27	SS&306	Rip Rap (31" Thick) (D50=14")	SY	586	$120.00	$70,320.00	$99.15	$58,101.90	$99.85	$58,512.10
28	401	4" Aggregate Base Course (Class 7)	SY	11,358	$13.00	$147,654.00	$7.95	$90,296.10	$15.79	$179,342.82
29	405	Asphalt Concrete Patching for Maintenance of Traffic	Ton	10	$500.00	$5,000.00	$887.00	$8,870.00	$427.59	$4,275.90
30	406	Asphalt Concrete Hot Mix Patching of Existing Roadways	Ton	10	$300.00	$3,000.00	$887.00	$8,870.00	$747.78	$7,477.80
31	501	Concrete Curb and Gutter	LF	86	$50.00	$4,300.00	$76.80	$6,604.80	$53.56	$4,606.16
32	502	4" Thick Concrete Sidewalk	SY	210	$80.00	$16,800.00	$99.15	$20,821.50	$119.67	$25,130.70
33	SS&505	Seeding	AC	8	$6,000.00	$48,000.00	$4,637.00	$37,096.00	$2,420.09	$19,360.72
34	SS&505	Sodding	SY	5,947	$6.50	$38,655.50	$5.10	$30,329.70	$4.02	$23,906.94
35	SS&505	Additional Watering	MG	75	$95.00	$7,125.00	$92.00	$6,900.00	$101.97	$7,647.75
36	507	4" Striping (Reflectorized Paint)	LF	4,030	$1.50	$6,045.00	$3.00	$12,090.00	$2.83	$11,404.90
37	507	6" Striping (Thermoplastic)	LF	727	$3.00	$2,181.00	$4.75	$3,453.25	$4.53	$3,293.31
38	507	Crosswalks (Thermoplastic)	LF	95	$27.00	$2,565.00	$23.70	$2,251.50	$22.66	$2,152.70
39	507	Yield Line Pavement Symbols (Thermoplastic)	EA	10	$100.00	$1,000.00	$47.35	$473.50	$45.32	$453.20
40	509	Erosion Control	LS	1	$110,000.00	$110,000.00	$93,500.00	$93,500.00	$135,041.00	$135,041.00
41	SS&510	Traffic Control	LS	1	$25,000.00	$25,000.00	$19,460.00	$19,460.00	$18,694.00	$18,694.00
42	511	Mobilization (not to exceed 5% of contract price)	LS	1	$267,000.00	$267,000.00	$260,452.00	$260,452.00	$149,366.00	$149,366.00
43	512	6' Chain Link Fence	LF	262	$40.00	$10,480.00	$33.35	$8,737.70	$77.24	$20,236.88
44	513	Cast-in-Place Tactile Panel	SF	160	$40.00	$6,400.00	$23.91	$3,825.60	$32.70	$5,232.00

CITY OF SPRINGDALE
DEAN'S TRAIL PH. 3A (TAP) (S)
HWY. 412 TO DON TYSON PKWY. - F.A.P NO. TAPF-9399(26)
BID TABULATION
July 11th, 2023 - 2:00 p.m.

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	Engineer's Estimate of Probable Cost UNIT PRICE	Engineer's Estimate of Probable Cost AMOUNT	Emery Sapp & Sons, Inc. UNIT PRICE	Emery Sapp & Sons, Inc. AMOUNT	Benchmark Construction Company of NWA UNIT PRICE	Benchmark Construction Company of NWA AMOUNT
45	513	Handicap Ramp Concrete	SY	32	$110.00	$3,520.00	$362.35	$11,595.20	$102.71	$3,286.72
46	SP-2	Phase 2 Pedestrian Trail Light	EA	5	$8,000.00	$40,000.00	$12,764.02	$63,820.10	$11,115.86	$55,579.30
47	SP-2	Phase 2 Pedestrian Trail Light and Foundation	EA	14	$11,500.00	$161,000.00	$15,195.00	$212,730.00	$13,232.31	$185,252.34
48	SP-2	Phase 3A Pedestrian Trail Light and Foundation	EA	73	$12,000.00	$876,000.00	$15,195.00	$1,109,235.00	$13,232.31	$965,958.63
49	SP-3	Tree Protection Fencing	LS	1	$1,000.00	$1,000.00	$28,000.00	$28,000.00	$3,437.52	$3,437.52
50	SP-4	6" Thick Concrete Trail	SY	9,538	$82.00	$782,116.00	$61.55	$587,063.90	$98.63	$940,732.94
51	SP-5	4' Decorative Fence	LF	628	$120.00	$75,360.00	$87.70	$55,075.60	$81.73	$51,326.44
52	SP-5	Decorative Fence (Cedar Rail)	LF	5,870	$90.00	$528,300.00	$75.76	$444,711.20	$71.44	$419,352.80
53	SP-7	Standard Mid-Block Crossing	EA	1	$45,000.00	$45,000.00	$33,655.05	$33,655.05	$27,305.00	$27,305.00
54	SP-8	Signs	SF	79	$120.00	$9,480.00	$59.15	$4,672.85	$67.92	$5,365.68
55	SP-10	Rectangular Rapid Flashing Beacon	EA	4	$20,000.00	$80,000.00	$16,588.00	$66,352.00	$11,262.02	$45,048.08
56	SP-6	Utility Mobilization (Not to exceed 5%)	L.S.	1	$3,750.00	$3,750.00	$4,215.00	$4,215.00	$2,832.50	$2,832.50
57	SP-6	Utility Trench Excavation Safety Systems	L.S.	1	$1,000.00	$1,000.00	$8,840.00	$8,840.00	$5,325.10	$5,325.10
58	SP-6	Spot Dig and Verify Exiting Utility Locations	L.S.	1	$1,000.00	$1,000.00	$1,540.00	$1,540.00	$6,231.50	$6,231.50
59	SP-6	Bypass Pumping	L.S.	1	$3,000.00	$3,000.00	$45,475.00	$45,475.00	$11,330.00	$11,330.00
60	SP-6	15" PVC Sanitary Sewer Line	L.F.	161	$150.00	$24,150.00	$148.60	$23,924.60	$198.28	$31,923.08
61	SP-6	5' ID San. Sewer Manhole, Cast-in-Place, 0' to 6' Depth	EA.	1	$6,000.00	$6,000.00	$6,505.00	$6,505.00	$8,497.50	$8,497.50
62	SP-6	5' ID San. Sewer Manhole Additional Depth, Over 6'	V.F.	2.1	$700.00	$1,470.00	$650.50	$1,366.05	$1,359.60	$2,855.16
63	SP-6	6' ID San. Sewer Manhole, Cast-in-Place, 0' to 6' Depth	EA.	2	$7,500.00	$15,000.00	$6,505.00	$13,010.00	$9,630.50	$19,261.00
64	SP-6	6' ID San. Sewer Manhole Additional Depth, Over 6'	V.F.	4.0	$800.00	$3,200.00	$650.50	$2,602.00	$1,359.60	$5,438.40
65	SP-6	Abandon Existing Manhole	EA.	1	$2,500.00	$2,500.00	$3,420.00	$3,420.00	$3,965.50	$3,965.50
66	SP-6	Adjust Manhole to Grade	EA.	4	$2,000.00	$8,000.00	$4,520.00	$18,080.00	$3,399.00	$13,596.00
67	SP-6	16" Split Steel Encasement by Open Cut	L.F.	20	$250.00	$5,000.00	$287.00	$5,740.00	$458.87	$9,177.40
68	SP-6	Trench Undercut and Backfill	C.Y.	40	$60.00	$2,400.00	$74.00	$2,960.00	$47.00	$1,880.00
69	SP-6	Rock Excavation for Utilities	C.Y.	25	$200.00	$5,000.00	$250.00	$6,250.00	$200.00	$5,000.00
					Total	$5,692,548.80	**Total**	$5,415,081.19	**Total**	$5,924,015.25

RESOLUTION NO. XX-XX

A RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES CONTRACT FOR BLUFF CEMETERY EXPANSION

WHEREAS, a charitable donation agreement was entered to expand Bluff Cemetery; and

WHEREAS, design and engineering services are necessary to expand the cemetery and are required for Arkansas Department of Health approval;

WHEREAS, a professional service contract has been negotiated with CEI Engineering to complete the necessary design and engineering work;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that

The Mayor and City Clerk are hereby authorized to execute a contract with CEI Engineering Design and Engineering services necessary to complete the expansion of Bluff Cemetery for $16,050. to be paid out of the General Fund.

PASSED AND APPROVED this 8th day of August, 2023.

_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED AS TO FORM:

_____
Ernest B. Cate, City Attorney

3108 SW Regency Parkway
Bentonville, AR 72712 / (479) 273-9472
CEI Contact: Jacob Shy – jshy@ceieng.com

I. PROJECT DESCRIPTION

Thank you for the opportunity to present this proposal for design and engineering services for the expansion of Bluff Cemetery. To our understanding, this proposal shall include the design of an extension of 3rd Street and 4th Street to the south, that will be connected at the southern end, location of a maintenance road and extension of wrought iron fence on the east side of the property, and identification of existing structures to be demolished on said properties. This proposal also includes platting services to combine 5 properties, totaling approximately 7.31 acres, as well as platting of potential grave plots. Said properties included are Washington County Parcel No. 815-28318-000, 815-28315-000, 815-28316-000, 815-28317-000, and 815-25549-000.

This proposal does not include construction level plans or specifications that will be bid to contractors. It is our understanding, high level graphics and location of required elements will be constructed or demolished with "in-house" forces. Topographical survey will not be performed by CEI, as a part of this proposal. Available GIS data and existing City survey information will be used to determine placement of cemetery boundaries as required by Ark Dept. of Health.

II. SCOPE OF BASIC SERVICES

A. Informal Plat

Informal Plat will be submitted to the City of Springdale for approval. New lot line locations will be provided by Client to create new lots from the existing parcel(s). Process will go through the administrative platting process and one meeting will be required. Fees cover two submittals due to revisions addressing city comments. Additional submittals due to changes from the client and unexpected city comments are not included. All work will be supervised by a licensed Arkansas Surveyor. Informal Plat fees ($50) will be billed as a reimbursable expense.

CEI shall also stake the centerline of proposed road extension and proposed fence along the east side of the property line for use by City forces.

Fees ..... $ 6,650.0
Reimbursable expenses are excluded from the fee quoted above. Expenses associated with this phase of services are estimated to be <$850> to be invoiced in accordance with Section VI below.

B. Site Plan Design

CEI shall work with the City of Springdale Engineering department to prepare a Site Plan Design that will include extension of 3rd and 4th street alignment, location of cemetery plots, extension of wrought iron fence, maintenance road and identification of buildings to be demolished. This Site Plan Design shall be contained on one sheet and will also include a cover sheet and a details sheet, as needed.

Fees ..... $ 2,000.00

C. Design Meetings

At the discretion of the Client, CEI Project Manager or other appropriate personnel are available to attend in-person or teleconference meetings. Such meetings may be called by the Client. The allowance below is recommended to Client for budgeting purposes and shall be invoiced on an hourly basis in accordance with the Schedule of Charges Section below. Routine communications and coordination with Client are excluded from this allowance and have been considered in the respective phases detailed under other services descriptions. Client shall be invoiced for meetings as described herein only when attendance has been requested by Client.

Fees ..... $ 500.00

D. Reimbursables

The scope of services listed above is intended as fee only and does not include reimbursable expenses such as application fees, reprographics, etc. See Section V of this agreement for an explanation of reimbursable expenses that may be incurred during production of project documents and permitting approval.

Fees ..... $ 850.00

Total Fees ..... $ 10,000.00

III. SCOPE OF ADDITIONAL SERVICES (AS REQUIRED)

A. Geotechnical Services

CEI shall coordinate with a geotechnical engineering subconsultant for geotechnical services to include the following:

- Five test pits to the lesser of 6 feet or when rock is encountered.
- Test pits observed and logged by an engineer or geologist.
- Moisture content testing on up to 5 samples per test pit to better define the moisture profile within the soil.
- Letter information report to include:
  - Exploration Plan showing approximate test pit locations.
  - Log of each test pit based on visual classification of soils by a professional engineer or professional geologist.
  - Commentary regarding moisture conditions (groundwater seepage) noted during excavation of test pits.
  - Commentary regarding risk of perched water conditions, if appropriate based on encountered subsurface conditions.

Fees ..... $ 4,000.00

B. Permitting - Arkansas Department of Health

CEI shall submit all pertinent documents to the Arkansas Department of Health (ADH), as in accordance with the Guidelines and Resources set forth by ADH for the extension of boundaries of Cemeteries. Items to be included for submittal are to include, but are not limited to:

- An accurate legal description of land for which the permit is requested. The legal description should be certified by an engineer or surveyor and be consistent with all maps or plans of the proposed cemetery.
- A contour map with five-foot contour intervals is required.
- A detailed design of the cemetery layout is required. All dimensions should conform with those on the contour map.
- The size of the minimum grave space should be provided.

- A map showing locations of and distances to the nearest human habitation in each direction is required. This map should show all water wells and/or springs serving as water supplies. Locations of roads or highways in the immediate vicinity should be shown. The reference point should be shown on this map.
- At least one test hole per acre, uniformly spaced, is required. Holes should be at least six feet deep. Logs of all test holes should describe types of soil and any rock encountered. Depths at which water is encountered should be indicated. Logs should be certified by a competent person.

Fees ..... $ 2,000.00
Reimbursable expenses are excluded from the fee quoted above. Expenses associated with this phase of services are estimated to be <$50> to be invoiced in accordance with Section VI below.

Total Additional Services Fees ..... $ 6,050.00

Grand Total Fees ..... $ 16,050.00

IV. RESPONSIBILITY OF CLIENT

Client shall provide to CEI, the following items:

A. Retainer

No Retainer is required for this project. A credit limit has been established for Client on this specific project and timely payments are required in order to avoid a cessation of work. Payment for services shall not be dependent on receipt of reimbursement from other parties.

B. Project Documents

Client shall provide the following:

1. Access to the Site

C. Lien Releases

If the Client requests lien releases, the Client shall be responsible for the administrative costs, associated with processing lien releases at a rate of $100.00 per release.

D. Engineer's Consent to Assign Documents

If the Client or the Client's financial institution requests an Engineer's Consent to Assign Document (or similar), the Client shall be responsible for the administrative costs associated with the processing and the added risk to CEI or the inability to control such risk imposed by non-contractual financial entity's consignment documentation, at a cost of $1,000.00 per consent document. Execution of this agreement does not limit CEI's right to negotiate an assignment that is fair and reasonable for itself and the Client, nor does it guarantee agreement to all assignment terms.

V. SERVICES NOT INCLUDED / ADDITIONAL SERVICES

In addition to the services described above, CEI is capable and available to provide the following services on an "as requested" basis. An Extra Work Authorization (EWA) form or contract amendment will be issued for any services outside the scope of this proposal. All EWA's or contract amendments will be approved and signed by the Client identified herein prior to beginning work. All additional services will be performed on an hourly basis per the current Schedule of Charges.

- Feasibility study, including physical, political, and/or financial opportunities or constraints
- Contract management and coordination of subconsultants including, but not limited to, the follow services:
  - Environmental studies/report (e.g. Phase I & II ESAs)
  - Traffic study/report
  - Water flow test/distribution report
  - Historical and archeological studies
  - Ecological studies (e.g. wetland and threatened & endangered species)
- Preparation of perspectives and models

- Attendance/presentation at public meetings (e.g. Planning Commission, City Council, Zoning Board of Appeals, Board of Adjustments, etc.)
- Preparation/presentation of conditional or special use permit applications
- Obtaining new or updated title policies
- Platting/replatting
- Preparation of easement and right of way documents, including new and vacations/abandonments
- Preparation of covenant and development agreements
- Preparation of a drainage study/report
- Design and plan preparation for major stormwater drainage improvements or relocations (e.g. box culverts, large ditches, and storm sewers greater than 4-foot in diameter)
- Preparations of flood studies, elevation certificates, FEMA or Corp of Engineer applications or permits
- Preparation of documentation, applications or permits for stormwater pollution prevention plans, NOIs, etc.
- Design and plan preparation for offsite utility extensions other than those immediately adjacent to the project site
- Design and plan preparation for offsite street improvements, such as road widenings, acceleration/deceleration lanes, and medians *(design/plans for both curb cuts and municipal sidewalks along the site frontage will be included in the basic services for design projects)*
- Preparation of retaining wall design/plans
- Photometric design/preparation of site lighting plans
- Preparation of opinions of probable construction costs (OPCs)
- Bidding assistance and construction contract negotiations
- Construction contract administration, management, and observation services (e.g. reviewing contractor requests for payment, answering RFI's, reviewing shop submittals, etc.)
- Construction staking
- As-built survey/preparation of final record drawings
- Design permitting with AHJs
- Property negotiation
- Construction Drawings/ Details

Boundary Issues
Boundary determinations often disclose unseen or unknown conflicts between record documents and/or the location of physical improvements. Thus, in the process of conducting the research, field work, and/or analysis, if the surveyor identifies a possible boundary or title conflict, a sketch showing the revealed conditions will be prepared and a meeting with the client and affected neighbors (if desired) will be scheduled. Following the meeting, if the client wishes to engage the surveyor to assist in pursuing resolution of the problem as a consultant, expert and/or formal or informal mediator, the contract will be modified accordingly. Otherwise the client will be invoiced only for the time expended to that point, and work on the survey will be suspended until or unless the client is able to resolve the issue by agreement or litigation, at which time a subsequent contract may be executed to complete the survey pursuant to that agreement or litigation.

VI. SCHEDULE OF CHARGES

Charges for our services are divided into three categories: Labor, Consultants, and Reimbursable Expenses.

LABOR: For fees billed on an hourly basis, labor charges are billed by category as follows:

ARKANSAS (04-01-23)

Officer / Branch Manager	$ 235.00
Department Manager	$ 205.00
Client Sector Leader	$ 195.00
Senior Project Manager	$ 195.00
Program Manager	$ 185.00
Project Manager	$ 175.00

Assistant Project Manager	$ 140.00
Senior Project Engineer	$ 185.00
Project Engineer	$ 165.00
Assistant Project Engineer	$ 135.00
Civil Designer	$ 125.00
Registered Landscape Architect	$ 160.00
Lead Landscape Designer	$ 130.00
Landscape Designer	$ 125.00
Registered Land Surveyor	$ 165.00
Assistant Project Surveyor	$ 130.00
Survey Project Manager	$ 160.00
Assistant Survey Project Manager	$ 130.00
Sr. Survey Party Chief	$ 115.00
Survey Party Chief	$ 95.00
Survey Technician	$ 105.00
Field Specialist	$ 85.00
Senior Project Designer	$ 150.00
Project Designer	$ 130.00
CAD Designer	$ 105.00
CAD Technician	$ 90.00
Construction Observer	$ 110.00
Land Acquisition Agent	$ 130.00
Project Coordinator	$ 120.00
Program Assistant	$ 90.00
Administrative Assistant	$ 75.00

SUB-CONSULTANT SERVICES: In cases where CEI retains another consultant to provide services outside of our area of practice, cost of such services will be charged at 110% of actual invoice cost.

REIMBURSABLE EXPENSES: Outside services, and related materials, will be charged at the actual invoice cost. In addition, direct out-of-pocket costs such as postage, delivery services, travel (other than vehicle mileage), and subsistence expenses will be charged at actual costs. Vehicle mileage is billed at the applicable I.R.S. rate allowed per mile.

All impact, permitting, expediting, and review fees will be charged at 15% over the cost of the fee unless the client is willing to pay those fees directly to the service provider.

REVENUE RECOGNITION

The intellectual services and resulting instruments of service (Scope of Basic Services and any subsequently agreed amendments or additions) provided by this Agreement whether in various stages of completeness or in whole are considered earned by CEI in its performance obligation to Client as prescribed by said Agreement and deemed usable by Client at the time they are earned, cost incurred, and progressively billed. Further, at time of received payment by Client, Client acknowledges its possession of, acceptance, and confirms its legal right to use said intellectual services and resulting instruments of service, in part or in whole, for the specific intent they were provided.

VII. CREDIT POLICY

Terms will be given only to clients with approved credit. Invoices will be rendered monthly, either as final or progress billing. CEI payment terms are net 30 days. Invoices past 30 days due will be subject to a monthly service charge, which will be assessed in compliance with state usury laws. Should the account be placed for collection with an outside collector, the cost of such collections will be added to the principal amount owed. CEI may stop work on any account that is 60 days delinquent. In the event that CEI elects to stop work as provided herein, Client will be assessed a resumption of work charge equal to 20% of the total contract amount. Said resumption of work charge and all outstanding invoices must be paid in full by Client prior to the resumption of work on the project. Client agrees that the balance as stated on the invoice from CEI to Client is correct, conclusive, and binding on the Client unless Client within thirty (30) days from the date of the receipt of the invoice notifies CEI in writing of the particular item that is alleged to be incorrect.

VIII. STANDARD TERMS AND CONDITIONS

STANDARD OF PRACTICE

Services performed by CEI under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by similar professionals currently practicing in the same locale under similar conditions. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document, or otherwise. All other common law warranties are hereby expressly disclaimed.

Client agrees that payment of all CEI invoices under this Agreement is for services rendered on behalf of Client and payment is not conditioned on (1) the receipt of any municipal or governmental approvals, authorizations, permits, or licenses or any type; (2) the availability of any Utility services: or (3) payment to Client by any third party.

OWNERSHIP OF DOCUMENTS

All documents including drawings and specifications prepared or furnished by CEI pursuant to this Agreement are instruments of service in respect to the project and CEI shall retain an ownership and property interest therein whether or not the project is completed. Client may make and retain copies for information and reference in connection with the use and occupancy of the project by Client or others.

RE-USE OF DOCUMENTS

Copies of all reports, drawings, specifications, field data, field notes, laboratory test data, calculations, estimates, and other documents provided to Client as instruments of service are for use on the project specifically described in this Agreement. Any re-use of these by the Client for any other project or extension of this project, without the express, written authorization, verification, or adaptation by CEI, will be at Client's sole risk and without liability or legal exposure to CEI or CEI's independent professional associates or consultants, and Client shall indemnify, hold harmless and defend CEI and CEI's independent professional associates and consultants from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom.

INSURANCE

CEI maintains the following insurances:
Worker's compensation of a form and in an amount as required by law and employer's liability insurance of $1,000,000.
Comprehensive general liability with limits of $4,000,000 ($2,000,000 per occurrence), and automotive liability insurance with limits of $1,000,000 combined single limit.
Excess liability umbrella insurance of $5,000,000.
Professional liability insurance with a limit of $2,000,000, per claim/annual aggregate.

Upon written request of Client, CEI will provide additional insurance, if available; including increased coverage and/or limits, and the Client shall pay CEI an agreed amount for the increased coverage.

LIMITATION OF LIABILITY

The Client hereby agrees that, to the fullest extent permitted by law, CEI's total liability to Client for any and all injuries, claims, losses, expenses, or damages whatsoever arising including but not limited to CEI's negligence, errors, omissions, strict liability, breach of contract, or breach of warranty shall not exceed the total sum paid on behalf of or to CEI by CEI's insurance policies applicable thereto and CEI's deductible amounts (excluding fees, costs & expenses of investigation, claim adjustment, defense, and appeal).

Any service deleted from this offer by the Client will become the responsibility of the Client. If this proposal was written without the benefit of an on-site investigation, changes in the scope may be necessary. CEI shall be held harmless in the event that any unseen condition adversely affects the design or intended use of the property in any way.

INDEMNIFICATION
The Client shall indemnify, hold harmless and defend CEI, its officers, directors, employees, agents, consultants, and subconsultants from and against any and all liabilities, damages, or expenses, including without limitations any and all legal costs and expenses; whatsoever in connection with any personal injury or property damage arising out of or in any way connected with the negligence, reckless, or intentional acts or omissions by Client, its officers, directors, shareholders, agents, employees, consultants, and subcontractors, whether said acts or omissions and negligent reckless intentional or unintentional.

Further, the Client shall, to the fullest extent of the law, indemnify, defend and hold harmless CEI, its directors, officers, employees, agents and subcontractors from and against all claims or action, based on, or arising out of, damages or injuries to persons or property caused by, or arising out of, any hazardous, and/or toxic substances present at the site where CEI and/or its subcontractors have performed work.

In accordance with generally accepted construction practices, the Client and Client's contractors shall be solely and completely responsible for the conditions of the job site, including the health and safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Any construction observation by the engineer of the contractor's performance is not intended to include review of the adequacy of the contractor's safety measures, in, on, or near the construction site.

WAIVER OF CONSEQUENTIAL DAMAGES
Client hereby irrevocably and unconditionally waives, to the maximum extent allowed by law, any right to claim or recover any special, exemplary, indirect or consequential damage in any legal action or proceeding in respect of this contract unless otherwise stipulated herein.

DISPUTE RESOLUTION
Client and CEI agree to attempt to settle all claims, disputes or controversies arising out of, or in relation to the interpretation, application or enforcement of this Agreement by direct discussions; however, absent resolution by direct discussions, they agree to attempt to settle disputes by formal mediation according to the Construction Industry Mediation Rules of the American Arbitration Association. Absent resolution by mediation they agree to binding arbitration under the Rules of the American Arbitration Association.

Client and CEI waive consequential damages for claims, disputes, or other matters in question arising out of or related to this agreement. This mutual waiver is applicable, without limitations, to all consequential damages due to either party's termination of this agreement, except for any licensing or use fees charged to Client by CEI for continued use of CEI's instruments of service upon termination of this agreement.

SEVERABILITY
Any element of this Agreement later held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force. However, the Client and CEI will in good faith attempt to replace an invalid or unenforceable provision with one that is valid and enforceable, and which comes as close as possible to expressing or achieving the intent of the original provision.

PROJECT PUBLICITY AND RECOGNITION
During development construction, or upon completion of the project, CEI's name will be included on any public recognition / project identification display indicating design team, owners, and / or financiers. CEI shall be allowed to place or hang a temporary banner on the site during construction of the project.

LIEN RIGHTS
Client agrees that CEI shall have a lien upon real property constituting the project site for all unpaid sums due pursuant to this agreement or any addendum hereto, and that CEI is authorized to perfect a lien, enforce the lien, and foreclose the lien in the manner prescribed under local statutes for the perfection, enforcement and foreclosure of a mechanic and material man's lien upon real property.

AMENDMENTS
The duties, responsibilities, and limitation of authority of the Client or CEI shall not be made or extended without a written, executed agreement between CEI Engineering Associates, Inc and the Client.

PROJECT DELAY
Client acknowledges that in the event this project is delayed or put on hold for more than 60 days, after authorization to proceed, Client acknowledges that a resumption fee may be necessary based on the progress of the project prior to the hold and the timing associated with the hold. Client and CEI agree to negotiate a reasonable resumption fee prior to resumption.

SUCCESSORS AND ASSIGNS
CEI Engineering Associates, Inc and the Client each bind themselves, their associates, directors, partners, successors, executors, administrators and assigns to the other party to this Agreement and to the associates, directors, partners, successors, executors and administrators and assigns to such other party, with the respect to all obligations contained in this Agreement. CEI Engineering Associates, Inc. may assign its rights and obligations under this Agreement at any time without the consent of the Client. However, the Client shall not assign its obligations under this Agreement or sublet as a whole, without the prior written approval by CEI Engineering Associates, Inc.'s of the successor or assignee and its ability to comply with the terms and conditions of this and/or subsequent written Agreement. All assignments made by Client without CEI Engineering Associates, Inc.'s consent shall be considered null and void.

TERMINATION
Either Party may terminate this Agreement in full or in part, in writing, if the other Party fails to fulfill its obligations under the Agreement through no fault of the other Party. In such event, one may declare the other in default by issuing a written Declaration of Default and terminate the Agreement for cause. Prior to, an opportunity to cure any default or breach shall be given by way of a written notice being delivered to the Breaching Party including a description of the conditions constituting default or breach of the Agreement and providing the Breaching Party a period of time of ten (10) days within which to correct such conditions. If defined default or breach is not corrected within allotted number of days, then the written Declaration of Default may be issued. Upon any termination or suspension of an Agreement, CEI Engineering Associates, Inc. shall be paid for all work performed up to the date of termination or suspension.

Termination or suspension of contract shall exist when services conducted and provided by CEI to the date of termination are paid by Client and shall be deemed nonrefundable, at which time, control of said provided services will be transferred to Client with no further obligation of CEI.

PROVIDED DATA
Any information or data provided by Owner or Owner's representatives or by a third party as directed by Owner or Owner's representative to CEI to be used as base or supplemental information or data to the scope shall be considered reliable and CEI shall be held harmless to any errors or omissions due to its use.

SITE SAFETY OR CONTROL
In no form or fashion shall it be implied or assumed, unless expressively written into scope, that CEI has or will be responsible for an Owner's or Contractor's control of the site nor will CEI dictate the means and methods of the Owner, Contractor and Contractor's subcontractors regarding preparation of, conducting, and the completion and closeout of construction, safety, and control of site.

All provisions under the heading "STANDARD TERMS AND CONDITIONS" shall survive termination or completion of this agreement.

IX. APPROVAL SIGNATURE AND AUTHORIZATION TO PROCEED

Execution of this document in all required locations shall form the entire Professional Services Agreement between the Client and CEI. This Proposal and Agreement shall be executed by both parties, with both parties receiving a fully executed copy thereof. A copy of the executed Agreement shall be equally binding as the original.

In the event that the Client issues a notice to proceed to CEI prior to the execution of this contract, the Client acknowledges that the services rendered by CEI will be in accordance with the terms and conditions contained in this proposal.

In the event that the Client instructs services on the contract/agreement to be on hold for a period greater than forty-five days, Client acknowledges that CEI will not proceed until a new contract between CEI and the client can be executed.

This proposal shall become null and void if signatures have not been obtained within forty-five days of proposal date. If authorization to proceed is not given after the proposal has been executed said agreement will become null and void within forty-five days of the date of the Client's signature.

The following is the complete Contracting Entity (Client) name and address that is responsible for this contract, its terms and conditions, and for payment of CEI invoices:

Contracting Entity Name (Client) include its business structure of INC, LLC, LP, etc.
Responsible for contract terms, conditions, obligations and payment

Complete mailing address for invoicing and/or receiving notification (Street / PO Box/ Suite number, if required)

City / State / Zip

Complete Phone Number

Signature - legally authorized to bind Contracting Entity	Print Name	Title	Date

Signature, CEI Engineering Associates, Inc.	Print Name	Title	Date

RESOLUTION NO.

A RESOLUTION AMENDING THE 2023 BUDGET OF THE CITY OF SPRINGDALE POLICE DEPARTMENT

WHEREAS, the Police Department has received funds that have not been appropriated from vehicle insurance settlements, and

WHEREAS, the Police Chief has requested that these funds be appropriated for vehicle maintenance,

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that the 2023 budget of the City of Springdale Police Department is hereby amended as follows:

Department	Account No.	Description	Present Budget	Increase	Proposed Budget
Police	1010501-397.00-00	Vehicle Maintenance	$155,000.00	$92,000.00	$247,000.00

PASSED AND APPROVED this 8th day of August, 2023.

_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED AS TO FORM:

_____
Ernest B. Cate, City Attorney

CITY of SPRINGDALE

POLICE DEPARTMENT
OFFICE OF THE CHIEF OF POLICE

FROM: Chief Frank Gamble

TO: Colby Fulfer and Mayor Doug Sprouse

DATE: 07/26/23

RE: Request to transfer insurance recovery funds

I request permission to transfer funds from the insurance recovery account (101-0501-397.00-00) into the vehicle maintenance account (101-0501-421.51-11). The money deposited into the insurance recovery account comes from insurance claims due to vehicle or building damage. I request that the City Council authorize the transfer of $92,000 from this account to place in the vehicle maintenance account to cover expenses for the repairs from hail damage and several vehicle accidents. There is currently a balance of $92,038.24 in the insurance recoveries account. Please let me know if you have any questions regarding this matter.

Respectfully,

Chief of Police Frank Gamble
Springdale Police Department

DEPARTMENT FUNDING REQUEST

Department: Springdale Police Department	Date: 07-26-23
Point of Contact: Frank Gamble	Amount Requested: $ 92,038.24
Brief Description of Funding Request: I request that the City Council allow the transfer of funds from the insurance recoveries account (101-0501-397.00-00) to the vehicle maintenance account (101-0501-421.51-11). This is a request to transfer the funds to balance the budget.	

IS IT BUDGETED?

YES ☐		**NO ☑**	
If *YES*, No Action Needed		If *NO*: Date to be Presented to Committee: _____/_____/20____	
☐ $35,000+	Requires Bid	☐ $0 - $5,000	No Action
Waive Bidding		☐ $5,000 - $35,000 Requires **3** Quotes	
☐ Buy Board	☐ Sole Source		
		☐ $35,000+	Requires Bid
		Waive Bidding	
		☐ Buy Board	☐ Sole Source

Signature: _____

That which is underlined is added and that which is stricken through is deleted.

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 18 OF THE CODE OF ORDINANCES OF THE CITY OF SPRINGDALE, ARKANSAS; AND DECLARING AN EMERGENCY.

WHEREAS, Chapter 18 of the Code of Ordinances of the City of Springdale, Arkansas, contains the regulations pertaining to aviation and the administration of the Springdale Municipal Airport;

WHEREAS, Chapter 18 of the Code of Ordinances of the City of Springdale, Arkansas, specifically Section 18-97, needs to be amended to clarify the procedure for construction plan approval, and to implement design standards for the Springdale Municipal Airport; and

WHEREAS, it is in the best interest of the City of Springdale, Arkansas, for the City Council of the City of Springdale, Arkansas, to amend Chapter 18 of the Code of Ordinances for the City of Springdale, Arkansas.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS:

Section 1: Section 18-97 of the Code of Ordinances of the City of Springdale, Arkansas, is hereby amended to read as follows:

Sec. 18-97. Procedure for construction plan approval.

Licensees for commercial aeronautical activity at the municipal airport shall follow the following procedure for approval of construction plans:

(1) *Preparation of plans.* All plans and specifications for buildings or structures to occupy space obtained through the airport commission shall be prepared ~~by a licensed architect and submitted with the architect's seal to the airport commission for review~~ in accordance with Section 112-8 of the Code of Ordinances of the City of Springdale, Arkansas.

(2) ~~*Submission.* The licensee shall submit to the airport commission an application for preliminary approval of plans and specifications for any proposed building or structure to occupy space obtained through the commission and three copies of the plans and specifications of any proposed building or structure.~~ *Applicability*. The provisions of this section shall apply to all developments proposed within the property limits of the Springdale Municipal Airport with the following exemptions:

(a) Interior renovation or construction that does not affect the exterior appearance of buildings; and

(b) Exterior repairs or replacements that do not exceed fifty percent (50%) of the exterior appearance or material of the building as of the effective date of the adoption of these standards.

(3) *Application Process.*

(a) Letter of Intent – prior to the submission of a large scale/non-large scale development plan, as outlined above, a Letter of Intent must be submitted to the Airport Commission expressing the applicant’s desire to lease land from the City of Springdale at the Springdale Municipal Airport to construct a hangar or other structure in accordance with all applicable city, state and federal requirements subject to the submission requirements as follows:

(i) Conceptual/Pre-design Meeting – a conceptual/pre-design meeting must be held prior to the submission of the Letter of Intent. The applicant shall meet with the Chairman of the Springdale Municipal Airport Commission, Airport manager, and city planning and engineering staff. The applicant shall provide preliminary drawings and concepts sufficient for an informal review and discussion.

(ii) *Submission Requirements* – following a conceptual/pre-design meeting the Letter of Intent, along with preliminary drawing and concepts, shall be submit to the Airport Commission to the city clerk at least 15 days prior to a meeting of the airport commission at which consideration is requested.

(iii) The airport commission will in writing advise the licensee as promptly as possible of the extent to which the proposed building or structure conforms to the requirements of the Springdale Municipal Airport master plan, the city planning commission, and other city, county, state and federal agencies that may be associated with the development of the airport, and will discuss possible modification if necessary to secure conformance; provided, further, that all prospective airport tenants and licensees shall submit to the Federal Aviation Administration prior to commencement of any construction a "Notice of Proposed Construction or Alteration" on FAA Form 7460-1 as required by Part 77 of the Federal Aviation Regulations.

(b) Airport Commission Approval – the letter of intent and conceptual design must be approved by the Springdale Municipal Airport Commission prior to submission of a development plan as outlined in Section 112-8.

(c) Submission of Development Plan – submission of the development plan shall be made in conformance with the provision of Section 112.8 of the Code of Ordinances of the City of Springdale.

(d) Planning Commission Approval – the review and approval of the development shall be as outlined in Section 112-8. Following approval, a copy of the approved plans will be forwarded to the Airport Commission for development of the necessary Lease Agreements.

(e) *Variances*. The Planning Commission, acting as the board of adjustment as provided in Sec. 90-30 of the Code or Ordinances of the City of Springdale, will review all variance and waiver requests of this section following the procedures outlined in Section 112-8 of the Code of Ordinances after consideration of recommendations from the Airport Commission.

(4) *Springdale Airport Design Standards.* The design standards in this section are intended to implement the City of Springdale's vision for the highest quality development on the property of the Springdale Municipal Airport (ASG). The intent of standards is to improve the overall quality and compatibility of municipal airport development with those of the surrounding City, as well as enhance airport safety with the following guiding principles:

- Development and land use must have a strong emphasis on aviation related activities;
- Development and design must emphasize and ensure safe movement of aircraft for hangar ingress and egress;
- Development should be located to achieve maximum efficiency of land utilization; and

- Structures and buildings should feature a common appearance using compatible and complimentary design principles.

(a) *Building compatibility*. All airport buildings and structures shall be designed in a manner compatible with the materials, color, scale, size, proportion, and massing of other structures in the surrounding vicinity. All airport buildings and structures directly facing the exterior of the airport property shall feature at least one common element of color (see exterior color palettes identified below) or material among all other structures that face all other exterior facades of the airport.

(b) *Building frame*. The frame of the building or structure must be steel, and must meet current Building Code and the minimum standards of the Arkansas State Department of Aeronautics, whichever is more restrictive.

(c) *Building height*. All buildings and structures shall comply with the maximum height regulation(s) established by FAA standards for regulating airspace in the vicinity of runways.

(d) *Roofs*. Roof pitch of individual or multi-unit hangar buildings shall be a minimum of 2:12 slope (rise/run) up to a maximum of 4:12 slope. Roof shape must be either gable, round, shed or Quonset. Any variance to roof pitch will be processed through the standard variance procedure as outlined herein.

(e) *Building size and shape*. All hangars shall be a minimum of 2,500 square feet per unit. All building and structure footprints must be square or rectangular for maximum space efficiency. All buildings and structures must have vertical walls. Buildings and structures must be consistent in size to preserve sight lines of the airfield from all surrounding visibility.

(f) *Doors*. Doors must be metal and produced by an aviation door manufacturer. Overhead doors are prohibited from all facades or walls directly facing the surrounding exterior properties.

(g) *Exterior materials*. The front, rear, and sides of all buildings and structures shall be constructed with materials approved by the City of Springdale's Commercial Design Standards. Builders are encouraged to use sustainable materials, when possible.

(i) *Generally*: With the exception of facades facing the surrounding exterior properties, which are subject to specific requirements in this section, materials may include metal, masonry, aluminum, glass, concrete, hardi board, translucent panels, synthetic stucco, and steel or a combination thereof. Building glazing shall not cause glare or reflectors that will interfere with airport operations or ground circulation. If synthetic stucco is used on any side of the building, the maximum allowable coverage for that side is 10% and cannot be used below four (4) feet above base of the building or structure. Metal exterior siding must be a minimum of 26 gauge.

(ii) *Facades Fronting Highway 265, Highway 412, Emma Avenue, Powell Street* – use of metal material on the façade facing the streets listed above may not exceed 50% of the wall area.

(iii) *Interior airport facades:* Facades located on interior portions of airport property that face the streets listed above shall not be applicable for façade upgrades if the airport commission decides that future hangar development will shadow the exterior facing façade.

(iv) *Compatibility*: The architectural design and style of a building shall be carried throughout the building and shall match on all sides of the building.

(h) *Exterior colors*. Exterior colors shall utilize primarily muted, neutral, or earth tone colors. Builders must choose from a set of four (4) pre-approved color palettes, which will be made available to all prospective builders. The selected color palette shall be provided with all plan submittals.

(i) *Floors*. All hangar floors must be constructed with finished concrete that is impermeable to water seepage.

(j) *Insulation*. For all fully enclosed T and Box hangars, interior insulation is required, including hangar doors when applicable.

(k) *Utility and mechanical equipment screening*. All exterior mechanical equipment, including roof mounted equipment, must be screened from view from surrounding exterior properties with similar building materials.

(l) *Setbacks*. The Springdale Airport Commission will determine setback distances for construction based on FAA regulations, airport layout plan and other airport regulations that may be enacted from time to time. No part or portion of any building shall be erected, constructed, or extended into any setback area. No building construction equipment or materials shall be staged, placed, or operated in a manner that impedes the movement of aircraft along taxi lanes or taxiways. No variances from the provisions of this section shall be permitted.

(m) *Parking*. Parking spaces may be constructed at Builder's discretion with the approval of the Airport Commission and must be included in the leased ground area. Parking spaces shall not be placed on the active side of hangar where aircraft movement could be compromised. Parking areas must be developed with a dust proof/all-weather surface.

(n) *Landscaping* – builders will be required to contribute to a common airport landscape fund based on a fee established by the Airport Commission and used for the sole purpose of establishing and maintaining a unified landscaping area in and around the airport property.

(o) *Barriers to entry*. A "barrier to entry" will be established with each project to provide separation between aircraft movement areas and other areas of airport property. A “barrier to entry” fee in lieu of the barrier may be approved for special circumstances by the Airport Commission in which constructing the barrier is not practical during the building project.

(~~3~~5) *Airport commission action.* Within 90 days after acceptance for review of the preliminary plans and specifications by the airport commission, it shall indicate in writing its approval, disapproval or approval with condition. Failure of the airport commission to act on the preliminary plans and specifications within 90 days of its acceptance will be deemed approval of

the plans and specifications. Approval, approval with conditions or disapproval of the preliminary plans and specifications by the airport commission shall be noted, both upon the preliminary plans and the airport commission records.

Section 2: All other provisions of Chapter 18 of the Code of Ordinances of the City of Springdale, Arkansas, not specifically amended by this ordinance shall remain in full force and effect.

Section 3: **Emergency Clause.** It is hereby declared that an emergency exists and this ordinance, being necessary for the preservation of the health, safety and welfare of the citizens of Springdale, Arkansas, shall be in effect immediately upon its passage and approval.

PASSED AND APPROVED this _____ day of _____, 2023.

_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED AS TO FORM:

_____
Ernest B. Cate, City Attorney

RESOLUTION _____

A RESOLUTION TO ADOPT A COMPREHENSIVE SAFETY ACTION PLAN AND VISION ZERO POLICY.

WHEREAS, The City of Springdale is a member of the Northwest Arkansas Regional Planning Commission; and

WHEREAS, on May 25, 2022, the Board of Directors of the Northwest Arkansas Regional Planning Commission (NWARPC) approved Resolution # 2022-9 authorizing the submittal of an application to the U.S. DOT for a FY2022 Safe Streets and Roads for All (SS4A) Discretionary Grant to prepare a Regional Comprehensive Safety Action Plan (CSAP); and

WHEREAS, the proposed Regional Comprehensive Safety Action Plan was developed through consultation with expert stakeholders, the SS4A CSAP working group, and public outreach across Northwest Arkansas; and

WHEREAS, street crashes are one of the leading causes of death in the United States[1]; and

WHEREAS, the life and health of all persons living and traveling within the City of Springdale are our utmost priority, and no one should die or be seriously injured while traveling on our streets; and

WHEREAS, Vision Zero supports a paradigm shift toward making streets safer for all people by prioritizing the safety of those most at risk to death and serious injury; and

WHEREAS, making streets safer for all people using all modes of transportation will encourage people to travel on foot, by bicycle, and by public transit, which supports a healthier, more active lifestyle and reduces environmental pollution; and

WHEREAS, on June 28, 2023, the Board of Directors of the Northwest Arkansas Regional Planning Commission adopted the CSAP and a Vision Zero Policy.

NOW, THEREFORE, BE IT RESOLVED BY THE SPRINGDALE CITY COUNCIL:

Section 1: The City of Springdale adopts the Regional Comprehensive Safety Action Plan

[1] Centers for Disease Control and Prevention. (2023, January 10). Global Road Safety. Centers for Disease Control and Prevention. Retrieved May 2, 2023, from https://www.cdc.gov/injury/features/global-road-safety

attached hereto as Exhibit A and makes it part of this resolution, effective immediately.

Section 2: The City of Springdale adopts a Vision Zero Policy which includes the goal of eliminating traffic deaths and serious injuries to zero by 2038 and endorses Vision Zero as a comprehensive and holistic approach to achieving this goal.

PASSED AND APPROVED BY THE _____
CITY COUNCIL ON THE __ DAY OF ____, 202_.

_____
Mayor

ATTEST: _____
City Clerk

NWA Regional

VISION ZERO

Northwest Arkansas

Safety Action Plan

June 2023

Fayetteville, AR | Credit: NWAonline, Spencer Tirey


15 years
to ZERØ

Fayetteville, AR

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

FEDERAL PARTICIPATION: This notice is in accordance with the Northwest Arkansas Regional Planning Commission (NWARPC) 2045 Metropolitan Transportation Plan, the Federal Infrastructure Investment and Jobs Act (IIJA) in cooperation with local agencies, the Arkansas Department of Transportation (ARDOT), the Missouri Department of Transportation (MoDOT), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). This document was funded in part through grant(s) from the FHWA, FTA, and/or the United States Department of Transportation. The views and opinions of the NWARPC expressed herein do not necessarily state or reflect those of the United States Department of Transportation.

NORTHWEST ARKANSAS REGIONAL PLANNING COMMISSION NOTICE OF NONDISCRIMINATION POLICY

The Northwest Arkansas Regional Planning Commission (NWARPC) complies with all civil rights provisions of federal statues and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the NWARPC does not discriminate on the basis of race, sex, color, age, national origin, religion or disability, in the admission, access to and treatment in NWARPC's programs and activities, as well as the NWARPC's hiring or employment practices. Anyone with special communication or accommodation needs may contact Nicole Gibbs at (479) 751-7125 ext.106 or email ngibbs@nwarpc.org. For complaints of alleged discrimination and inquiries regarding the NWARPC's nondiscrimination policies contact Nicole Gibbs, AICP, Regional Planner – EEO/DBE (ADA/504/TitleVI Coordinator), 1311 Clayton, Springdale, AR 72762, (479) 751-7125 ext. 106, (Voice/TTY 7-1-1 or 1-800-285-1131) or the following email address: ngibbs@nwarpc.org. This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

If information is needed in another language, contact Nicole Gibbs. Si se necesita informacion en otro idioma, comuniqese Nicole Gibbs, ngibbs@nwarpc.org.

AVISO DE NO DISCRIMINACION DE LA COMISION DE PLANIFICACION DEL NORODSTE ME ARKANSAS

EL NWARPC cumple con todas las disposiciones de derechos civiles de los estatutos federales y autoridades relacionadas que prohiben la discriminacion en programas y actividades que reciben asistencia financiera federal. Por lo tanto, la NWARPC no discrimina por razoes de raza, sexo, color, edad, origen nacional, religion o discapacidad, el la admision, el acceso y el tratamiento en los programas y actividades NWARPC, asi como de contratacion de empleados de la NWARPC. Lasque jas de supuesta discriminacion y consultas sobre la politica antidiscriminatoria de la NWARPC pueden ser dirigidas a Nicole Gibbs, AICP, planificador regional – EEO/DBE (ADA/504/Titulo Coordinador VI), 1311 Clayton, Springdale, AR 72762, (479) 751-7125, (Voz/TTY 7-1-1 o 1-800-285-1131) o en la siguiente direccion de correo electronico: ngibbs@nwarpc.org. Este aviso esta disponible en el Coordinador de ADA/504/Titulo VI en letra grande, cinta de audio y en Braille. Si se necesita informacion en otro idioma, pongase en contacto con Nicole Gibbs, ngibbs@nwarpc.org.

Contents

List of Abbreviations

ACAT: Arkansas Crash Analytics Tool

ACS: American Community Survey

AR: Arkansas

ARDOT: Arkansas Department of Transportation

ATSDR: Agency for Toxic Substances and Disease Registry

CDC: Centers for Disease Control and Prevention

DUI: Driving Under the Influence

FHWA: Federal Highway Administration

FTA: Federal Transit Administration

GTFS: General Transit Feed Specification

HIN: High Injury Network

KABCO: Injury Severity Scale (Arkansas):

- K: Fatal injury
- A: Suspected serious injury
- B: Suspected minor injury
- C: Possible injury
- O: No apparent injury

Injury Severity Scale (Missouri)

- 1: Fatal
- 2: Disabling
- 3: Evident – Not Disabling
- 4: Probable – Not Apparent
- 5: None Apparent

KSI: Killed or Serious Injury (K and A on KABCO scale also 1 and 2 on Injury scale)

LRS: Linear Referencing System

MO: Missouri

MODOT: Missouri Department of Transportation

MP: Mile Post

NWA: Northwest Arkansas

NWARPC: Northwest Arkansas Regional Planning Commission

OSM: OpenStreetMap

PCSi: Proven Safety Countermeasure initiative

RRFB: Rectangular Rapid Flashing Beacon

SRTS: Safe Routes to School

STARS: Missouri Statewide Traffic Accident Records System

SVI: Social Vulnerability Index

TDM: Transportation Demand Management

USDOT: United States Department of Transportation

VRU: Vulnerable Road User includes Pedestrian, Bicyclists, or Motorcyclist*

**Note this Plan is using the National Safety Council definition that includes Motorcycles. USDOT does not include motorcycles in their definition and only includes non-motorized users.*

NWARPC Members

Avoca
Bella Vista
Benton County
Bentonville
Cave Springs
Centerton
Decatur
Elkins
Elm Springs
Farmington
Fayetteville
Garfield
Gateway
Gentry
Goshen
Gravette
Greenland
Highfill
Hindsville*
Huntsville*
Jane, Missouri
Johnson
Lincoln
Little Flock
Lowell
McDonald County, Missouri
Pea Ridge
Pineville, Missouri
Prairie Grove
Rogers
Siloam Springs
Springdale
Springtown
Sulphur Springs
Tontitown
Washington County
West Fork
Winslow
ARDOT
MODOT
Beaver Water District*
Razorback Transit
University of Arkansas*
National Airport Authority

**Indicates non-voting member*

15 years to ZERØ

The Northwest Arkansas Vision Zero Safety Action Plan (NWA Vision Zero Plan) recognizes that one life lost within the region's transportation network is one too many and something must change. The Northwest Arkansas Regional Planning Commission (NWARPC) has developed this Plan and sets a target to eliminate all killed and serious injury (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.

Fayetteville, AR

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.

The NWA Vision Zero Plan is organized into four sections. An overview of each section is provided below to serve as a summary of the 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 in 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 when 55 people died in roadway crashes—a 25% increase from the five year average. 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 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 for people that may be disproportionately impacted.

Traditional Approach

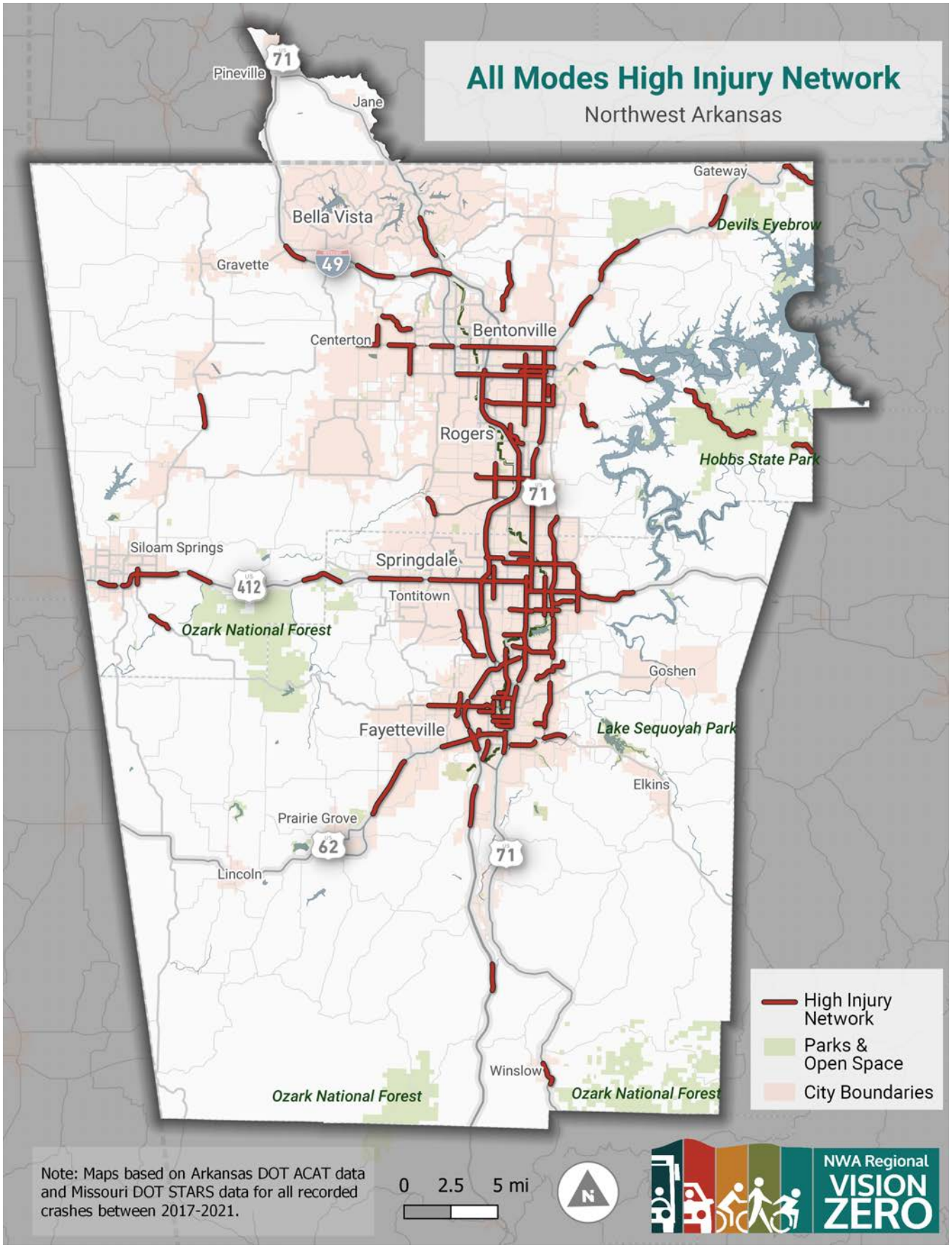
- Traffic deaths are inevitable
- Aims to fix humans
- Expects perfect human behavior
- Prevents collisions
- Exclusively addresses traffic engineering
- Doesn't consider disproportionate impacts

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

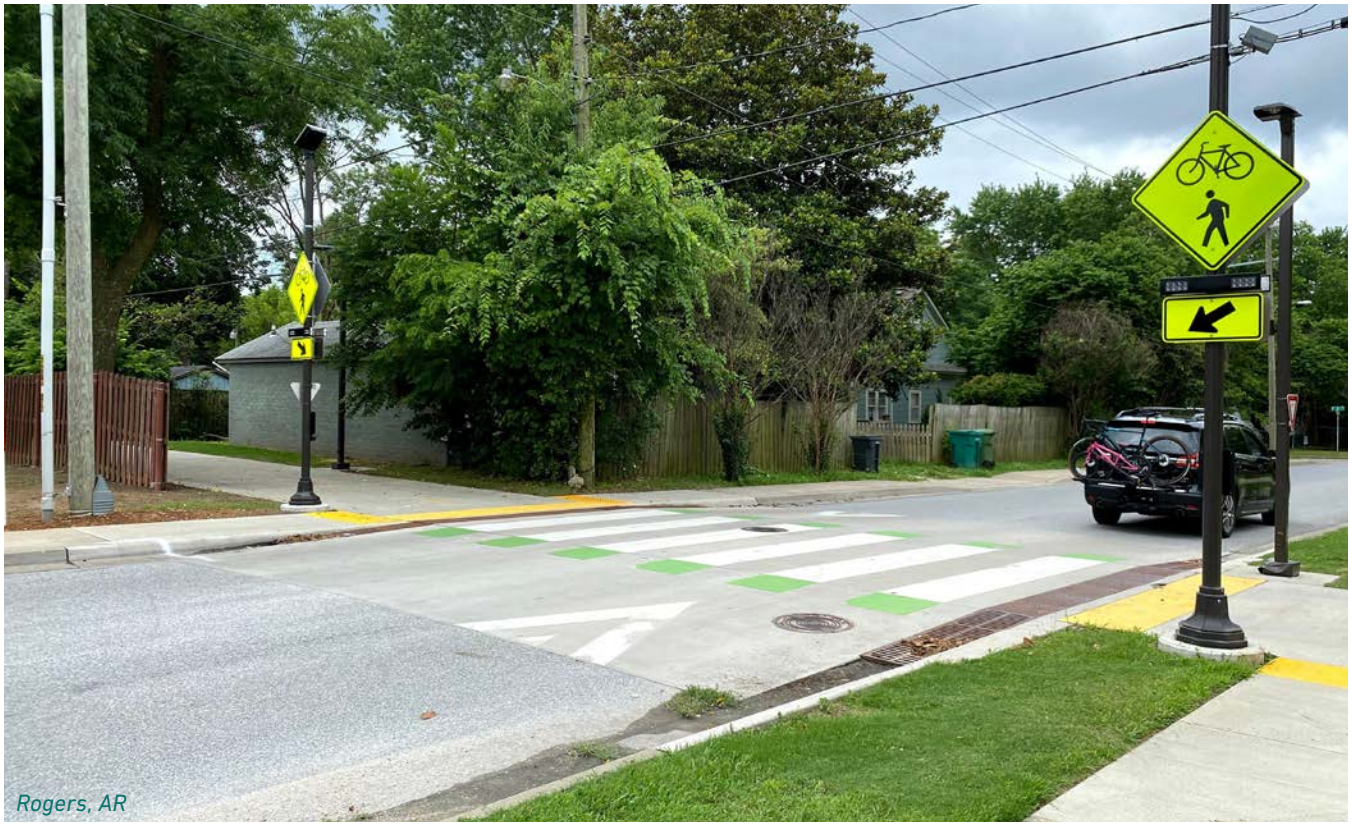
Starting a conversation around roadway safety was a key component of the NWA Vision Zero Plan. Information about the current state of safety along with opportunities for feedback were distributed across the region. Online resources were developed that included surveys, an interactive map, and a series of safety webinars. To complement online engagement opportunities, a "go-to" approach to engagement resulted in tabling and interacting with people at over one 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 decisions made related to safety can have such an enormous impact. Engagement during Plan devlopment 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 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.



Rogers, AR

THIS PAGE INTENTIONALLY LEFT BLANK

Bentonville, AR

1 A Paradigm Shift

1. A Paradigm Shift

What is a Vision Zero Safety Action Plan?

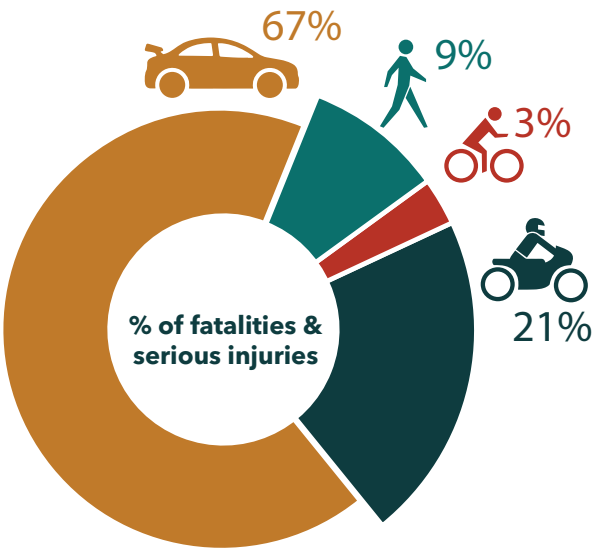
Every year, people in the NWA Region lose family, friends, neighbors, and colleagues to preventable traffic crashes on our roads. Between 2017 and 2021, 1,369 people were killed or seriously injured in crashes in NWA, averaging more than five people every week. Across the state, motor vehicle crashes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

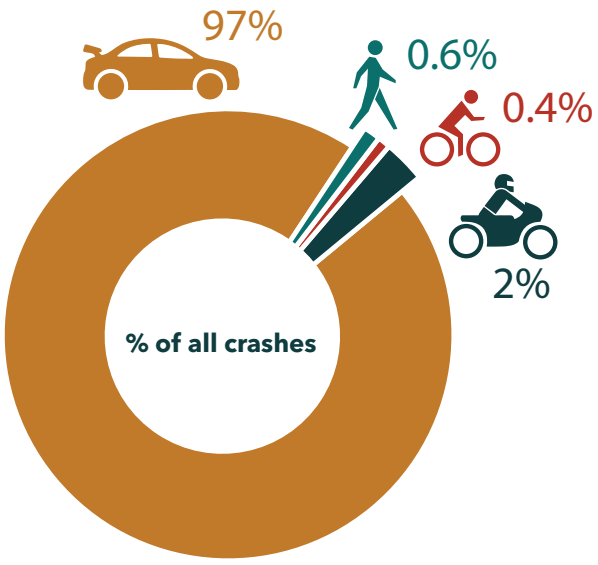
For the last century, our transportation system has been built on the belief that these crashes are accidents – events no one can fully prevent or predict. While no one thinks traffic deaths among friends and family are acceptable, the historical approach to transportation has taken roadway fatalities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

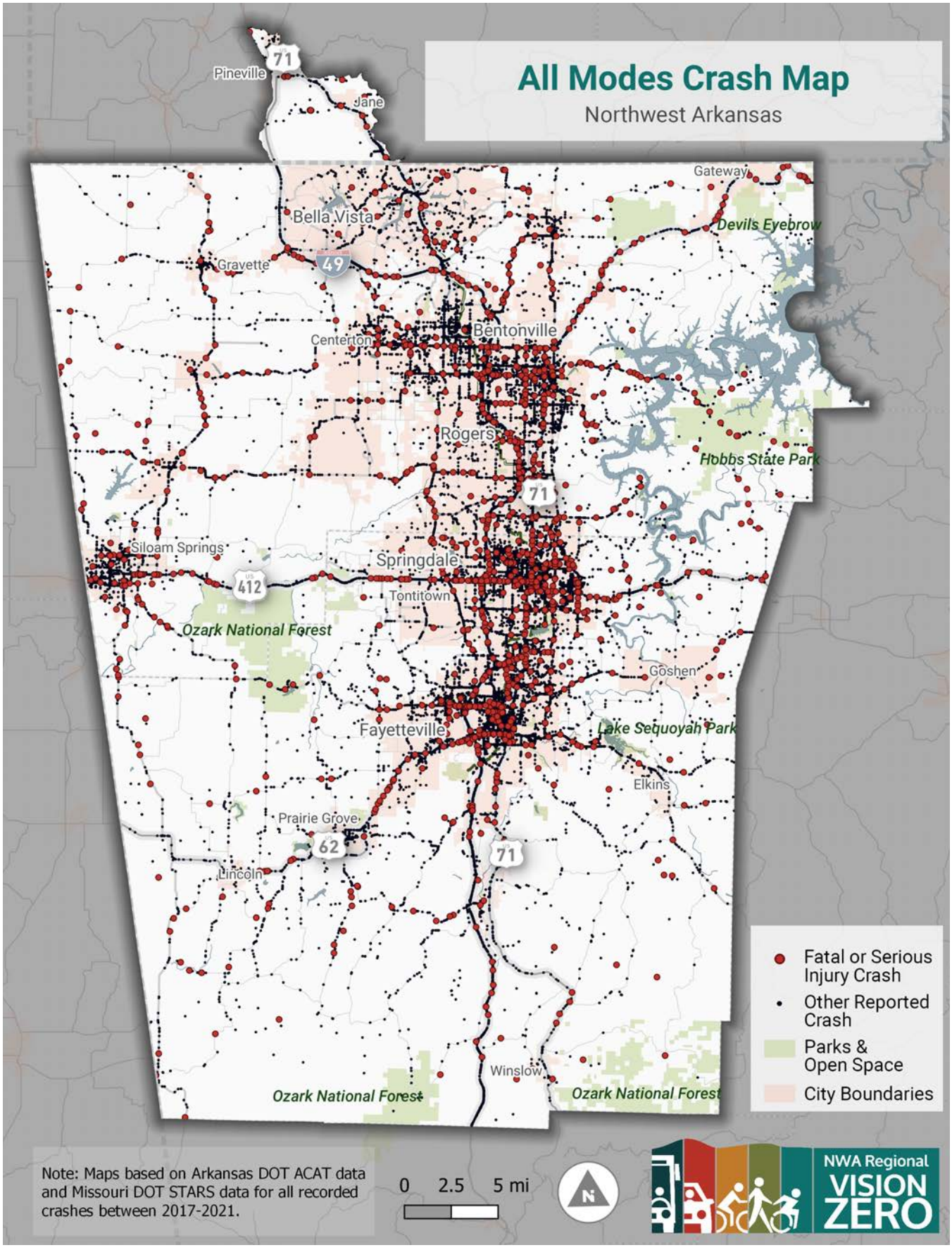
Vulnerable Users

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 recent 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. This Plan is using the National Safety Council's definition for vulnerable roadway users that includes motorcyclists. USDOT does not include motorcycles in their definition and only includes non-motorized users. In Northwest Arkansas, vulnerable roadway users accounted for only 3% of all roadway crashes but 33% of serious injuries and fatalities.



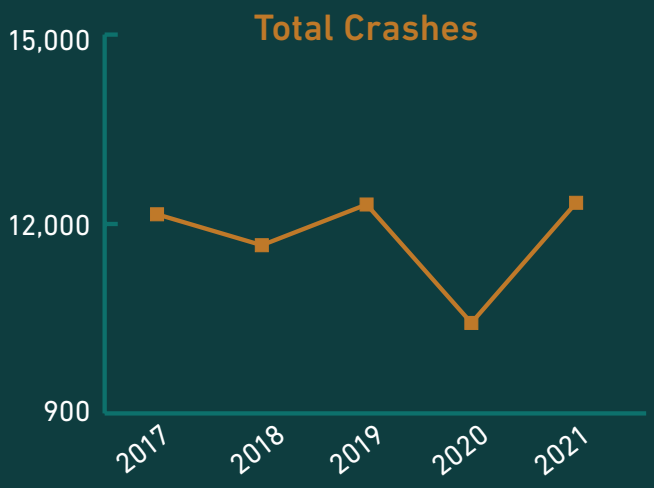


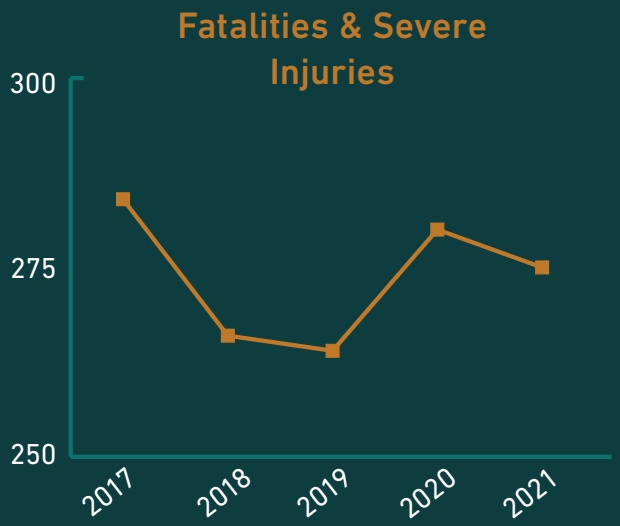
All Modes Crash Map

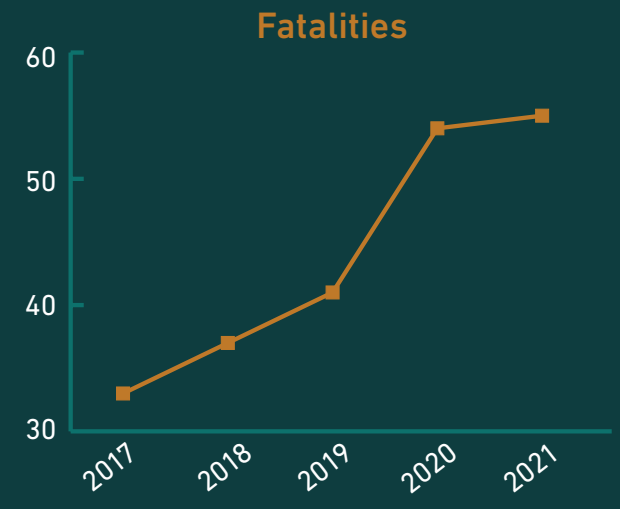


Between 2017 and 2021 **1,369 people** were killed or seriously injured in crashes in NWA, averaging more than five people every week.

Averaging **44** fatalities a year / **5** KSI crashes a week over 5 years







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. **Death & serious injury is unacceptable**

   While no one likes to get in a fender-bender, this plan focuses on crashes that lead to deaths and serious injuries.

2. **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.

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**

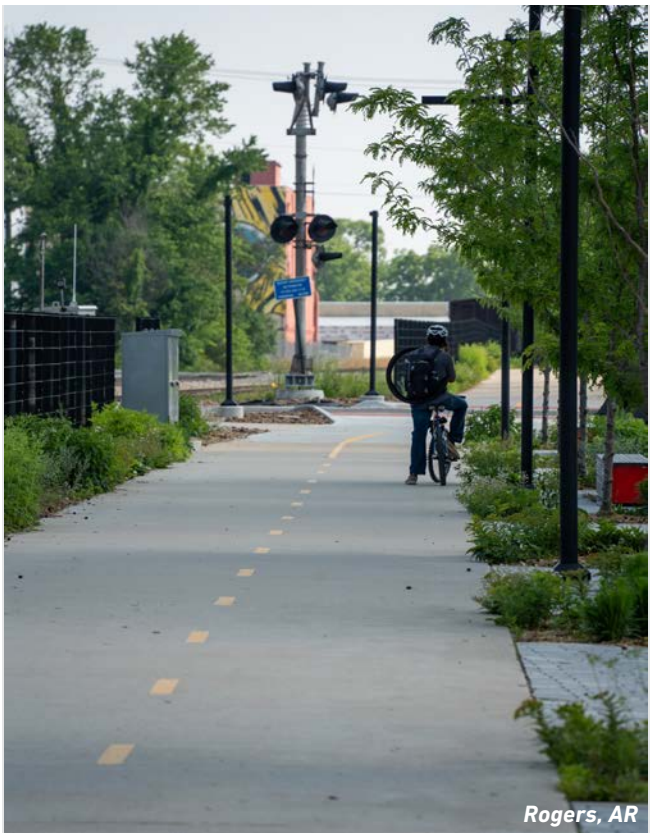
   Slower vehicle speeds increase visibility and reaction times for drivers and reduce impact forces when a crash occurs. Moving towards safe speeds can be done through speed limit reduction, traffic calming, and roadway design.

4. **Safe Roads**

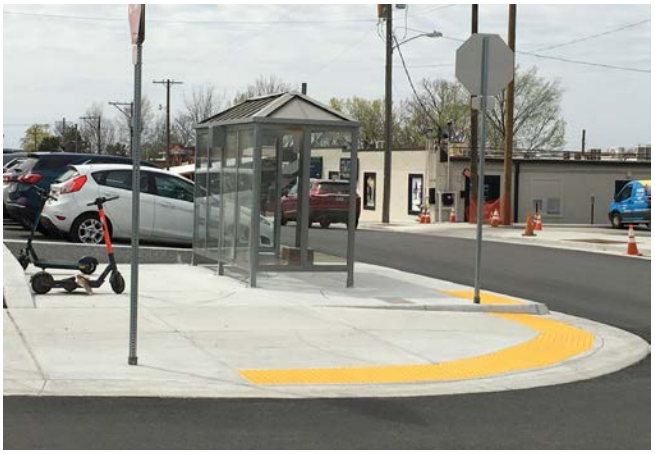
   Safer roads come from providing physical separation (like separated bike lanes and sidewalks) as well as designing to accommodate human mistakes.

5. **Post-Crash Care**

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

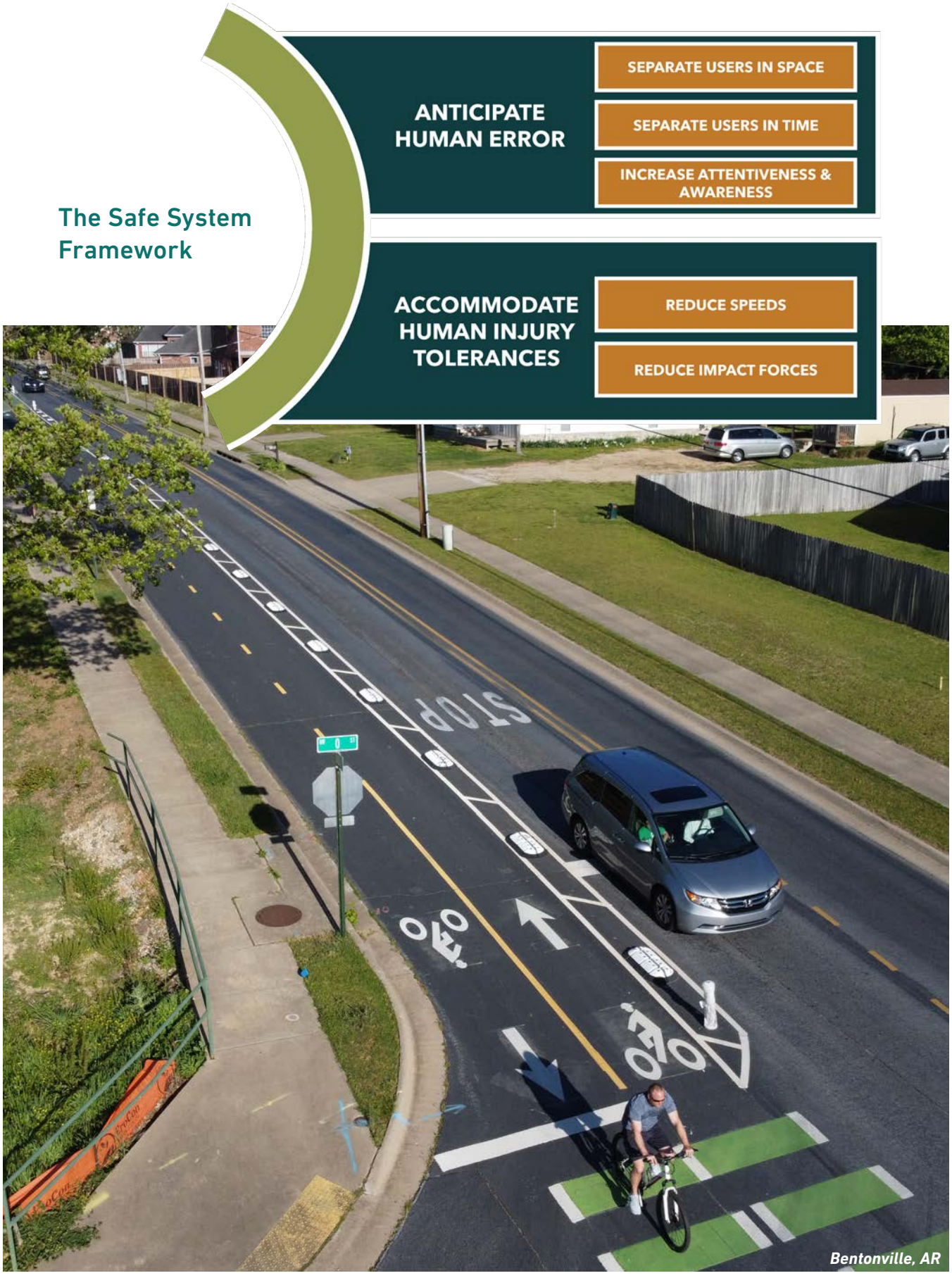


Rogers, AR

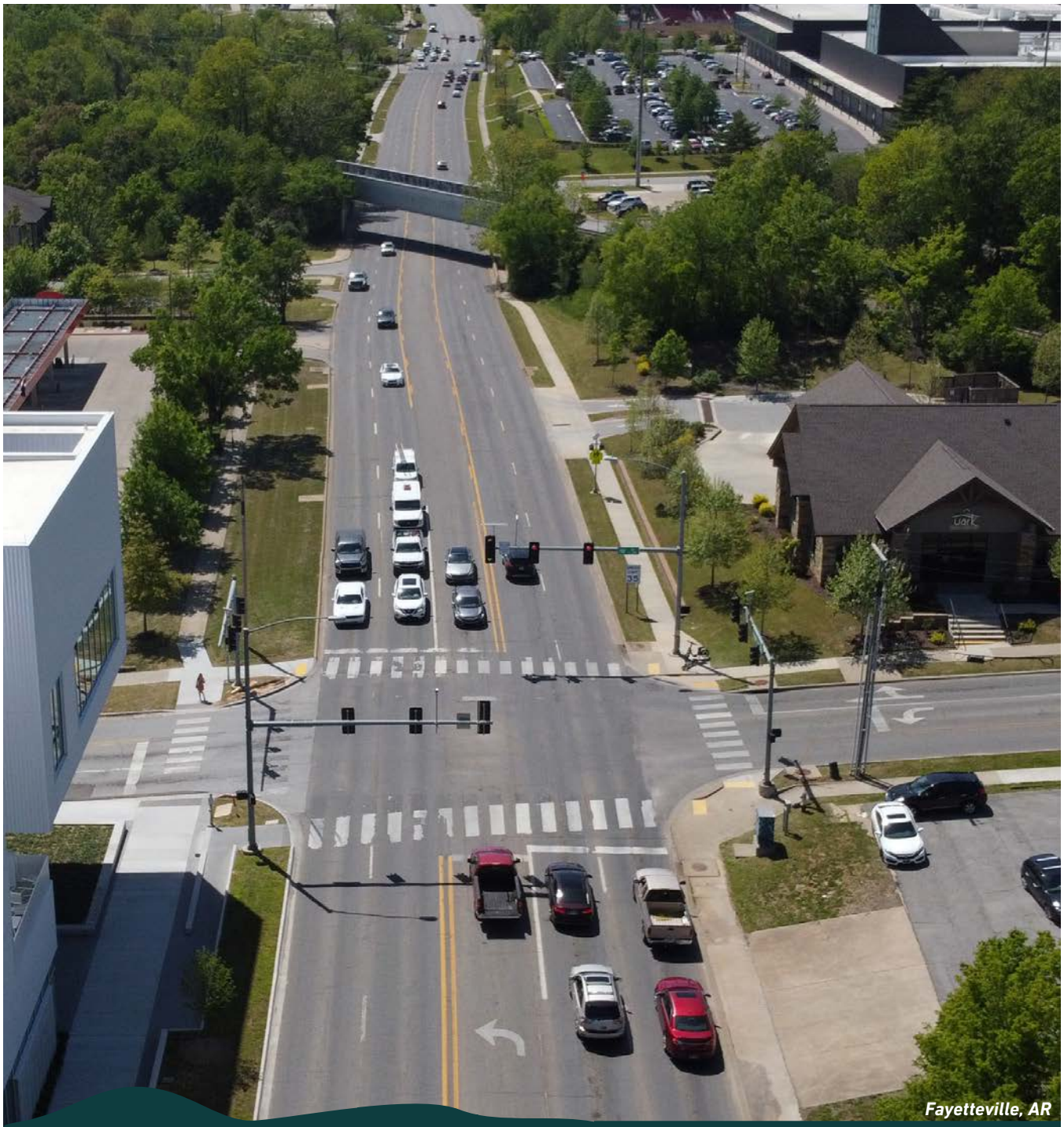


Fayetteville, AR

The Safe System Framework



THIS PAGE INTENTIONALLY LEFT BLANK



Fayetteville, AR

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, and 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 injuries. 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	2023	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
Rogers Master Street Plan	2019	Rogers
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. Additionally, roundabouts constructed on Highway 112 are examples of proven safety countermeasures on the ground.

Design Standards Highlight: Fayetteville Minimum Street Standards

The City of Fayetteville Minimum Street 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 the National Association of City Transportation Officials' (NACTO's) Don't Give Up at the Intersection and the Federal Highway Administration's (FHWA's) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.

Feyetteville, AR (credit: NWARPC)

Springdale, AR (credit: NWARPC)

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, and 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.

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	3	1	3	3	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
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 have 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, escalating 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 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, allowing 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 at 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 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. Trailblazers

has partnered with NWARPC and the Walton Family 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 Rogers (credit: Trailblazers)

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.

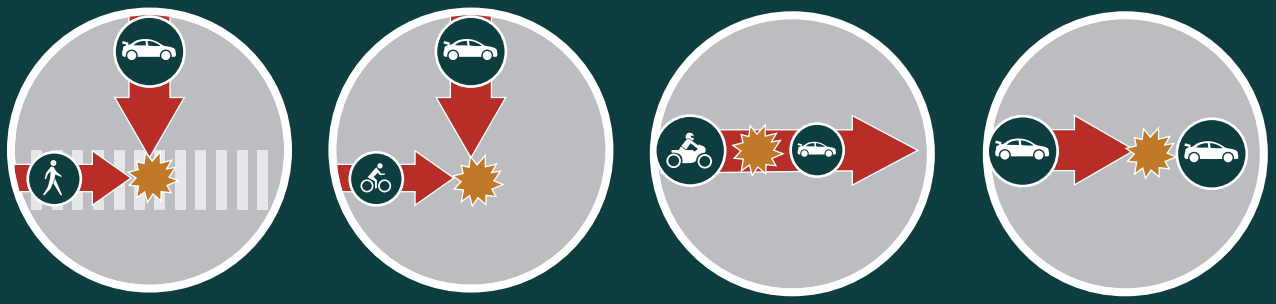
Siloam Springs Neighborhood Greenway Instalation (credit: Trailblazers)

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.

Most Dangerous Crash Types:

Crash type with the highest number of KSI crashes for each mode



Pedestrian

Pedestrian crossing road; vehicle traveling straight

56 KSI Crashes
116 Total

Bicycle

Bicycle crossing road; vehicle traveling straight

14 KSI Crashes
61 Total

Motorcycle

Motorcycle traveling straight; Vehicle slowing

6 KSI Crashes
11 Total

Motor Vehicle

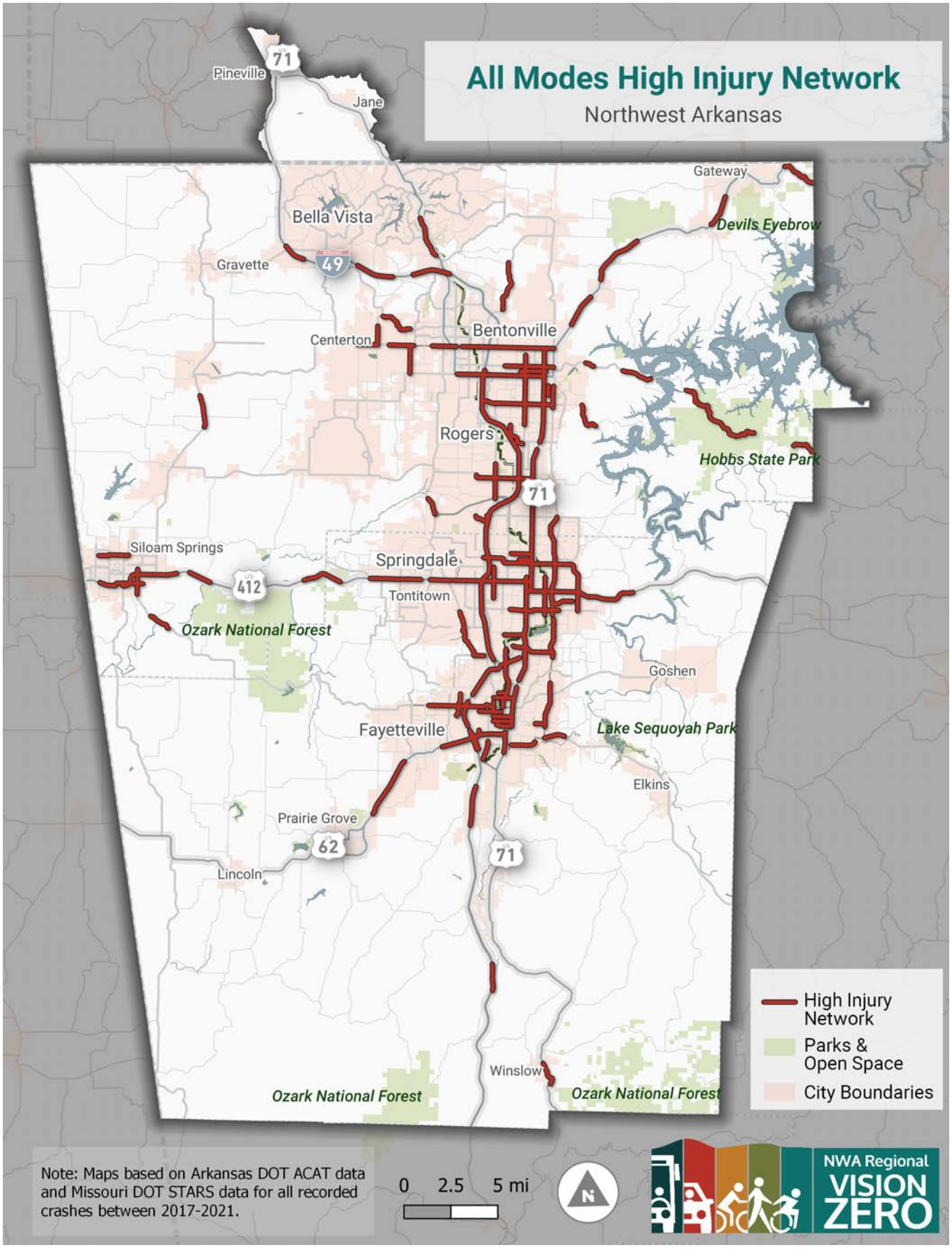
Vehicle traveling straight; vehicle stopped in traffic

25 KSI Crashes
4,664 Total

43%

of 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, 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 Communities[4] 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 - communities and places that spend more, and take longer, to get where they need to go.
- Health disadvantage - communities based on variables associated with adverse health outcomes, disability, as well as environmental exposures.
- Environmental disadvantage - communities with disproportionately high levels of certain air pollutants and high potential presence of lead-based paint in housing units.
- Economic disadvantage - areas and populations with high poverty, low wealth, lack of local jobs, low homeownership, low educational attainment, and high inequality.
- Resilience disadvantage - communities vulnerable to hazards caused by climate change.
- Equity disadvantage - communities with a high percentile of persons (age 5+) who speak English "less than well."

Area of Persistent Poverty[5] 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.

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.

Social Vulnerability[6] 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 NWA 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.

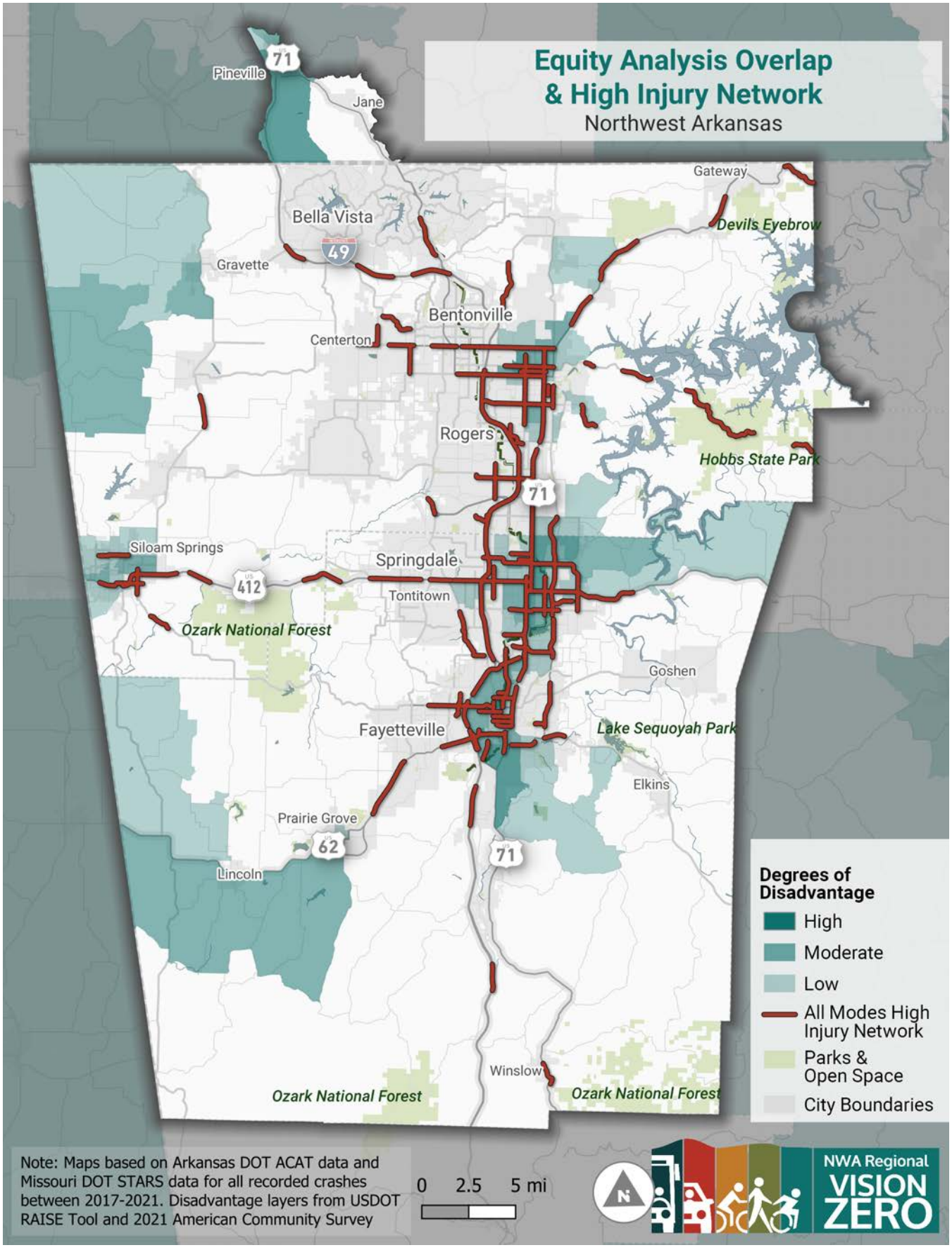
Bentonville, AR

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

6%
of the roadway network passes through disadvantaged areas

however, they represent
16%
of total KSI crashes

Equity Analysis Overlap and HIN



THIS PAGE INTENTIONALLY LEFT BLANK

Rogers, AR

3 Community Outreach

3. Community Outreach

The NWA 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 was 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 provided community members sufficient advanced notice for in-person events as well as online feedback opportunities, allowing them to plan and prioritize their participation.

5. **Prioritize Equity:** Activities ensured that minority and low-income populations were specifically engaged and heard and materials were provided in English and Spanish.

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

Promotion and Media Coverage

Promotion for the 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, eliminate 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 Meeting 3	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 Ride (Springdale 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 local municipality infrastructure problems and solutions. 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 each 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.

Fayetteville, AR

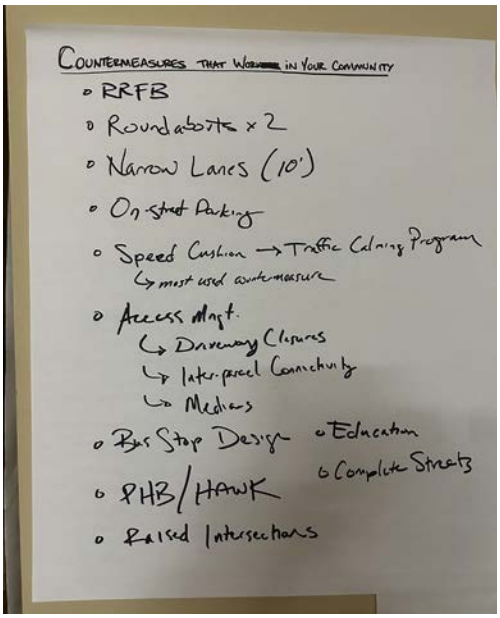
Springdale, AR

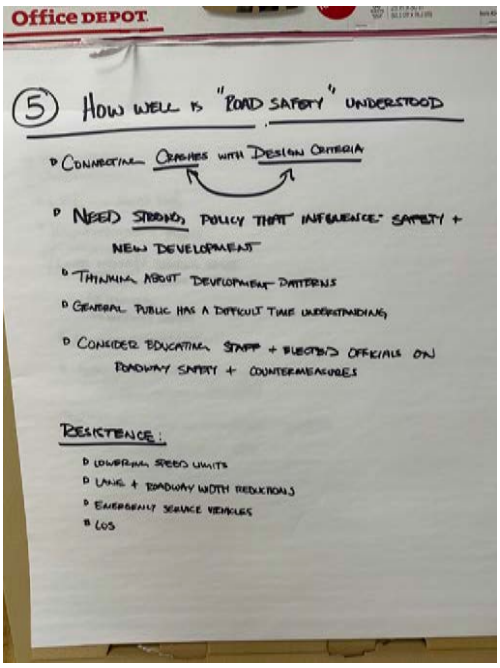
Rogers, AR

Rogers, AR

Regional Safety Working Group

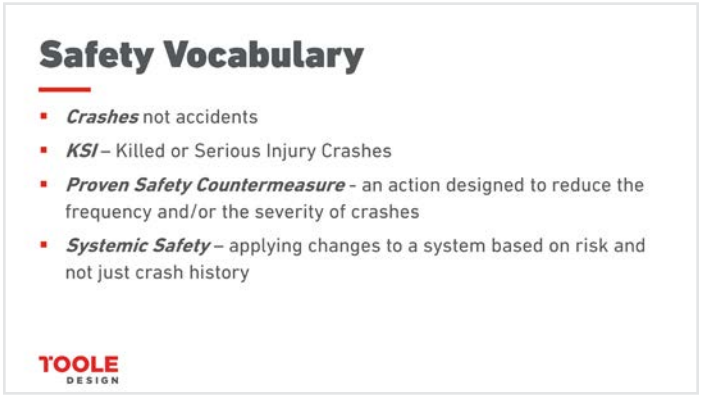
The regional safety working group met four times over the course of the NWA Vision Zero Plan development. It consisted of municipal staff, elected officials, regional advocates, and more. A key role of the working group was to discuss safety in the region, to guide recommended actions for policies, programs, 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.

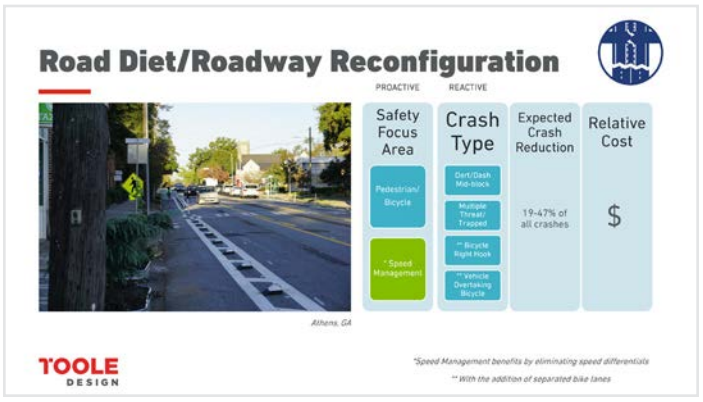




Safety Webinar Series

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 Safe 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 posted to the project website to allow for on-demand listening.





Public Feedback

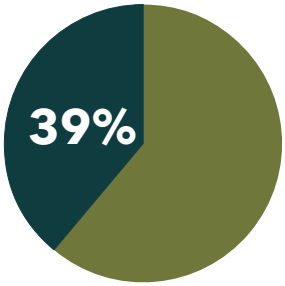
Digital engagement tools included an online survey and map. Participants that provided feedback on the interactive map were asked to identify the following:

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

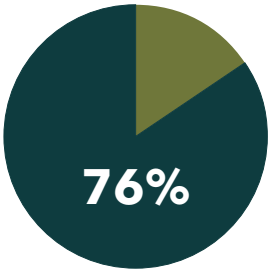
Most people who commented live in the eastern part of the region, yet most of the points are shown in the larger, more dense areas of Fayetteville and Bentonville. Overall, 316 people responded to the survey, placing over 600 points on the interactive map.

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

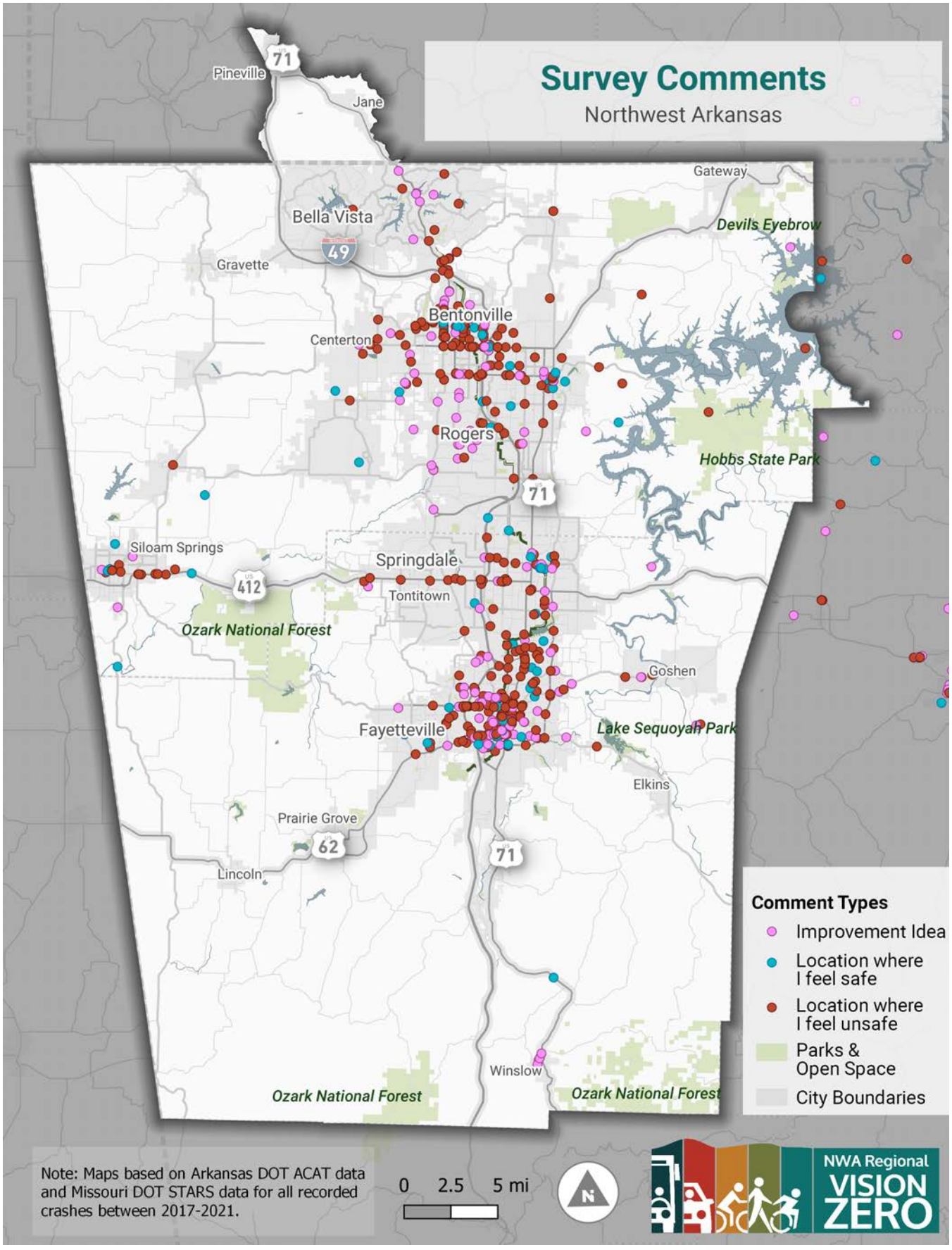


Walk or bike at least once a week

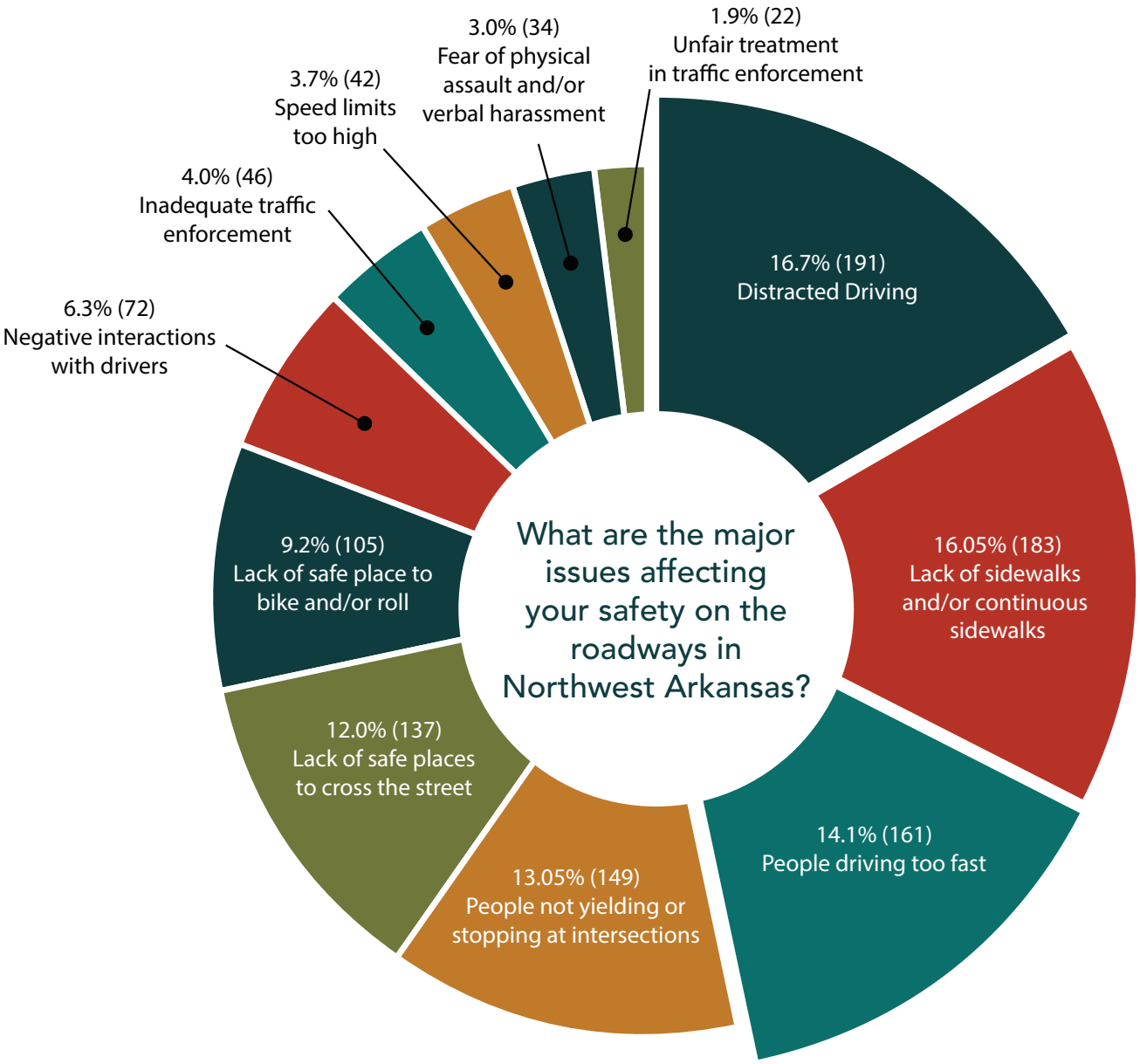
How do you typically get around NWA?

Bentonville, AR

Interactive Map Comments

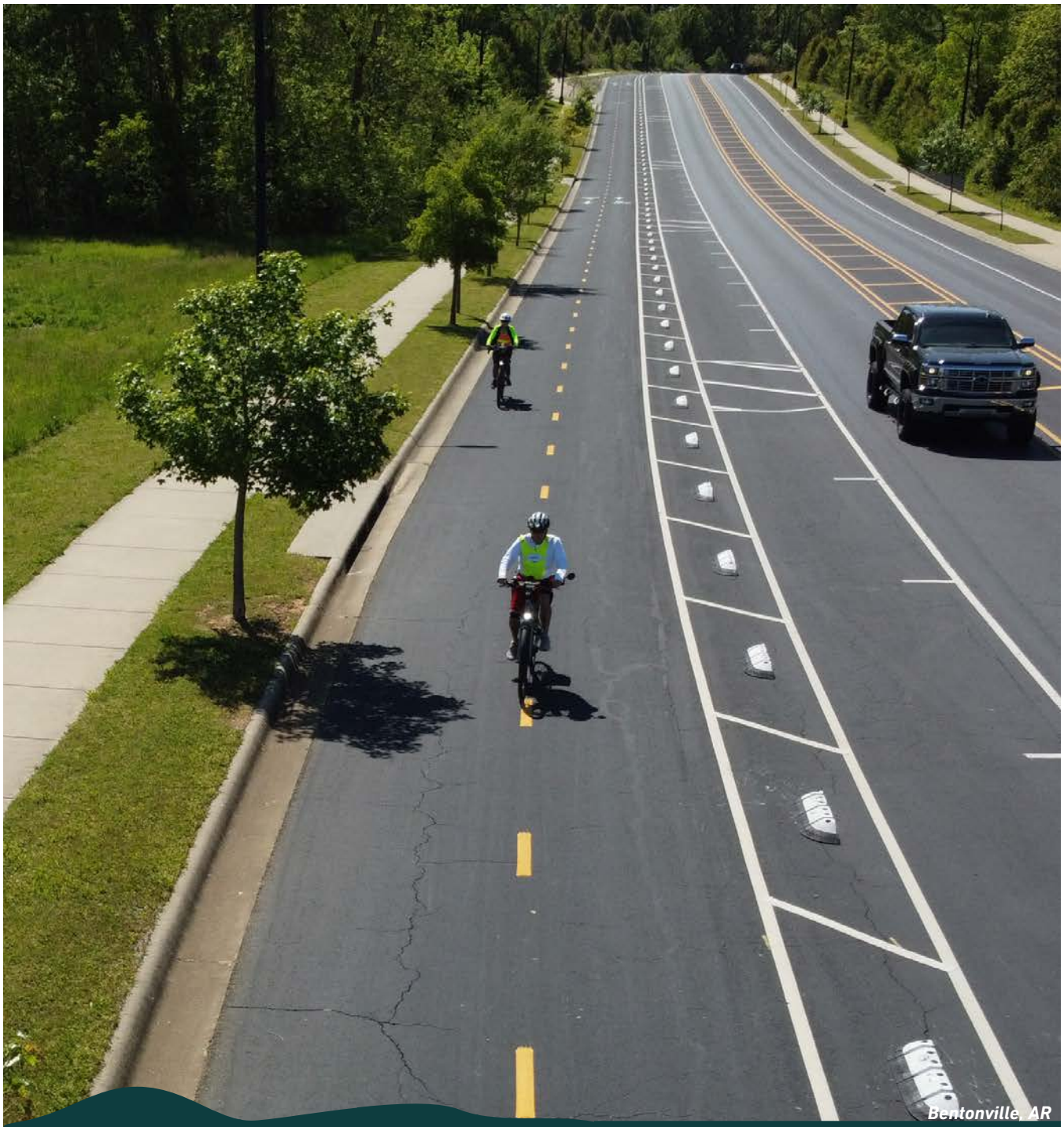


Public Survey Results



Bentonville, AR

THIS PAGE INTENTIONALLY LEFT BLANK



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

Fayetteville, AR

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 staff 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. All actions consider and support the five Safe System Elements.

What you'll see here...

A. Action items - Each is a discrete, specific effort that can be advanced by a Vision Zero partner.

B. Asterisk (*) - Items followed by an astrisk represent systemic safety countermeasus that can be installed on the HIN or proactively jurisdiction-wide where similar conditions exist for crashes to potentially occur. Learn more about these actions on page 51.

C. 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.

D. Cost - There is an anticipated annual cost level listed with each step based on the following ranges:

   a. $ - low (less than $100k)
   b. $$ - medium (between $100k-$500k)
   c. $$$ - high ($500k and above)

E. Action Leader and Supporting Partners - Each action item is led by an action leader and supported by various agency partners.

	A Action	B	C Timeframe	D Cost	E Action Leader	Supporting Partners
1-3	Create guidance for micro sidewalk gap program		Immediate	$	Member Agency, NWARPC	
1-11	Conduct roadway safety audits after every KSI crash		Short	$ - $$	Member Agency	
1-18	Install lighting on arterial roadways, starting with the HIN *		Medium-Long	$$$	ARDOT, MODOT, Member Agency	NWARPC

The Actions that follow are understood to be general recommendations. For some Actions, implementation would only occur when and where appropriate based on further analysis, engineering design, and environmental assessment. Other Actions may require policy changes in alignment with other agency goals. Due to staffing, financial, and other constraints, each agency will need to consider how to prioritize implementation of these Actions in support of Vision Zero.

1

Promote a culture that prioritizes people's safety

Ongoing communication along with projects that put safety first are 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.

Fayetteville, AR

	Action	Timeframe	Cost	Action Leader	Supporting Partners
1-1	Work with media partners to report traffic crashes more accurately, to avoid victim blaming, and report crashes in the context of Vision Zero	Immediate	$	NWARPC	Member Agency
1-2	Enhance training for law enforcement and emergency service personnel responsible for crash reporting to address the unique attributes required to accurately report crash circumstances involving people walking and bicycling	Immediate	$ - $$	NWARPC	Member Agency
1-3	Create guidance for micro sidewalk gap program	Immediate	$	Member Agency, NWARPC	
1-4	Consider hiring Vision Zero staff dedicated to safety projects and programs across departments	Immediate	$ - $$	Member Agency	NWARPC
1-5	Develop branded Vision Zero signage to be deployed with Vision Zero infrastructure projects during construction	Immediate	$	Member Agency	NWARPC
1-6	Promote using transit to reduce vehicle trips	Immediate	$	Member Agency, NWARPC	
1-7	Partner with youth organizations to create peer-to-peer anti-distraction messaging campaigns	Short	$	Member Agency	
1-8	Promote Transportation Demand Management (TDM) and street design policies that reduce Vehicle Miles Traveled (VMT) and automobile dependence	Short	$ - $$	NWARPC	Member Agency
1-9	Promote Street Networks and Land Use Patterns that Reduce Trip Distances and Automobile Dependence	Short	$	Member Agency	NWARPC
1-10	Develop a Region-Wide Safety Campaign to Share Information with the Community about Traffic Safety for All Modes	Short	$ - $$	NWARPC	Member Agency
1-11	Conduct roadway safety audits after every KSI crash	Short	$ - $$	Member Agency	

	Action	Timeframe	Cost	Action Leader	Supporting Partners
1-12	Conduct analysis of inequities within native populations	Short	$	NWARPC	
1-13	Prioritize Vision Zero investments in areas with high social vulnerability	Medium-Long	$$ - $$$	Member Agency	NWARPC
1-14	Pursue a sustainable funding source for transit to increase frequency, reduce travel time, and expand service area	Medium-Long	$$ - $$$	Transit Agency	Member Agency
1-15	Support DUI/DWI court programs that focus on education and treatment over punishment	Medium-Long	$	Member Agency	
1-16	Encourage large employers of truckers to put speed governors on trucks	Medium-Long	$	NWARPC	
1-17	Install pedestrian-scale lighting along the HIN, especially at trail crossings *	Medium-Long	$$ - $$$	Member Agency	
1-18	Install lighting on arterial roadways, starting with the HIN *	Medium-Long	$$$	ARDOT, MODOT, Member Agency	NWARPC
1-19	Conduct ongoing safety campaigns and events with the community - community safety advisory team (religious leaders, community centers, rec centers)	Medium-Long	$ - $$	NWARPC	Member Agency
1-20	Analyze growth areas adjacent to HIN for future planned development	Medium-Long	$	NWARPC	Member Agency
1-21	Conduct economic and equity analysis	Medium-Long	$	NWARPC	

2

Reduce conflicts between roadway users

Anticipating human error means providing more space and/or time 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.

Bentonville, AR

	Action	Timeframe	Cost	Action Leader	Supporting Partners
2-1	Implement no right turn on red on the HIN or high-volume pedestrian routes*	Short	$	ARDOT, Member Agency	
2-2	Implement pedestrian friendly cycle lengths, maximum 3' per second of walking speed*	Short	$ - $$	ARDOT, Member Agency	
2-3	Standardize crosswalk design standards including ladder spacing and widths*	Short	$	NWARPC, ARDOT	Member Agency
2-4	Review crosswalk spacings and distance of crossings (include pedestrian refuge islands)*	Short	$	ARDOT, Member Agency	
2-5	Implement a sidewalk gap program to fill short segments outside of development process	Short	$$	ARDOT, Member Agency	
2-6	Identify walking zones for schools, recreation centers, and other community identified priorities for connectivity	Short	$	ARDOT, Member Agency	School Board
2-7	Assess and install bicycle and pedestrian projects to increase separation*	Short	$$$	Member Agency	NWARPC, ARDOT
2-8	Install median refuge and pedstrian crossing signals (RRFB or PHB) for mid-block crossings, starting with transit stops on the HIN*	Short	$$$	Member Agency, ARDOT	
2-9	Reduce distances between crossings along arterials with long distances between signalized intersections*	Medium-Long	$$ - $$$	ARDOT	NWARPC, Member Agency
2-10	Implement road diets along the HIN where applicable*	Medium-Long	$$$	Member Agency	ARDOT
2-11	Close gaps in bicycle and pedestrian networks	Medium-Long	$$ - $$$	Member Agency	
2-12	Close slip lanes where applicable, starting with the HIN*	Medium-Long	$ - $$$	Member Agency	
2-13	Implement leading pedestrian intervals at signalized intersections, specifically on applicable HIN corridors*	Medium-Long	$ - $$	ARDOT, Member Agency	

	Action	Timeframe	Cost	Action Leader	Supporting Partners
2-14	Implement pedestrian recall on all permissive and through signal phases specifically on applicable HIN corridors*	**Medium-Long**	$ - $$$	ARDOT, Member Agency	
2-15	Install or retrofit countdown pedestrian signal heads*	**Medium-Long**	$$ - $$$	ARDOT, Member Agency	
2-16	Consider removing permissive left turns during active pedestrian signal phase*	**Medium-Long**	$$	ARDOT, Member Agency	
2-17	Install sidepath or separated/raised/ protected facilities for bicycle routes on roadways with speeds above 35 mph in accordance with FHWA Bikeway Selection Guide*	**Medium-Long**	$$$	ARDOT, Member Agency	
2-18	Install edge and center line treatment with bicycle-friendly rumble strips on roadways with marked shoulders*	**Medium-Long**	$$ - $$$	ARDOT, MODOT, Member Agency	
2-19	Design and install overpass or tunnel for trail crossings of roadways with vehicle speeds of 45 mph or greater in Urban/Suburban contexts and 55 mph+ in Rural contexts*	**Medium-Long**	$$$	ARDOT, Member Agency	
2-20	Daylight intersections (removing obstacles that impair sight lines) in town centers and in high-volume pedestrian areas*	**Medium-Long**	$	ARDOT, Member Agency	
2-21	Convert front-in angle parking to back-in angle or parallel parking in downtown areas*	**Medium-Long**	$$	Member Agency	
2-22	Provide buffers to sidewalks and sidepaths (paint, greenspace, trees, etc.)*	**Medium-Long**	$$ - $$$	ARDOT, Member Agency	
2-23	Install backplates with retroreflective boards at all signalized intersections and use reflectors on curves and bridges, starting with the HIN*	**Medium-Long**	$$ - $$$	Member Agency, ARDOT	
2-24	Deploy access management strategies to combine driveways to adjacent properties OR build medians to restrict left turns near driveways and intersections*	**Medium-Long**	$$ - $$$	ARDOT, 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 stage for daily decisions to change and can influence practices, programs, and mindsets that are essential for the Safe System Approach to be effective.

Bentonville, AR

	Action	Timeframe	Cost	Action Leader	Supporting Partners
3-1	Adopt Complete Streets policies	**Immediate**	$	NWARPC, Member Agency, ARDOT	
3-2	Establish equitable zero tolerance policies and incentive programs to reduce and eliminate speeding	**Immediate**	$	Member Agency, Police Department	
3-3	Establish program and procedures to conduct roadway safety audit after KSI crash	**Immediate**	$	Member Agency	NWARPC, ARDOT, MODOT
3-4	Create regional and local roadway safety education program for practitioners, boards, and elected officials	**Immediate**	$ - $$	NWARPC, Member Agency	
3-5	Develop a Vision Zero dashboard to track performance metrics related to KSI crashes, safety projects, completed actions, and other items that focus on the Safe Systems Approach	**Immediate**	$	NWARPC	ARDOT, Member Agency
3-6	Publish annual report on crashes and other safety metrics for transparency and accountability	**Immediate**	$	NWARPC, Member Agency	ARDOT, MODOT
3-7	Create policy to site transit stops closer to intersections to reduce dart and dash crashes	**Immediate**	$	Member Agency, Transit Agency	NWARPC
3-8	Review and update land use policies and development standards to prioritize the safety of all road users (e.g., block size, crosswalk spacing, access management)	**Immediate**	$	Member Agency	NWARPC
3-9	Consider adopting a Roundabout First Policy—the process of considering a roundabout before any other form of control at an intersection—to increase user safety and reduce conflict points	**Immediate**	$	Member Agency	NWARPC
3-10	Develop a multimodal safety toolbox that identifies strategies available to address safety concerns for all modes	**Short**	$	NWARPC	
3-11	Establish multidisciplinary crash response teams to evaluate and address fatal and serious injury crashes at crash locations	**Short**	$	Member Agency	NWARPC, ARDOT, MODOT
3-12	Adopt specifications for incorporating safety features in new fleet vehicle purchases and retrofit existing vehicles	**Short**	$	NWARPC	Member Agency

	Action	Timeframe	Cost	Action Leader	Supporting Partners
3-13	Advocate for changes to state law to expand the use of automated safety cameras	Short	$	NWARPC	Member Agency
3-14	Conduct crash analysis by type of vehicle due to semis and large trucks with trailers on roads	Short	$	NWARPC	ARDOT, Member Agency
3-15	Conduct analysis of crashes on curves and hills in region	Short	$	NWARPC	ARDOT, Member Agency
3-16	Conduct analysis of crashes related to two-way left-turn lanes and access management on arterials, especially in commercial areas	Short	$	NWARPC	ARDOT, Member Agency
3-17	Analyze crashes within new greenfield development, housing, and commercial	Short	$	NWARPC	Member Agency
3-18	Establish policy to conduct routine walking audits to review safety needs for roadway projects during scoping phase	Short	$	Member Agency	
3-19	Address safety through installing proven countermeasures during routine roadway maintenance	Medium-Long	$ - $$$	ARDOT, MODOT, Member Agency	
3-20	Identify and implement applicable road safety countermeasures through routine resurfacing	Medium-Long	$$ - $$$	ARDOT, MODOT, Member Agency	
3-21	Consider policies that provide alternatives for primary access to schools on arterials or HIN for future school sites	Medium-Long	$	School Board	Member Agency
3-22	Analyze before and after crash trends along recent roadway projects	Medium-Long	$	NWARPC, ARDOT	
3-23	Conduct ongoing safety analyses for intersections, specifically along the HIN	Medium-Long	$ - $$	NWARPC	Member Agency

4

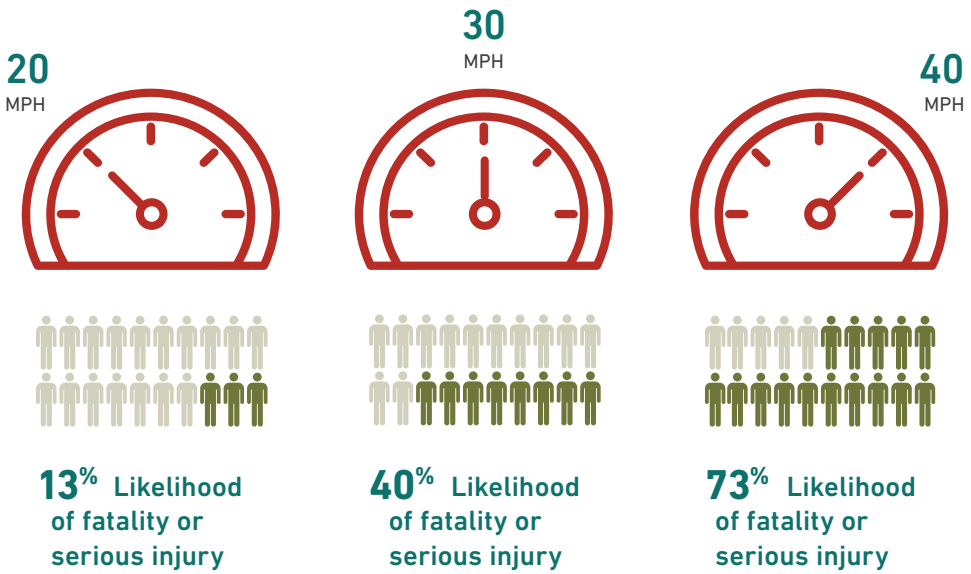
Slow Vehicle Speeds

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

Fayetteville, AR

	Action	Timeframe	Safe System Elements	Action Leader	Supporting Partners
4-1	Post nighttime speed limits *	Immediate	$ - $$	Member Agency, ARDOT	
4-2	Develop guidance for equitable traffic calming policies and resources	Immediate	$	NWARPC	Member Agency
4-3	Reduce speed limits on local streets to 20 mph *	Short	$	Member Agency	
4-4	Conduct a special speed study in local jurisdictions for blanket speed limit reduction	Short	$$	NWARPC, Member Agency	
4-5	Engage state legislature to change laws related to speed limit setting	Short	$ - $$	NWARPC, Member Agency	
4-6	Adjust signal timing and signage for speed limit on arterials *	Short	$ - $$	Member Agency, ARDOT	
4-7	Review speed limits on the HIN	Medium-Long	$	NWARPC	Member Agency, ARDOT
4-8	Tighten turning radii to reduce turning speeds and include truck aprons on freight routes *	Medium-Long	$$	Member Agency, ARDOT	

Pedestrian vulnerability when struck by a vehicle at this speed



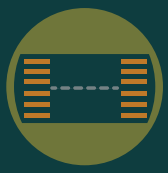
Data Citation: Tefft, B.C. (2011). *Impact Speed and a Pedestrian's Risk of Severe Injury or Death* (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety.

Proactive Systemic Safety Countermeasures

Systemic safety countermeasures can be installed on the HIN or proactively across the region and in member agency jurisdictions where similar conditions exist for crashes to potentially occur. Generally, systemic safety improvements increase safety of all road users. These proactive systemic safety countermeasures will likely require additional funding for implementation and perpetual maintenance for staffing and materials and/or changing a policy or standard by member agencies or the State to allow the measures to be installed for use in a more widespread manner. These systemic safety countermeasures could also be implemented proactively or established as safety standards as part of other safety projects, such as street reconstruction or as part of new land use development projects.

The following highlights several safety countermeasures for proactive, systemic implementation in Northwest Arkansas that were listed in the previous action tables. Proactive and systemic safety countermeasures should be installed on the HIN first, as part of other street projects, in similar conditions where crashes could occur and eventually in a more widespread fashion, as budget and staff resources allow.

Install pedestrian-scale lighting along the HIN, especially at trail crossings and along arterials



Reduce distances between crossings along arterials with long distances between signalized intersections

Daylight intersections (remove obstacles that impair sight lines) in town centers and in high-volume pedestrian areas

Implement leading pedestrian intervals at signalized intersections, specifically on applicable HIN corridors

Implement no right turns on red on the HIN or high-volume pedestrian routes

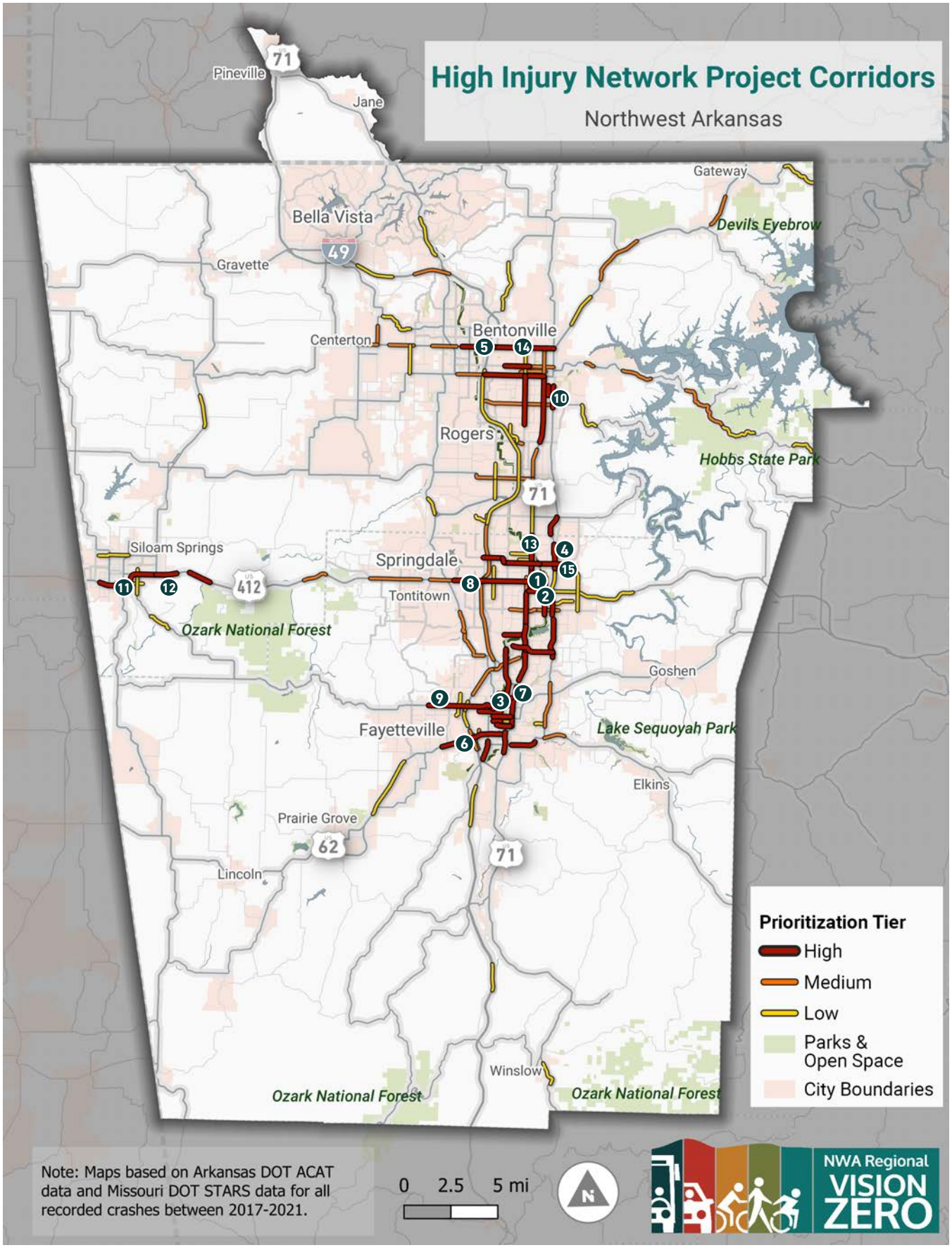
Adjust signal timing and signage for speed limit on arterials

Highest Priority Projects

The following map shows prioritized HIN project corridors for the region. The Top 15 highest scoring projects are listed below.

1. **West Robinson Avenue (US 412)**
   Turner Street to South Thompson Street (Springdale)
2. **South Thompson Street (US 71B)**
   West Lakeview Drive to West Emma Avenue (Springdale)
3. **North Garland Avenue**
   Norht of West Berry Street to South of West Lawson Street (Fayetteville)
4. **North Old Missouri Road (Hwy 265)**
   East Emma Avenue to South of East Randall Wobbe Lane (Springdale)
5. **Southeast 14th Street (Hwy 102)**
   Water Tower Road/Bekaert Drive to West of Phyllis Street (Bentonville)
6. **West Martin Luther King Jr. Boulevard**
   West Ozark Trail to South School Avenue (Fayetteville)
7. **North College Avenue (US 71B)**
   South of East Township Street to East Center Street (Fayetteville)
8. **West Sunset Avenue (US 412)**
   South Thompson Street to Westside Village Street (Springdale)
9. **West Wedington Drive**
   MP 16.40 to North Garland Avenue (Fayetteville)
10. **South 5th Street**
    West Olrich Street to West Oak Street (Rogers)
11. **US 412; AR 59**
    AR 59 to West of AR 59 (Siloam Springs)
12. **US 412**
    AR 59 to MP 11.65 (Siloam Springs)
13. **North Thompson Street (US 71B)**
    West Emma Avenue to West County Line Road (Springdale)
14. **West Hudson Road (US 62)**
    Water Tower Road/Bekaert Drive to North 2nd Street (Rogers)
15. **East Huntsville Avenue**
    Mill Street to East Emma Avenue (Springdale)

High Injury Network Projects



Proven Safety Countermeasures

Addressing safety in Northwest Arkansas will require the deployment of proven safety countermeasures across the regional transportation network, starting with the HIN. Selection and design of safety countermeasures on every street project in the region should be decided through the lens of the Safe System Approach, so that if a crash occurs it will not result in a fatal or serious injury. Safety countermeasures should not be compromised or simplified during the design or construction phases. These modifications can reduce the level of safety for all road users.

The FHWA Proven Safety Countermeasures initiative (PCSi) is a collection of specific design or operational changes to streets that have been proven nationally to improve safety. Safety countermeasures are listed below along with hyperlinks to provide a more detailed description and effectiveness of the full safety countermeasure.

Speed Management

Appropriate Speed Limits for All Road Users

Speed Safety Cameras

Variable Speed Limits

Pedestrian/Bicyclist

Bicycle Lanes

Crosswalk Visibility Enhancements

Leading Pedestrian Interval

Medians and Pedestrian Refuge Islands

Pedestrian Hybrid Beacons

Rectangular Rapid Flashing Beacons (RRFB)

Road Diets (Roadway Configuration)

Walkways

Roadway Departure


Enhanced Delineation for Horizontal Curves


Longitudinal Rumble Strips and Stripes on Two-Lane Roads


Median Barriers


Roadside Design Improvements at Curves


Safety Edge


Wider Edge Lines

Intersections


Backplates with Retro-reflective Borders


Corridor Access Management


Dedicated Left- and Right-Turn Lanes at Intersections


Reduced Left-Turn Conflict Intersections


Roundabouts


Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections


Yellow Change Intervals

Crosscutting


Lighting


Local Road Safety Plans


Pavement Friction Management


Road Safety Audit

Taking Action

The NWA Vision Zero Plan is a commitment along with an initial set of goals and actions to reach the vision of zero fatal and serious injuries on roadways across Northwest Arkansas. However, Vision Zero must be more than a document; it must be embraced, discussed, emphasized, and reinforced every day. This Plan must be a living document that unites people across agencies, departments, organizations, and the region to prioritize roadway safety.

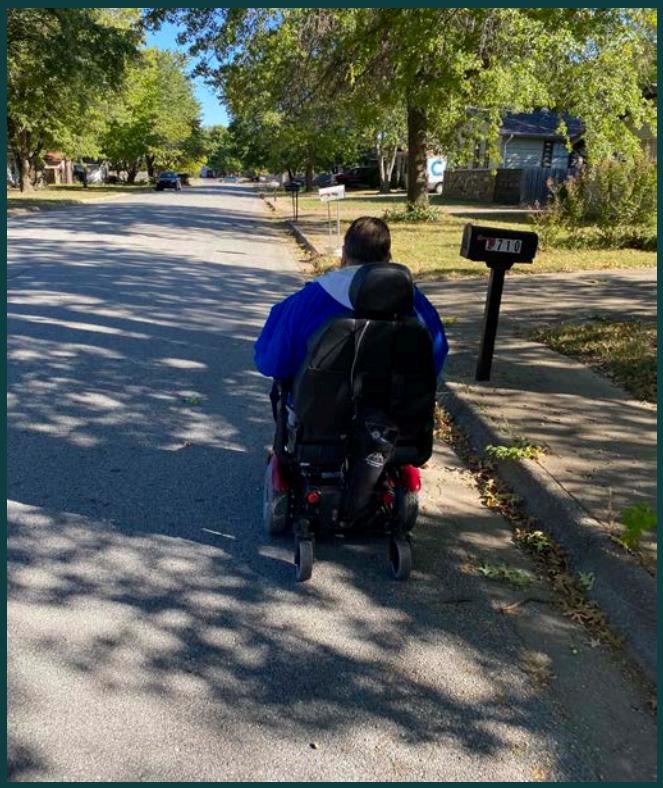
Performance Measures

NWARPC and member agencies will need to monitor the success of individual Vision Zero actions related to each goal. Evaluation and regular reporting are essential for the data-driven approach to Vision Zero. There must be accountability to the commitment of eliminating traffic deaths and severe injuries. If certain actions are not successful, not moving fast enough, or not working for another reason, the region and member agencies should assess and modify actions as needed. However, it is critical that monitoring does not reduce or minimize the focus on the ultimate performance measure of eliminating fatal and serious injuries on all roadways in Northwest Arkansas by 2038. Actions such as the data dashboard and annual reporting can track progress and provide insight into a number of metrics, including but not limited to:

- Crashes involving bicycles and pedestrians
- Crashes resulting from unsafe speeds
- Crashes in rural versus urbanized areas
- Crashes occurring on roadways in Historically Disadvantaged Communities, Areas of Persistent Poverty, and/or Socially Vulnerable communities.

Sharing Responsibility for Vision Zero

To carry out everything presented in this Vision Zero Plan and to eliminate fatalities and serious injuries on all roadways across Northwest Arkansas by 2038, everyone—from elected officials and municipal staff to local employers and residents of all ages and abilities—will need to take action. We all have a personal responsibility to make the right choices and to communicate the importance of why roadway safety matters—making the region's efforts even more effective.



Fayetteville, AR

References

1 Population based on 2021 American Community Survey 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.
2 Benton County Sherriff's Office. DWI Unit.
3 Governors Highway Safety Association. Speed and Red Light Cameras: Arkansas.
4 Historically Disadvantaged Communities Methodology: https://www.transportation.gov/priorities/equity/justice40/transportation-disadvantaged-census-tracts-historically-disadvantaged
5 Areas of Persistent Poverty: https://www.transportation.gov/RAISEgrants/raise-app-hdc
6 Social Vulnerability: https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html

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 led by the NWARPC, in partnership with the Regional Working Group.

NORTHWEST ARKANSAS REGIONAL PLANNING COMMISSION

Elizabeth Bowen

Tim Conklin

MEMBER AGENCIES

ADVOCACY ORGANIZATIONS

Trailblazers

Bentonville Moves

Bentonville Coalition

Runway Group

Walton Family Foundation

Bentonville Traffic Safety Committee

Fayetteville Traffic Safety Committee

STATEWIDE AGENCIES

ARDOT

MODOT

PROJECT CONSULTANT

Toole Design Group

Safety Action Plan

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE EXECUTION OF A TEMPORARY CONSTRUCTION EASEMENT AGREEMENT ON PROPERTY OWNED BY THE CITY OF SPRINGDALE, ARKANSAS.

WHEREAS, the City of Springdale owns the following real property located in the City of Springdale, Arkansas, said land being more particularly described as follows (collectively "the Property"):

Public property held by the City of Springdale, currently comprising a portion of the Razorback Greenway Trail, formerly known as Mill Street, immediately to the west of Lot 3, Holcombs First Subdivision to the City of Springdale, Washington County, Arkansas, more commonly known as Washington County Tax Parcel No. 815-22945-000, and more commonly known as 100 E. Emma Ave.

Right-of-way along the north side of Emma Avenue located adjacent to and south of Washington County Tax Parcel No. 815-30041-000, 815-30039-000, 815-30040-000, and 815-30036-000, and in front of property located at 100 W. Emma Avenue.

WHEREAS, Ark. Code Ann. §14-54-302 empowers and authorizes municipalities to sell, convey, lease, rent, let, or dispose of any real property it owns, subject to approval by the City Council;

WHEREAS, Emma & Turnbow, LLC, has a pending development plan ("the Project") on property adjacent to the Property;

WHEREAS, in connection with the Project, it is necessary that Emma & Turnbow, LLC, be granted a temporary construction easement on the Property, and as shown on the attached Exhibit; and

WHEREAS, the City and Emma & Turnbow, LLC, wish to enter into a Temporary Construction Easement Agreement, a copy of which is attached hereto and incorporated herein by reference, governing the terms and conditions by which the Property may be used for the Project.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF SPRINGDALE, ARKANSAS, that the Mayor and City Clerk of the City of Springdale, Arkansas, are hereby authorized to execute a Temporary Construction Easement Agreement with Emma & Turnbow, LLC, governing the terms and conditions by which the Property may be used for the Project.

PASSED AND APPROVED this _____ day of _____, 2023.

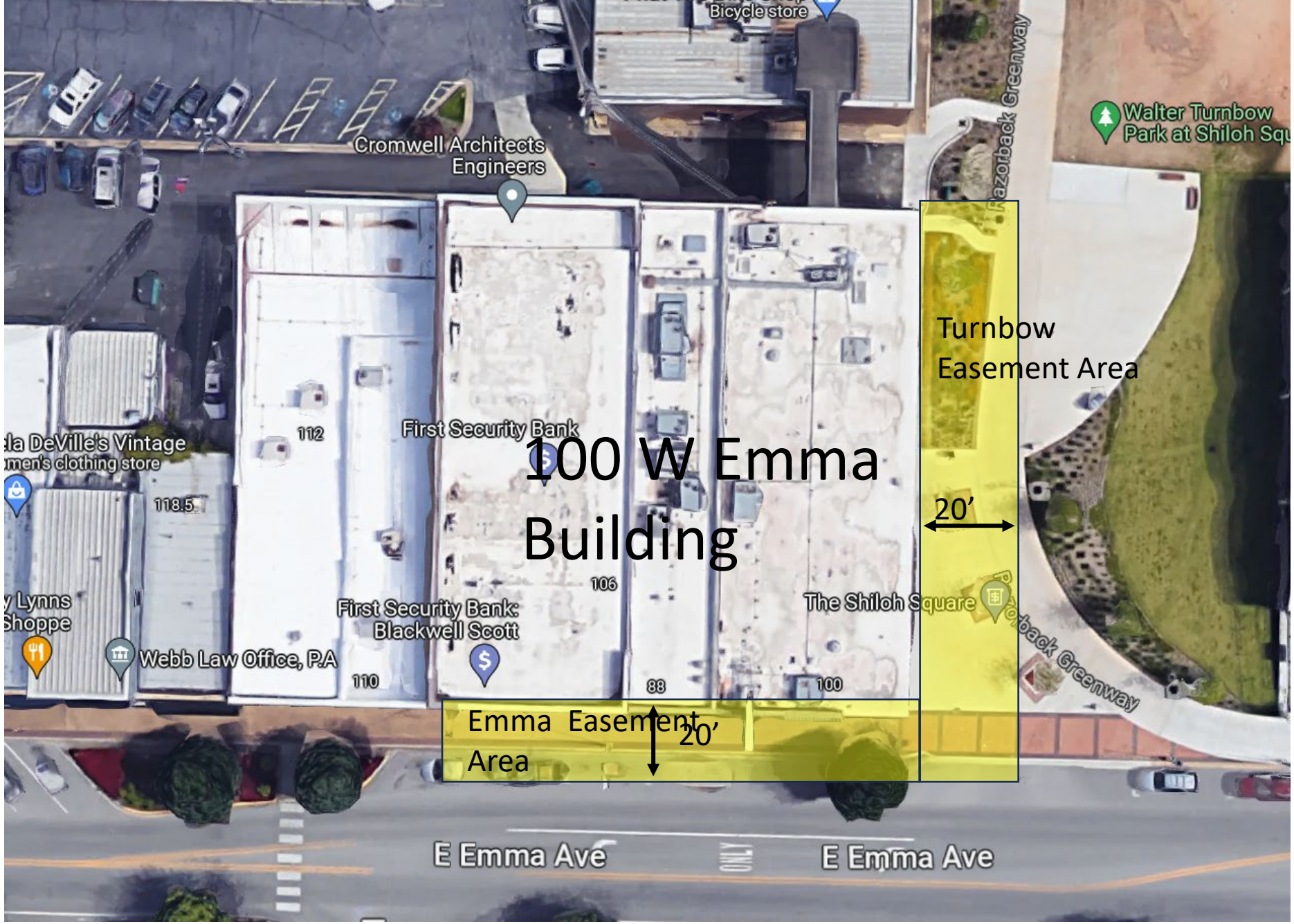
_____
Doug Sprouse, Mayor

ATTEST:

_____
Denise Pearce, City Clerk

APPROVED:

_____
Ernest B. Cate, City Attorney


Cromwell Architects Engineers
Bicycle store
Walter Turnbow Park at Shiloh Squ
Razorback Greenway
Turnbow Easement Area
100 W Emma Building
20’
First Security Bank
112
118.5
106
First Security Bank: Blackwell Scott
The Shiloh Square
Webb Law Office, P.A
110
88
100
Emma Easement Area
20’
E Emma Ave
ONLY
E Emma Ave

RESOLUTION _____

A RESOLUTION TO REVISE THE FLOOD DAMAGE PREVENTION CODE FOR SPRINGDALE IN ORDER TO MITIGATE FLOOD RELATED RISK TO MECHANICAL AND ELECTRICAL EQUIPMENT

WHEREAS, The City of Springdale is a member of the National Flood Insurance Program (NFIP) and the Community Rating System (CRS); and

WHEREAS, on January 1, 2021, an Addendum to the 2017 CRS Coordinator's Manual went into effect requiring Class 8 CRS communities to implement a freeboard requirement of at least one foot throughout the Special Flood Hazard Area (SHFA); and

WHEREAS, Springdale currently requires the lowest floor of all structures in the SFHA have an elevation 2 feet or more above the published BFE; and

WHEREAS, elevation of mechanical and electrical equipment, in addition to the lowest floor, above the Base Flood Elevation (BFE) is considered best practice for reducing flood related risk to those who work and live in Springdale; and

NOW, THEREFORE, BE IT RESOLVED BY THE SPRINGDALE CITY COUNCIL:

Section 1: The City of Springdale adopts a revision to the Flood Damage Prevention Code for Springdale as follows in the attachment provided.

PASSED AND APPROVED BY THE _____
CITY COUNCIL ON THE __ DAY OF ____, 202_.

_____
Mayor

ATTEST: _____
City Clerk

FLOOD DAMAGE PREVENTION CODE FOR SPRINGDALE, AUGUST 2023

ARTICLE 1 DEFINITIONS

Unless specifically defined below, words or phrases used in this Code have their common usage meaning to give the most reasonable application to this Code.

Additional definitions for floodplain management terms can be found at Part §59.1 of 44 CFR.

44 CFR (Emergency Management and Assistance – National Flood Insurance Program Regulations) Parts 59-75 contain Federal regulations upon which local floodplain managements are based

44 CFR § 65.12 – contains the section of the Federal regulations which involves revision of flood insurance rate maps to reflect base flood elevations caused by proposed encroachments.

"100-year flood" is any flood with a 1% chance of occurring in any given year. The term is misleading, because of its statistical derivation. A "100-year flood" may occur many times in any given 100-year period, or it may not occur at all in 100 years.

"500-year flood" is any flood with a 0.2% chance of occurring in any given year. As with the 100-year flood, this term is also misleading, because of its statistical derivation. A "500-year flood" may occur many times in any given 500-year period, or it may not occur at all in 500 years.

"Accessory Structures" are structures which are on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure (such as garages and storage sheds).

"Adverse impact" means any negative or harmful effect.

"AE Risk Zones" are special flood hazard areas where detailed studies have determined base flood elevations.

"AH Risk Zones" are special flood hazard areas characterized by shallow flooding with ponding effects (where floodwaters accumulate in depressions and linger until absorbed or evaporated).

"AO Risk Zones" are special flood hazard areas characterized by shallow flooding with sheet flow (where floodwaters flow in a broad, shallow sheet rather than through a narrow channel).

"A Risk Zones" are special flood hazard areas without detailed studies, where base flood elevations have not been determined.

"Appeal Board" means a person or persons specifically designated to render decisions on variance applications and floodplain management complaints.

"Automatic" entry and exit of floodwaters means that the water must be able to enter and exit with no intervening action from a person.

"Base flood" is the flood profile used as the basis for the NFIP regulations. The Federal government has selected the "100-year flood" as the base flood.

"Base flood elevation" refers to the expected height of floodwaters during the peak of the base flood event.

"Basement" is any enclosed area that is below grade on all four walls.

"BFE" is the acronym for Base Flood Elevation.

"Buoyancy" is the upward force exerted by water. Buoyancy can cause underground tanks to float free and can lift structures off foundations.

"Certificates of Compliance" are formal documents issued by floodplain administrators certifying that completed projects comply with the requirements of the local Code.

"CFR" is the acronym for the Code of Federal Regulations. The Code of Federal Regulations is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation. The Federal regulations pertaining to the national Flood Insurance Program are found in title 44, Emergency Management and Assistance.

"Clearing" is the act of cutting timber or shrubs from an area

"Commercial business park" is typically an area of offices or light industrial usage, although retail, service, or industrial usage is sometimes included in supporting roles. For example, a commercial business park of office complexes may also include restaurants which service these offices.

"Concrete deadman anchors" are heavy steel rods embedded in buried sections of concrete, used to secure items in place under tension.

"Covenant" is a clause in a contract that requires one party to do, or refrain from doing, certain things. A covenant frequently appears as a restriction that a lender imposes on a borrower.

"Crawlspace" is a type of structural foundation where the space beneath the lowest floor is typically not deep enough to allow a person to stand and not all four walls are below grade.

"Critical Facilities" include: Governmental facilities that are considered essential for the delivery of critical services and crisis management (such as data and communication centers and key governmental complexes); facilities that are essential for the health and welfare of the whole population (such as hospitals, prisons, police and fire stations, emergency operations centers, evacuation shelters and schools); mass transportation facilities (such as airports, bus terminals, train terminals); lifeline utility systems (including potable water, wastewater, oil, natural gas, electric power and communications systems); high potential loss facilities (such as nuclear power plants or military installations); hazardous material facilities (such as industrial facilities housing or manufacturing or disposing of corrosives, explosives, flammable materials, radioactive materials and toxins.

"D Zones" areas in which the flood hazard has not been determined, but may be possible

"Deed restriction" refers to a clause in a deed that limits the future uses of the property in some respect. Deed restrictions may impose a vast variety of limitations and conditions, for example, they may limit the density of buildings, dictate the types of structures that can be erected, prevent buildings from being used for specific purposes or even from being used at all.

"Development" broadly means any manmade change in improved or unimproved real estate. It includes, but is not limited to, construction, reconstruction, or placement of a building, or any addition or substantial improvement to a building. "Development" also includes the installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than 180 consecutive days. The installation of utilities, construction of roads, bridges, culverts or similar projects are also "developments." Construction or erection of levees, dams, walls, or fences; drilling, mining, filling, dredging, grading, excavating, paving, or other alterations of the ground surface are "developments." Storage of materials including the placement of gas and liquid storage tanks are "developments," as are channel modifications or any other activity that might change the direction, height, or velocity of flood or surface waters. "Development" does not include maintenance of existing buildings and facilities, maintenance of existing drainage ditches, resurfacing of roads, gardening, plowing, or similar practices that do not involve filling, grading, or construction of levees.

"Development Permit" refers to the permit required for placing a "development" in the floodplain.

"Easements" are rights or permissions held by one person to make specific, limited use of land owned by another person.

"Elevation Certificate" refers to FEMA form 81-31, which for the purposes of this Code must be properly completed by a Professional Engineer, Surveyor or Architect licensed to practice in the State of Arkansas.

"Erosion" is the process of soil removal by moving water.

"Existing Structure" means, for floodplain management purposes, a structure which is in place before any reconstruction, rehabilitation, addition, or other improvement takes place.

"Existing Manufactured Home Park or Subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

"Expansion to an Existing Manufactured Home Park or Subdivsion" - means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Federal Emergency Management Agency", or FEMA, is the Federal agency responsible for administering the National Flood Insurance Program.

"FEMA" is the acronym for the Federal Emergency Management Agency.

"Fill" refers to the placement of natural sand, dirt, soil, rock, concrete, cement, brick or similar material at a specified location to bring the ground surface up to a desired elevation.

"FIRM" is the acronym for Flood Insurance Rate Map.

"Flood Fringe" refers to the portion of the 100-year floodplain which is outside the floodway (See definition of floodway below.)

"Flood Insurance Rate Map" **(or "FIRM")** refers to the official flood map of a community on which FEMA has categorized Special Flood Hazard Areas into risk premium zones.
flood maps

"Flood Insurance Study" **(or "FIS")** is the official report provided by FEMA. It contains flood profiles, floodway tables, engineering methods, and other descriptive and technical data.

"Floodplain Management" means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

"Flooding events" are general or temporary conditions of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, or from the unusual and rapid accumulation or runoff of surface waters from any source.

"Floodplain" refers to any land area susceptible to inundation by floodwaters from any source. For the purposes of this Code, floodplain refers to the land area susceptible to being inundated by the base flood.

"Floodplain Administrator" refers to the community official designated in the local Flood Damage Prevention Code as responsible for the Code's administration.

"Floodplain Development Permit" is a permit issued by the local Floodplain Administrator and is required before beginning any development in an area designated as a Special Flood Hazard Area on the community's FIRM.

"Floodproofing" is a combination of structural and nonstructural additions, changes, or adjustments to structures that reduce or eliminate the risk of flood damage.

"Floodproofing Certificate" refers to FEMA form 81-65, which for the purposes of this Code must be properly completed by a Professional Engineer or Architect licensed to practice in the State of Arkansas.

"Floodway" **or** ***"Regulatory Floodway"*** refers to a stream channel and the land to either side of the stream channel that must remain undeveloped and open in order to allow floodwaters to pass without increasing the base flood elevation more than a designated height. For the purposes of this Code, the height is one foot (1 ft.). Severe restrictions or prohibitions are imposed on development within the floodway.

"Flow-through openings" are openings specifically designed to allow floodwaters to flow into and out of enclosed spaces, minimizing the danger of foundation or wall collapse from lateral hydrostatic pressure.

"Functionally dependent use" is a use that requires a location or construction contrary to the requirements of the Code. Shipyards and docks are the most common examples of "functionally dependent uses," but in Arkansas, water and wastewater treatment facilities are often constructed on normally prohibited sites. Another example of a functionally dependent use might be an addition to a manufacturing facility with precision equipment which must align with existing equipment in a pre-existing, pre-FIRM building. Variances may be granted for functionally dependent uses.

"Grade" means the surface of the ground.

"Grading" means to smooth the surface of the ground, typically with heavy construction equipment.

"Highest Adjacent Grade" (HAG) means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historical Structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

4. Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:

    a. By an approved state program as determined by the Secretary of the Interior or;
    b. Directly by the Secretary of the Interior in states without approved programs.

"Hydrodynamic forces" are the forces and stresses associated with moving water, including impacts from objects carried in the water.

"Hydrostatic flood forces" are the forces and stresses associated with standing floodwaters.

"Lacustrine Flooding" is flooding associated with a lake.

"Lateral forces" are the horizontal hydrostatic forces associated with standing water. Water exerts an equal force in all directions, and as little as three feet of standing water can generate sufficient lateral force to collapse a foundation or wall.

"Lowest floor" refers to the lowest floor of the lowest enclosed area (including basement). For a typical **slab-on-grade construction**, the elevation of the lowest floor is the top of the first floor of the house. For a typical **basement foundation construction**, the elevation of the lowest floor is the top of the basement floor. For a typical **crawlspace foundation construction**, the elevation of the lowest floor is the top of the first floor of the house. For typical **split-level constructions**, the elevation of the lowest floor is the top of the first living area floor – the **garage floor** is not the lowest floor as long as there are no living areas in the garage and it is used solely for storage, parking vehicles and entry to the house. The elevation of the lowest floor of a **manufactured home**, however, is the bottom surface of the lowest floor joist.

"Manufactured Homes" or Structures are modular in nature and are constructed elsewhere and transported to another site for placement, assembly, or reassembly.

"Manufactured Home Park or Subdivision" means a parcel (or contiguous parcels) of land subdivided into two or more manufactured home lots for rent or sale.

"Mean Sea Level" (MSL) means, for the purposes of the NFIP, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's FIRM are referenced.

"Mixed Use Structures" are structures with both a business and a residential component, but where the area used for business is less than 50% of the total floor area of the structure.

"New Construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

"New Manufactured Home Park or Subdivision" - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

"No Adverse Impact principle" is a principle of restricting or prohibiting land development that does harm or "adversely affects" someone else's property or land.

"Nonresidential Structures" are structures used only for commercial or public purposes, such as businesses, schools, churches, etc...

"No-Rise Certificates" are formal certifications signed and stamped by a Professional Engineer licensed to practice in the State of Arkansas, demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that a proposed development will not result in any increase in flood levels within the community during the occurrence of a base flood event.

"Piers" are columns of masonry or other structural material (commonly cement blocks stacked up to support a manufactured home), usually rectangular, used to support other structural members.

"Pilings" are steel tubes driven to rock or a suitable soil bearing layer and connected to the foundation of a structure.

"Ponding" is a flooding effect where floodwaters accumulate in shallow depressions and linger until absorbed or evaporated.

"Recreational vehicles" means a vehicle which is:

(i) built on a single chassis;
(ii) 400 square feet or less when measured at the largest horizontal projections;
(iii) designed to be self-propelled or permanently towable by a light duty truck; and
(iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Risk Zones" categorize special flood hazard areas into groupings by the specific risk of flooding. Zones A, AE, AO, and AH are Special Flood Hazard Areas. See "X Risk Zones" in this section.

"Riverine flooding" is flooding associated with a river or stream channel.

"RV" is the acronym for recreational vehicle.

"Screw augers" are any type of anchor that twists into the soil, typically to a depth of 4 feet or more. They are not suitable for securing manufactured homes against floodwaters because saturated grounds often soften and fail to hold the anchor in place.

"Section 404 Wetlands Permit" is a permit required under Section 404 of the Clean Water Act for the discharge of dredged and fill material into any surface water of the United States. The US Army Corps of Engineers issues Section 404 permits.

"SFHA" is the acronym for Special Flood Hazard Area.

"Shallow flooding" means a depth of less than 3 feet.

"Slab anchors" are anchors where the hook of the anchor is wrapped around a horizontal rebar in the slab before the concrete is poured.

"Special flood hazard areas" are geographical areas identified on FEMA flood maps as being at-risk for flooding. The maps further categorize these areas into various flood risk zones A, AE, AH, and AO.

"Start of Construction" includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"State Coordinating Agency" is the agency that acts as a liaison between FEMA and a community for the purposes of floodplain management. The Arkansas Natural Resources Commission is the State Coordinating Agency for Arkansas.

"Stream channels" are depressed natural pathways through which water of any quantity routinely flows.

"Structural development" is a development that includes the placement or construction of a structure.

"Structure," for the purposes of floodplain management, refers to any building with two or more rigid walls and a fully secured roof on a permanent site or to any gas or liquid storage tank that is principally above ground.

"Substantial damage" is damage of any origin where the cost to restore a structure to its original undamaged state would equal or exceed 50% of the market value of the structure before any damage occurred. In determining whether substantial damage has occurred, estimators must use standard contractor and materials costs. There are no exceptions for homeowners who make their own repairs or for discounted or free raw materials.

"Substantial improvement" is any reconstruction, remodeling, addition or improvement to a structure with a cost equaling or exceeding 50% of the market value of the structure before any improvement. Improvements to correct identified violations of local health, sanitary or safety Codes are not substantial improvements, regardless of the cost, as long as they are the minimum improvement necessary to bring the structure up to Code. Alterations to historical structures are also exempted, as long as the improvement does not affect the structure's official status of "historical structure."

"Uses vulnerable to floods" are simply any land or structural uses that may be negatively affected by a flood.

"Variance" is a formal, written permission from the Appeals Board to construct or develop in a way that is inconsistent with the requirements of this Code. The variance only deals with this Code – the Appeals Board has no authority to waive any other governmental requirement, and has no say in the cost of flood insurance.

"Violation" - means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this Code is presumed to be in violation until such time as that documentation is provided.

"Watercourse alteration" refers to any change that occurs within the banks of a watercourse.

"Water Surface Elevation" - means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

"X Risk Zones" are a special group of insurance risk zones. One type, shown as non-shaded areas on FEMA issued flood maps, indicates a zone where flooding is not expected to occur. The second type, shown as shaded areas of FEMA flood maps, indicates a flood hazard area that is expected to be affected by the 500-year flood, but not by the 100-year base flood.

ARTICLE 2 ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Mayor of Springdale, or his/her designee, is hereby appointed the Floodplain Administrator.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

It is the duty and responsibility of the Floodplain Administrator or his/her designee to:

(1) **Obtain accreditation each year** as required by A.C.A. §14-268-106 through the State Coordinating Agency, which is the **Arkansas Natural Resources Commission**.

(2) **Administer and implement the provisions of this Code** and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) as they pertain to floodplain management

(3) **Review applications for Floodplain Development Permits** to:

a) Evaluate proposed projects for reasonable safety from flooding;

b) Evaluate proposed projects for conformance with No Adverse Impact principles;

c) Ensure that all other permits necessary (including Section 404 Wetlands Permits as required by the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) for proposed projects are obtained from the appropriate government agency prior to issuing a Floodplain Development Permit; and

d) Ensure that proposed projects conform to the applicable provisions of this Code.

(4) **Approve or deny applications for Floodplain Development Permits** on the basis of:

a) The proposed development's compliance or non-compliance with the provisions of this Code;

b) The expected flood elevation, flood water velocity, flood duration, rate of rise and sediment transport of the floodwaters expected at the proposed development site;

c) The proposed development's potential to adversely impact life and property by changing flooding patterns, changing erosion rates, or being swept onto other lands by flood waters;

d) The proposed development's susceptibility to flood damage;

e) The proposed development's compatibility with existing and planned community development;

f) The proposed development's accessibility by ordinary and emergency vehicles during flooding events;

g) The anticipated costs of providing governmental services to the proposed development during and after flooding events, including maintenance and repair of streets, bridges, facilities and public utilities such as sewer, gas, electrical and water systems;

h) The proposed development's functionally dependent use;

i) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed development; and

j) The relationship of the proposed use to the comprehensive plan for that area.

(5) **Interpret the exact location of the boundaries of Special Flood Hazard Areas** whenever a mapped boundary appears to be different from actual field conditions. (The sole purpose of this interpretation is to determinate the applicability of the provisions of this Code to the proposed project.)

(6) **Notify adjacent communities** and the State Coordinating Agency, which is the Arkansas Natural Resources Commission, a minimum of 60 days **prior to any alteration or relocation of a watercourse,** and submit evidence of all such notifications to FEMA.

(7) **Ensure that the flood carrying capacity** within an altered or relocated portion of a watercourse is not diminished, and that the alteration or relocation does not adversely impact any other lands.

(8) **Obtain, review and reasonably utilize**, whenever the current Flood Insurance Study or current Flood Insurance Rate Map does not provide **base flood elevation data, any base flood elevation data and floodway data** available from any Federal, State or other source. The Floodplain Administrator may obtain such data by requiring the applicant to submit it in conjunction with a Floodplain Development Permit application. (The sole use of this data is the administration of the provisions of this Code.)

(9) **Inspect floodplain developments as necessary** to ensure construction is in accordance with the application data that formed the basis for the decision to issue the Floodplain Development Permit.

(10) **Issue Certificates of Compliance**.

(11) **Maintain all records and documents pertaining to this Code for public inspection**.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A **Floodplain Development Permit is required** for all structural development, placement of manufactured structures, clearing, grading, mining, drilling, dredging, placement of fill, excavating, watercourse alteration, drainage improvements, roadway or bridge construction, individual water or sewer installations or any other development **in a Special Flood Hazard Area to ensure conformance with the provisions of this Code**.

SECTION D. PERMIT PROCEDURES

(1) **Application** for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard.

(2) The **documentation** required with each Application for a Floodplain Development Permit, and the specific provisions of this Code applicable to the proposed development, are dependent upon the type of development proposed and the Risk Zone of the proposed development site. Article 3, Section A contains standards for all developments in all Risk Zones. Article 3, Section B contains standards for specific development types in specific Risk Zones.

(3) The decision of the Floodplain Administrator to **approve or deny** issuance of a Floodplain Development Permit is **subject to appeal** to the designated Appeal Board. Within Springdale, Arkansas the designated Appeal Board is the Board of Adjustments.

SECTION E. <u>PROCEDURES FOR VARIANCE FROM THE REQUIRMENTS OF THIS CODE</u>

(1) Applicants must submit petitions for variances directly to the Appeal Board (Section E).

(2) Variances may only be issued:

a) if showing a good and sufficient cause;

b) granting of the variance will not result in any adverse impact upon other lands;

c) if granting of the variance will not result in any additional threats to public safety;

d) if granting of the variance will not result in extraordinary public expense;

e) if granting of the variance does not create a nuisance, cause fraud on or victimization of the public, or conflict with existing laws or ordinances;

f) if granting of the variance will not result in increased flood heights or an increase in expected flood velocities;

g) if the requested variance is the minimum necessary, considering the flood hazards, to afford the necessary relief; and

h) upon determination that the requested variance is necessary to avoid an extraordinary hardship to the applicant.

(3) Variances may not be issued for developments inside a regulatory floodway unless

a) all requirements of 44 CFR §65.12 are first met; or

b) the following requirements are met:

1. a No-Rise Certificate signed and sealed by a Professional Engineer licensed to practice in the State of Arkansas is submitted to document that no increase in the base flood elevation would result from granting a variance for the proposed development;
2. protective measures are employed to minimize damages during flooding events; and
3. the variance does not result in any adverse impact to other lands.

(4) Examples of developments for which variance petitions may be appropriate include but are not limited to

a) the new construction of, or substantial improvement to, a structure on a lot of 1/2 acre or less in size that is surrounded by contiguous lots with existing structures constructed below the base flood elevation;

b) for the reconstruction, rehabilitation or restoration of an historical structure, provided that:

1. the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure; and
2. the variance is the minimum necessary to preserve the historic character and design of the structure.

c) the new construction of, substantial improvement to, or other development necessary to conduct a functionally dependent use, provided that:

1. the criteria outlined in Article 2, Section E, (3) and (4) and Article 2, Section F are met, and
2. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

SECTION F. <u>APPEAL BOARD</u>

(1) Within Springdale, Arkansas the Board of Adjustments is the designated Appeal Board.

(2) The Appeal Board will consider an appeal only with allegations of an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this Code.

(3) Upon consideration of the factors noted in Article 1, Sections E and F, and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance.

(4) Appeal Board decisions are binding only upon the requirements of this Code, and have no bearing on the decision of any lending institution to require the purchase of flood insurance or on the rate determination of such insurance.

(5) Any time the Appeal Board issues a variance, it must provide the applicant with a formal written warning of an increased risk of flood damage due to removal of restrictions designed to lessen such risks. The notice must also warn of a corresponding increase in the cost of flood insurance, since the cost of such insurance will be commensurate with the increased risk.

(6) Aggrieved parties may appeal anydecision of the Appeal Board to a court of competent jurisdiction.

ARTICLE 3 PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A. GENERAL STANDARDS

The following standards apply to all developments in Special Flood Hazard Areas, regardless of the type of proposed development or the Risk Zone of the proposed site.

1. **All new and substantial construction or substantial improvements** shall be **designed (or modified) and adequately anchored** to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

2. **All new construction or substantial improvements** shall be constructed by methods and practices that **minimize flood damage**;

3. **All new construction or substantial improvements** shall be constructed **with materials resistant to flood damage**;

4. All **critical facilities** constructed or substantially improved in Special Flood Hazard Areas (SFHA) must be constructed or modified to **exceed 500-year flood protection** standards **or located outside the SFHA**.

5. **The placement or construction of all new structures must be in full compliance with the provisions of this Code**

6. For the purposes of this Code, all **mixed-use structures** are **subject to the more stringent requirements of residential structures**.

7. **A substantial improvement or substantial damage** to an existing structure **triggers a requirement to bring the entire structure into full compliance** with the provisions of this Code. The existing structure, as well as any reconstruction, rehabilitation, addition, or other improvement, must meet the standards of new construction in this Code.

8. **Any improvement to an existing structure that is less than a substantial improvement requires the improvement, but not the existing structure, to be in full compliance with the provisions of this Code**.

9. **All manufactured homes** to be placed within a Special Flood Hazard Area on a community's FIRM shall be **installed using methods and practices which minimize flood damage**. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. Screw augers or expanding anchors will not satisfy the requirement of this provision.

10. The design or location of **electrical, heating, ventilation, plumbing, and air conditioning equipment for new structures**, or for any improvements to an existing structure, must prevent water from entering or accumulating within the components during base flood events.

11. The design of **all new and replacement water supply systems** must minimize or eliminate infiltration of floodwaters into the system during base flood events.

12. The design of **all new and replacement sanitary sewage** systems must minimize or eliminate infiltration of floodwaters into the system during flooding events, and must prevent sewage discharge from the systems into floodwaters.

13. The placement of **on-site waste disposal systems** must avoid impairment to, or contamination from, the disposal system during base flood events.

14. **Construction of basement foundations in any Special Flood Hazard Area is prohibited**.

15. New construction and substantial improvements, with **fully enclosed areas (such as garages and crawlspaces)** below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are below the base flood elevation shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

    (a) A minimum of two openings on separate walls having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.

    (b) The bottom of all openings shall be no higher than 1 foot above grade.

    (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

16. The placement of **recreational vehicles (RV)** in Special Flood Hazard Areas must either

    (a) be temporary, as demonstrated by the RV being fully licensed, being on wheels or a jacking system, attached to the site only by quick disconnect type utilities and security devices, having no permanently attached additions, and being immobile for no more than 180 consecutive days; or else

    (b) meet all provisions of this Code applicable to manufactured home structures.

17. All proposals for the development of a **residential subdivision, commercial business park or manufactured home park/subdivision** must have **public utilities and facilities such as sewer, gas, electrical and water systems** located and constructed to minimize or eliminate flood damage.

18. All proposals for the development of a **residential subdivision, commercial business park or a manufactured home park/subdivision** must include an adequate **drainage plan** to reduce exposure to flood hazards.

19. All proposals for the development of a **commercial business park or a manufactured home park/subdivision** must include an adequate **evacuation plan** for the escape of citizens from affected nonresidential structures during flooding events.

SECTION B. <u>RISK ZONE SPECIFIC STANDARDS</u>

In addition to the General Standards, the following standards apply to specific development types in specific Risk Zones, except as revised in Section E of this Article. Risk Zones listed in this Code that do not appear on the current FIRM are not applicable.

---

(1) <u>In AE Risk Zones</u>:
Special Flood Hazard Areas with base floods determined

a) **For Residential Structures in Zone AE**:

1. For all new residential structures, the top surface of the lowest floor (and all mechanical and electrical equipment serving the structure) must have an elevation 2 feet or more above the published BFE. This elevation must be documented on an Elevation Certificate properly completed by a Professional Engineer, Surveyor or Architect licensed to practice in the State of Arkansas.

2. For all substantial improvements or substantial damage to existing residential structures, the entire structure becomes subject to the requirements of a new residential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing residential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new residential structure.

b) **For Nonresidential Structures in Zone AE**:

1. All new commercial, industrial or other nonresidential structures must either:

   a. have the lowest floor (including basement and all mechanical and electrical equipment serving the structure) elevated 2 feet or more above the base flood level; or
   b. be floodproofed such that, together with attendant utility and sanitary facilities, be designed so that below an elevation of 3 feet above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
   c. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify on a Floodproofing Certificate that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

2. For all substantial improvements or substantial damage to existing commercial, industrial or other nonresidential structures the entire structure becomes subject to the requirements of a new nonresidential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing nonresidential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new nonresidential structure.

c) **For Manufactured Homes in Zone AE**:

1. All manufactured homes that are placed or substantially improved on sites:

   a. outside of a manufactured home park or subdivision,
   b. in a new manufactured home park or subdivision,
   c. in an expansion to an existing manufactured home park or subdivision, or
   d. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated 2 feet or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

2. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision on the community's FIRM that are not subject to the provisions of paragraph (1.) of this section be elevated so that either:

   a. the lowest floor of the manufactured home (and all mechanical and electrical equipment serving the structure) is 2 feet or more above the base flood elevation, or
   b. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. For all substantial improvements or substantial damage to existing manufactured home, the entire structure becomes subject to the requirements of a new manufactured home.

4. For any reconstruction, rehabilitation, addition, or other improvement to an existing manufactured home that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new manufactured home.

d) **Where FEMA has not established a regulatory floodway in Zone AE**, no Floodplain Development Permit may be issued unless a detailed engineering analysis is submitted along with the application that demonstrates the increase in base floodwater elevation due to the proposed development and all cumulative developments since the publication of the current FIRM will be less than 1 foot.

(2) Floodways
High risk areas of stream channel and adjacent floodplain

a) Developments in regulatory floodways are **prohibited**, **unless**

1. **A No-Rise Certificate**, signed and stamped by a Professional Engineer licensed to practice in the State of Arkansas, **is submitted** to demonstrate through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed development would not result in any increase in flood levels within the community during the occurrence of a base flood event; **or**

2. **All requirements of 44 CFR §65.12 are first met**.

b) **No Manufactured Home may be placed in a regulatory floodway**, regardless of elevation height, anchoring methods, or No-Rise Certification.

---

(3) In AH or AO Risk Zones:
Special Flood Hazard Areas of shallow flooding

a) **For Residential Structures in Zones AH or AO**:

1. All new residential structures must be constructed with the top surface of the lowest floor (and all mechanical and electrical equipment serving the structure) elevated 2 feet or more above the published BFE, or 2 feet or more above the highest adjacent grade in addition to the depth number specified (at least 2 feet if no depth number is specified) on the community's FIRM. This elevation must be documented on an Elevation Certificate properly completed by a Professional Engineer, Surveyor or Architect licensed to practice in the State of Arkansas.

2. For all substantial improvements or substantial damage to existing residential structures the entire structure becomes subject to the requirements of a new residential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing residential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new residential structure

b) **For Nonresidential Structures in Zones AH or AO**:

1. All new commercial, industrial or other nonresidential structure must either:

   a. have the top surface of the lowest floor (and all mechanical and electrical equipment serving the structure) elevated 2 feet or more above the published BFE, or 2 feet or more above the highest adjacent grade in addition to the depth number specified (at least 2 feet if no depth number is specified) on the community's FIRM, with documentation on an Elevation Certificate properly completed by a Professional Engineer, Surveyor or Architect licensed to practice in the State of Arkansas; or
   b. be floodproofed such that the structure, together with attendant utility and sanitary facilities be designed so that below 3 feet or more above the published BFE in Zone AH, or 3 feet or more above the base specified flood depth in an AO Zone, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

2. For all substantial improvements or substantial damage to existing commercial, industrial or other nonresidential structures the entire structure becomes subject to the requirements of a new nonresidential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing nonresidential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new nonresidential structure.

c) **For Manufactured Homes in Zones AH or AO**:

1. All manufactured homes that are placed or substantially improved on sites:

   a. outside of a manufactured home park or subdivision,
   b. in a new manufactured home park or subdivision,
   c. in an expansion to an existing manufactured home park or subdivision, or
   d. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor (and all mechanical and electrical equipment serving the structure) of the manufactured home is elevated 2 feet or more above the published BFE, or 2 feet or more above the highest adjacent grade in addition to the depth number specified (at least 2 feet if no depth number is specified) on the community's FIRM, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

2. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision on the community's FIRM that are not subject to the provisions of paragraph 1. of this section be elevated so that either:

   a. the lowest floor of the manufactured home meets the elevation standard of paragraph 1., or
   b. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. For all substantial improvements or substantial damage to existing manufactured home, the entire structure becomes subject to the requirements of a new manufactured home.

4. For any reconstruction, rehabilitation, addition, or other improvement to an existing manufactured home that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new manufactured home.

d) **Where FEMA has not established a regulatory floodway in Zone in Zones AH or AO**, no Floodplain Development Permit may be issued unless a detailed engineering analysis is submitted along with the application that demonstrates the increase in base floodwater elevation due to the proposed development and all cumulative developments since the publication of the current FIRM will be less than 1 foot.

e) **Require adequate drainage paths** around structures on slopes, to guide flood waters around and away from proposed structures.

---

(4) In "A" Risk Zones:
Special Flood Hazard Areas with no base flood elevations determined

a) **In Zone A, The applicant or the applicant's agent must determine a base flood elevation prior to construction. The BFE will be based on a source or method approved by the local Floodplain Administrator**.

b) **For Residential Structures in Zone A**:

1. For all new residential structures, the top surface of the lowest floor (and all mechanical and electrical equipment serving the structure) must have an elevation 2 feet or more above the BFE. This elevation must be documented on an Elevation Certificate properly completed by a Professional Engineer, Surveyor or Architect licensed to practice in the State of Arkansas.

2. For all substantial improvements or substantial damage to existing residential structures, the entire structure becomes subject to the requirements of a new residential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing residential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new residential structure.

c) **For Nonresidential Structures in Zone A**:

1. All new commercial, industrial or other nonresidential structures must either:

   a. have the lowest floor (including basement and all mechanical and electrical equipment serving the structure) elevated 2 feet or more above the base flood level or

b. be floodproofed such that, together with attendant utility and sanitary facilities, be designed so that below an elevation of 3 feet above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

c. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify on a Floodproofing Certificate that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

2. For all substantial improvements or substantial damage to existing commercial, industrial or other nonresidential structures the entire structure becomes subject to the requirements of a new nonresidential structure.

3. For any reconstruction, rehabilitation, addition, or other improvement to an existing nonresidential structure that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new nonresidential structure.

d) For Manufactured Homes in Zone A:

1. All manufactured homes that are placed or substantially improved on sites:

a. outside of a manufactured home park or subdivision,
b. in a new manufactured home park or subdivision,
c. in an expansion to an existing manufactured home park or subdivision, or
d. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor (and all mechanical and electrical equipment serving the structure) of the manufactured home is elevated 2 feet or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

2. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision on the community's FIRM that are not subject to the provisions of paragraph (1.) of this section be elevated so that either:

    a. the lowest floor (and all mechanical and electrical equipment serving the structure) of the manufactured home is 2 feet or more above the base flood elevation, or
    b. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. For all substantial improvements or substantial damage to existing manufactured home, the entire structure becomes subject to the requirements of a new manufactured home.

4. For any reconstruction, rehabilitation, addition, or other improvement to an existing manufactured home that is less than a substantial improvement, only the improved area, but not the entire structure, becomes subject to the requirements of a new manufactured home.

e) **Base flood elevation data and a regulatory floodway**, utilizing accepted engineering practices, shall be generated for subdivision proposals and other proposed development including the placement of **manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser**, if not otherwise provided.