

HIGHWAY 412 CORRIDOR PLANNING STUDY UPDATE (OKLAHOMA TO MISSOURI)

**BAXTER, BENTON, BOONE, CARROLL, FULTON, GREENE, LAWRENCE,
MADISON, MARION, RANDOLPH, SHARP, AND WASHINGTON COUNTIES**



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EXECUTIVE SUMMARY



Prepared by Garver for the
Arkansas Department of Transportation
In cooperation with the Federal Highway Administration

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U.S. Department of Transportation. The views and opinions of the authors expressed herein
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ARKANSAS DEPARTMENT OF TRANSPORTATION

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INTRODUCTION

Highway 412 is the only continuous principal arterial parallel to, and north of, Interstate 40 in Arkansas. Highway 412 extends from Oklahoma to Missouri, connecting Interstate 49 to Highway 67 (Future Interstate 57). Beyond Arkansas, Highway 412 extends from Interstate 25 in New Mexico to Interstate 65 in Tennessee. As a Congressionally-designated High Priority Corridor and an element of the National Highway System, Highway 412 is part of a strategic network of highways that support the Nation's economy, defense, and mobility.

In February 2017, Governor Asa Hutchinson signed House Concurrent Resolution 1007, encouraging the expansion of the Highway 412 corridor to improve accessibility and create economic prosperity in northern Arkansas. In October 2017, the Arkansas State Highway Commission adopted Minute Order 2017-101 (attached as Appendix A) authorizing a study to update and expand the *US 412 Corridor Planning Study* from the Oklahoma State line to the Missouri State line.

EXISTING CONDITIONS

As shown in Figures 1a and 1b, the Highway 412 corridor is approximately 285 miles in length, consisting of approximately 125 miles with four or more travel lanes, approximately 42 miles with three lanes (primarily passing lane sections), and the remaining approximately 118 miles with two lanes. Traffic volumes range from approximately 3,300 vehicles per day in parts of Fulton County to more than 34,000 vehicles per day in Springdale. Anticipated traffic growth varies, consistent with the differences in regional population and employment growth.

PLANNING CONSIDERATIONS

The last major Highway 412 planning study – the *US 412 Corridor Planning Study* – examined Highway 412 from Norfolk Lake, in Baxter County, to the Missouri State line. This study was completed in 1998. It evaluated several alternatives, including an improved two-lane arterial, multilane undivided highway, four-lane divided highway, and four-lane freeway. All improvement alternatives were found feasible from a benefit-cost perspective, but the four-lane divided highway yielded the highest overall ratings and was the recommended alternative. That study also identified and prioritized numerous interim improvements, many of which have been implemented over the last 20 years.

The 2019-2022 Statewide Transportation Improvement Program (STIP) recognizes the need to improve and maintain Highway 412. As shown in Table 1, twenty-nine jobs are scheduled or underway on Highway 412, totaling more than \$160 million. The locations of capital and capacity projects that are scheduled or underway are illustrated in Figures 1a and 1b. Several recent and ongoing studies (including the *Harrison Bypass Study* [2015] and *Springdale Highway 412 Improvement Study* [ongoing]) have examined the need for improvements in urban areas. As an element of the Four-Lane Grid, the ultimate vision for Highway 412 is four or more travel lanes from Oklahoma to Missouri.

Figure 1a – Existing Conditions

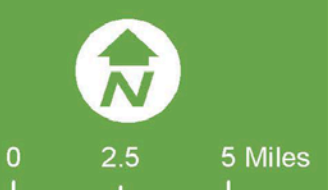


Highway 412 Corridor Planning Study Update

(Job 012313)

Existing Conditions, Part 1

Vicinity of Benton, Washington, Madison, Carroll, Boone, Marion and Baxter Counties



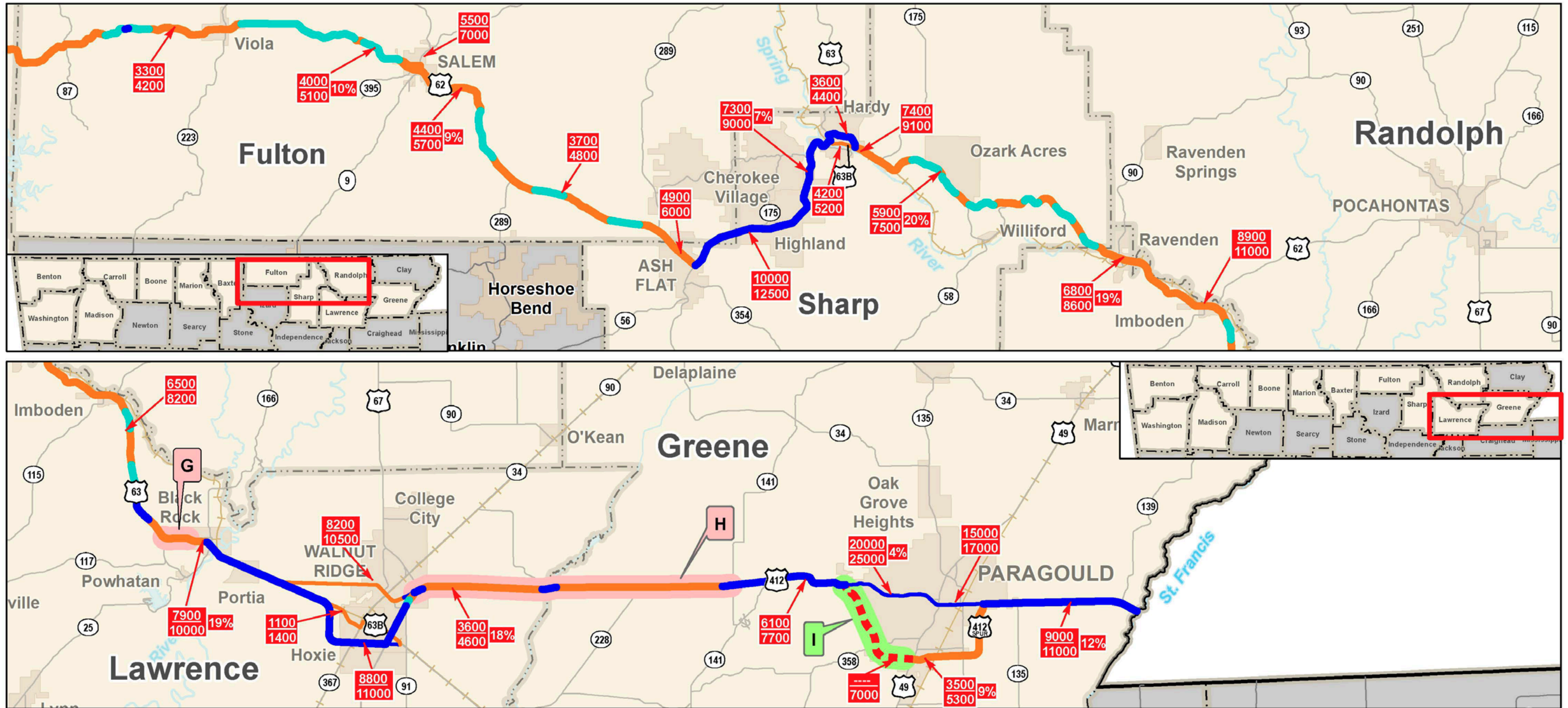
Legend

Work Scheduled or Underway		Average Daily Traffic (ADT)		Number of Travel Lanes	
Major Widening	New Location	2017 ADT	2040 ADT		
Passing Lanes	Intersections/Widening	%	Trucks		

Note: Map does not show pavement preservation or bridge replacement projects.

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Figure 1b – Existing Conditions



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Existing Conditions, Part 2

Vicinity of Fulton, Sharp, Randolph, Lawrence and Greene Counties

Legend

Work Scheduled or Underway

 Major Widening	 New Location
 Passing Lanes	 Intersections/Widening

Note: Map does not show pavement preservation or bridge replacement projects.

Average Daily Traffic (ADT)

2017 ADT	2040 ADT	% Trucks
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Number of Travel Lanes

	2 Lanes		4 Lanes
	3 Lanes		2 Lanes (UC)

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Table 1. Jobs Scheduled or Underway

Project Label in Figure 1	Job Number	Location Termini Work	Length (in miles)	Amount Committed (in millions)	Year Scheduled
A	012326	Tontitown/Springdale/Elm Springs Hwy. 412 West to Hwy. 112 ROW Acquisition for Springdale Bypass	6.2	\$15.0	2021
B	012305	Tontitown Hwy. 112 Intersection Intersection Improvements	–	\$10.0	2022
C	090438	Harrison Hwy. 43 Intersection Intersection Improvements	–	\$1.3	2020
	090490	Harrison Various Inters. between Hwy. 980 and Hwy. 43 Inters. Improvements and Signal Coordination	–	\$1.6	2020
D	090578	Harrison Industrial Park Rd. to South Scope of Work to Be Determined	3.6	\$5.5 ¹	2023
E	090519	Bellefonte Hwy. 65/Hwy. 62 Intersection Install Traffic Signal	–	\$0.3 ²	Underway
F	090581	Boone County East of Bellefonte Construct One Set of Alternating Passing Lanes	2.4	\$4.0	2022
G	100981	Black Rock Hwy. 117 to Hwy. 25 Widen to Four Travel Lanes with Flush Median	2.1	\$8.0	2022
H	CA1003	Lawrence and Greene Counties Hwy. 67 to Hwy. 141 Widen to Four Travel Lanes with Flush Median	14.5	\$58.5 ²	Underway
I	100708	Paragould Hwy. 412 West to Hwy. 49 Construct Two Lanes of Western Portion of Bypass	5.2	\$13.9 ²	Underway
Not Shown	Various (14 jobs)	Various Pavement Preservation	116.2 ³	\$35.3 ⁴	Various
Not Shown	Various (5 jobs)	Various Bridge Preservation and Replacement	–	\$7.1	Various
TOTAL for Jobs Scheduled or Underway				\$160.5	

1 – The City of Harrison has offered to contribute up to \$2.5 million for this project. The initial construction cost estimate for the work proposed by the City (intersection improvements, lane widening, sidewalks, and drainage improvements) was \$22.7 million. This project has been identified for the Department’s Construction Manager-General Contractor (CMGC) Method of Procurement Pilot Program, at a cost of \$15.0 million.

2 – Current contract amount.

3 – Some pavement preservation jobs are for select sections. Actual treated mileage within study area may be less than mileage reported here.

4 – Estimate for pavement preservation jobs may include some bridge preservation activities.

PURPOSE AND NEED

The *Arkansas Long Range Intermodal Transportation Plan (LRITP)* identifies six goal areas that work together to accomplish the Department's mission. These goal areas inform the purpose of and need for improvements to Highway 412.

SAFETY AND SECURITY

Safety

Safety performance was analyzed using crash data from 2013 to 2017, with an emphasis on fatal and serious injury (KA) crashes and crashes involving commercial vehicles. Safety Investigation Areas were identified based on meeting one or more of the following criteria:

- KA crash rate for a highway segment was twice the statewide average for similar facilities;
- Multiple (generally five or more) KA crashes of the same type occurred along a highway segment;
- Multiple (generally three or more) KA crashes of the same type occurred at the same intersection;
- Multiple (generally 10 or more) commercial vehicle crashes of any type or severity occurred along a highway segment;
- Multiple (generally 2 or more) KA crashes involving commercial vehicles occurred at the same intersection or highway segment.

Based on these criteria, eighteen Safety Investigation Areas were identified for the Highway 412 study area.

The locations of KA crashes and Safety Investigation Areas are shown in Figures 2a and 2b. Three types of Safety Investigation Areas were defined, based on setting, typical crash types, and potential countermeasures (discussed in the Alternatives section):

- **Urban Highway Segments** (shown in **green**) – High traffic volume areas include a multitude of access points, which creates numerous vehicle conflicts and increases the likelihood of angle KA crashes.
- **Rural Multilane Highway Segments** (shown in **blue**) – Moderate traffic volumes traveling at high speeds encounter changing alignments and occasional access points, which increases the likelihood of angle, rear-end, and single-vehicle KA crashes.
- **Rural Two-Lane Highway Segments** (shown in **red**) – Low traffic volumes traveling at high speeds encounter changing alignments and occasional access points, which increases the likelihood of single-vehicle KA crashes and some angle KA crashes.

Further analysis of each Safety Investigation Area will be needed to confirm initial findings and to determine the feasibility of improving safety in those areas.

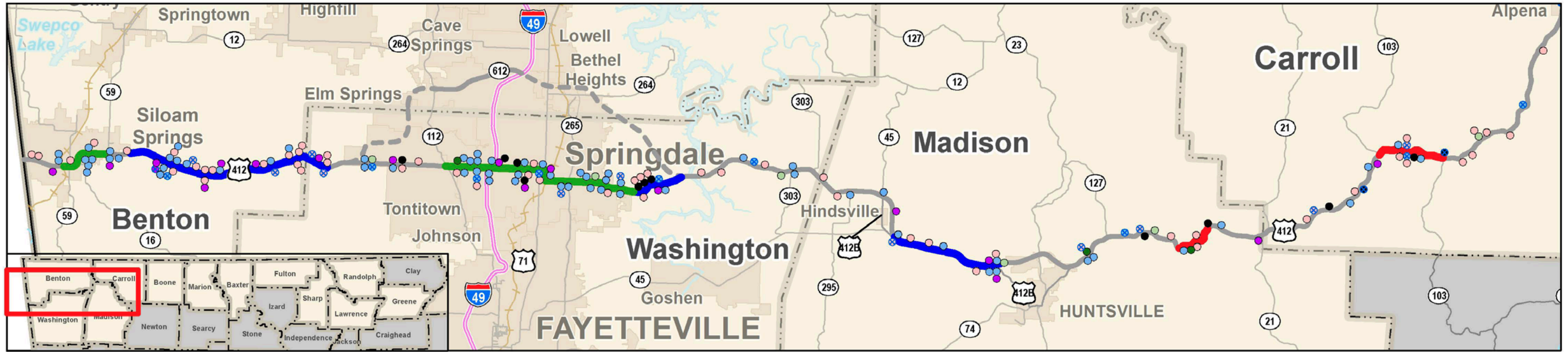
Security

A *secure* transportation system is free from harm, tampering, natural disasters, and extreme weather events. When security is compromised, the continued movement of people and goods depends upon the resiliency of the system. *Resiliency* refers to the ability of the transportation system to recover from major disruptions, such as roadway failures, major incidents, work zones, or other roadway closures. A resilient system provides alternate routes to accommodate travelers when their desired route is not available.

Highway 412 is the only continuous east-west arterial in northern Arkansas and provides system resiliency as an alternative to Interstate 40. The need for such resiliency was demonstrated during the 2019 Arkansas River flood event, when flooding nearly closed portions of Interstate 40 west of Conway. As part of the emergency management planning performed by ArDOT, Highway 412 was identified as an alternative route for traffic impacted by Interstate 40 flooding.

For traffic on Highway 412, two primary threats to resiliency were identified: flooding and seismic events. Highway 412 crosses numerous waterways, some of which have flooded in the past, resulting in temporary closures at various locations along the corridor. Flood risk mitigation should be considered when locations with a history of flooding are improved. In addition, several bridges along the corridor were constructed before modern seismic design standards were developed. Some of those structures, particularly in Lawrence and Greene Counties, may be at risk during seismic events. It is anticipated that structures that do not meet modern seismic design standards will be replaced as Highway 412 is improved or during the normal course of structure replacement.

Figure 2a – KA Crash Locations and Safety Investigation Areas



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KA Crash Locations & Safety Investigation Areas, Part 1

Vicinity of Benton, Washington, Madison, Carroll,
Boone, Marion and Baxter Counties

Legend

○ Single Vehicle Crash	○ Sideswipe Opposite Direction Crash	█ Urban Highway Segment
● Rear End Crash	● Sideswipe Same Direction Crash	█ Rural Multilane Highway Segment
● Head On Crash	○ Other Crash	█ Rural Two-Lane Highway Segment
● Angle Crash	⊗ Wet Pavement Condition	

0 2.5 5 Miles

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Figure 2b – KA Crash Locations and Safety Investigation Areas



Highway 412 Corridor Planning Study Update
(Job 012313)

KA Crash Locations & Safety Investigation Areas, Part 2

Vicinity of Fulton, Sharp, Randolph, Lawrence and Greene Counties

Legend

○ Single Vehicle Crash	● Sideswipe Opposite Direction Crash	— Safety Investigation Areas
● Rear End Crash	● Sideswipe Same Direction Crash	— Urban Highway Segment
● Head On Crash	○ Other Crash	— Rural Two-Lane Highway Segment
● Angle Crash	⊗ Wet Pavement Condition	

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MOBILITY AND SYSTEM RELIABILITY

Recurring Congestion

Current and future (2040) traffic demand were analyzed to identify peak-hour operational needs along the Highway 412 main route. Locations with unsatisfactory traffic operations (current or future) include:

- Siloam Springs
- Springdale
- Huntsville Bypass
- Alpena
- Harrison
- Yellville
- Cotter
- Salem

Additionally, operational needs were identified for rural portions of Highway 412 through Lawrence County (Ravenden to Black Rock). Generally, traffic operations on business routes were not analyzed as part of this study. Business routes that may warrant further study in the future are identified in the Alternatives section.

Access Management

Access management refers to methods that promote the safe and efficient movement of people and goods by reducing roadway conflicts at street intersections and driveways. A large body of research indicates that as the number of access points increases, crash frequency increases and travel speeds decrease. Effective access management preserves the functional needs of the roadway while providing reasonable access to property.

With the exception of the four-lane divided portions of Highway 412, access management has not been implemented within the study area. Lack of access management contributes to poor operations and safety along some urbanized portions of Highway 412. In rural areas, where speeds are high, poorly located access points create a safety risk.

A high level of access management is recommended for Highway 412. For new locations, divided cross sections and partial control of access should be considered. For urban areas and areas that are expected to transition from rural to urban, access management plans should be considered so that future access points are designed and located to promote safety and mobility on Highway 412.

INFRASTRUCTURE CONDITIONS

As noted above, the Highway 412 corridor is approximately 285 centerline miles in length (not including business routes, spur routes, and other parallel routes). Less than one percent (approximately 0.2 centerline miles) of pavement is in poor condition, in comparison with approximately 32 percent of pavement (approximately 92.5 centerline miles) in good condition. Currently, fourteen pavement preservation projects (covering approximately 116 centerline miles) are scheduled or underway on the Highway 412 corridor.

There are 168 bridges and culverts within the study area. Of those, approximately three percent (five structures) are in poor condition, in comparison with 69 percent (116 structures) that are in good condition. Six bridges within the study area have posted weight limits, two of which are also in poor condition. Of the nine poor and/or posted bridges, six are scheduled to be replaced. It is recommended that all remaining load-posted bridges be strongly considered for inclusion in future STIPs.

MULTIMODAL TRANSPORTATION SYSTEM

Various local and statewide bicycle and pedestrian plans should be considered as projects on the Highway 412 corridor are developed. Prominent examples include:

- The *Northwest Arkansas Regional Bicycle and Pedestrian Master Plan (2015)*, which illustrates bicycle and pedestrian facilities on Highway 412; and
- The *Arkansas Bicycle and Pedestrian Transportation Plan (2016)*, which identifies Statewide Priority Bike Routes following Highway 412 east of Paragould and between Alpena and Mountain Home.

The Department's sidewalk and bicycle facility accommodation policies set forth the standards and conditions for constructing pedestrian and bicycle facilities on State highways.

ECONOMIC COMPETITIVENESS

Highway 412 serves local, regional and long-haul freight – including agricultural goods, medical supplies, and other goods produced in northern Arkansas. Truck volumes vary from approximately 400 trucks per day crossing the bridge at Norfork Lake to approximately 3,400 trucks per day west of Interstate 49 in Springdale. Highway 412 is also a commuting route between rural areas and major employment centers such as the Fayetteville-Springdale metropolitan area, Harrison, Mountain Home, and Paragould. In addition, Highway 412 is vital to tourism, connecting Arkansans to the many recreational opportunities and historic destinations throughout the region.

The potential economic impacts of improving Highway 412 were studied by Dr. Michael Pakko of the Arkansas Economic Development Institute. After reviewing the economic

conditions of the study area and the transportation economics literature, Dr. Pakko concluded:

[Highway] 412 connects two of the most dynamic regions in the state. Economic development in North-Central Arkansas has unexploited potential. An improved East-West transport corridor could help by: reducing transportation costs locally; expanding effective laborsheds; linking the state’s high-growth regions; bringing additional traffic/business to local communities; [and] alleviating congestion on alternative East-West routes. (Slide 47, from Dr. Pakko’s presentation, *Highway 412 Improvements and Economic Development*, delivered May 16, 2018, at Arkansas State University, Mountain Home)

Future-year (2040) traffic modeling indicates that a four-lane buildout would attract an additional 4,000 to 5,000 trips per day to Highway 412 between Interstate 49 (Springdale) and Highway 67 (Walnut Ridge). The projected increase in traffic volumes lends support to the economic development themes discussed by Dr. Pakko.

CONSTRAINTS

Preliminary environmental constraints were identified for the existing corridor from publicly available data. Due to the length of the study corridor and potential for new locations, this review does not include a complete list of potential constraints. As projects are developed, environmental constraints will need to be identified in greater detail to assess the feasibility of future improvements to Highway 412.

Preliminary utilities surveys were conducted to identify high-profile utilities and utilities that are owned by small utility providers. It is likely that any improvements to Highway 412 will include significant utility impacts.

PURPOSE AND NEED SUMMARY

The purpose of and need for improvements to Highway 412 were examined for each goal area of the *Long Range Intermodal Transportation Plan*. Table 2 provides a high-level summary of findings for the study area. Recommendations for improving specific locations are described in the Alternatives section.

Table 2 – Purpose and Need Summary

<i>Long Range Intermodal Transportation Plan</i> Goal Area	Findings
Safety and Security	<ul style="list-style-type: none"> • Eighteen Safety Investigation Areas identified for further analysis • Highway 412 provides resiliency to Interstate 40, but is vulnerable during major flooding or seismic events
Mobility and System Reliability	<ul style="list-style-type: none"> • Recurring congestion in major urban areas • Inadequate passing opportunities in some rural areas • Lack of access management, inconsistent with the functional needs of Highway 412
Infrastructure Condition	<ul style="list-style-type: none"> • Ninety-nine percent of pavements are in good or fair condition • Ninety-seven percent of structures are in good or fair condition, though some of those structures are load posted and others may not be designed for seismic events
Multimodal Transportation System	<ul style="list-style-type: none"> • Identified in regional and statewide bicycle and pedestrian plans
Economic Competitiveness	<ul style="list-style-type: none"> • Vital to local, regional, and long-haul freight movements • Essential for rural commutes to urban employment areas • Supports tourism and recreation across northern Arkansas
Constraints	<ul style="list-style-type: none"> • Further environmental study required on a project-by-project basis • Numerous small utility providers noted within study area

ALTERNATIVES

Based on an evaluation of current and future (2040) transportation needs, four strategic alternatives were identified for the Highway 412 corridor – System Preservation, Safety Improvements, Mobility Improvements, and Economic Development Improvements. Total planning-level cost estimates include costs for preliminary engineering, right-of-way acquisition, utility adjustments, construction, and construction engineering.

SYSTEM PRESERVATION ALTERNATIVE

This alternative would implement asset management strategies to maintain all pavement and structures within the Highway 412 study area in good or fair condition. This approach supports ARDOT's state of good repair goals, as described in the *2019 Transportation Asset Management Plan* (TAMP). Table 3 summarizes estimated preservation costs through 2040. These costs are in addition to projects that are currently scheduled or underway, including \$35.3 million for pavement preservation and \$7.1 million for bridge preservation or replacement (as shown in Table 1). It should be noted that these estimates do not include costs for routine maintenance (such as mowing, ditch clearing, or striping).

Cost estimates for pavement preservation are based on planning-level assumptions about pavement degradation and use of a generalized pavement strategy. The preservation strategy consists of a 10-year cycle of crack sealing in year 1 or 2; crack sealing or microsurfacing in year 3 or 4; and an overlay in year 10. Unit costs for each of these pavement preservation techniques are documented in the TAMP.

Table 3. System Preservation Cost Summary (2019 dollars, in millions)

Pavement Only		
Implementation	Construction Cost	Total Cost
Short-Term (Next 5 Years)	\$60	\$65
Mid-Term (5 to 10 Years)	\$95	\$105
Long-Term (10 to 20 Years)	\$280	\$305
SUBTOTAL Pavement	\$435	\$475
Structures Only		
Implementation	Construction Cost	Total Cost
Short-Term (Next 5 Years)	\$35	\$40
Mid-Term (5 to 10 Years)	\$25	\$30
Long-Term (10 to 20 Years)	\$40	\$45
SUBTOTAL Structures	\$100	\$115
Cost Summary – Pavement and Structures		
Implementation	Construction Cost	Total Cost
Short-Term (Next 5 Years)	\$95	\$105
Mid-Term (5 to 10 Years)	\$120	\$135
Long-Term (10 to 20 Years)	\$320	\$350
GRAND TOTAL For System Preservation	\$535	\$590

For bridges, the Deighton Total Infrastructure Management System (dTIMS) was used to identify the optimal initial treatment strategy for each structure (epoxy overlay, hydrodemolition, or replacement), the year of application, and the cost of the treatment. The cost of follow-up treatments and treatments not modeled in dTIMS (such as bridge painting and joint replacement) were also estimated and are included in the totals presented in Table 3.

SAFETY IMPROVEMENTS ALTERNATIVE

As shown in Figures 2a and 2b, eighteen Safety Investigation Areas were identified for the study area. Pending further evaluation, low-cost safety countermeasures that may be considered for implementation in the short-term (next five years) are as follows:

- **Urban Highway Segments** – Intersection improvements and access management plans
- **Rural Multilane Highway Segments** – Intersection improvements, enhanced signs and pavement markings, and surface treatments
- **Rural Two-Lane Highway Segments** – Rumble strips, enhanced signs and pavement markings, shoulder improvements, and surface treatments

The proposed safety countermeasures tend to have high benefit-cost ratios, which would make them eligible for funding through the Highway Safety Improvement Program (HSIP). Table 4 summarizes the estimated costs of this alternative.

Table 4. Safety Alternatives Cost Summary (2019 dollars, in millions)

Area Type	Construction Cost	Total Cost
Urban Highway Segments	\$6.1	\$8.1
Rural Multilane Highway Segments	\$18.8	\$23.9
Rural Two-Lane Highway Segments	\$6.3	\$7.1
GRAND TOTAL for Safety Improvements	\$31.2	\$39.1

Numerous pavement preservation jobs are currently scheduled that overlap with Safety Investigation Areas. The scope of each preservation job should be reviewed to determine if low cost safety improvements can be included at those locations. Additionally, as rural two-lane highway segments are widened, consideration should be

given to geometric modifications (for instance, curve straightening) within Safety Investigation Areas.

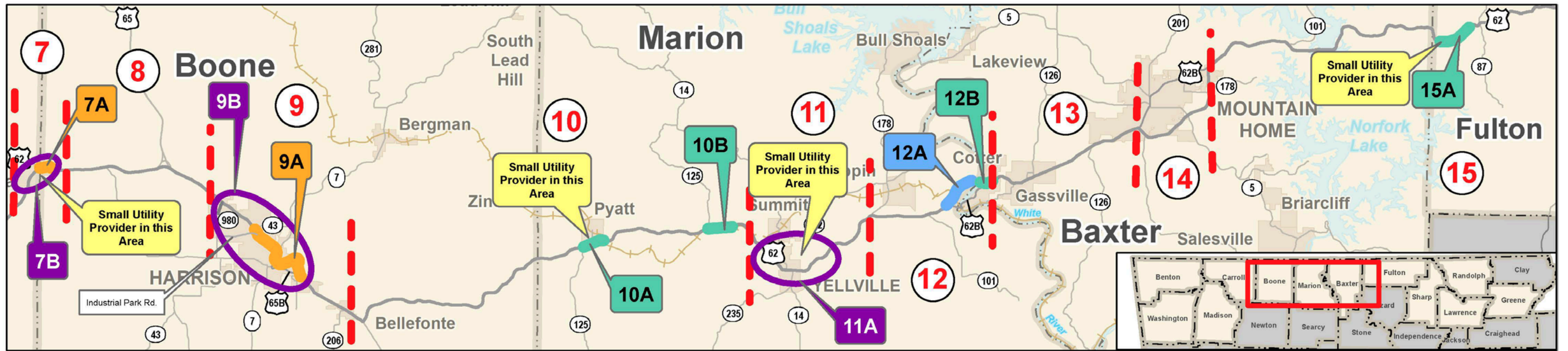
MOBILITY IMPROVEMENTS ALTERNATIVE

This alternative would address the current and future (2040) mobility needs of Highway 412. Because some mobility projects are more urgent, beneficial, costly, or environmentally sensitive to implement than others, the list of mobility projects has been divided as follows:

- **Short-Term Improvements** – Current mobility needs that – based on a preliminary review of cost estimates, stage of project development, and known environmental constraints – may be possible to implement within the next five years.
- **Mid-Term Improvements** – Current mobility needs and some future mobility needs that require additional system, environmental, or financial planning. It is recommended that these projects be implemented within the next 5 to 10 years.
- **Long-Term Improvements** – Future mobility needs that are not feasible to implement without substantial system, environmental, and financial planning. It is recommended that these improvements be implemented within the next 10 to 20 years.
- **Other Proposed Mobility Improvements** – Improvements suggested by stakeholders that would provide mobility benefits, but are not essential to providing acceptable traffic operations. Given the many mobility needs of the corridor, it is recommended that these improvements generally be given a lower priority than the Short-, Mid-, or Long-Term Improvements.

The location and proposed phasing of each mobility improvement is illustrated in Figures 3a and 3b, and the proposed work at each location is discussed below. For ease of reference, the corridor has been broken into segments, and the proposed improvements have been labeled by segment number, project, and phasing/priority. Based on the findings of the preliminary utilities survey, locations where proposed improvements may require utility relocations that would place a financial burden on the utility owner are noted in Figures 3a and 3b.

Figure 3a – Mobility Improvement Alternatives



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Mobility Improvement Alternatives, Part 1

Vicinity of Benton, Washington, Madison, Carroll,
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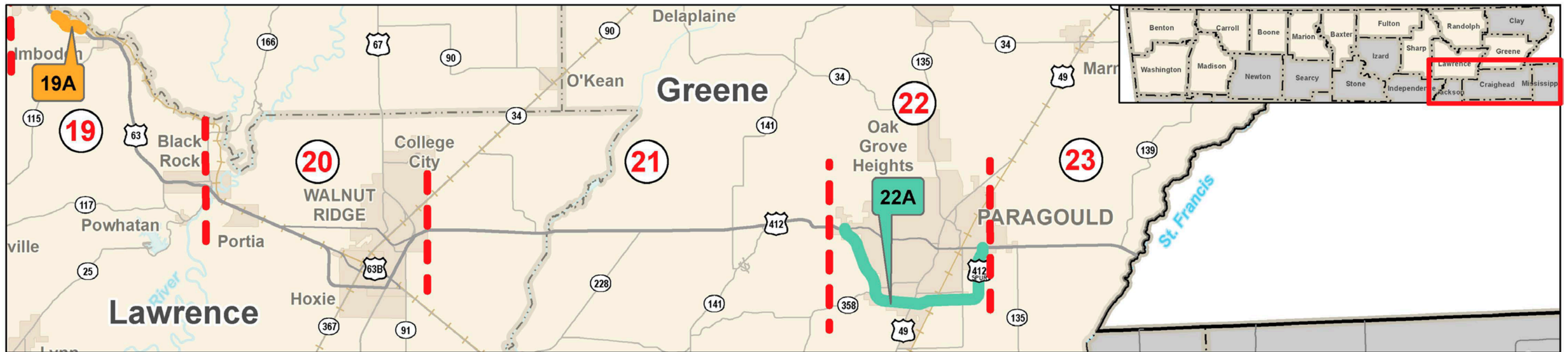
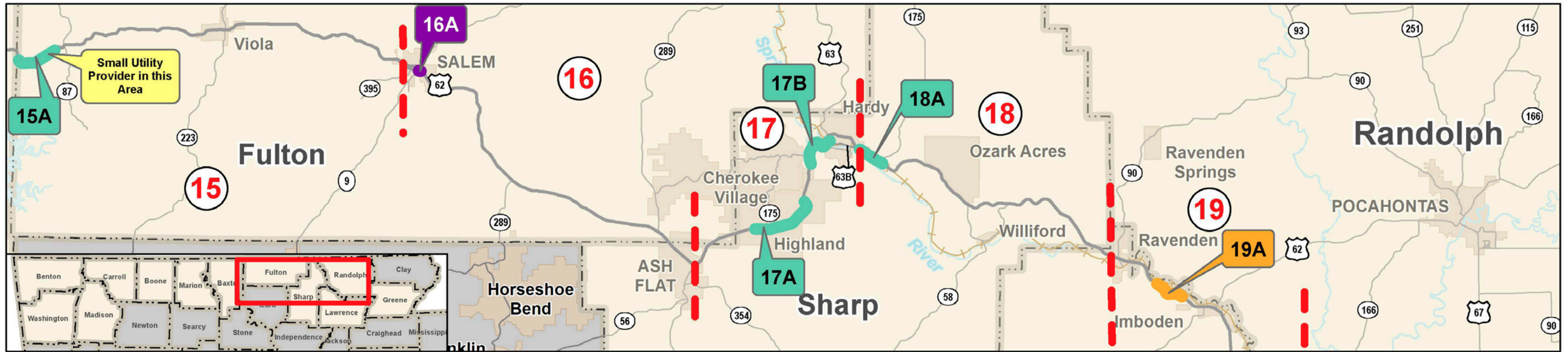
0 2.5 5 Miles

Legend

<p><i>Mobility Improvement Alternatives</i></p> <ul style="list-style-type: none"> Short-Term Long-Term Mid-Term Other 	<ul style="list-style-type: none"> Segment Boundary Segment Numbers
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Figure 3b – Mobility Improvement Alternatives



Highway 412 Corridor Planning Study Update
(Job 012313)

Mobility Improvement Alternatives, Part 2

Vicinity of Fulton, Sharp, Randolph, Lawrence and Greene Counties

Legend

<p><i>Mobility Improvement Alternatives</i></p> <ul style="list-style-type: none"> Short-Term Long-Term Mid-Term Other 	<ul style="list-style-type: none"> Segment Boundary Segment Numbers
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Segment 1 – Siloam Springs

In the mid-term, it is recommended that improvements be made from the end of the six-lane divided section to Highway 16, approximate length 1.7 miles. This location is labeled 1A in Figure 3a. In the long-term, additional improvements may be needed from Highway 16 to the eastern city limits, approximate length 1.4 miles. This location is labeled 1B in Figure 3a. Without improvements, traffic operations are expected to degrade to unacceptable levels as peak-hour traffic volumes continue to increase.

For the purpose of this study, it is assumed that these locations will be widened to six lanes with a raised median, consistent with the findings of the *Siloam Springs Highway 412 Improvement Study* (2002). The proposed cross-section would not only improve operations, but would also improve a Safety Investigation Area with a history of multiple angle KA crashes. However, an updated traffic operations study should be performed to determine the scope of improvements at these locations.

Segment 2 – Siloam Springs to Tontitown

No mobility needs were identified for this segment.

Segment 3 – Springdale

In the mid-term, it is recommended that the western portion of the Springdale Northern Bypass (Highway 412 West to Highway 112) be constructed, approximate length 6.2 miles. This location is labeled 3A on Figure 3a. Construction of this portion of the Springdale Northern Bypass would significantly improve the mobility of eastbound-to-northbound and southbound-to-westbound traffic between Highway 412 and Interstate 49. In addition, the proposed Northwest Arkansas Regional Airport Access (Job 090069) is currently under development and may connect with this portion of the Springdale Northern Bypass.

In the long-term, it is recommended that the eastern portion of the Springdale Northern Bypass (Interstate 49 to Highway 412 East) be constructed. Consideration should be given to phasing these improvements, first by constructing the approximately 3.2-mile segment between Interstate 49 and Highway 265 (labeled 3B in Figure 3a), and then by constructing the approximately 6.7-mile segment between Highway 265 and Highway 412 East (labeled 3C in Figure 3a). Additional consideration may be given to advance right-of-way acquisition between Interstate 49 and Highway 265, where there is some concern about the potential for development to encroach on the proposed alignment in this rapidly growing area.

Completing the Springdale Northern Bypass would significantly improve the mobility of Highway 412 through traffic, improve the mobility of westbound-to-northbound and southbound-to-eastbound traffic between Highway 412 and Interstate 49, and generally improve regional east-west mobility. The completion of the Springdale Northern Bypass is also expected to improve traffic safety by reducing traffic (including a high volume of truck traffic) on existing Highway 412, which was flagged as a Safety Investigation Area. Recommendations for improving the existing route will be included in the *Springdale Highway 412 Improvement Study* (ongoing).

Segment 4 – Springdale to Huntsville

No mobility needs were identified for this segment.

Segment 5 – Huntsville

In the long-term, it is recommended that Highway 412 be widened to four-lanes divided between Highway 412B West and Highway 127 North, approximate length 5.8 miles. This location is labeled 5A in Figure 3a. The proposed project will be needed not only to improve mobility, but also to improve a Safety Investigation Area at the west end of the

project area and a separate location with a history of KA crashes toward the east end of the project area.

Segment 6 – Huntsville to Alpena

No mobility needs were identified for this segment.

Segment 7 – Alpena

In the short-term, it is recommended that a two-way left-turn lane (TWLTL) be constructed from the Highway 412/Highway 62 intersection to the eastern City limits (approximate length 0.5 miles) to minimize traffic disruption due to left-turning vehicles. It has been reported that this issue is particularly acute during the morning peak, when motorists are traveling to and from the Alpena School District campus south of Highway 412. This location is labeled 7A in Figure 3a.

In the long-term, it is recommended that Highway 412/Highway 62 be widened to four travel lanes with a TWLTL through Alpena or that a four-lane bypass be constructed, approximate length between two and three miles, depending upon alignment. The western terminus for this work would be the end of the five-lane section on Highway 62 west of Alpena, and the eastern terminus would be the end of the five-lane section on Highway 412 east of Alpena. This location is labeled 7B in Figure 3a.

The need for additional improvements at this location is driven by a number of factors, including: high and increasing traffic volumes that result in vehicle platoons and limit turning opportunities from side streets; significant truck traffic; and potential for conflicts between through traffic and on-street parking and pedestrians. Further study is needed to determine the feasibility of widening the existing highway versus

constructing a bypass, based on environmental constraints (including potential impacts to historic structures) and public involvement.

Segment 8 – Alpena to Harrison

No mobility needs were identified for this segment.

Segment 9 – Harrison

Multiple projects (labeled C and D in Figure 1a and Table 1, and 9A in Figure 3a) have been scheduled to improve Highway 412 through Harrison. Jobs 090438 and 090490 will improve signal coordination and make improvements at multiple intersections between Highway 980 and Highway 43. Job 090578, a potential partnering project, will make improvements south of Industrial Park Road, approximate length 3.6 miles.

In the long-term, based on the results of the *Harrison Bypass Study (2014)*, a bypass of Harrison (approximate length between eight and nine miles, based on alignment) may be needed to provide satisfactory traffic operations on Highway 412. This location is labeled 9B in Figure 3a. Local officials have stated that a potential bypass should be considered a lower priority than any proposed improvements to the existing route since deficiencies along the existing route should be addressed as completely as possible prior to constructing a bypass.

Segment 10 – Bellefonte to Yellville

Stakeholders commented on the lack of passing opportunities within this segment, which is approximately 20 miles in length. Currently, the longest westbound stretch without a passing lane section measures approximately 12 miles, and the longest eastbound stretch without a passing lane section measures approximately 18 miles. Job 090581 will increase passing opportunities within this segment by constructing one

set of alternating passing lanes between Bellefonte and Pyatt. This location is labeled F in Figure 1a. As a result of this project, the longest westbound stretch without a passing lane section will be reduced to approximately 5 miles, and the longest eastbound stretch without a passing lane section will be reduced to approximately 11 miles.

Stakeholders suggested constructing an eastbound passing lane to match the westbound passing lane at Pyatt. This location is labeled 10A on Figure 3a. While this project would provide mobility benefits, current and projected traffic volumes at this location are not high enough to require additional passing lanes for satisfactory traffic operations. Therefore, constructing an eastbound passing lane near Pyatt is not viewed as a high-priority improvement at this time. If improvements are made at this location as a capital investment, it is recommended that the existing passing lane section (approximate length 1.0 miles) be evaluated for conversion to an ultimate cross-section (four travel lanes with an appropriate median) instead of constructing an alternating passing lane section.

A large poultry feed mill is under construction on Highway 412 west of Yellville. Comments made at a public meeting indicate that a significant number of trucks will enter and exit this facility each day. This location should be monitored for potential operational or safety conflicts relating to trucks entering and exiting that facility, and turning improvements (approximate length 0.5 miles) may be considered. This location is labeled 10B on Figure 3a.

Segment 11 – Yellville to Flippin

In the long-term, it is recommended that the initial two lanes of an ultimate four-lane divided bypass of Yellville be constructed, approximate length between four and five miles, assuming a northern alignment. This location is labeled 11A in Figure 3a. The need for a bypass at this location is driven by a number of factors, including: tight geometry resulting in an advisory speed of 15 mph entering Yellville from the west; high truck volumes through the downtown environment; potential for conflicts between through traffic and on-street parking and pedestrians; and difficulty turning from side streets during peak hours. While consideration should be given to widening the existing route, this does not appear to be feasible from an environmental standpoint based on likely impacts to existing structures.

Segment 12 – Flippin to Cotter

In the mid-term, it is recommended that Highway 412 be widened to four travel lanes with a flush median from Highway 62B West to the White River, approximate length 1.8 miles. This location is labeled 12A on Figure 3a. The transition from four travel lanes west of Cotter to two lanes over the White River and back to four travel lanes east of Cotter causes platooning through this section, which creates merge/diverge conflicts and results in vehicle delay. While widening the White River Bridge and short section of highway to the east to four travel lanes (total length approximately 1.0 miles) would provide additional benefits by eliminating platooning issues through this area, satisfactory operations can be achieved through 2040 without this additional work. Therefore, widening the White River Bridge and highway to the east (labeled 12B in Figure 3a) is not viewed as a high-priority improvement at this time.

Segment 13 – Cotter to Mountain Home

No mobility needs were identified for this segment.

Segment 14 – Mountain Home

No mobility needs were identified for this segment. In the future, it may be necessary to perform a detailed traffic operations study to determine the need for improvements along the business route through Mountain Home (Highway 62B).

Segment 15 – Mountain Home to Salem

Stakeholders commented on the lack of passing opportunities in this segment, particularly between Lake Norfolk and Viola, a distance of approximately 17 miles. Between Lake Norfolk and Viola, the longest westbound stretch without a passing lane section measures approximately 12 miles, and the longest eastbound stretch without a passing lane section measures approximately 14 miles. An illustrative location for the proposed passing improvements is labeled 15A in Figure 3a and Figure 3b.

While passing lanes would provide some mobility benefits, current and projected traffic volumes are not high enough to require passing lanes for satisfactory operations at this location. Therefore, providing passing lanes within this segment is not viewed as a high-priority improvement at this time. If improvements are made at this location as a capital investment, it is recommended that approximately one mile of the ultimate cross-section (four travel lanes with an appropriate median) be constructed instead of alternating passing lane sections.

Segment 16 – Salem to Ash Flat

In the long-term, it is recommended that the signalized intersection of Highway 412 and Highway 9 be improved. This location is labeled 16A in Figure 3b. Stakeholders commented that operations at this intersection are poor during peak travel periods, likely due in part to the lack of eastbound or westbound left-turn bays. It is noted that improvements to the eastbound and westbound intersection approaches would require

replacement of a nearby bridge, which is currently in fair condition. It is recommended that intersection improvements be deferred until the condition of the structure warrants replacement.

Segment 17 – Ash Flat to Hardy

Within the cities of Highland and Hardy, Highway 412 transitions from open shoulders to curb and gutter sections with narrow (10 foot) lanes. These locations are labeled 17A and 17B in Figure 3b, and measure approximately 3.0 and 1.9 miles, respectively. In Highland, stakeholders have reported that the drainage system is inadequate during heavy rains, which periodically results in the closure of an outside lane and introduces the possibility of hydroplaning. Thus, stakeholders have requested that these sections be improved to provide wider lanes and effective drainage.

While the described conditions are undesirable to some stakeholders, neither of the KA crashes that occurred within these sections between 2013 and 2017 were attributable to wet conditions or standing water. Additionally, only 11 percent of crashes between Highland and Hardy were attributable to wet conditions, which is lower than the statewide average (16 percent) for the same time frame. Moreover, the overall KA crash rate for this location was lower than the statewide average for similar facilities. Therefore, lane widening and drainage modifications at these locations are not viewed as a high-priority improvements at this time.

Segment 18 – Hardy to Ravenden

The City of Hardy has expressed interest in partnering with the Department to make improvements to Highway 412 between Hardy and Portia. In consideration of this potential partnership, the parties may explore the possibility of widening Highway 412 to four travel lanes with a flush median from the east end of the Hardy Bypass to the

eastern City limits (approximate length 1.6 miles), which would improve mobility through Hardy. This location is labeled 18A in Figure 3b.

Segment 19 – Ravenden to Black Rock

In the short-term, it is recommended that an approximately one-mile segment of Highway 412 between Ravenden and Imboden be widened to four lanes with an appropriate median. The need for this project is twofold: first, to improve traffic operations by increasing passing opportunities at a location with high truck volumes and other sources of delay; and second, to improve safety by revising the alignment of the double reverse curve section approximately one mile west of Imboden, where numerous single-vehicle KA crashes have occurred over the last five years. This location is labeled 19A in Figure 3b. Job 100981 (scheduled for 2022) will widen Highway 412 to four lanes with a flush median from Highway 117 to Highway 25 in Black Rock (labeled G in Figure 1b).

Segment 20 – Black Rock to Walnut Ridge

No mobility needs were identified for this segment.

Segment 21 – Walnut Ridge to Paragould

No mobility needs were identified for this segment, which will be widened to four travel lanes with a flush median under Job CA1003. This location is labeled H in Figure 1b.

Segment 22 – Paragould

The first two lanes of the eastern portion of the Paragould Bypass are open to traffic, and a project to construct the first two lanes of the western portion (Job 100708) is expected to be complete in 2020. Based on projected traffic volumes, the initial two lanes of the Paragould Bypass should provide satisfactory traffic operations through

2040. Therefore, completion of the remaining work (labeled 22A in Figure 3b), including two additional lanes (approximate length 10.5 miles) and interchanges at Highway 358, Highway 49, and Highway 69, is not viewed as a high priority at this time. In the future, it may be necessary to perform a detailed traffic operations study to determine the need for improvements along the signalized portion of Highway 412 through Paragould.

Segment 23 – Paragould to Missouri State Line

No mobility needs were identified for this segment.

The estimated costs of recommended (Short-, Mid-, and Long-Term) mobility improvements are summarized in Table 5. The costs of Other Proposed Mobility Improvements are summarized in Table 6.

Table 5 – Mobility Improvement Alternative Cost Summary (2019 dollars, in millions)

Project Label in Figure 3	Location Termini Work	Length (miles)	Cost Estimate		Proposed Phasing
			Const. Only	Total	
1A	Siloam Springs End of Six-Lane Section to Hwy. 16 Widen to Six Lanes ¹	1.7	\$16.0	\$20.7	Mid
1B	Siloam Springs Hwy. 16 to Eastern City Limits Widen to Six Lanes ¹	1.4	\$7.8	\$10.6	Long
3A	Tontitown/Springdale/Elm Springs Hwy. 412 West to Hwy. 112 Construct New Location Four-Lane Freeway	6.2	\$101.0 ²	\$114.3	Mid
3B	Springdale/Bethel Heights I-49 to Hwy. 265 Construct New Location Four-Lane Freeway	3.2	\$80.0 ³	\$102.4	Long
3C	Springdale/Bethel Heights Hwy. 265 to Hwy. 412 East Construct New Location Four-Lane Freeway	6.7	\$130.0 ³	\$166.4	Long
5A	Huntsville Hwy. 412B West to Hwy. 127 Widen to Four-Lanes Divided	5.8	\$35.8	\$45.5	Long
7A	Alpena Hwy. 62/Hwy. 412 Inters. to Eastern City Limits Construct Two-way Left-Turn Lane	0.5	\$1.4	\$1.9	Short
7B	Alpena Hwy. 62 West to Hwy. 412 East Widen to Four Lanes with TWLTL or Construct Bypass	2.5	\$13.4 ⁴	\$16.9	Long
9A	Harrison Industrial Park Rd. to South Scope of Work to be Determined	3.6	\$17.2 ⁵	\$25.1	Short
9B	Harrison Refer to <i>Harrison Bypass Study</i> Construct Four-Lane Divided Bypass	8.5	\$56.5	\$71.2	Long
11A	Yellville West of Yellville to East of Yellville Construct Two Lanes of Ultimate Four-Lane Bypass	4.5	\$19.5	\$25.6	Long
12A	Cotter Hwy. 62B West to White River Bridge Widen to Four Travel Lanes with Flush Median ⁶	1.8	\$10.3	\$13.1	Mid

Continued on Next Page

**Table 5 – Mobility Improvement Alternative Cost Summary (2019 dollars, in millions)
(continued)**

Project Label in Figure 3	Location Termini Work	Length (miles)	Cost Estimate		Proposed Phasing
			Const. Only	Total	
16A	Salem Hwy. 412/Hwy. 9 Intersection Improve Intersection ⁷	–	\$2.1	\$3.2	Long
19A	Lawrence County Ravenden to Imboden Widen to Four Travel Lanes (Median Type TBD)	1.0	\$4.9	\$6.2	Short
Sub-Total for Short-Term Mobility Improvements		5.1	\$23.5	\$33.2	Short
Sub-Total for Mid-Term Mobility Improvements		9.7	\$127.3	\$148.1	Mid
Sub-Total for Long-Term Mobility Improvements		32.6	\$345.1	\$441.8	Long
GRAND TOTAL For Recommended Mobility Improvements		47.4	\$495.9	\$623.1	All

1 – Traffic operations study required to refine scope of improvements.

2 – Construction cost estimate is the average of two estimates – one estimate based on 2016 cost per mile sheet and a second estimate based on recent jobs in the region. Total cost estimate is exclusive of \$15 million in project development costs in current STIP.

3 – Construction cost estimate based on cost of jobs in the region.

4 – Cost estimates reflect average of widening and new location alternatives.

5 – Job 090578. Potential partnering project. Cost estimates are for intersection improvements, lane widening, sidewalks, and drainage improvements, as proposed by the City of Harrison, at an estimated construction cost of \$22.7M. However, it is noted that this project has been identified for the Department’s Construction Manager-General Contractor (CMGC) Method of Procurement Pilot Program, at a cost of \$15.0 million. Cost estimates are exclusive of \$5.5M in funds already committed.

6 – Staff Minutes Job 090237.

7 – Work to be coordinated with future replacement of bridge A1532 (Town Creek).

**Table 6 – Other Proposed Mobility Improvements Cost Summary
(2019 dollars, in millions)**

Project Label in Figure 3	Location Termini Work	Length (miles)	Cost Estimate	
			Const. Only	Total
10A	Pyatt Existing Westbound Passing Lane Section Widen to Four Travel Lanes (Median Type TBD)	1.0	\$4.1	\$5.4
10B	West of Yellville Vicinity of New Feed Mill Construct Turning Improvements to Accommodate Site Traffic	0.5	\$1.6	\$2.0
12B	Cotter White River Bridge to East Widen Existing Bridge and Three/Four Lane Highway Segment to East	1.0	\$13.6	\$17.3
15A	Fulton County Vicinity of Fulton/Baxter County Line and Hwy. 87 Widen One Mile Segment to Four Travel Lanes (Median Type TBD)	1.0	\$5.3	\$6.6
17A	Highland East of Hwy. 175 Lane Widening, Sidewalks, and Drainage Improvements	3.0	\$9.6	\$12.9
17B	Hardy West of Spring River Bridge Lane Widening and Drainage Improvements	1.9	\$7.9	\$9.9
18A	Hardy Eastern Terminus of Hardy Bypass to Eastern City Limits Widen to Four Travel Lanes with Flush Median	1.6	\$7.7	\$9.9
22A	Paragould Hwy. 412 West to Hwy. 412 East Construct Interchanges and Remaining Two Lanes ¹	10.5	\$81.2	\$89.8
GRAND TOTAL For Other Mobility Improvements		20.5	\$131.0	\$153.8
1 – Jobs 100708, 100710, and 100711 used as cost basis for future work (excluding interchanges).				

ECONOMIC DEVELOPMENT ALTERNATIVE

The public involvement process revealed that many stakeholders believe that widening Highway 412 is critical for the economic development of northern Arkansas. As discussed above, Dr. Pakko concluded that improving Highway 412 could create economic opportunity in northern Arkansas by reducing transportation costs, expanding laborsheds, linking high-growth areas, and bringing additional traffic/business to communities along Highway 412.

Consistent with this economic development theme, this alternative consists of the remaining work (after the completion of the Short-Term, Mid-Term, Long-Term, and Other Proposed Mobility Improvements described above) required to complete Highway 412 to four or more travel lanes from Oklahoma to Missouri. The portions of Highway 412 that would be improved under this alternative are shown in orange in Figures 4a and 4b. Estimated costs by segment are summarized in Table 7.

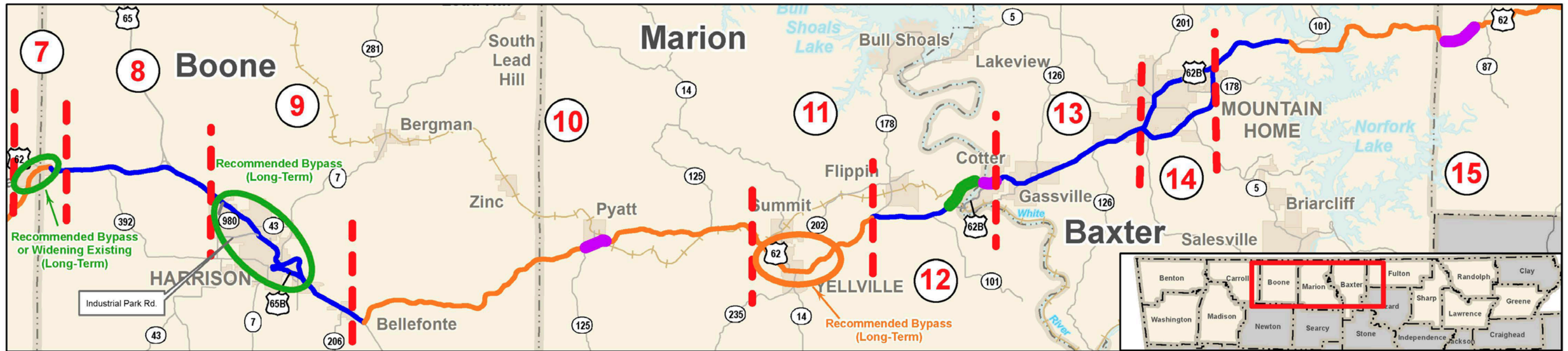
Table 7 – Economic Development Alternative Cost Summary (2019 dollars, in millions)

Location	Miles Improved	Construction Cost	Total Cost
Segment 6	29.4	\$168.3	\$213.4
Segment 10	20.3	\$107.3	\$136.0
Segment 11	7.0	\$34.6	\$43.7
Segment 15	26.7	\$174.4	\$220.8
Segment 16	18.2	\$87.0	\$110.2
Segment 17	0.3	\$2.4	\$3.2
Segment 18	12.4	\$67.1	\$85.2
Segment 19	11.8	\$72.2	\$92.5
Segment 23 ¹	1.6	\$5.1	\$6.8
GRAND TOTAL for Economic Development Improvements	127.7	\$718.4	\$911.8

1 – Existing location is four lanes with flush median. Proposed work would widen narrow lanes.

Pending future decisions about the cross-section at each location of improvement, the cost estimates in Table 7 represent the average of alternatives to widen these locations to four lanes with a flush median or to widen to four lanes divided. It is noted that the Highway 412 corridor traverses mountainous terrain, which significantly increases the costs of improving Highway 412.

Figure 4a – Four Lane Status and Proposed Economic Development Improvements



Highway 412 Corridor Planning Study Update
(Job 012313)

Four Lane Status, Part 1

Vicinity of Benton, Washington, Madison, Carroll,
Boone, Marion and Baxter Counties

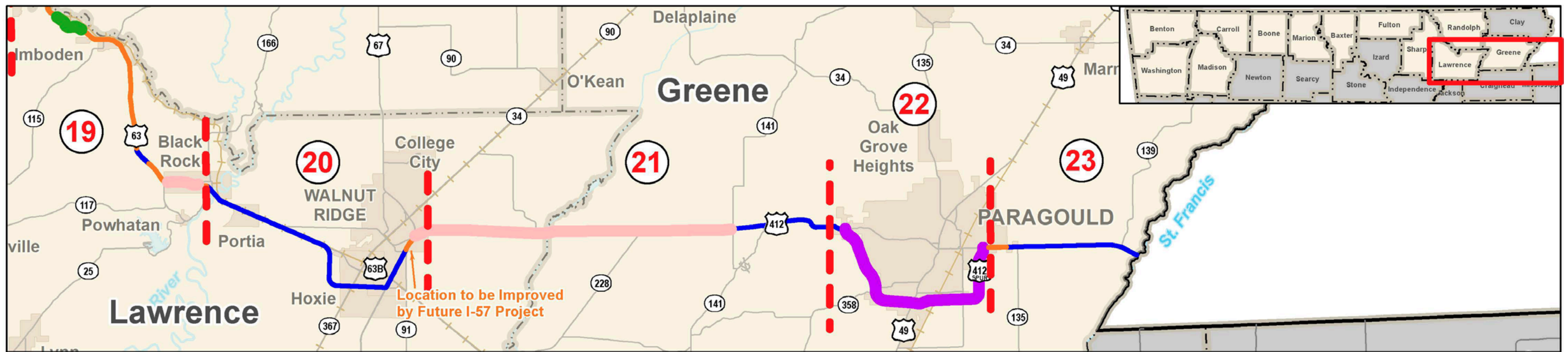
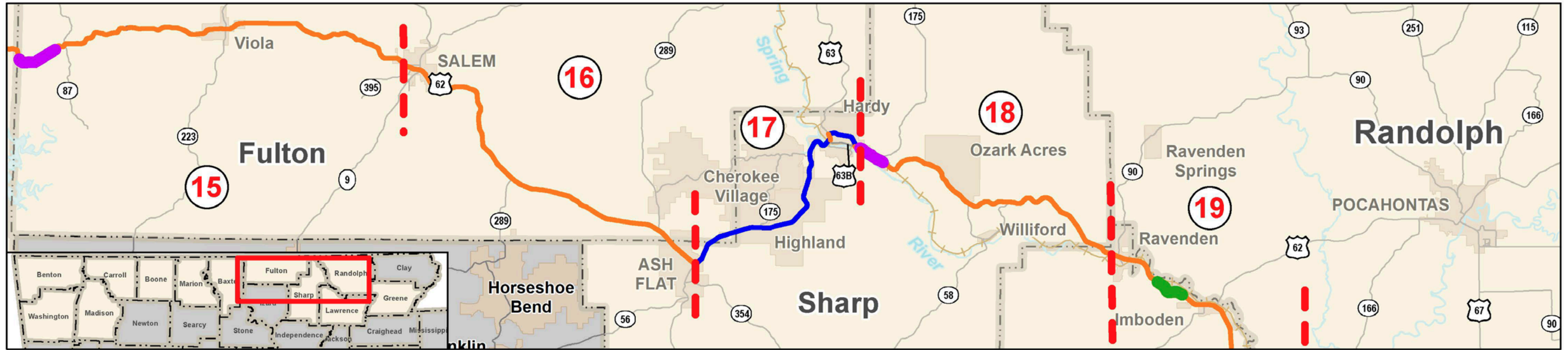
0 2.5 5 Miles

Legend

<p>Proposed Economic Development Improvement</p> <p> BYPASS</p> <p>Existing 4+ Lane</p> <p></p>	<p>Other Proposed 4 Lane</p> <p></p> <p>Short, Mid, Long-Term Recommended 4 Lane</p> <p> BYPASS</p>	<p> Segment Boundary</p> <p> Segment Numbers</p>
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Figure 4b – Four Lane Status and Proposed Economic Development Improvements



Highway 412 Corridor Planning Study Update
(Job 012313)

Four Lane Status, Part 2

Vicinity of Fulton, Sharp, Randolph, Lawrence and Greene Counties

0 2.5 5 Miles

<p>Proposed Economic Development Improvement</p> <p>Existing 4+ Lane</p> <p>Scheduled 4 Lane</p>	<p>Other Proposed 4 Lane</p> <p>Short, Mid, Long-Term Recommended 4 Lane</p>	<p>Legend</p> <p>Segment Boundary</p> <p>Segment Numbers</p>
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CONCLUSIONS

As an element of the Four-Lane Grid System, the ultimate vision for Highway 412 is four or more travel lanes from Oklahoma to Missouri. For many stakeholders, improving Highway 412 is viewed as critical path towards economic prosperity for northern Arkansas. However, as shown in Table 8, more than \$1.2 billion in preservation, safety, and mobility needs have been identified for the Highway 412 corridor. An additional nearly \$1.1 billion would be needed to complete a four-lane buildout. As emphasized in the *LRITP*, improving safety and preserving the existing system should be top priorities. To accelerate costly mobility and economic development improvements to Highway 412, partnership opportunities with local authorities should be explored.

Table 8 – Cost Summary for All Improvements (2019 dollars, in millions)

Improvement Type	Construction Cost	Total Cost
Recommended Improvements (Tables 3, 4, and 5)		
Short-Term (Next 5 Years) ¹	\$149.7	\$177.3
Mid-Term (5 to 10 Years)	\$247.3	\$283.1
Long-Term (10 to 20 Years)	\$665.1	\$791.8
Subtotal for Recommended Improvements	\$1,062.1	\$1,252.2
Other Mobility Improvements (Table 6)	\$131.0	\$153.8
Economic Development Improvements (Table 7)	\$718.4	\$911.8
GRAND TOTAL for All Improvements	\$1,911.5	\$2,317.8

1 – Costs for safety improvements are included as Short-Term.

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APPENDIX A

MINUTE ORDER

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ARKANSAS STATE HIGHWAY COMMISSION

MINUTE ORDER

District: Inter-District
County: Various
Category: Miscellaneous

Page 1 of 1 Page


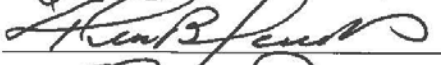

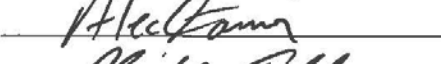
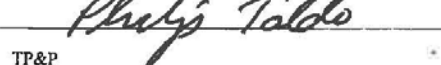
WHEREAS, Minute Order 98-068 adopted the *US 412 Corridor Planning Study* as a guide for future project development between Norfolk Lake in Baxter County and the Missouri State Line; and

WHEREAS, various projects along the corridor have been completed over the years; and

WHEREAS, the House Concurrent Resolution 1007 from the 91st General Assembly expressed the need to expand the US Highway 412 east-west corridor through northern Arkansas to improve accessibility and economic prosperity; and

WHEREAS, the need exists to update the planning study and expand the study area across northern Arkansas.

NOW THEREFORE, the Director is authorized to proceed with updating and expanding the planning study from the Oklahoma State line to the Missouri State line.

Approved:  Chairman
 Vice-Chairman
 Member
 Member
 Member

Submitted By: 
 Assistant Chief Engineer - Planning
 Approved:  lht
 Director
 Minute Order No. 2017 101
 Date Passed OCT 18 2017

TP&P

Form 19-456
Rev. 1/13/2016

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1 State of Arkansas
2 91st General Assembly
3 Regular Session, 2017

HCR 1007

4
5 By: Representative Speaks
6 By: Senator Flippo

7
8 **HOUSE CONCURRENT RESOLUTION**

9 ENCOURAGING THE EXPANSION OF THE UNITED STATES ROUTE
10 412 EAST-WEST CORRIDOR TO IMPROVE ACCESSIBILITY AND
11 CREATE ECONOMIC PROSPERITY.

12
13
14 **Subtitle**

15 ENCOURAGING THE EXPANSION OF THE UNITED
16 STATES ROUTE 412 EAST-WEST CORRIDOR TO
17 IMPROVE ACCESSIBILITY AND CREATE ECONOMIC
18 PROSPERITY.

19
20
21 WHEREAS, Arkansas is richly endowed with natural resources and provides
22 limitless opportunities for both commercial and recreational activities; and

23
24 WHEREAS, the overall economic viability of the state has been directly
25 impacted by the state and federal commitment to provide accessibility to
26 specific areas with improved roads and highways; and

27
28 WHEREAS, in contrast, while the northern part of Arkansas extending
29 from Jonesboro to Rogers has much to offer, nearly all the communities in
30 that area are experiencing a decline in economic prosperity that threatens to
31 make those communities irrelevant as business and tourist destinations as a
32 direct result of the limited commercial and recreational traffic through the
33 area; and

34
35 WHEREAS, improving road and highway accessibility to the northern part
36 of the state by expanding the United States Route 412 east-west corridor not



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1 only will serve to create economic prosperity for the Arkansas communities
2 that extend along the corridor, but also will contribute to the overall
3 economic prosperity of the entire state,
4

5 NOW THEREFORE,

6 BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE NINETY-FIRST GENERAL
7 ASSEMBLY OF THE STATE OF ARKANSAS, THE SENATE CONCURRING THEREIN:
8

9 THAT the House of Representatives recognize the need for expansion of
10 the United States Route 412 east-west corridor and encourage the United
11 States government to fund a project to provide accessibility to and create
12 economic prosperity for the Arkansas communities extending along the
13 corridor.
14

15 BE IT FURTHER RESOLVED THAT upon adoption of this resolution, an appropriate
16 copy shall be provided to the Arkansas congressional delegation by the Chief
17 Clerk of the House of Representatives.
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HIGHWAY 412 CORRIDOR PLANNING STUDY UPDATE (OKLAHOMA TO MISSOURI)



BAXTER, BENTON, BOONE, CARROLL, FULTON, GREENE, LAWRENCE,
MADISON, MARION, RANDOLPH, SHARP, AND WASHINGTON COUNTIES