



Western North-South Connector Study

Virtual Public Meeting

August 29 - September 20, 2021

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Background



ARKANSAS STATE HIGHWAY COMMISSION

MINUTE ORDER

District: Nine
County: Benton
Category: Miscellaneous

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WHEREAS, IN BENTON COUNTY, local officials have suggested that a highway connection from the proposed Highway 612 (Springdale Northern Bypass) to Highway 549 (Bella Vista Bypass) west of Interstate 49 and in the vicinity of the Northwest Arkansas Regional Airport could improve regional mobility.

WHEREAS, a comprehensive study of the existing highway network, upcoming highway improvements and possible new location alternatives in this region should be considered.

NOW THEREFORE, the Director is authorized to conduct a planning study of the region west of Interstate 49 to identify the need for and feasibility of a western connection between the Springdale Northern Bypass and the Bella Vista Bypass.

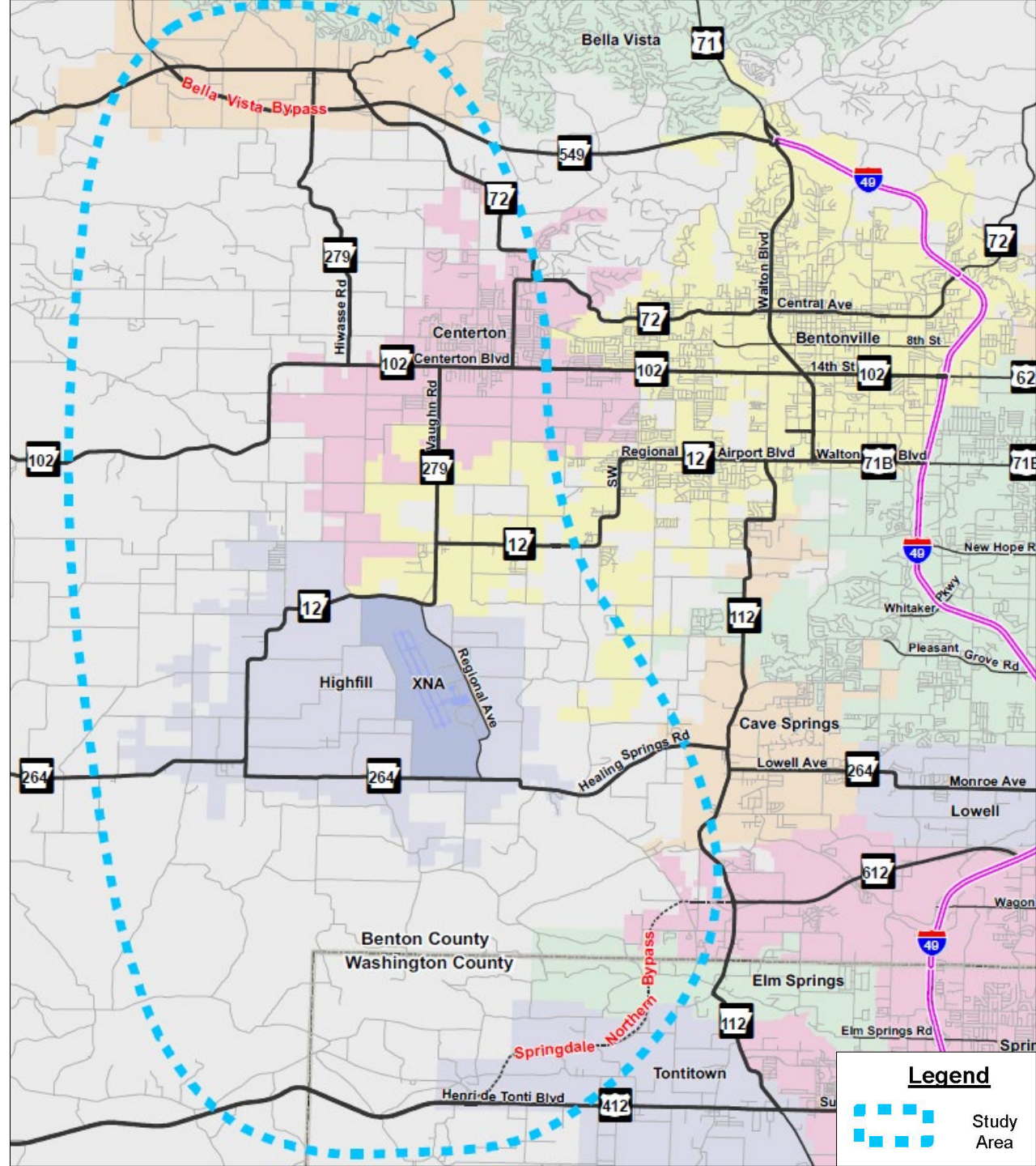
Approved: *John Hummel* Chairman
Paul Z. Beer Vice Chairman
Gregory Member
Alec Member
Philip T. Cobb Member

Submitted By: *Genie Juden*
Assistant Chief Engineer - Planning
for
Approved: *Scott A. Pennington*
Director
Minute Order No. 2019 011
Date Passed JAN 9 2019

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Study Purpose

- Determine the need for a new highway connection from the proposed Highway 612 (Springdale Northern Bypass) to Highway 549 (Bella Vista Bypass) west of Interstate 49
- Identify feasible alternatives for addressing regional needs



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Study Goals



Improve connectivity
(primary study goal)



Improve mobility/
relieve congestion



Improve reliability



Enhance safety/
security



Improve resiliency



Strengthen economic
competitiveness



Support alternative
transportation choices



Maintain a state
of good repair



Minimize impacts to
the natural, historic and
cultural environments

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Transportation Demand



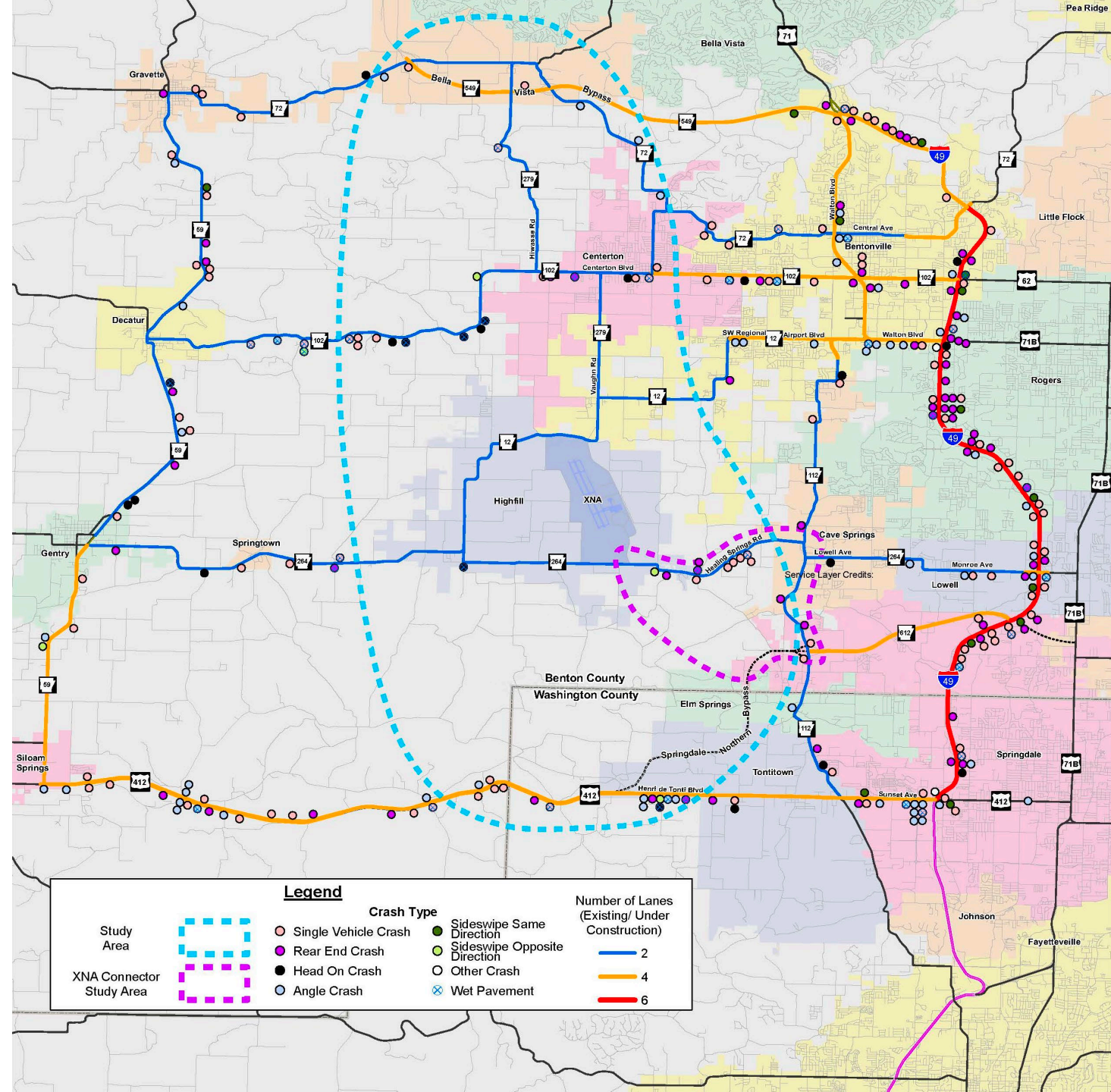
- Utilized historical data and latest Northwest Arkansas Regional Planning Commission (NWARPC) Travel Demand Model to forecast future traffic volumes
- Determined Vehicle Miles Travelled, Vehicle Hours Travelled, and Total Travel Delay for western Benton County
- These measures were used to quantify the benefits of a new roadway or other improvements

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Analysis

Evaluate various data such as:

- Traffic
- Safety
- Environmental



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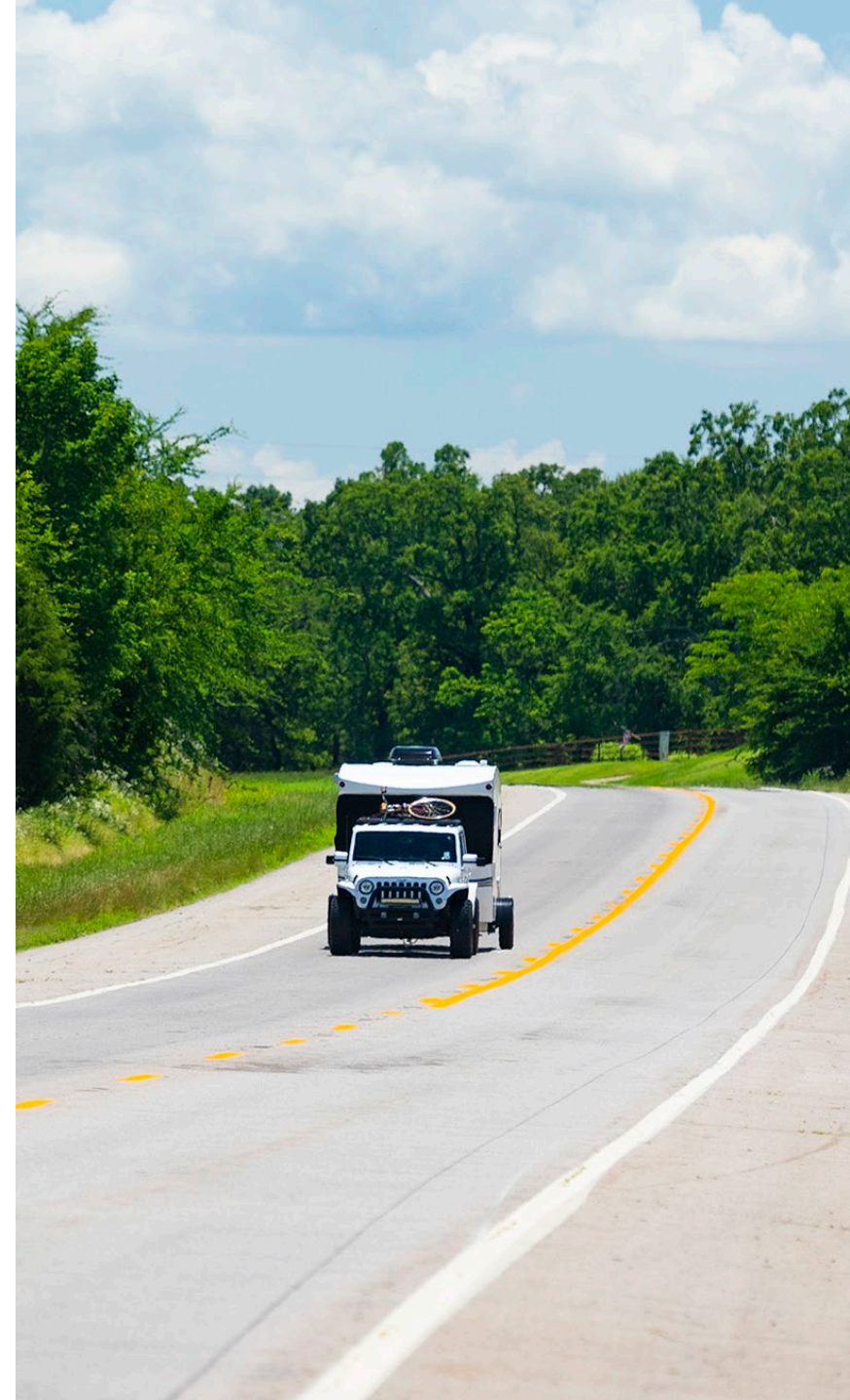
Public Involvement

Summer 2020 meeting results

Eighty-four percent of respondents felt there was a need for a north-south connector

MOST CRITICAL CONCERNS

- Lack of highway infrastructure to support regional growth
- Lack of direct north-south routes within the study area
- Traffic congestion on existing routes
- Indirect access to Northwest Arkansas National Airport



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**Potential Connector
Benefits**



Improve connectivity
(primary study goal)



Improve mobility/
relieve congestion



Improve reliability



Improve resiliency

A new roadway corridor could improve:

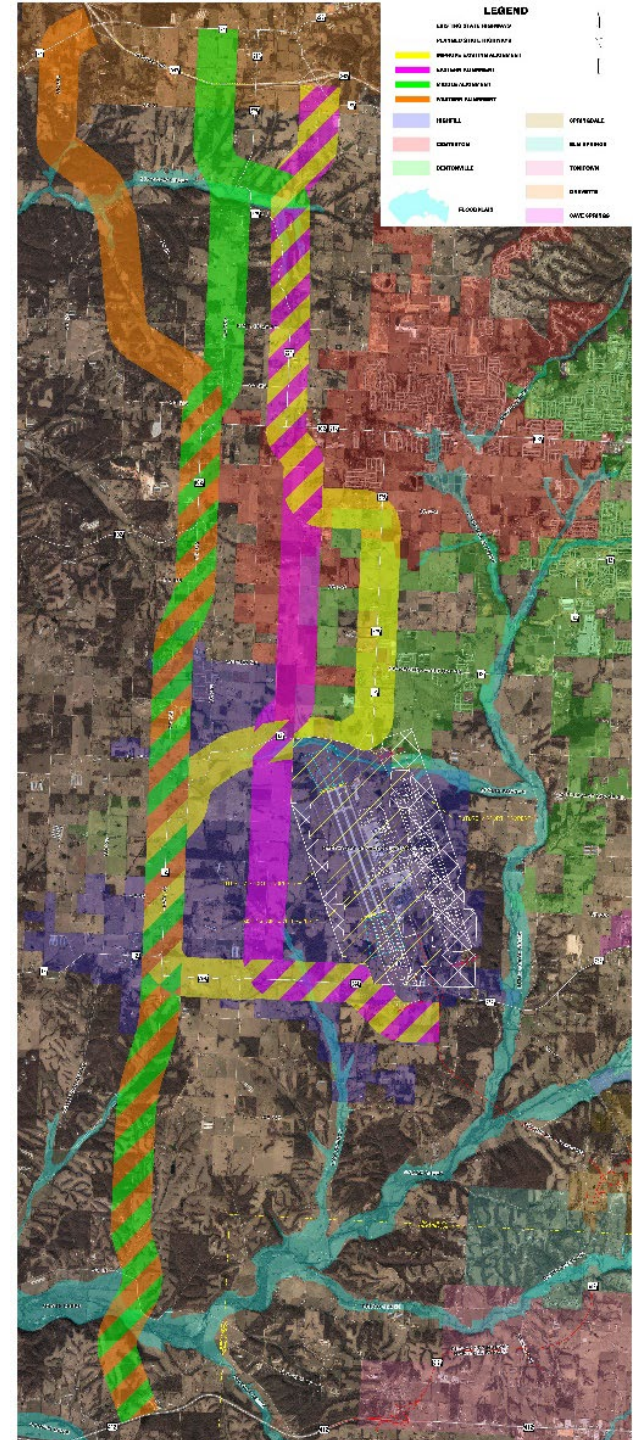
- Connectivity in western Benton County between Highway 612 and Highway 549
- Mobility by providing an alternate route to avoid congestion
- Access to Northwest Arkansas National Airport
- Resiliency of regional transportation system

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Action Alternatives

Four alternatives were developed and evaluated for:

- Cost
- Environmental and Community Impacts
- Connectivity and Access
- Travel Time
- System Reliability
- Coordination with local master street plans (MSPs)
- Constructability
- Traffic Attracted



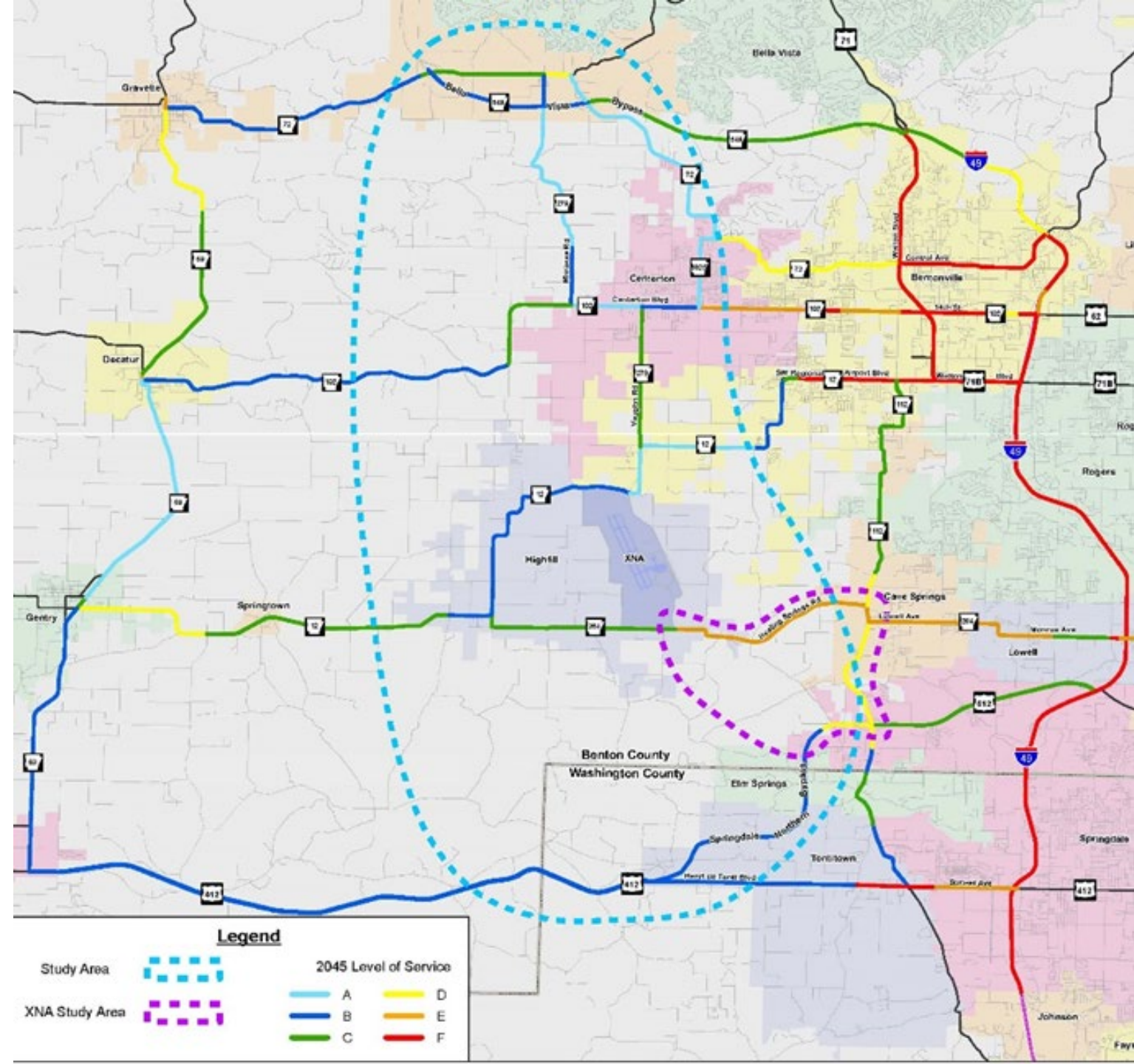
NO-ACTION ALTERNATIVE

Pros

- No environmental impacts

Cons

- No direct, efficient north-south route between I-49, Centerton, Highfill, and XNA
- Travel times will remain higher due to indirection and congestion
- No relief if incident occurs on other north-south routes



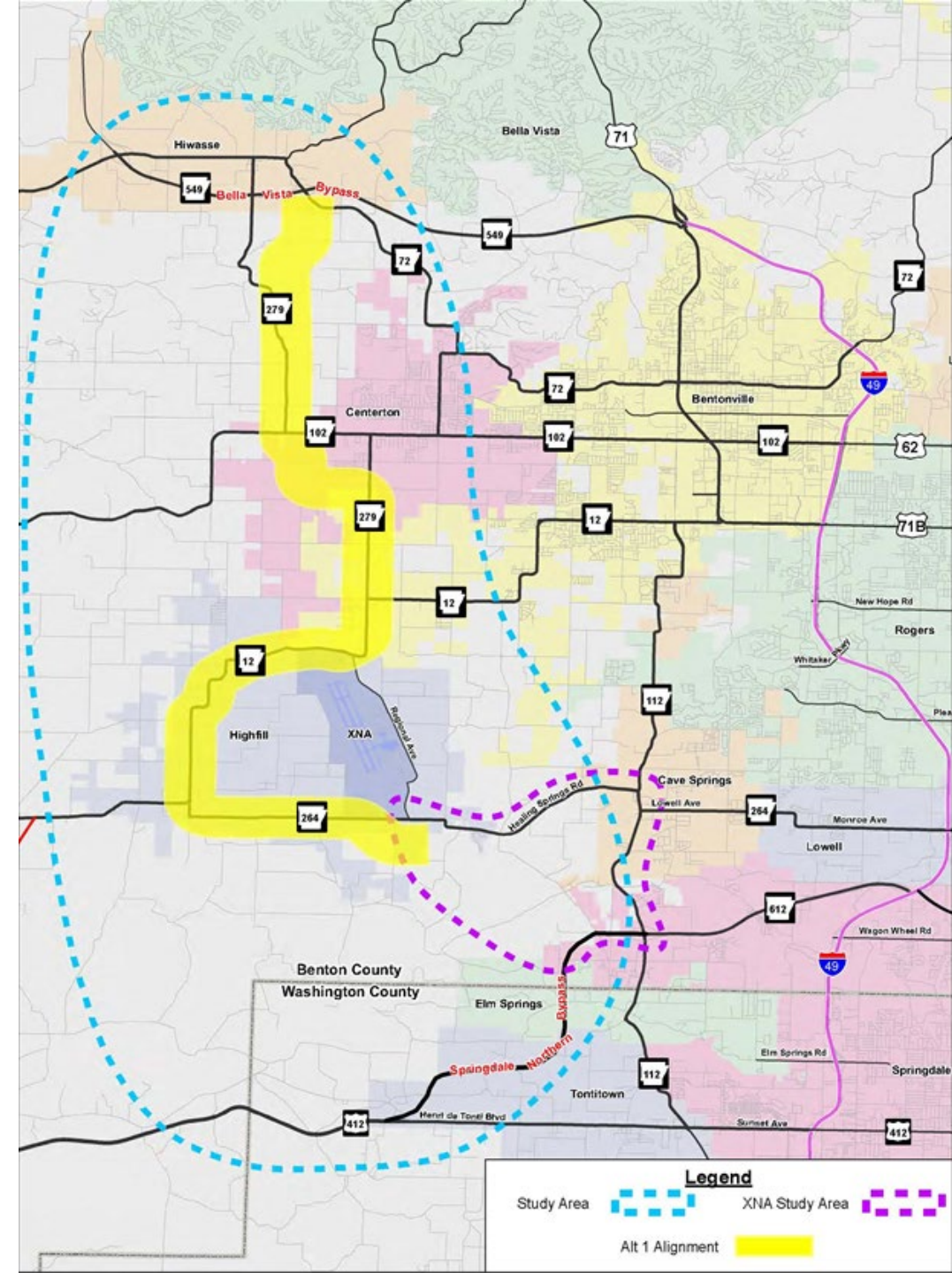
ALTERNATIVE 1

Pros

- Provides additional capacity to an existing route

Cons

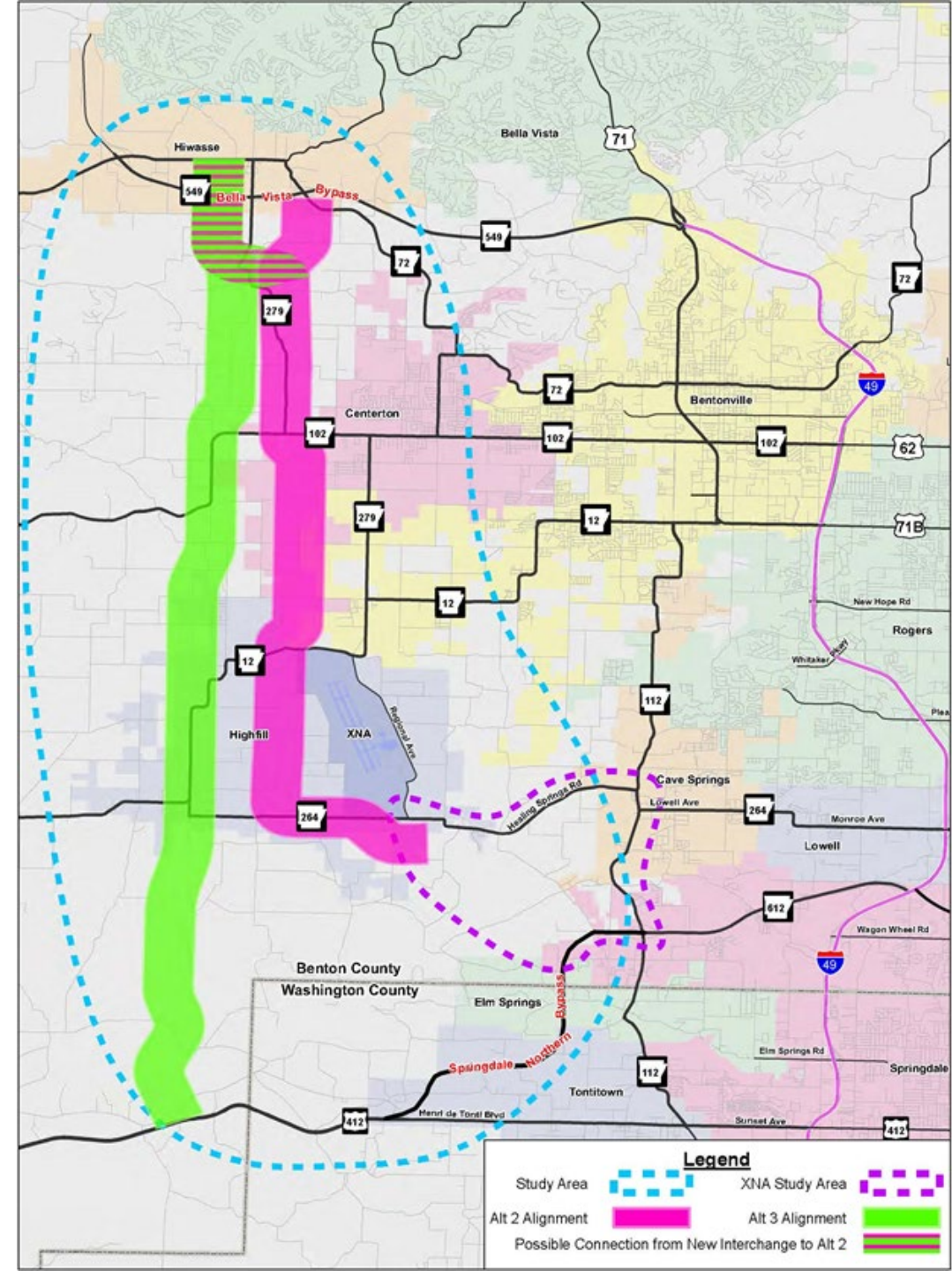
- No direct north-south route between I-49, Centerton, Highfill, and XNA
- Community impacts to the built environment
- Not carried forward
 - Does not improve connectivity



ALTERNATIVE 2

Pros

- Direct/efficient north-south route
- Improved travel times
- More resilient travel
- Coordinates well with MSPs
- Easily constructed in phases
- Low environmental impacts



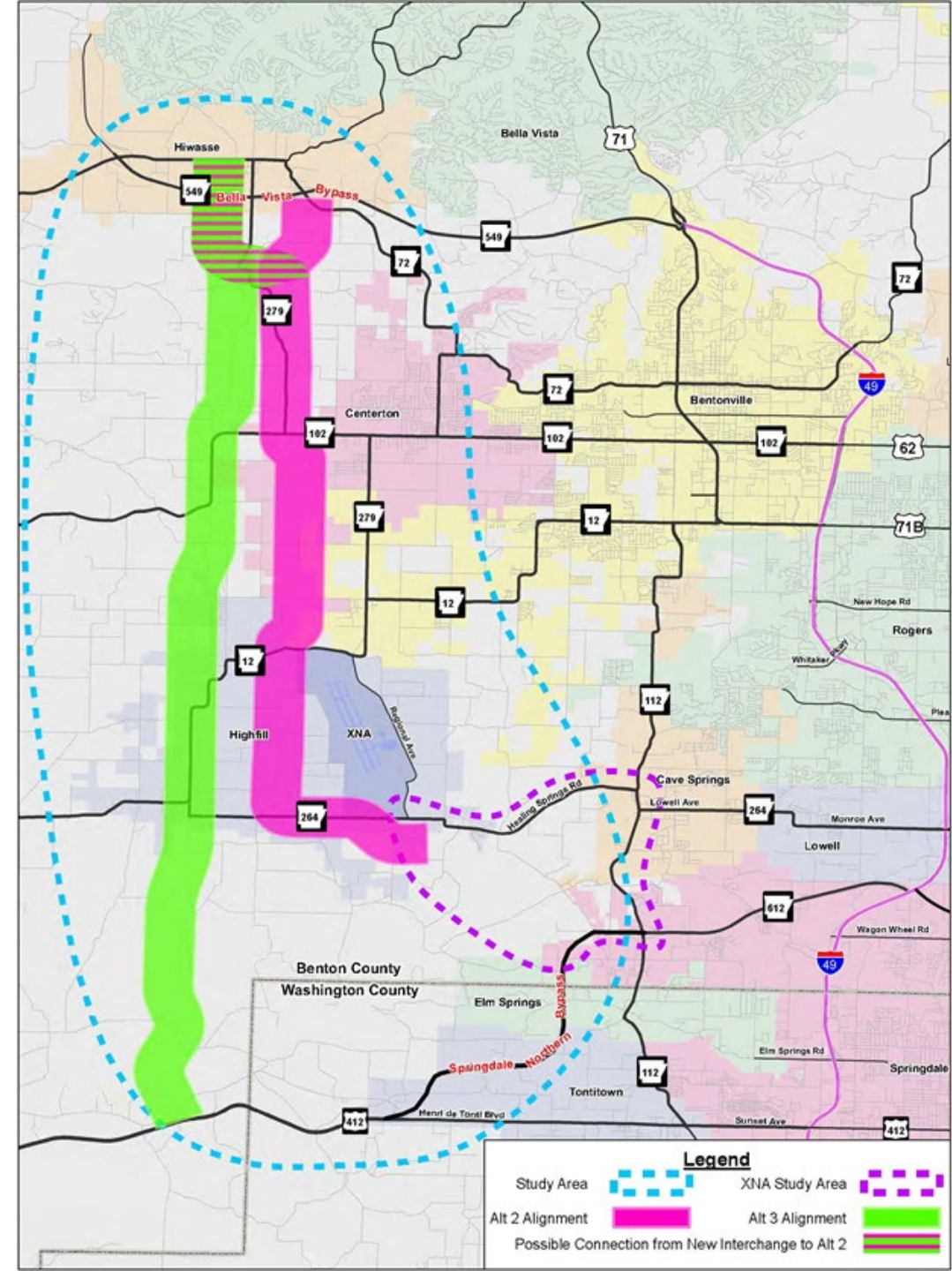
ALTERNATIVE 3

Pros

- Direct/efficient north-south route
- Improved travel times
- More resilient travel
- Attracts more traffic than alternatives

Cons

- Doesn't coordinate with MSPs
- More expensive to construct
- Environmental impacts



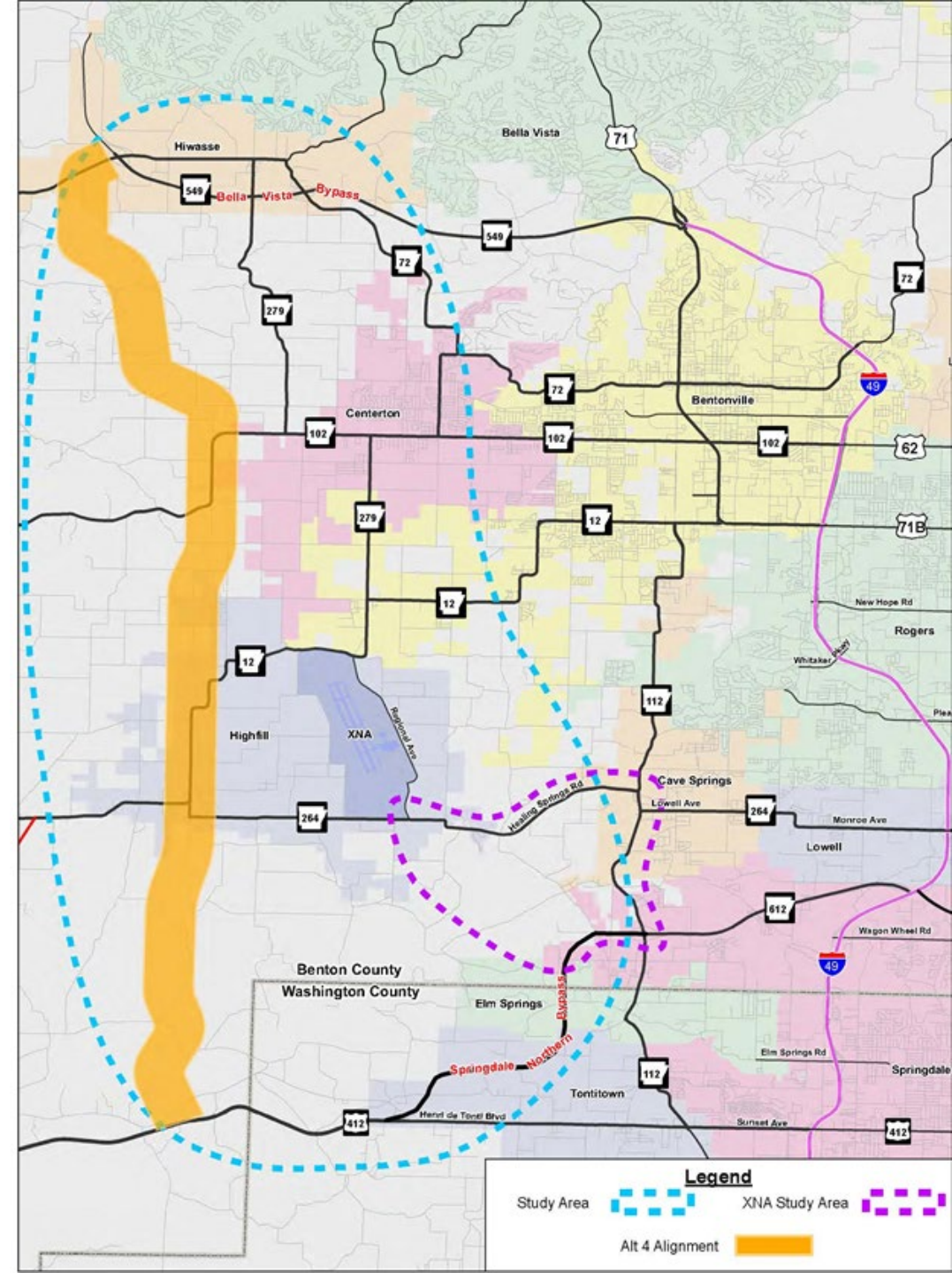
ALTERNATIVE 4

Pros

- Attracts traffic away from other routes

Cons

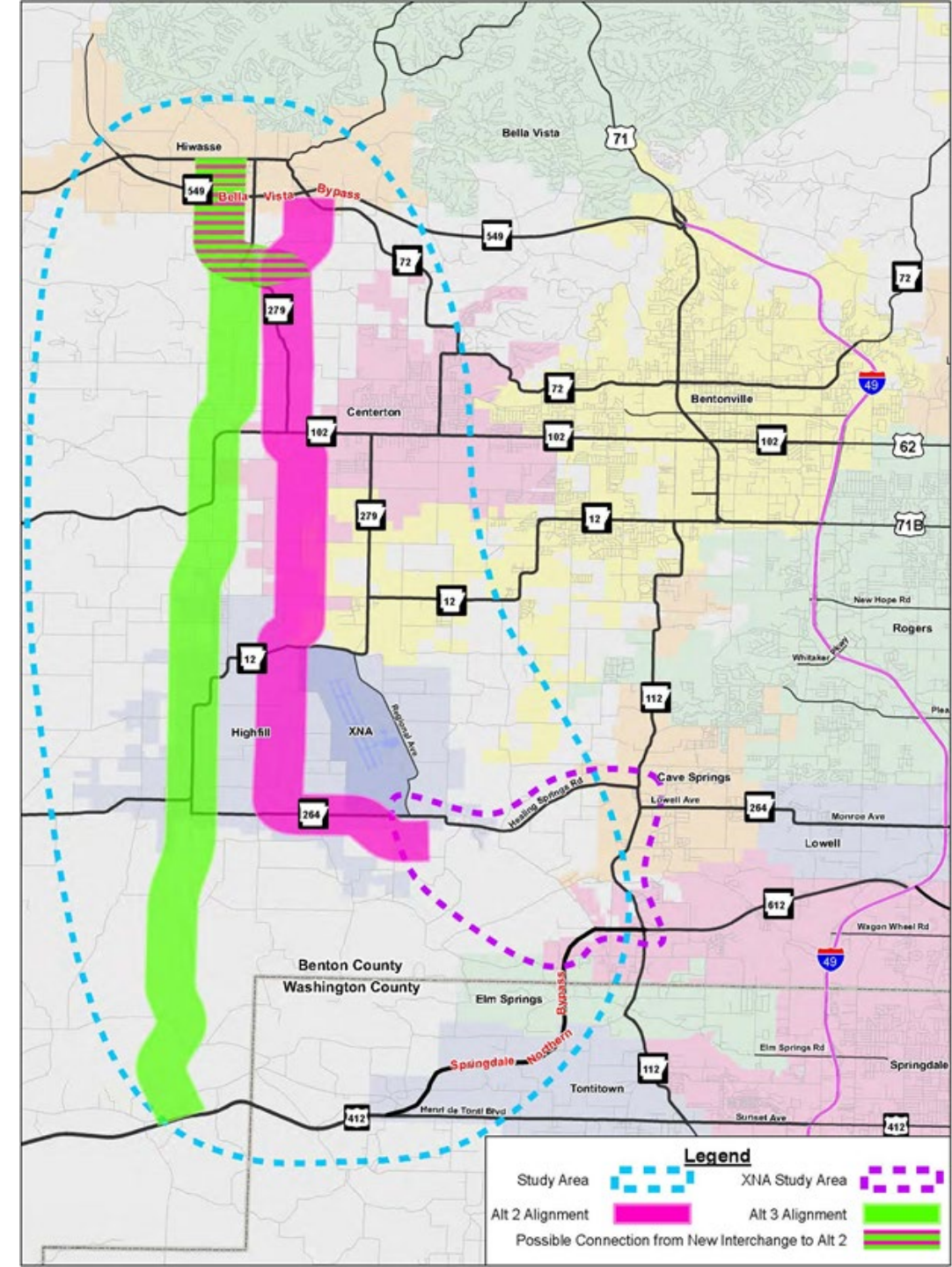
- Environmental challenges
- Difficult to construct
- Lower benefit for the cost
- Doesn't coordinate with MSPs
- More indirect
- Not carried forward
 - High construction costs and impacts



ALTERNATIVE 2 & ALTERNATIVE 3

Greater benefit to the transportation system by providing:

- Connectivity and access
- Travel time savings
- System redundancy
- Least impact on the community and natural environments



Evaluation Matrix

	Total Cost (Millions)	Environmental and Community Impacts	Connectivity and Access	Travel Time	System Redundancy	Coordination with MSPs	Constructability	2045 Traffic Attracted		
								BVB to Hwy 102	Hwy 102 to Vaughn Road	Vaughn Road to Hwy 264
No-Action	\$0	None	No direct, efficient north-south route between I-49, Centerton, Highfill, and XNA	Travel times will remain higher due to indirection and resulting congestion	No relief if an incident occurs on other north-south routes	N/A	N/A	6,000	10,000	4,900
Alternative 2 Eastern Alignment	\$179.4	Low	Direct, efficient north-south route between I-49, Centerton, Highfill, and XNA	Improved travel times to communities along corridor	Additional north-south route provides more resilient travel	Coordinates well with MSPs	Able to be constructed in phases	14,000 (8,000 New)	10,500 (10,500 New)	10,500 (10,500 New)
Alternative 3 Middle Alignment	\$249.2	Medium	Direct, efficient north-south route between I-49, Centerton, Highfill, and XNA	Improved travel times to communities along corridor	Additional north-south route provides more resilient travel	Does not coordinate well with MSPs	More difficult to construct in phases	9,000 (9,000 New)	13,000 (13,000 New)	18,000 (13,100 New)

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Next Steps

PUBLIC INVOLEMENT

Virtual Meeting

Sunday, August 29 through
Monday, September 20



WNSConnector.TransportationPlanRoom.com

- Study team will review stakeholder input and finalize study documents for presentation to the ARDOT Administration and Arkansas State Highway Commission
- At this time, no funds have been identified for implementation of any improvements discussed in this study
- Once funding is available, future steps include the environmental review process and design

Draft Final Report

Western North – South Connector Study
(Springdale - Gravette) (S)

Job 090573



Prepared For:
Arkansas Department of Transportation



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Questions/Comments