ARDOT Job 061562

SOUTHWEST TRAIL DESIGN

Pulaski, Saline, & Garland Counties

Environmental Assessment



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Environmental Assessment

Submitted pursuant to:

The National Environmental Policy Act 42 U.S.C. §4322(2)(c) and 23 C.F.R. §771

Submitted by:

FEDERAL HIGHWAY ADMINISTRATION

and

ARKANSAS DEPARTMENT OF TRANSPORTATION

Prepared by:

Garver, North Little Rock, Arkansas

The following people may be contacted for additional information concerning this document:

Randal Looney

FHWA

700 W. Capitol, Room 3130

Little Rock, AR 72201-3298

(501) 324-6430

John Fleming

ARDOT

P.O. Box 2261

Little Rock, AR 72203-2261

(501) 569-2281

In compliance with the National Environmental Policy Act, this Environmental Assessment describes the proposed project to provide a recreational and alternative transportation trail from Hot Springs National Park in Garland County to the Little Rock Central High School National Historic Site in Pulaski County. The analysis did not identify any significant adverse environmental impacts and identifies the Build Alternative as the Preferred Alternative.

Comments should be directed to:

Mail: Garver

Attn: Jon Hetzel 4701 Northshore Drive North Little Rock, AR 72118

Email: PublicInvolvement@GarverUSA.com

This Environmental Assessment is also available for review online at: http://www.arkansashighways.com/

Randal Looney
Environmental Coordinator
Federal Highway Administration

Date of Approval



6/16/2020



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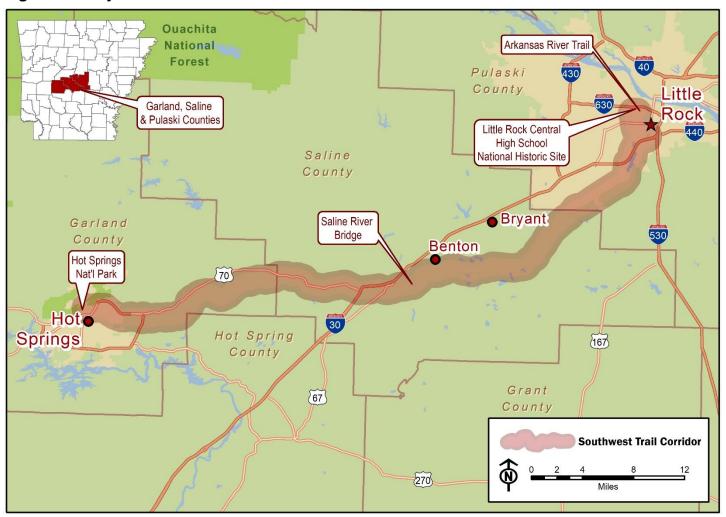
Chapter 1 – Purpose and Need

Chapter 1 describes the need for a recreational, multi-use trail, explains how the proposed project could fill this need, and outlines the project's lead agency roles.

What is the Southwest Trail?

Pulaski, Saline, and Garland Counties, in coordination with the Arkansas Department of Transportation (ARDOT) and the Federal Highway Administration (FHWA) are proposing to construct a multi-use, non-motorized recreational trail, known as the Southwest Trail (SWT), from the City of Hot Springs in Garland County to the City of Little Rock in Pulaski County Arkansas (Figure 1).

Figure 1: Project Location



1.2 What is the history of the project?

A Corridor and Economic Impact Study for the proposed (SWT) was completed in 2015 by ALTA. The trail generally follows and commemorates the early path of Native Americans (known as the Natchitoches Trace) and later of early pioneers and settlers (known as the Military Road). The study identified several possible alignments that provide access to the communities and special interest areas along this corridor. The study also identified the potential economic benefit (as described in **Section 1.3**) to the local and regional economies.

In June 2017, Pulaski County received a Federal Lands Access Program (FLAP) award to design and engineer the SWT from Hot Springs National Park (HSNP) in Hot Springs to the Central High School National Historic Site (CHSNHS) in Little Rock. The FLAP grant is funding the current Environmental Assessment (EA) and a portion of the future design work.

Why is the SWT needed and what are the benefits? 1.3

Multi-use trails are a popular way to achieve healthier lifestyles and improve the quality of life for local communities. They can also attract visitors and spur tourism and economic growth. The proposed SWT would benefit the communities along its route by providing connectivity to existing recreational features and offering a non-motorized alternative transportation route that can improve the quality of life and bolster local economies.

Quality of Life

In 2018, Arkansas was one of the lowest ranked states in the United States (ranked 46th) for overall health (United Health Foundation, 2019). Moreover, Arkansas is the third most inactive, the third most hypertensive, and the seventh most obese (over all age groups) state in the nation (The State of Obesity, 2018). In addition to a decreasing quality of life and life expectancy, obesity increases work absenteeism and healthcare costs.

A **hypertensive** person is an individual with high blood pressure. Hypertension, or high blood pressure, is the leading cause of stroke, heart attack, and kidney failure.

When people have safe places to walk within 10 minutes of their home, they are one and a half times more likely to meet recommended activity levels than those who do not (Powell et al., 2003). More than 9,000 people live within a quarter mile of the proposed SWT route. Comprehensive trail systems increase access to outdoor recreation opportunities as exercising options become more accessible. Research conducted on existing bike trails in Northwest Arkansas estimated bicycling provided \$86 million in benefits to the economy in 2017, of which

approximately \$7 million is avoided health care costs (BBC, 2018). ALTA (2015) estimated \$18 million per year in health-care costs could be saved as a result of communities' use of a multi-use trail.

Improved Connectivity

The SWT would enhance and add to existing social and recreational opportunities for citizens of the cities of Hot Springs, Bryant, Benton, and Little Rock, as well as several other smaller communities along the proposed route. Along its 62-mile length, the proposed SWT would connect with, or come into close proximity to, numerous city parks and recreational areas (Table 1).

Two federal parks are the anchor points for the SWT: HSNP and CHSNHS. HSNP, the trail's proposed western terminus, draws 1.5 million visitors a year. According to Hot Springs city officials, many of these visitors are also interested in bicycling opportunities.

As shown in Figure 2, the SWT would extend the reach of the existing 15-mile Arkansas River Trail (ART) by creating a complimentary north-south trail, providing better access to the Arkansas State Capitol, and a direct connection to CHSNHS, the Arkansas State Fairgrounds, and Interstate Park. This trail would provide a safer option for local residents or tourists on foot or on bike to travel from the Clinton Library and downtown Little Rock to these important Arkansas landmarks.

The SWT would provide a safer means of travel for transportation and recreation when connected to the existing Little Rock bicycle and pedestrian network as opposed to traveling on city streets next to vehicles. A recent Metroplan study using a one-mile wide corridor along the proposed SWT route showed that from 2015 and 2017, there were 88 pedestrian crashes and 20 bicycle crashes on the corridor, resulting in six deaths. The League of American Bicyclists reports that the number of bicycle crashes and fatalities in the region are much higher than is typical for a comparable city that is classified as being more bike-friendly (http://bikeleague.org/sites/default/ files/bfareportcards/BFC Spring 2016 ReportCard Little Rock AR.pdf).

Table 1: Recreational **Areas Near the SWT**

Name	Location	
Hot Springs	Hot	
National	Springs	
Park		
Lonsdale	Lonsdale	
City Park Spring Lake		
Park	Lonsdale	
Saline River		
Regional		
Park and	Benton	
Recreational		
Area		
City of		
Benton Fishing	Benton	
Docks		
Bernard	5 .	
Holland Park	Benton	
Bauxite High		
School	Bauxite	
Baseball	Dauxile	
Fields		
Fourche	Little	
Bottoms	Rock	
Park Interstate	Little	
Park	Rock	
Southside	Little	
Park	Rock	
Arkansas		
State	Little Rock	
Fairgrounds		
Barton Park	Little	
	Rock	
Central High	Little	
School	Little	
National Historic Site	Rock	
Arkansas	Little	
River Trail	Rock	
Julius		
Breckling	Little	
Riverfront	Rock	
Park		

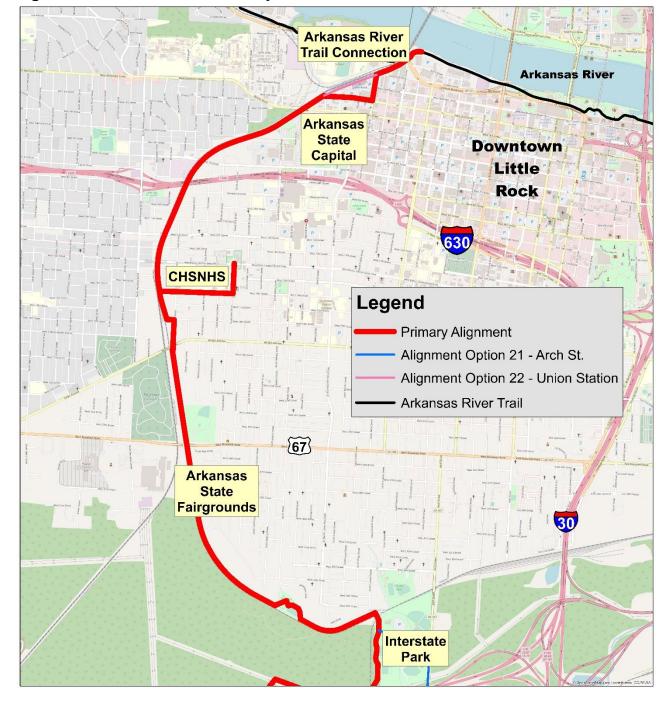


Figure 2: The SWT's Connectivity to Little Rock Points of Interest

Tourism and Economic Benefits

The SWT would have both short-term and long-term economic benefits to local communities. Short-term benefits would include stimulation of the local economy with employment opportunities from the construction of the trail and an increase in local tax revenues. Construction of the SWT is estimated to cost roughly \$42 million and support about 450 temporary jobs (ALTA, 2015).

Long-term economic benefit would likely result from increased out-of-state tourism. A 2018 study conducted by the Walton Family Foundation estimated that cycling produces over \$51 million in annual business for Northwest Arkansas, including almost \$27 million in tourism spending by out-of-state visitors (BBC, 2018). Approximately 90,000-150,000 bicycle tourists visited Northwest Arkansas between March 2017 and March 2018. In Hot Springs, the prevalence of out of state visitors notably increased within a year of groundbreaking of the Northwoods Trail (a 15-mile bike trail system located 2 miles from the Convention Center) according to Visit Hot Springs (Jayroe, 2019).

Studies have shown that trails can have a long-term beneficial impact or a neutral impact to nearby property values (Bucchianeri et al. 2012; Campbell and Munroe 2004; Economy League for Greater Philadelphia et al. 2010; Econsult Corporation and Greenways Incorporated 2007; Riddel 2001). An increase in property values would provide an increase in household wealth and provide higher property tax revenues to local jurisdictions. It is estimated that implementation of the SWT would result in a one-time property value increase of about \$13.7 million, of which about \$3.2 million would be in Garland County, \$6.3 million would be in Saline County, and \$4.2 million would be in Pulaski County (ALTA, 2015).

Construction of the SWT would likely increase livability near the project corridor. Increased livability could help attract and retain talent for area businesses, as well as attract new businesses. One attribute often associated with high livability scores is a bike and pedestrian-

Livability refers to characteristics that make a place pleasant

friendly environment. A survey conducted by the Arkansas Department of Transportation (ARDOT, 2017), found that bicycle and pedestrian friendliness was an important consideration for 66% of Arkansans in choosing where to live.

The SWT would also increase tourism revenue, which is an important engine of economic growth. Research conducted on existing bike trails in Northwest Arkansas estimated bicycling provided \$27 million in Northwest Arkansas tourism spending by out-of-state visitors in 2017 (BBC, 2018). Based on the experience of similar trails in Arkansas and the nation, the SWT could attract approximately 1,000 out-of-town users per mile per year (ALTA, 2015). This would mean approximately 65,000 new visitors, and an additional \$3 million annually into the local economy. The construction of the SWT would provide an estimated total economic impact of about \$4.8 million annually within Garland, Saline, and Pulaski Counties as a result of increased tourism spending, supporting an additional 68 long-term jobs post construction.

Another tourism benefit of the SWT would be to increase public exposure to, and education of, important areas of Little Rock and United States history, such as the CHSNHS. The City of Little Rock conservatively projects that the SWT would increase visitation to the CHSNHS by 6,000 visitors per year, which is over a 5% increase in visitation from 2014 (Landosky, 2017).

1.4 Are there other trails in the area?

HSNP has dozens of hiking trails that extend throughout the park. In 2018, groundbreaking began on the Hot Springs Northwoods Trail, which is located less than two miles from the beginning of the SWT. Currently, over 15 miles out of the total of 44 miles planned to be constructed of the Northwoods Trail are available to ride. The City of Hot Springs also has an existing and planned bike/ped trail called the Hot Springs Creek Greenway Trail. While the northern portion, spanning 2 miles from Market Street to Chelsea Street, is complete and open

for use, the segment continuing south to Lake Hamilton is yet to be constructed. The north end of the existing Hot Springs Creek Greenway Trail is 0.2 mile from the SWT. When complete, the Hot Springs Creek Greenway Trail will run for 4.2 miles from HSNP to Lake Hamilton. Additionally, the Tri-Lakes **MPO** (Metropolitan Planning Organization) Bicycle and Pedestrian Master Plan identified several recreational-use trails in Garland County to which the SWT would function as a connector if they were constructed.

MPOs are policy-making groups made up of representatives from local government representatives and governmental transportation authorities.

In Saline County, both the Cities of Benton and Bryant have master bike/ped plans showing planned connections to the SWT. The SWT would connect to the ART and other trails that provide an approximately 88-mile loop through Little Rock, North Little Rock, Maumelle, and Conway. Approximately 150 miles of connected trails would be created by connecting the SWT with the ART. Figure 3, Figure 4, and Figure 5 show existing and proposed trails in the vicinity of the SWT, the majority of which are located in the Little Rock and Benton areas.

What is the purpose of the Southwest Trail project?

The purpose of the project is to provide a multi-use trail connecting HSNP, the Little Rock CHSNHS, and the ART, in order to allow pedestrians and bicyclists to safely enjoy outdoor recreation while fostering healthier communities and healthier individuals to enjoy a better quality of life while also providing a "green" transportation alternative and an economic stimulus to the local and regional economies.

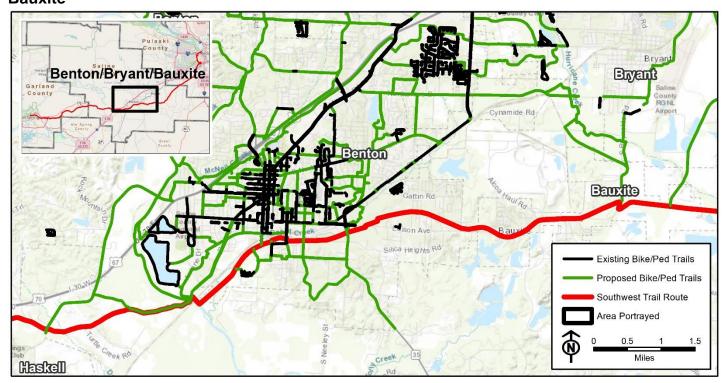
1.6 Who is leading this project?

The FHWA is the federal lead agency because it is funding the preliminary engineering of the project through the Federal Lands Access Program (FLAP) and has the primary responsibility for the content and accuracy of this NEPA document. The ARDOT is administering the FLAP grant and is responsible for overseeing preparation of this EA. Pulaski County is spearheading the preliminary design and environmental work for the EA.

Hot Springs Legend National Park Southwest Trail Route Northwoods Trails Saline Existing Bike/Ped Trails Hot Proposed Bike/Ped Trails Springs Area Portrayed 0 0.25 0.5 0.75 RAF Miles t Springs ional-Park AVE McClendon Rd Grand-Ave_US-70-BR-W=US-70-BR-E Garland Ave Springs Creek Cones Rd Greenway Ridgeway S Trail Hot eprings

Figure 3: Existing and Proposed Bike/Ped Trails in Vicinity of SWT - Hot Springs

Figure 4: Existing and Proposed Bike/Ped Trails in Vicinity of SWT - Benton, Bryant, and **Bauxite**



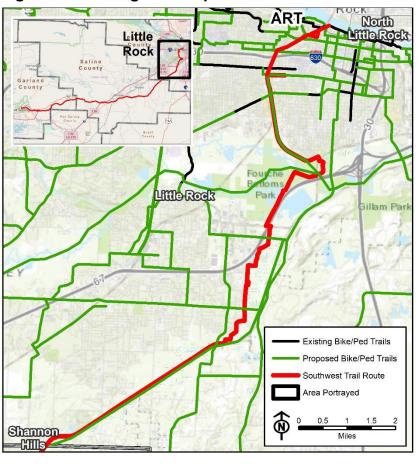


Figure 5: Existing and Proposed Bike/Ped Trails in Vicinity of SWT - Little Rock

Sources for Figures 2-4 include Tri-Lakes MPO Bicycle and Pedestrian Master Plan and GIS data provided by the Parks and Recreation Departments of the Cities of Benton, Bryant, and Little Rock.

why **Environmental Assessment** 1.7 How was this and prepared?

This Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA). The EA serves to:

- Explain the purpose and need of the proposed action.
- Describe the alternatives considered for implementing the proposed action and how the Preferred Alternative was chosen.
- Evaluate the social, economic, and environmental effects of the recommended alternative.
- Include public and local official involvement in the process to inform them about potential impacts of the proposed action.
- Provide sufficient evidence and analysis to determine whether to prepare a more detailed Environmental Impact Statement or a Finding of No Significant Impact (FONSI).

A Finding of No **Significant Impact** (FONSI) presents the reasons why an action will not have significant environmental effects and therefore does not require preparing an **Environmental Impact** Statement. Based on analyses and project feedback received to date, the ARDOT anticipates preparing a FONSI for this project.

Chapter 2 – Alternative Development

Chapter 2 identifies the project limits, explains how project alternatives were developed, describes the public involvement process, and details the alternatives evaluated in this EA.

What are the project limits? 2.1

The project limits extend from Hot Springs to Little Rock (approximately 60 miles). The trail would connect the HSNP to the CHSNHS with a connection to the Old Saline River Bridge near Benton.

2.2 What is the No Action Alternative?

The No Action Alternative would not construct the SWT. No bike/ped connection between Hot Springs and Little Rock would be constructed. As shown in Figure 3, 4, and 5, few existing trails are present within the project extent, with the exception of those in downtown Benton. Currently, bicyclists and pedestrians are restricted to a limited set of designated areas and are not able to easily move between designated trails and neighboring communities without use of a motorized vehicle. The No Action Alternative would not connect communities and existing bike/ped trails.

The No Action Alternative would avoid any positive or negative impacts to the social, economic, natural, and cultural environments. Although the No Action Alternative would not meet the purpose and need of the proposed project, the No Action was carried forward as an alternative for comparison to the Build Alternative.

How were trail alignments developed and what design considerations were required?

Early planning studies completed in 2015 identified the use of abandoned railroad alignments between Hot Springs and Little Rock as a starting point for the development of trail alignments. Rail-to-trail projects are a common approach used across the country to develop long distance trails because there are typically fewer property owners impacted and the environmental impacts and design considerations are minimal due to previous railroad development. Trail proximity to various cultural sites, parks, and other public use and natural areas were identified and considered in the preliminary alignment development.

The FLAP grant associated with the current study required connections to the HSNP and the Little Rock CHSNHS, so these became the logical termini for the project. The historic Saline River Bridge, currently under rehabilitation, was identified as a key connection point for the SWT to cross the Saline River. Additionally, there was an approximate four-mile section of abandoned railroad alignment owned by Pulaski County that was identified as another key connection point for the SWT.

As studies progressed with more detailed evaluation of the preliminary alignments, it became apparent that much of the proposed abandoned railroads were not a viable option because the railroad property was sold back to the original owners or offered up for sale to the public. Consequently, the old rail alignments originally considered are substantially segmented by many different owners and much of the original ballast and bed has been destroyed.

Environmental Inventory

Environmental data was collected for the SWT study area from federal and state agencies to identify key issues and environmental constraints early in the alternative development process. As more data became available, options were developed that could minimize or avoid known environmental constraints. Environmental considerations are discussed further in Chapter 3 of this EA.

Public and Local Officials Involvement

Public and local official involvement was an important part of the alternative development process. This collaboration began during the original planning study completed in 2015 and continued throughout the EA process. Detailed information on all public and local official involvement is presented in Section 2.5.

Design Considerations

Various trail typologies were developed for the SWT to fit within the communities and natural areas that the trail would directly affect. These trail types include on-street facilities, off-street facilities, trail within railroad rights-of-way, and boardwalks. The proposed typical sections of some trail types are shown below in Figure 6.

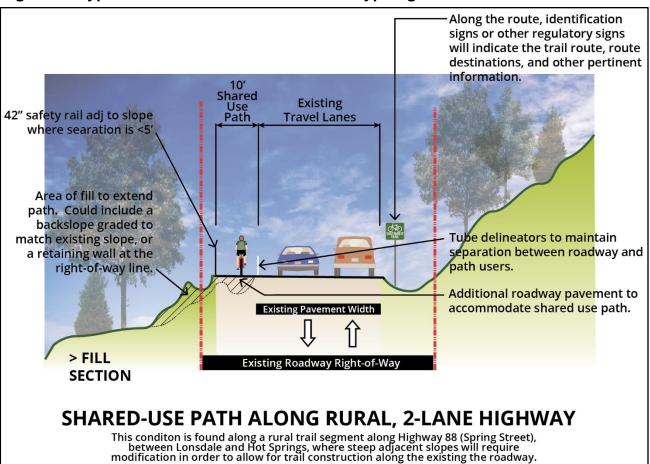
Typical sections show the usual cross-sectional features of a linear feature like a path or roadway and generally include things like lane and shoulder widths, limits of surfacing, or other details pertinent to the design.

2.4 What alternatives were considered and carried forward for further study.

A Build Alternative was developed for this project by designating a Primary Alignment and consideration of Alignment Options. The Primary Alignment was based on previous studies and additional review of current environmental and social constraints, and the Alignment Options were developed and considered in order to minimize negative social or environmental impacts or reduce costs.

A Primary Alignment with 17 Alignment Options were initially developed and presented to the public and local officials. The Primary Alignment was approximately 62 miles long, while the 17 Alignment Options ranged from 0.2 mile to 11.2 miles long. Detailed views of the Primary Alignment and the 17 Alignment Options are shown in **Appendix A-1**. A description of revisions that were made to the Primary Alignment and an explanation of why Alignment Options were added, modified, or removed from further consideration is provided in **Appendix A-4**.

Figure 6: Typical Sections of Some SWT Trail Typologies



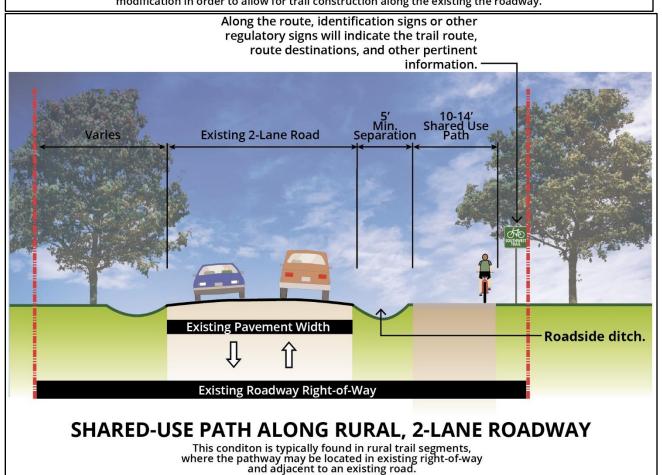
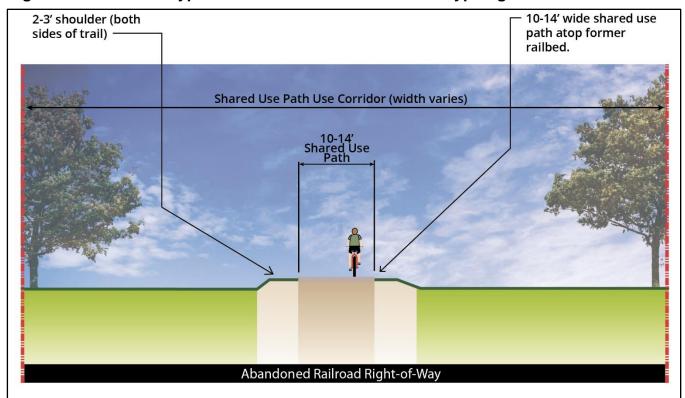
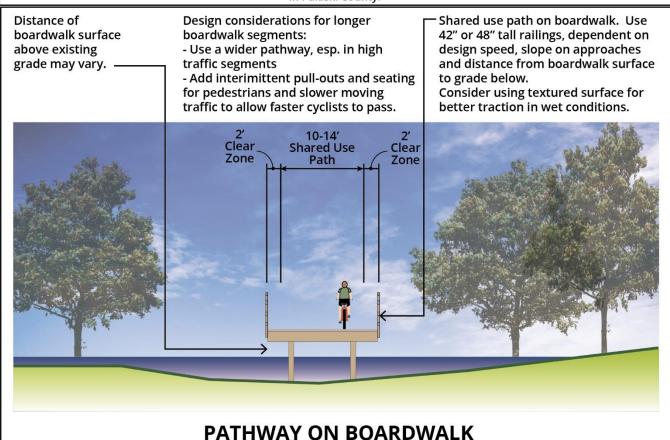


Figure 6 Continued: Typical Sections of Some SWT Trail Typologies



SHARED USE PATH WITHIN ABANDONED RAILROAD RIGHT-OF-WAY

This possible conditon is found within abandoned rail corridors in Pulaski County.



This conditon is typically found in existing parks, open space, or segments passing through areas prone to flooding or periodic inundation.

The Build Alternative carried forward into the EA included the Primary Alignment with the eight Alignment Options listed below. The No Build Alternative and Build Alternative are analyzed in this EA.

- Alignment Option 2, Spring Street
- Alignment Option 7, Pawnee Drive
- Alignment Option 18, Edison Avenue
- Alignment Option 12, W. Sardis Road
- Alignment Option 19, Germania
- Alignment Option 20, N. Sardis Road
- Alignment Option 21, Arch Street
- Alignment Option 22, Union Station

An overview of the Primary Alignment and the eight Alignment Options being carried forward in the EA are shown below in Figures 7-17, and detailed views are provided in Appendix B.



Figure 7: Primary Alignment and Alignment Options Carried Forward in EA (1 of 11)

200 400 600 On Ramp Grand N Frontage Off Ramp Grand Service Dr Martin Luther King Jr 70B Grand Grand Grand S Frontage Alignment Option 2 Ashbrook Eagle Hill Dr Martin Luther King Jr Dr Martin Luther King Little Rock & Unnamed Legend Bryant Primary Alignment Benton Alignment Option 2 - Spring St. Springs

Figure 8: Main Alignment and Alignment Options Carried Forward in EA (2 of 11)

Figure 9: Main Alignment and Alignment Options Carried Forward in EA (3 of 11)



Little Rock Hwy 70 Bryant Hot Springs I-30 Ramp I-30 Ramp Old 88 Alignment Option 7 Legend Primary Alignment Alignment Option 7 - Pawnee Dr. 0 100 200 300 400

Figure 10: Main Alignment and Alignment Options Carried Forward in EA (4 of 11)

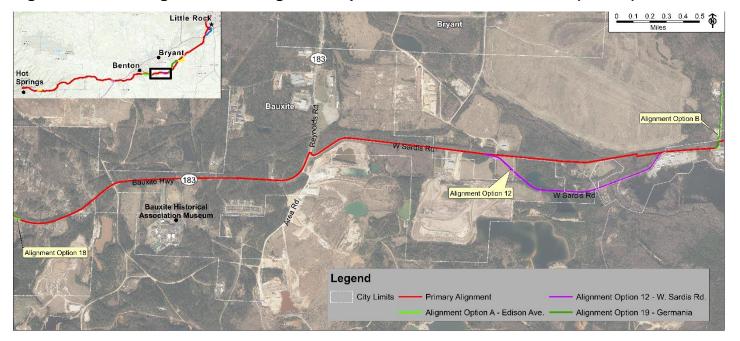
Figure 11: Main Alignment and Alignment Options Carried Forward in EA (5 of 11)



Winfield. Little Rock Gattin Hot Springs Alignment Option 18 Legend Primary Alignment Alignment Option 18 - Edison Ave.

Figure 12: Main Alignment and Alignment Options Carried Forward in EA (6 of 11)

Figure 13: Main Alignment and Alignment Options Carried Forward in EA (7 of 11)



0.2 0.4 0.6 Shannon Hills Miles Alexander Alignment Option 19 **Shannon Hills** Germania Germania **Bryant** Alignment Option 20 Legend City Limits **Primary Alignment** Alignment Option 12 - W. Sardis Rd. Alignment Option 19 - Germania Alignment Option 20 - N. Sardis Rd. Alignment Option 19 Little Rock Bryant Alignment Option 12 Benton Hot Springs Bauxite Bauxite

Figure 14: Main Alignment and Alignment Options Carried Forward in EA (8 of 11)

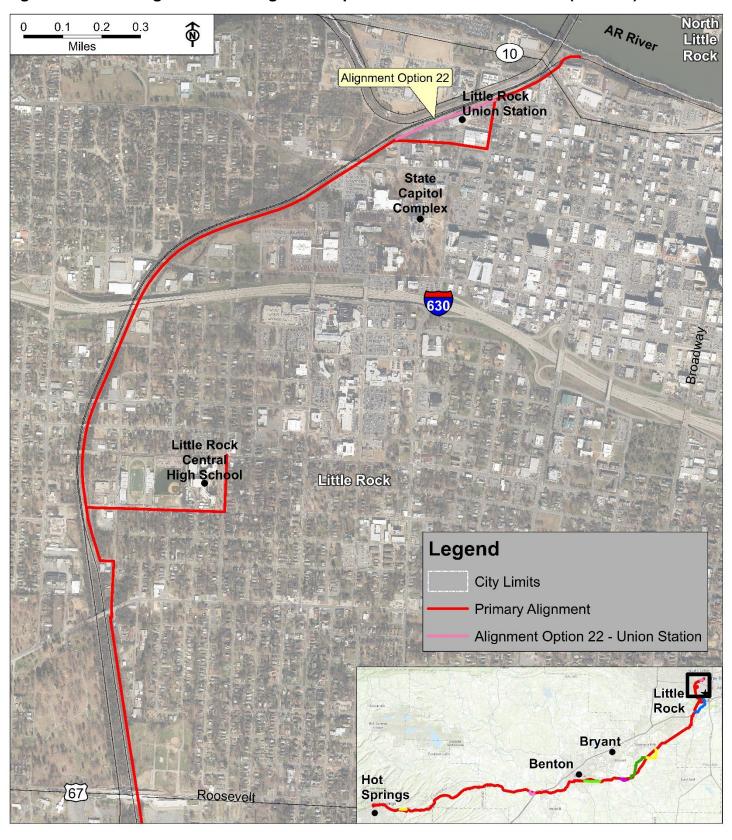
Little Rock Bryant Alignment Option 21 Benton Hot Springs 70 Little Rock Legend County Lines City Limits Primary Alignment Pulaski Saline Alignment Option 20 - N. Sardis Rd. Shannon Hills Alignment Option 21 - Arch St. 0.2 0.4 0.6 0.8 \$ Alignment Option 20 Miles

Figure 15: Main Alignment and Alignment Options Carried Forward in EA (9 of 11)

Little Rock 67 Roosevelt AR Bryant State Benton **Fairgrounds** Hot **Springs** 30 Southside Interstate Legend Park Alignment Option 21 Park Interstate Park **Primary Alignment** Alignment Option 21 - Arch St. Fourche 440 **Bottoms** Park 30 Little Rock Big Rock 65 Settling Pond (367) 3M Little Rock Quarry Alignment Option 21 0.2 0.4 1 Miles

Figure 16: Main Alignment and Alignment Options Carried Forward in EA (10 of 11)

Figure 17: Main Alignment and Alignment Options Carried Forward in EA (11 of 11)



2.5 How has the public been involved?

Open forum public involvement meetings and public officials meetings were held in each of the three counties where the trail would be located. The public officials meetings and the public involvement meetings were held on November 13, 2018 in Saline County (at the Benton High School Campus in Benton), on November 14, 2018 in Garland County (at the Embassy Suites by Hilton in Hot Springs), and on November 15, 2018 in Pulaski County (at the Centre at University Park in Little Rock). Meeting content presented in each county was identical. All materials and information presented at the meetings are provided in **Appendix A-2**.

Total attendance at the three public meetings was 243 people, with 183 comment forms received either during the meetings or the two-week comment period following the meetings. A synopsis of the meetings and summary of the comments received is included in Appendix A-2.

In addition to the public meetings, additional communication with the public included:

- A project website (swtrail.transportationplanroom.com) published in April 2019 to provide study information and updates. The website includes a project overview, frequently asked questions, information presented at the November 2018 public meetings, and project contact information.
- A project update newsletter published in June 2019. Information included the status of the project study, schedule information, and instructions on how to be notified of future public meetings and hearings. This newsletter was published on the project website, emailed to 300 addresses on the contact list, and submitted to more than 30 individuals with social media sites relevant to the Southwest Trail.
- Ongoing communication with the public through a designated project email address.

How have government agencies been involved? 2.6

In May 2018, input from local, state and federal agencies was solicited regarding the proposed SWT. Agencies were asked to review the proposed study area and provide any information or identify concerns they may have regarding resources within their jurisdiction or expertise. Responses from these agencies are provided in **Appendix C**.

Local officials from all three counties were contacted to participate in the public meetings and to provide information such as unique environmental features or environmentally sensitive areas, socio-economic concerns, and proposed urban developments. Additional meetings with local officials and important stakeholders have occurred regularly throughout the alignment development process, helping define alignments that would best fit within the context of each community. A list of 34 project development meetings held with various stakeholders, local officials, and agencies is provided in Appendix A-3.

2.7 How have tribal governments been involved?

Section 106 of the National Historic Preservation Act requires federal agencies to consult with tribes where projects could affect tribal areas with historical or cultural significance. The FHWA initiated coordination with tribes having an active cultural interest in the area. The Tribal Historic Preservation Officers were given the opportunity to comment on the proposed project. No substantive responses by tribes were received. The final Cultural Resources report will be sent to any tribe requesting a copy of the report. Coordination letters and responses are included in Appendix C.

Chapter 3 – Environmental Impacts & Mitigation

This chapter summarizes potential project impacts on people and the environment.

How were potential impacts evaluated? 3.1

Studies to determine how the project might impact the area's natural and social environments were completed and results for each specific type of impact are provided. Results of studies and analyses that are not fully discussed in the following EA text are incorporated by reference or included as EA appendices. Resources not impacted by the project are not discussed in detail.

The analyses considered both the intensity of the effects and their duration (e.g., short-term during construction, or long-term, remaining after construction). The effects discussed in this chapter are presumed to be long-term unless otherwise noted and generally described as positive or negative. In the absence of quantitative data, best professional judgement was used to determine impacts.

The project study area was limited to a 50-foot wide corridor for all alignments unless noted otherwise, such as the Area of Potential Effect for historic resources. Off-site areas that might be required for borrow areas, waste areas, laydown yards, etc., during construction would be evaluated when they are identified during the construction phase of the project.

3.2 Would the project have any effect on the economy?

Potential impacts are changes or effects that could occur as a result of a proposed action. The impacts may be social, cultural, economic, or ecological, and may also be beneficial or adverse. The terms "impact" and "effect" can be used interchangeably.

What are significant impacts?

NEPA regulations do not provide specific thresholds to determine if project impacts are considered significant, but they do discuss the process that should be used to evaluate impacts.

Consideration is given both to context of the setting, and intensity, which is the severity of the impacts.

The evaluation of economic impacts for the SWT considers how the trail might impact local, regional, and statewide economic factors such as property values, job creation, induced development, and tourism. Different alignment options might have slightly better economic benefits to an area due to having a greater amount of accessibility that would attract development; however, as each of the alignment options are within a very similar geographic location as their comparable section of Primary Alignment, each alignment is expected to have a similar overall impact on the economy.

No Action Alternative

Under the No Action Alternative, a multi-use trail would not be constructed. The No Action Alternative would not provide an increase in expenditures and jobs for trail construction and would not result in long-term economic improvements such as job creation and bolstering tourism and associated industries.

Build Alternative

Construction of the SWT would provide both temporary and long-term economic benefits to the region. Temporary benefit to the local economies would result from the hiring of construction workers and an increase in local revenue generated from associated activities such as increased lodging and restaurant use. The short-term economic impact resulting from construction of the SWT translates into an estimated total expenditure of \$42 million and the creation of 450 jobs (ALTA 2015).

Long-term economic impacts include increased tourism activity. The SWT is estimated to bring 20,000 new visitors to the region, injecting \$1.2 million into the local economy and supporting 27 jobs each year (ALTA 2015). Moreover, the effects of the SWT on personal property values also are expected to be generally beneficial as most studies examined by Racca (2006) indicate that the presence of a bicycle path/trail either increases personal property values and ease of sale slightly or has no effect. Overall, the SWT is expected to have beneficial impacts to the local economies. Please refer to Section 1 (Purpose and Need) for more details about the economic goals of the SWT.

Would there be any relocations or right of way acquisition required by the project?

The project passes through dense urban areas, light residential, and rural undeveloped lands. Avoiding the take of homes, businesses, or other structures was an important element in making sure the project was accepted and embraced within the communities it directly passes through. Right of way (ROW) acquisition of developed and undeveloped land was minimized where possible by locating the SWT in or adjacent to existing roadways, in parks and utility corridors, and on property already owned by the participating cities and counties.

No Action Alternative

The No Action Alternative would not require any ROW acquisition or relocations.

Build Alternative

Acres of ROW required (excluding utility/park easements) for the Primary Alignment and for each of the Alignment Options as compared to the Primary Alignment for that segment are shown in **Table 2**. Once final design is complete, more accurate ROW impacts can be determined. Some Alignment Options are very similar to the Primary Alignment in that neither require large amounts of ROW (e.g., Alignment Options 7, 21, and 22) as they are both on-street facilities. However, the Primary Alignment requires more ROW than compared to the alignments utilizing Alignment Options 2, 18, 12, 19, or 20 because these options use existing roads for the shared use path.

The Primary Alignment would likely require the relocation of two small structures (one shed and one billboard); however, continued efforts will be made throughout the design process to avoid these structures, if possible.

Depending on the selected alignment and final design, it is estimated that approximately 50-74 acres of ROW (excluding utility/park easements) would be required for the SWT based on the preliminary plans currently available. The required ROW is primarily adjacent to roadways along existing transportation corridors, or along a railroad bed. The amount of ROW per linear mile of trail is low because the trail will only be a maximum of 14 feet wide.

Table 2: Right of Way Required for Alignment Options & Primary Alignment

	Alignment Option	Primary Alignment
Alignment Option 2 - Spring Street	0 acre	3 acres
Alignment Option 7 - Pawnee Drive	0 acre	0 acre
Alignment Option 18 - Edison Avenue	0 acre	6 acres
Alignment Option 12 - W. Sardis Road	0 acre	3 acres
Alignment Option 19 - Germania	4 acres	11 acres
Alignment Option 20 - N. Sardis Road	2 acres	5 acres
Alignment Option 21 - Arch Street	<1 acre	1 acre
Alignment Option 22 - Union Station	1 acre	0 acre
Total for Primary Alignment (no Alignment Options incorporated)	N/A	73 acres

there any environmental 3.4 Are associated with the project?

An Environmental Justice (EJ) analysis was performed in accordance with Executive Order 12898. The objective of the EJ analysis is to identify and address any disproportionately high and adverse impacts to minority and low-income populations within the project study area.

U.S. Census Tract data were obtained to determine the presence of minority and low-income populations within the study area. Of the 22 census tracts within the project study area, five have median incomes below

iustice/Title VI issues

What are minority and low-income populations?

A minority population is a readily identifiable group of minority (Black, Hispanic or Latino, Asian American, American Indian or Alaska Native, or Native Hawaiian or Other Pacific Islander) persons living close to a FHWA project who would be similarly affected by the project.

Low income is a household whose income is at or below the 2019 Department of Health and Human Services poverty guidelines for a family of four (\$25,750).

the poverty guideline and nine have a minority population greater than 50% of the total population. Of the estimated 98,855 people living within those 22 census tracts, approximately 38% are minorities. Figure 18 shows the location of the EJ/Title VI populations impacted by the project.

Six of the 22 census tracts indicate the presence of Limited English Proficiency (LEP) populations, primarily Spanish-speaking. Public involvement through the NEPA phases included accommodations for non-English speaking attendees.

No Action Alternative

No impacts to low-income or minority populations would occur under the No Action Alternative. The No Action Alternative would not result in any temporary disruptions, aesthetic changes, or ROW acquisitions or displacements that could adversely impact EJ/Title VI populations. Conversely, connectivity to EJ/Title VI populations would not be improved with the No Action Alternative.

Build Alternative

In general, the SWT would provide community connectivity and benefit all residents, including minority and low-income populations. This is especially true in the Little Rock area, as the SWT would provide an alternate and possibly safer access to business districts, schools, and healthcare facilities within minority areas. Approximately 21 acres of property acquisition for ROW (involving no displacements) would be required from those EJ communities identified in Figure 18. Avoidance of these acquisitions is not possible. Figures 18a, 18b, and 18c show the location of the trail alignments where they pass through the EJ/Title VI census tracts. Although these impacts total 21 acres, the vast majority of the trail would not pass through the communities and parcels in active residential or commercial use, but instead pass through primarily undeveloped lots. For the most part, the actual EJ populations in these block groups would not be directly impacted by ROW acquisition for the SWT. Permanent ROW impacts within the EJ/Title VI areas are not considered to disproportionately impact any EJ/Title VI populations.

Some members of the public expressed concerns about the potential for the SWT to result in increased crime, a concern likely shared by EJ communities. However, case studies (Racca & Dhanju, 2006; Economy et al, 2010) report recreational trails adjacent to residential areas can actually reduce incidence of crime. In addition, SWT project sponsors have committed to a design approach called "Crime Prevention Through Environmental Design" that incorporates up front design principles for reducing crime risk. These principles can include such practices as an open design that allows for natural surveillance and ensuring adequate maintenance following construction.

While some temporary negative construction impacts may be borne by EJ/Title VI populations, these would not be considered disproportionate to EJ/Title VI populations, as these impacts would equally affect all populations near the final trail alignment. EJ/Title VI populations would also receive all the benefits the SWT would offer.

Hestell > W Hot Springs Legend (ST2) (7) 8 Alignment Option 18 - Edison Ave. Alignment Option 2 -Spring St. Alignment Option 12 - W. Sardis Rd. Alignment Option 7 - Pawnee Dr. **Primary Alignment** 65 See Fig 17A, Box 1 Benden Alignment Option 20 - N. Sardis Rd. Block Groups Alignment Option 22
- Union Station Alignment Option 21 - Arch St. Alignment Option 19 - Germania Minority and Low-Income Population Block Group Beinglie Minority Population Block Group (17) (2) Hot Spring Garland Saline Shannon Pulaski Lonsdale See Fig 17A, Box 2 See Fig 17A,-Box 3 Little Rock Garland Saline Bast Bax **Hot Spring** See Fig 17B, Box 6-See Fig 13B, Box 4 See Fig 17B, Box 5-Pulaski Saline O See Fig 17C, Box See Fig 17C, Box Little Rock 8 367 4.5 Hestell 338 Heskell Bendon Rook CONTRACT CON

Figure 18: Location of Minority and Low-Income Block Groups

Figure 18a: Location of Minority and Low-Income Block Groups

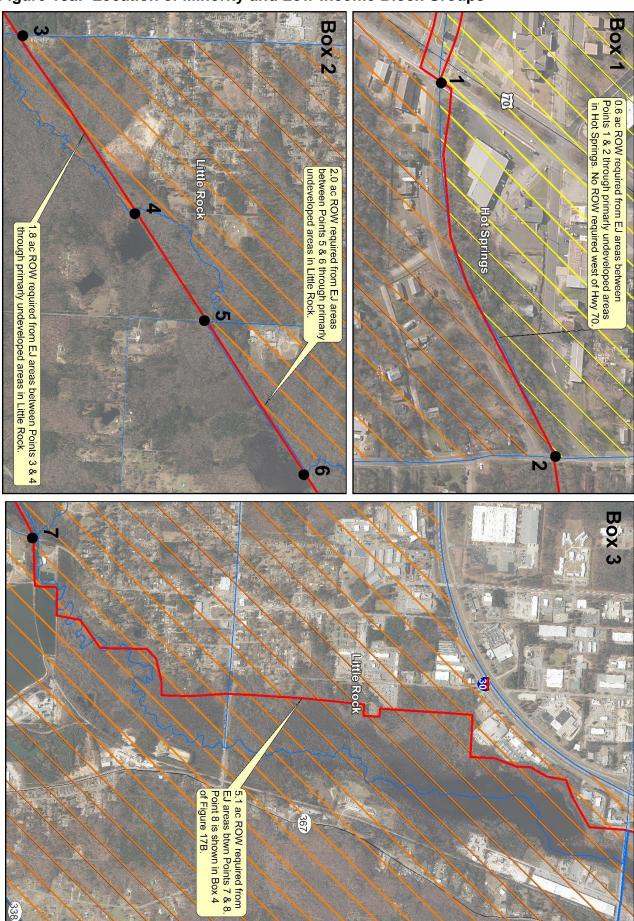


Figure 18b: Location of Minority and Low-Income Block Groups

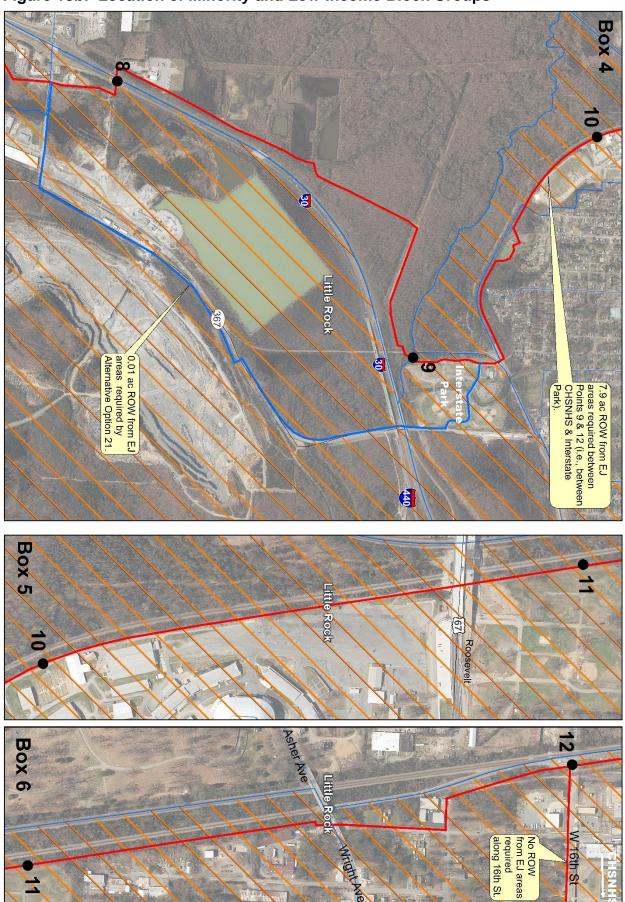
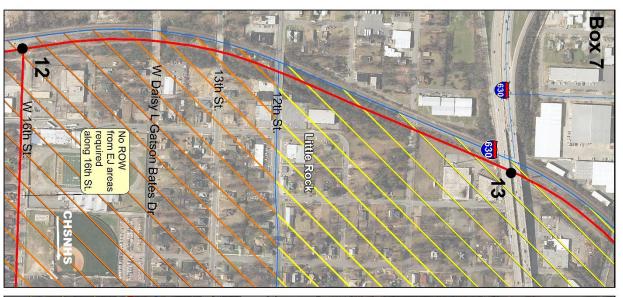


Figure 18c: Location of Minority and Low-Income Block Groups





3.5 How would the project affect views?

The viewshed along the project corridor is extremely diverse and includes dense downtown areas (e.g., Hot Springs, Benton, and Little Rock), rural areas and communities (along Highway 88, Highway 70, and Shannon Hills), and natural or open areas (e.g., the Fourche Bottoms, abandoned railroad corridors, and parks).

No Action Alternative

The No Action Alternative would not result in a change to the existing visual quality associated with the project area.

Build Alternative

Over half of the Primary Alignment would be built along an existing roadway such as the one shown in Figure 19. The entire lengths of all eight Alignment Options would be built along existing roadways. The addition of a bike lane on a roadway (thereby increasing the width of the paved corridor) or within the existing ROW would only result in

minor changes to the appearance of the existing roadway for travelers along the road and for adjacent residents and businesses. Impacts to the viewshed in these areas are anticipated to be very minor, and the SWT is not anticipated to cause any long-term, negative impacts to the visual landscape where it is located within the existing road ROW, paralleling an existing road, or within urban environments.

Existing natural and/or open areas along the proposed SWT route are resources that may have a A viewshed is the area that is visible from a specific location. The viewshed could be from the point of view of a trail user (pedestrian, bicyclist) with views from the trail, or it could be from individuals looking at the trail such as a park user, a traveler on an adjacent road, or a neighbor or adjacent landowner.

Visual quality impacts are determined by predicting viewer responses to changes in the project area's visual resources.

Figure 19: On-Street Facility Bike Path



particular sensitivity regarding viewshed. For viewsheds associated with existing community parks (those discussed in Section 3.7), the Build Alternative includes aesthetics that are consistent with the natural surroundings of the adjacent open/recreational space. The visual quality of park users and neighbors in the vicinity of existing parks would not be altered as recreational trails are considered typical and common features of parks.

The construction of the SWT along areas of new alignment, over an abandoned railroad/utility corridor, or through undisturbed natural areas, would result in changes to the visual environment. As these areas are generally rural or isolated, little to no change in viewshed would be discernable to most adjacent landowners; however, the viewshed for bicyclists and pedestrians would be positively impacted, as the addition of the SWT through such natural areas would enhance the visual quality for bicyclist and pedestrians compared to the existing route along state and local roads. The SWT would allow users opportunities to experience and appreciate the natural environment. This is especially true for the Primary Alignment on railbed and

boardwalk between Alignment Option 12 (W. Sardis Rd.) and Interstate Park, which includes passing through the Fourche Bottoms along portions of Old Highway 88. For Alignment Options 2, 18, 12, 19, 20, and 21, the Primary Alignment would be entirely on new location, boardwalk, or abandoned railbed while these six Alignment Options are entirely on roadway (see also Table 3).

Project construction would include the presence of construction vehicles and heavy equipment, temporarily altering the area's visual character. Vegetation impacts in temporary construction easements would be minor and short-term until new vegetation becomes established. Overall, construction activities would have minor short-term impacts on views to and from the project area.

Adverse impacts to overall visual quality are not expected as a result of the project. Minor longterm benefits would occur due to the aesthetic considerations incorporated into the Build Alternative, especially from the perspective of bicyclists and pedestrians.

How would the project affect land use? 3.6

The land use designations for the study area were examined using county or city zoning maps and/or were identified through field reconnaissance. Some portions of the study area outside city limits are not covered by specific zoning categories. Land use within the study area is characterized by a mix of urban, suburban, residential, institutional, commercial, industrial, parkland, natural areas, and agricultural.

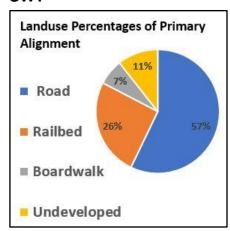
No Action Alternative

Because new ROW would not be acquired, the No Action Alternative would not directly impact current or future land uses.

Build Alternative

Land acquisition is required for the SWT and some change in land use would occur as quantified in Table 3 and shown for the Primary Alignment in Figure 20. Most of the land use changes would be the conversion of existing ROW or residential/commercial land immediately adjacent to an existing roadway to a paved non-motorized transportation use. No residential or commercial displacements would occur. The most noticeable land use change would occur in areas of where the proposed SWT route occurs along undeveloped areas or along abandoned railroad (or utility) corridors. These areas would be converted from natural vegetated areas to a paved trail or boardwalk.

Figure 20: Percentage of Land Use Types for the **Primary Alignment of the SWT**



While some changes in land use would occur, the Build Alternative would have minor direct impacts on land use as the SWT is compatible with the intended uses of residential, commercial,

open/park, mixed use, and roadways. Land use effects are therefore likely to be beneficial or neutral in these zones.

In general, the change and overall effect on land use in the study area is minor.

Table 3: Percentages of SWT Land Use Types for Alignment Options & Primary Alignment

Duild Alternative	Land Use Type						
Build Alternative	Shared Road	Railbed	Boardwalk	Undeveloped			
Alignment Option 2 - Spring Street	100%	0%	0%	0%			
Comparable Primary Alignment	0%	0%	0%	100%			
Alignment Option 7 - Pawnee Drive	100%	0%	0%	0%			
Comparable Primary Alignment	100%	0%	0%	0%			
Alignment Option 18 - Edison Avenue	100%	0%	0%	0%			
Comparable Primary Alignment	0%	100%	0%	0%			
Alignment Option 12 - W. Sardis Road	100%	0%	0%	0%			
Comparable Primary Alignment	0%	100%	0%	0%			
Alignment Option 19 - Germania	100%	0%	0%	0%			
Comparable Primary Alignment	0%	100%	0%	0%			
Alignment Option 20 - N. Sardis Road	100%	0%	0%	0%			
Comparable Primary Alignment	0%	100%	0%	0%			
Alignment Option 21 - Arch Street	100%	0%	0%	0%			
Comparable Primary Alignment	0%	4%	63%	32%			
Alignment Option 22 - Union Station	100%	0%	0%	0%			
Comparable Primary Alignment	100%	0%	0%	0%			
Entire Primary Alignment	57%	26%	7%	11%			
(no Alignment Options incorporated)							

How would the project affect parks and recreational areas?

There are eight parks and recreational areas that would be connected to the proposed SWT and would be classified as Section 4(f) resources (Figure 21). Interstate Park and Lonsdale City Park used Land and Water Conservation Funds (LWCF) for at least part of the park acquisition or development. The LWCF is a federal program that supports the protection of federal public lands and waters (including national parks, forests, wildlife refuges, and recreation areas) and voluntary conservation on private land. Parks receiving LWCF are referred to as **Section 6(f)** resources. Interstate Park and Lonsdale City Park are Section 6(f) Resources.

While each of the parks shown in **Figure 21** are eligible for Section 4(f) protection, the proposed undertaking of the SWT does not constitute a Section 4(f) "use". FHWA has determined that the project would enhance the protected features, assets, or activities that make the parks important for recreation under Section 4(f), thus qualifying the SWT for the exemption described in 23 CFR 774.13(g). Close coordination with the official with jurisdiction for each park has occurred in order to identify the trail alignment that best fits their plans and optimizes the SWT's enhancement of each park's activities and attributes. The officials with jurisdiction have agreed in writing that the SWT would be a benefit and enhancement to their parks. Documentation of coordination with each park is provided in **Appendix D**.

Coordination with the Arkansas Department of Parks, Heritage and Tourism regarding LWCF properties (Lonsdale City Park and Interstate Park) has occurred with final project Section 4(f) resources are those protected by Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 which prohibits the use of publicly owned parks, national wildlife and refuge areas, and significant historic sites unless it can be shown that: 1) there is no prudent and feasible alternative that meets the project's purpose and need that would avoid use of the land; 2) all possible planning to minimize harm to the property has been examined; and 3) a mitigation plan can be developed to compensate for the direct and indirect impacts.

Section 6(f) of the LWCF Act prohibits the conversion of property acquired or developed with LWCF grants to uses other than public outdoor recreation without the approval of the National Park Service (NPS). When acquisition is required, replacement lands of at least equal fair market value and of reasonably equivalent usefulness and location are required to be provided as a condition of such conversions.



Figure 21: Parks and Recreational Areas Connected to the Build Alternative

coordination occurring on August 29, 2019 (Appendix D). The Arkansas Department of Parks, Heritage and Tourism stated that the SWT does not conflict with the provisions of Section 6(f)(3) of the LWCF Act and no replacement land would be required.

No Action Alternative

The No Action Alternative would not impact any parks or recreational areas. Under the No Action Alternative the parks and recreational areas shown in Figure 21 would not have any improved connectivity for bicyclists and pedestrians.

Build Alternative

The Primary Alignment would connect to and "impact" all the parks shown in Figure 21, but the trail usage would be compatible with the purpose of all of the parks. Alignment Option 21, which runs through Interstate Park, is the only optional alignment impacting a park or recreational area.

During construction of the SWT, there would be temporary impacts due to construction noise at all eight parks. No amenities within or access to these parks would be impacted or restricted from use. The contractor would be required to coordinate closely with each park and the official with jurisdiction to minimize temporary disruptions during construction activities.

Positive impacts of the SWT include providing a direct connection to each park and enhancing park resources by providing a paved trail for pedestrians and bicyclists.

Would any historic or archeological resources be affected? 3.8

Section 106 of the *National Historic Preservation Act* requires agencies to consider the effects of federal actions to historic properties. In compliance with Section 106 requirements, the FHWA is conducting ongoing consultation with the appropriate Native American tribes. Consultation with the State Historic Preservation Officer (SHPO) was also conducted under Section 106 and is provided in Appendix E.

Historic properties are those that are listed, or eligible for inclusion, in the National Register of Historic Places (NRHP), as defined in (36 CFR §800.16(I)).

Records were checked to determine if previously-documented cultural resources were known in the project area. These include the archeological site files kept by the Arkansas Archeological Survey (ARAS) and the historic structure database kept by the Arkansas Historic Preservation Program (AHPP). The general location of known historic properties is shown in Figure 22.

A survey for cultural resources (within the footprint of the Build Alternative) was conducted and a report documenting the results of the survey, impacts to historic properties, and further recommendations was submitted to the SHPO for their review on March 13, 2020. Due to changes in alignment since this report was submitted, a supplemental study for approximately 10% of the alignment is underway. The supplemental report will be submitted to SHPO for approval when complete. SHPO approval is pending but will be obtained prior to final environmental clearance.

No Action Alternative

The No Action Alternative would not impact any historic properties or districts.

Build Alternative

As shown in Figure 22, numerous historic structures and districts are present in downtown areas of Hot Springs and Little Rock. The terminal end of the SWT in Hot Springs occurs within the Bathhouse Row Historic District and a portion of the Primary Alignment would pass through the Central High School Historic District. Except for the eastern-most 0.6 mile, the seven-mile long section of the Primary Alignment along Highway 70 from Highway 88 to Interstate 30 has been cleared during the previous NEPA effort involved with the Highway 70 expansion.

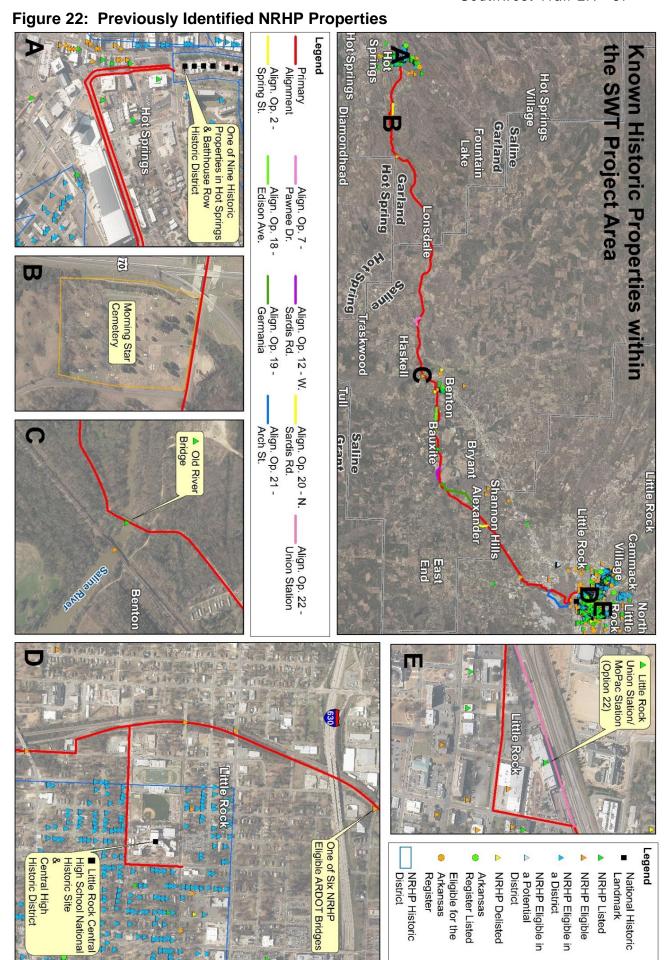
Based on ARAS data and the Cultural Resources Survey, the Primary Alignment is located within 300 feet of a total of 30 previously-identified archeological sites, none of which are eligible for the NRHP. None of the eight Alignment Options are within 300 feet of a known archeological site. The Primary Alignment of the SWT would connect with, but not impact, the Old River Bridge on the Saline River (a NRHP-listed structure) and the Little Rock CHSNHS (a National Historic Landmark). Additionally, the Primary Alignment would come into close proximity to, but not impact, nine historic properties and the Morning Star Cemetery in Hot Springs and six ARDOT bridges that are eligible for, or listed on, the NRHP. Alignment Option 22 would impact property associated with Union Station (also called MoPac Station) in Little Rock, which is a NRHP-listed property, but would not impact the building structure. None of the other seven Alignment Options would impact previously-identified NRHP properties.

The Cultural Resources Survey lists conditions associated with several of the historic properties. The Build Alternative would meet each of these conditions, resulting in no impacts to those identified structures.

An amendment to the existing cultural resources survey will be provided to SHPO for all sections of the Preferred Alternative that are not currently covered by initial the cultural resources survey. If prehistoric sites are impacted, FHWA-led consultation with the appropriate Native American Tribe will continue and the site(s) evaluated to determine if **Phase II testing** is necessary. Should

any of the sites be determined as eligible or potentially eligible for NRHP nomination and avoidance is not possible, site-specific treatment plans will be prepared and data recovery conducted at the earliest practicable time. All borrow pits, waste areas and work roads will be surveyed for cultural resources during the construction phase of the proposed project. Final SHPO clearance will be obtained prior to construction.

Phase II testing involves surveying and archeological testing to determine site boundaries, cultural and scientific importance, and National Register of Historic Places eligibility.



3.9 How would the project affect public water supplies?

Coordination with the Arkansas Department of Health (ADH) was conducted regarding the SWT (Appendix C). The ADH reviewed their public water supply databases and records to determine if any surface water intakes, wellheads, or associated protection areas were present in the project area. The ADH identified 11 public water supply systems within the vicinity of the project. Each of these systems were notified of the proposed SWT project. No responses were received.

No Action Alternative

The No Action Alternative would not impact any public water supplies.

Build Alternative

ADH concurred with the project in general with the condition that construction activity around the Saline River crossing shall be conducted as to not adversely impact the drinking water intake or water quality for a nearby water intake. Additionally, ADH commented that any plans and specifications for any water/sewer utility relocations shall be submitted to and approved by the Engineering Section prior to beginning utility work. There are no impacts anticipated to any public drinking water supplies as a result of this project and the project will comply with all ADH requirements.

3.10 How would streams be affected by the project?

Major water bodies in the project area are Gulpha Creek, East Branch Gulpha Creek, South Tenmile Creek, Tenmile Creek, Caney Creek, Trace Creek, Dobbs Creek, Dodson Creek, the Saline River, Depot Creek, Hurricane Creek, Briar Lick Branch, Little Fourche Creek, Springs Branch, Fourche Creek, and the Arkansas River.

Coordination with the Arkansas Natural Heritage Commission (ANHC) indicated that Tenmile Creek is listed by Arkansas Department of Environmental Quality (ADEQ) as an Ecologically Sensitive Waterbody. Fourche Creek is listed as impaired for dissolved oxygen, temperature, and silt turbidity. The Saline River is listed by ADEQ as an Extraordinary Resource Waterbody, Ecologically Sensitive Waterbody, is on the Nationwide Rivers Inventory, and is a state Natural and Scenic River.

A total of 133 ephemeral, intermittent, and perennial streams are within the 50-foot wide study corridor (see Table 4 for overview). Specific details on location and types of streams within the project area can be found in **Appendix F**, the Streams and Wetland Report.

No Action Alternative

Without construction of the project, there would be no impact on water resources.

Build Alternative

Table 4 provides the total number of linear feet (LF) of streams that would be impacted by the

Primary Alignment (14,326 LF) and each Alignment Option. See Appendix F for a breakdown of impacted ephemeral, intermittent, and perennial streams. The Primary Alignment would cross 115 streams, of which 57 are ephemeral, 45 are intermittent, and 13 are perennial. Of the Alignment Options, Alignment Option 19 would cross the greatest number of stream channels (8 streams totaling 198 LF) while Alignment Option 2 would cross the least (1 stream totaling 19 LF). No stream channels would be crossed by Alignment Option 18 nor Alignment Option 22.

Overall, the Build Alternative would impact 10,265-14,445 LF of stream, depending on the alignment option, and it is anticipated that Section 404 Permits will be issued for the proposed project. The majority of the streams impacted will be considered by USACE as separate and distant crossings and, therefore, permitted independently of one another with the maximum impact at one site estimated to be 1,920 LF of stream. When funding is available for final design, a detailed stream delineation will be conducted and submitted to the USACE as part of the Section 404 permitting process. Unavoidable impacts to streams will be mitigated with credits from an approved stream mitigation bank.

Construction activities in excess of one acre are required to apply for coverage under the National Pollutant Discharge Elimination System (NPDES) general permit for construction activities. The provisions of this permit include preparation of a Stormwater Pollution Prevention Plan which contains a selection of Best Management Practices (BMPs) to be implemented to effectively reduce or prevent the discharge of pollutants into receiving waters during construction activities. BMPs are measures that have been shown to prevent degradation of water quality due to construction activities.

Table 4: Linear Feet (LF) of Impacts to Identified Streams

Build Alternatives	Total Stream Impacts - Alignment Option	Total Stream Impacts - Comparable Section of Primary Alignment
Alignment Option 2 - Spring Street	19 LF	442 LF
Alignment Option 7 - Pawnee Drive	109 LF	74 LF
Alignment Option 18 - Edison Avenue	0 LF	718 LF
Alignment Option 12 - W. Sardis Road	30 LF	142 LF
Alignment Option 19 - Germania	198 LF	3,001 LF
Alignment Option 20 - N. Sardis Road	49 LF	54 LF
Alignment Option 21 - Arch Street	136 LF	52 LF
Alignment Option 22 - Union Station	0 LF	0 LF
Total for Primary Alignment	N/A	14,326 LF

The project will comply with all requirements of the Clean Water Act (CWA) as required by the United States Army Corps of Engineers (USACE) Section 404 permit program, ADEQ Water Quality Certification (Section 401), and the NPDES (Section 402). Avoidance and minimization efforts would be employed throughout the design and construction process. Unavoidable impacts would be mitigated by using an approved stream mitigation bank.

What is a **mitigation bank**?

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404. (https://www.epa.gov/cwa-404/mitigation-banks-under-cwa-section-404

What is the Clean Water Act (CWA)?

The CWA is a federal regulation governing activities that could have a harmful effect on the quality of the nation's water bodies. Section 404 of the CWA governs discharge of material into water bodies. Section 402 of the CWA governs the discharge of pollutants into water bodies. Section 401 of the CWA gives the states the authority to regulate the discharges that may affect water quality.

3.11 How would wetlands be affected by the project?

Executive Order 11990 requires that impacts to **wetlands** be considered in federal undertakings. The intent of the order and associated guidelines is to protect the high resource values found in wetlands by requiring an evaluation of alternatives and that mitigation be designed prior to development in wetlands.

Wetlands were preliminarily identified and classified within the proposed project corridor based on Cowardin, et al. (1979). This classification system is widely accepted by the

What are wetlands?

Wetlands are areas typically inundated or saturated by surface or groundwater to the extent that they can support vegetation adapted for life in wet soil conditions. Wetlands are protected under Section 404 of the CWA because they provide flood control, aid in improving water quality, and provide wildlife habitat.

U.S. Fish and Wildlife Service (USFWS) and the USACE. Wetlands types observed within the proposed action area included forested wetlands, scrub-shrub wetlands, and emergent wetlands. The detailed Wetland and Streams Report is provided in **Appendix F**.

No Action Alternative

The No Action Alternative would have no effect on wetlands.

Build Alternative

A total of 123 wetlands (31.9 acres) would be impacted by the Primary Alignment (**Table 5**). This includes 4.0 acres of herbaceous wetlands, 1.4 acres of scrub-shrub wetlands, 26.1 acres of forested wetlands, and 0.4 acre of ponded water. No wetlands would be impacted by Alignment Options 2, 7, 19, or 22. **Table 5** presents a comparison of the acres of wetlands impacted by each Alignment Option as compared to the Primary Alignment.

Alignment Option 21 was provided as an option to minimize wetland impacts compared to the Primary Alignment, which passes through Fourche Bottoms, a large forested wetland complex west of Interstate Park. While less wetland impacts would occur with Alignment Option 21 compared to the Primary Alignment, the Primary Alignment was intentionally positioned within Fourche Bottoms with the intent of providing aesthetic appeal to trail users. Additionally, the Primary Alignment, instead of Alignment Option 21, is strongly supported by City of Little Rock as they are working to further develop Fourche Bottoms Park with canoe, biking, and walking trails.

The Primary Alignment crosses through the proposed Central Arkansas Mitigation Bank. Coordination with the bank sponsor will occur prior to construction.

Overall, the Build Alternative would impact 18.6-31.9 acres of wetlands, depending on the alignment option, and it is anticipated that Section 404 Permits will be issued for the proposed project. The majority of the wetlands impacted would be considered by USACE as single and distant locations and, therefore, permitted independently of one another with the maximum impact at one site estimated to be 8.2 acres of wetlands. When funding is available for final design, a detailed wetland delineation will be conducted and submitted to the USACE as part of the Section 404 permitting process. Unavoidable impacts to wetlands will be mitigated with credits from an approved wetland mitigation bank.

Table 5: Acres of Impacted Wetlands by each Alignment Option Compared to Primary Alignment

Build Alternative	Total Wetland Impacts - Alignment Option	Total Wetland Impacts - Comparable Section of Primary Alignment
Alignment Option 2 - Spring Street	0 acre	0.8 acre
Alignment Option 7 - Pawnee Drive	0 acre	0.1 acre
Alignment Option 18 - Edison Avenue	<0.1 acre	1.4 acres
Alignment Option 12 - W. Sardis Road	<0.1 acre	1.4 acres
Alignment Option 19 - Germania	0 acre	1.5 acres
Alignment Option 20 - N. Sardis Road	0.1 acre	0.5 acre
Alignment Option 21 - Arch Street	0.5 acre	8.3 acres
Alignment Option 22 - Union Station	0 acre	0 acre
Total for Primary Alignment (no Alignment Options incorporated)	N/A	31.9 acres

3.12 What floodplain impacts are anticipated and how would they be mitigated?

The project was evaluated to determine if any encroachment into special flood hazard areas, typically the 100-year floodplain identified through Federal Emergency Management Agency Flood Insurance Rate Maps, would occur with either alternative.

No Action Alternative

The No Action Alternative would not affect any floodplains.

Build Alternative

The Build Alterative would impact 77.7-89.7 acres of floodplain, depending on the alignment option. A comparison of floodplain impacts by alternative is provided in **Table 6**. Although impacts to floodplains are anticipated, overall, the counties and cities within the project area would ensure that the project causes "no net rise" to water surface

elevations due to impacts to floodplains or floodways under their jurisdiction.

What is a **floodplain**?

Floodplains are land areas that become covered by water in a flood event. 100-year floodplains are areas that would be covered by a flood event that has a 1% chance of occurring (or being exceeded) each year, also known as a 100year flood. This is the floodplain commonly used for insurance and regulatory purposes.

The proposed action would cross the Fourche Creek Bottoms portion of the USACE Fourche Flood Control Project. 33 U.S.C. Section 408 authorizes the Secretary of the Army to permit the alteration, modification, permanent occupation, or use of completed USACE projects if approval of the request will not be injurious to the public interest and will not impair the usefulness of those projects. Further coordination with the USACE regarding Fourche Creek Bottoms will occur as

Table 6: Floodplain Impacts by Build Alternative

project development progresses.

Build Alternatives	Floodplain Impacts - Alignment Option	Floodplain Impacts - Comparable Section of Primary Alignment
Alignment Option 2 - Spring Street	0 acre	0 acre
Alignment Option 7 - Pawnee Drive	0 acre	0 acre
Alignment Option 18 - Edison Avenue	0 acre	0.3 acre
Alignment Option 12 - W. Sardis Road	1.7 acres	1.5 acres
Alignment Option 19 - Germania	0 acre	0 acre
Alignment Option 20 - N. Sardis Road	0 acre	7.4 acres
Alignment Option 21 - Arch Street	9.0 acres	13.1 acres
Alignment Option 22 - Union Station	0 acre	0 acre
Total for Primary Alignment (no Alignment Options incorporated)	N/A	89.5 acres

3.13 Are impacts to wildlife or their habitat expected from the project?

Wildlife Habitat

Due to its length, the project area is surrounded by contrasting topographies and contains diverse vegetation types at various densities. In fact, of the 32 Level IV ecoregions in Arkansas, six different ecoregions occur within the project extents (Woods et. al., 2004). Distinct areas were observed along the route that shared similar geographical, biological, and physical properties. A brief description of the various biotic communities encountered along the project is provided in **Appendix F** and includes the Ouachita Mountains area, the Saline River area, Little Fourche Creek area, and the Fourche Bottoms area. Overall, numerous types of wildlife and their respective habitat occur along the projects geographic extent and includes aquatic, avian, and forested and open-land terrestrial species.

Federally-Listed Species

In accordance with the Endangered Species Act (ESA) of 1973, federally-listed threatened and endangered species were identified for the proposed action area with the use of the USFWS's online Information, Planning, and Conservation (IPaC) decision support system (USFWS, 2019). These species have the potential to be present in, or migrate through, Saline, Garland, and Pulaski Counties. Additionally, the ANHC was contacted concerning the potential for state-listed species or other species of concern that may occur within the proposed action area.

The species identified and USFWS correspondence can be found in **Table 7.** A habitat assessment and effects determination is provided in Appendix G.

An **endangered species** is one that is in danger of extinction throughout all or a significant portion of its range. Endangered species receive the highest level of protection.

A threatened species is one that is likely to become endangered in the near future.

No Action Alternative

The No Action Alternative would have no effect on wildlife (including federally-listed species) or wildlife habitat.

Build Alternative

Wildlife Habitat

Based on the 2016 (most recent available) National Land Cover Database, 70% of the SWT footprint is through developed areas. An estimated 110 acres (30%) of habitat would be removed by the Build Alternative, comprised of approximately 94 acres of woodland, 10 acres of hay/pasture, and 2 acres of open or scrub-shrub natural areas. These areas provide habitat to numerous bird, reptile, amphibian, and mammal species. Conversion of these habitat types to paved trail and/or maintained ROW would only result in minor impacts to wildlife as the trail is relatively narrow, would have no motorized vehicles, and would not result in wildlife deaths due to vehicle collisions. All wildlife species are expected to be able to easily cross the SWT.

Federally-Listed Species

A total of 11 threatened, endangered, or candidate species are on the USFWS official species list for the proposed project. These species are listed in **Table 7** and included one bat, two birds, four mussels, one insect, and three flowering plants. Based on habitat observed in the study area, suitable habitat is present for seven of the eleven species listed by USFWS.

Foraging habitat for the Northern Long-eared Bat is present within the project limits. Coordination with USFWS will be completed before any tree removal.

The four protected mussel species are found in the Saline River. Although work is proposed in the vicinity of the Saline River to connect to the Old River Bridge, no work would take place within the banks of the Saline River. The Old River Bridge is being rehabilitated under a separate project funded through the ARDOT Transportation Alternatives Program.

Due to the proximity to the Saline River, its tributaries, and habitat within the project area, it is likely that the Bald Eagle (Haliaeetus leucocephalus) inhabits the area. Bald Eagles are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Prior to construction, the project area will be surveyed to ensure no nesting eagles are present or will be negatively impacted by the project.

Suitable nesting habitat is present within the proposed action area for migratory birds. Construction activities with the potential to affect migratory birds should occur between August 15 and March 31 to avoid the nesting season. Suitable habitat for non-migratory ground nesting birds is also present and construction is encouraged to occur during the same time frame. Provided construction can be conducted within the non-nesting season, no adverse effects are anticipated to migratory birds.

Table 7: Preliminary Species Conclusion Table

Species/Critical Habitat	Habitat Determination	USFWS Consultation	Preliminary Effects Determination for Build Alternative
Northern Long-eared Bat (Myotis septentrionalis)	Suitable	Required Informal	The Section 4(d) Rule would apply. Completion of the form will be submitted to the USFWS for concurrence of a "may affect, not likely to adversely affect" determination.
Least Tern (Sterna antillarum)	No Suitable habitat	Not Required	No Effect
Piping Plover (Charadrius melodus)	No Suitable Habitat	Not Required	No Effect
Arkansas Fatmucket (Lampsilis powellii)	Potential Habitat Present	Concurrence Required	May affect, not likely to adversely affect

Species/Critical Habitat	Habitat Determination	USFWS Consultation	Preliminary Effects Determination for Build Alternative		
Pink Mucket (Lampsilis abrupta)	Potential Habitat Present	Concurrence Required	May affect, not likely to adversely affect		
Rabbitsfoot (Quadrula cylindrica cylindrical)	Potential Habitat Present	Concurrence Required	May affect, not likely to adversely affect		
Winged Mapleleaf (Quadrula fragosa)	Potential Habitat Present	Concurrence Required	May affect, not likely to adversely affect		
Rattlesnake-master Borer Moth (Papaipema eryngii)	No Plants Observed	Concurrence Required	May affect, not likely to adversely affect		
Harperella (Ptilimnium nodosum)	Potential Habitat Present	Concurrence Required	May affect, not likely to adversely affect		
Missouri Bladderpod (Physaria filiformis)	No Suitable Habitat	Not Required	No Effect		
Running Buffalo Clover (Trifolium stoloniferum)	Considered by USFWS to be extirpated in Arkansas.	Not Required	No Effect		

3.14 Are there any hazardous materials in the project area?

A visual assessment and a review of government records were used to determine if any hazardous materials are in the project area. During the site reconnaissance, approximately 23 small trash dumps were identified along the Primary Alignment. These sites appeared to be inactive dump sites and typically consisted of discarded household items, household appliances, construction debris (e.g., concrete and bricks), automotive items (e.g., tires and empty 1-5 liter

oil containers), and electronics waste. Figure 23 shows a picture of a typical trash dump encountered. Site investigations also identified three electrical substations or utility stations and one cell tower in the immediate vicinity of the SWT. The government record review identified 21 Resource Conservation and Recovery Act (RCRA) sites, two Toxic Release Inventory (TRI) sites, and eight leaking underground storage tank (LUST) sites associated with gas stations in the immediate vicinity of the SWT. Over 1,000 55-gallon drums or barrels were observed at one of the RCRA sites in Little Rock (Figure 24). Identified sites are shown in Figure 25 and

What are hazardous materials?

Any materials which if encountered could cause a potential health risk to the public.

Figure 23: Example of Typical Trash **Dump Observed along SWT Route**



potential impacts are summarized below for each alternative.

No Action Alternative

The No Action Alternative would not have any effects on hazardous material or waste sites. None of the identified trash sites would be remediated under the No Action Alternative.

Build Alternative

None of the build alternatives for the SWT would impact any LUST sites, dry-cleaning facilities, active gasoline stations, underground storage tanks, cell towers, utility or electrical substations, or TRI sites. The Primary

Figure 24: RCRA Site in Little Rock with Over 1,000 Barrels Observed

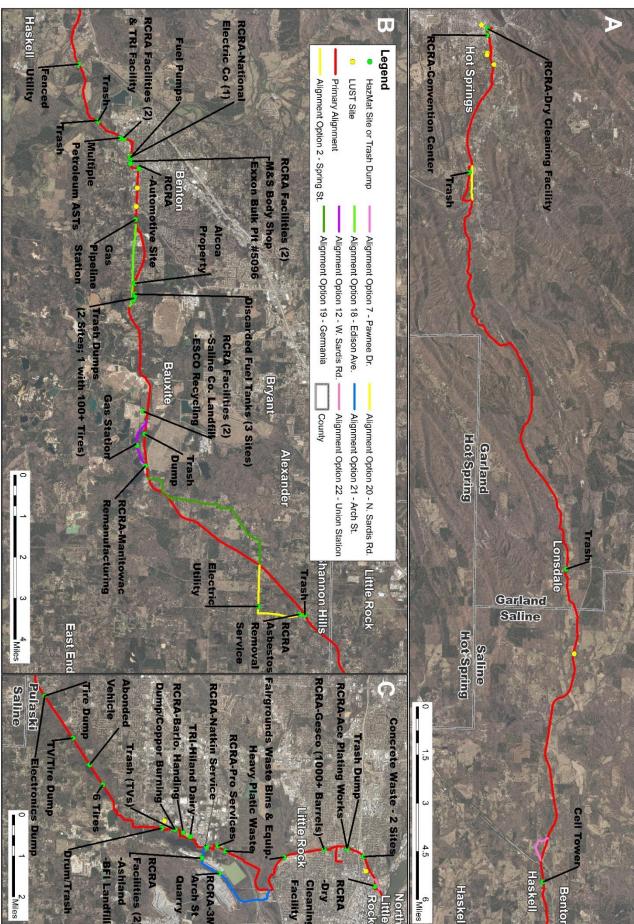


Alignment comes into close proximity to one of the RCRA sites. This site, which is shown in Figure 24, is identified by the Environmental Protection Agency (EPA) as Gesco Company Inc. and by the ADEQ as Sego Industries, is located at 2000 Thayer St. in Little Rock, and contained over 1,000 barrels or drums. The contents of these 55-gallon containers is unknown and there are no known records of violations by the facility according to the EPA's NEPAssist program.

If hazardous materials are identified, observed, or accidentally uncovered by any ARDOT personnel, contracting company(s), or state regulating agency, work will be halted, and the appropriate entities would be notified. Prior to resuming construction, the type of contaminant and extent of contamination would be identified. If necessary, a remediation and disposal plan will be developed. All remediation work would be conducted in conformance with the ADEQ, EPA, and Occupational Safety and Health Administration regulations.

Additionally, the Primary Alignment crosses through 23 trash dumps/disposal sites. None of the eight Alignment Options are located on or adjacent to an observed dump site. Most of these dump sites will have to be remediated prior to trail construction.

Figure 25: Hazardous Materials or Dump Sites along SWT Route



3.15 Would any prime farmland be impacted by the project?

Of the approximately 450 acres that comprise the proposed SWT route and Alignment Options, approximately 14% is **prime farmland**, 3% is prime farmland if drained, 4% is prime farmland if drained and either protected from flooding or not frequently flooded during the growing season, and 20% is farmland of statewide importance.

No Action Alternative

No prime farmland would be converted under the No Action Alternative.

Build Alternative

The Build Alterative would impact 59.8-76 acres of prime farmland or farmland of statewide importance, depending on the alignment option. The Primary Alignment would impact approximately 64 acres of prime farmland or farmland of statewide importance. Of those 64 acres, only 0.2 acre of prime farmland is currently being farmed. Alignment Options 12, 18, 19, and 20 would impact approximately 1.4 acres, 0.1 acre, 18.4 acres, and 7.7 acres, respectively, of prime farmland or

Prime farmland is defined by the U.S. Department of Agriculture as land that has the best combination of physical and chemical characteristics for producing crops. In some areas, land that does not meet the criteria for prime or unique farmland is considered to be farmland of statewide importance and may include lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

farmland of statewide importance. None of the other Alignment Options would convert prime farmland. Please see Appendix H for the Natural Resource Conservation Service Farmland Conversion Rating Form.

3.16 Does the project have any indirect effects?

No Action Alternative

The No Action Alternative would not result in any **indirect effects**.

Build Alternative

Indirect effects may temporarily occur to wetlands and streams under the Build Alternative. Except for Alignment Options 18 and 22, all **Indirect effects** are reasonably foreseeable effects that may be caused by the project but would occur in the future or outside of the project area.

options (including the Primary Alignment) would impact surface water streams and, therefore, may temporarily cause decreased water quality downstream of the project from increased sediment in stormwater runoff due to ground disturbance during construction. These temporary construction impacts would likely include increased rates of sedimentation in some areas or even sources of petroleum or other pollutants from construction vehicles. However, BMP measures will be implemented as part of the design and construction of the SWT to avoid and/or reduce indirect impacts to surrounding resources resulting from sediment-laden stormwater runoff. No long-term indirect effects to wetlands and streams are anticipated.

Additionally, indirect impacts to land use and other effects related to induced changes in the

pattern of land use, population density, or growth rate may occur. Development of the SWT may impact future land use by inspiring other trails to be developed that connect to the SWT. It might spur development of adjacent connected use areas such as parking facilities, walking trails, or even businesses that might want to locate near or adjacent to the trail. Overall, the Build Alternative may stimulate economic growth (which is a component of the project's purpose and need) and make the areas adjacent to the SWT corridor more desirable for development.

City planners or officials for Benton, Hot Springs, Shannon Hills, Garland County, Saline County, and Pulaski County do not foresee the trail causing any indirect land use changes or induced areas of growth, while planners for Lonsdale, Bryant, and Little Rock expect the SWT to induce minor growth (commercial, residential, or mixed-use) along or near the trail corridor. Lonsdale anticipates a restroom facility being constructed adjacent to the SWT in Lonsdale City Park; no sensitive resources would be impacted by this independent city project. The City of Bryant identified three areas of induced growth with reasonably foreseeable future projects: a 1.5-mile long bike trail connecting to the SWT, a one-acre commercial development, and a nine-acre site. Development on the larger site may impact approximately 0.8 acre of wetlands. The City of Little Rock identified two adjacent 12-acre areas in downtown Little Rock where redevelopment is expected as a result of the SWT. As much of the area is already developed, no impacts to sensitive resources are anticipated.

For all of the above described reasonably foreseeable projects, BMPs related to minimization of erosion and sedimentation will be required. Additionally, induced growth impacts are not expected to impact wildlife habitat (including federally-protected species) as foreseeable projects are occurring within already-urbanized areas and further habitat fragmentation is unlikely

3.17 Does the project have any cumulative impacts?

The cumulative impacts that result from an action may be undetectable but can add to other disturbances and eventually lead to a measurable environmental change. The assessment of cumulative impacts is required by the Council on Environmental Quality. For any given resource, a cumulative impact would only potentially exist if the resource were also directly or indirectly impacted by the proposed action.

The No Action Alternative would not result in any cumulative effects.

For the Build Alternative, cumulative impacts to water resources and wildlife habitat are analyzed. Direct impacts to other resources were not considered substantial enough to warrant a cumulative impacts

Cumulative impacts are defined as the impact on the environment which results from the incremental direct and indirect impacts of the proposed action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other action (CFR 40 §1508.7)

analysis. For example, although floodplains are identified to have direct impacts, the effects are not considered substantial since the local jurisdictions will ensure that there is "no net rise" in the water surface elevations in the floodways or floodplains and no building structures are proposed. Additionally, although indirect and direct land use impacts are anticipated, undeveloped areas

represent a large portion of the study area, land resources are not considered a declining resource, and the narrow trail width results in minor land use changes.

Water Resources (Wetlands and Streams)

The resource study area (RSA) for the cumulative analysis for water resources was delineated using the HUC12 watershed units. Based on USFWS National Wetlands Inventory (NWI) data, an estimated 14,420 acres of water resources are found in the RSA. These numbers are likely lower than the actual wetlands acres. Many of the wetlands and streams within undeveloped areas of the RSA are in good condition while those adjacent to or within urbanized areas are more degraded due to human-effects such as urban runoff. In addition to impacts to water resources summarized in Sections 3.10 and 3.11, impacts resulting from city, county, and ArDOT projects were evaluated. **Appendix I** lists past and other reasonably foreseeable actions within the next five years and provides an assessment of impacts resulting from those other actions. The direct and indirect impacts to water resources equates to approximately 34 acres, which is 0.2% of the total acreage for water resources found within the RSA. This reduction combined with an additional 24-acre reduction of water resources from other actions is anticipated within the RSA.

Wildlife Habitat (Including Federally-Listed Species)

The resource study area (RSA) for the cumulative analysis for wildlife habitat was delineated using the county boundaries. Based on the National Land Cover Database (NLCD) for 2016 (most recent year available), an estimated 60% of the RSA is wooded, 13% is pastureland or crops, 7% is open or scrub-shrub habitat, 5% is open water, and 15% is developed. These numbers are likely higher than the actual habitat present given the data is four years old and only intended to be approximations. Much of the wildlife habitat in more rural areas of the counties are in good condition while those near or within urbanized areas are more fragmented as contiguous habitats are generally of higher quality than fragmented sites. In addition to impacts to wildlife resources summarized in Section 3.13, impacts resulting from past and present city, county, and ArDOT projects were evaluated. Appendix I lists past and other reasonably foreseeable actions within the next five years and provides an assessment of impacts resulting from those other actions. The SWT impacts to wildlife habitat equates to approximately 0.03% of the total acreage of undeveloped land within the RSA. Additionally, a 187-acre reduction of habitat within the RSA due to other actions is anticipated.

Cumulative Impact Conclusion

For both of the above-described resources, minimization and mitigation for impacts are expected. The SWT and presumably any other action will comply with the ESA and the CWA as it relates to stormwater (Section 402) and point-source (Section 404) discharges. While substantial reductions in wetland extents can result in wildlife habitat loss and habitat fragmentation and may limit the ability to reconstruct and repair wetlands (Dahl 2011), the above-discussed impacts to water resources and wildlife habitat are considered minor compared to the amount of each resource that remains. Additionally, due to the narrow footprint of the SWT

and the use of construction BMPs, impacts to water resources and wildlife habitat are not expected to influence other areas of the watershed or be significant in scale. Thus, no substantial cumulative impacts are anticipated to water resources or wildlife habitat.

3.18 What resources are either not present or not affected?

Air Quality

The proposed project is located in an area in attainment for all the national ambient air quality standards (NAAQS). There may be temporary, localized impacts to surrounding residential or commercial communities during construction of the project due to emissions from construction equipment. These air quality impacts are considered negligible. There are no air quality impacts associated with the No Action or Build Alternative.

Noise

There may be temporary, localized impacts to surrounding residential or commercial communities during construction of the project; impacts would be localized in the form of noise

levels exceeding ambient levels. No sensitive receptors would be impacted by noise as a result of implementing the Build Alternative. Based upon the current ARDOT Policy on Highway Traffic Noise Abatement, a noise analysis is not required for this project because it is not classified as a Type I project as established by criteria in the 23 CFR §772. There are no noise impacts associated with the No Action Alternative.

Sensitive noise receptors include residences and public places that have a special sensitivity to noise, such as schools, churches, and parks.

Energy

There are no known energy impacts associated with the No Action or Build Alternative.

Landforms and Geology

The landforms and geological resources of the area would not be impacted by either the No Action or Build Alternatives

Wild and Scenic Rivers

No Wild and Scenic Rivers would be impacted by the No Action or Build Alternative.

Chapter 4 – Results and Recommendations

This chapter summarizes environmental analysis results and recommendations.

4.1 What are the results of this EA?

Table 8 summarizes environmental impacts of the alternatives for comparison purposes. Impacts associated with economics and relocations are presented in a single row within **Table 8** because impacts to these resouce categories for each Alignment Option have no discernable differences among them compared to that particular section of the Primary Alignment.

Overall, the environmental analysis of the proposed project did not identify any significant impacts to the natural and social environment as a result of the No Action Alternative or the Build Alternative.

What is the Preferred Alternative?

The Preferred Alternative is the Build Alternative, consisting of the Primary Alignment with Alignment Option 19. This Build Alternative addresses the purpose and needs of the project while minimizing environmental and social impacts. Table 9 identifies the major impacts associated with the Preferred Alternative.

Table 8: Comparison of Impacts of the Project Alternatives

		Build Alternative									
Resource Categories	No Action	Alignment Options							Build		
		Op. 2	Op. 7	Op. 18	Op. 12	Op. 19	Op. 20	Op. 21	Op. 22	PA ¹	Range
Economic Benefit	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Relocations Required	No	No	No	No	No	No	No	No	No	No	No
EJ Population Present at Option EJ Population Present at CPA ²	No	No No	No No	No No	No No	No No	No No	Yes Yes	No No	Yes	Yes
Visual Quality to User ³ for Option Visual Quality to User ³ for CPA ²	None	Poor Good	Fair Fair	Poor Good	Poor Good	Poor Good	Poor Good	Poor Good	Fair Poor	Good	Good
ROW Required by Option ROW Required by CPA ²	0 ac	0 ac 3 ac	0 ac 0 ac	0 ac 6 ac	0 ac 3 ac	4 ac 11 ac	2 ac 5 ac	<1 ac	1 ac 0 ac	73 ac	50 - 74 ac
Park Connections for Option Park Connections for CPA ²	None	0 0	0	0	0	0	0 0	1 2	0	8	8
Known NRHP Sites near Option Known NRHP Sites near CPA ²	0	0	0	0 0	0	0	0	0	1 0	0	0-1
Stream Impacts by Option Stream Impacts by CPA ²	0 LF	19 LF 442 LF	109 LF 74 LF	0 LF 718 LF	30 LF 142 LF	198 LF 3,001 LF	49 LF 54 LF	136 LF 52 LF	0 LF 0 LF	14,326 LF	10,265 - 14,445 LF
Wetland Impacts by Option Wetland Impacts by CPA ²	0 ac	0 ac 0.8 ac	0 ac 0.1 ac	<0.1 ac	<0.1 ac	0 ac 1.5 ac	0.1 ac 0.5 ac	0.5 ac 8.3 ac	0 ac 0 ac	31.9 ac	18.6 - 31.9 ac
Floodplain Impacts by Option Floodplain Impacts by CPA ²	0 ac	0 ac 0 ac	0 ac 0 ac	0 ac 0.3 ac	1.7 ac 1.5 ac	0 ac 0 ac	0 ac 7.4 ac	9.0 ac 13.1 ac	0 ac 0 ac	89.5 ac	77.7 - 89.7 ac
HazMat Cleanup by Option HazMat Cleanup by CPA ²	None	None 1 Site	None None	None 6 Sites	None 1 Site	None None	None None	None 1 Site	None None	23 Sites	23 Sites
Farmland Impacts by Option Farmland Impacts by CPA ²	0 ac	0 ac 0 ac	0 ac 0 ac	0.1 ac 1.1 ac	1.4 ac 4.5 ac	18.4 ac 11.6 ac	7.7 ac 2.4 ac	0 ac 0 ac	0 ac 0 ac	63.9 ac	59.8 - 76.0 ac

¹PA - Primary Alignment

²CPA - Comparable Section of Primary Alignment

³ "Visual Quality" is rated for the SWT User as follows: Poor - Route is on-street facility with heavy or close traffic and no aesthetic value; Fair - Route is on-street facility with little traffic or traffic distanced from rider, and moderate aesthetic value; Good - Route is not an on-street facility or traffic is well separated from rider, and would be considered aesthetically pleasing by the general public.

Table 9: Impacts Associated with the No Action and Preferred Alternative

Resource Categories	No Action	Preferred Alternative
Construction Cost	\$0	\$42 million
Annual Economic Benefit	\$0	\$4.8 million
Relocations Required	0	0
EJ Block Group Impacts (acres)	0	21
Visual Impacts to Trail Users	No Change	Beneficial Change
Right of Way Required (acres)	0	66
Park Connections	0	8
Known NRHP Sites Impacted	0	0
Stream Impacts (linear feet)	0	11,523
Wetland Impacts (acres)	0	30.4
Floodplain Impacts (acres)	0	89.5
HazMat Sites Impacted/Remediated	0	23
Farmland Impacts (acres)	0	70.7

4.3 What commitments have been made?

Commitments made for the proposed project are as follows:

- If hazardous materials, unknown illegal dumps, or USTs are identified or accidentally uncovered during construction, the type and extent of the contamination will be determined according to the ARDOT response protocol. In cooperation with the ADEQ, appropriate remediation and disposal methods will be determined.
- Project construction will be in compliance with all applicable CWA regulations, as required. This includes obtaining the following: Section 401 Water Quality Certification: Section 402 NPDES; and Section 404 Permit for Dredged or Fill Material.
- Stream and wetland mitigation will be offered at an approved mitigation bank site at a ratio approved during the Section 404 permitting process.
- Each county or city within the project area will ensure that the design meets the requirements of "no net rise" certification for all floodplains and floodways under their jurisdiction impacted by the project.
- An amendment to the existing cultural resources survey will be provided to SHPO for all sections of the Preferred Alternative that are not currently covered by initial the cultural

resources survey. If sites are affected, a report documenting the survey results and stating the ARDOT recommendations will be prepared and submitted for SHPO review. If prehistoric sites are impacted, FHWA-led consultation with the appropriate Native American Tribe will be conducted and the site(s) evaluated to determine if Phase II testing is necessary. Should any of the sites be determined as eligible or potentially eligible for NRHP nomination and avoidance is not possible, site-specific treatment plans will be prepared and data recovery conducted at the earliest practicable time. All borrow pits, waste areas and work roads will be surveyed for cultural resources during the construction phase of the proposed project. Final SHPO clearance will be obtained prior to final NEPA approval and identification of a Selected Alternative.

- A Water Pollution Control Special Provision will be incorporated into the contract to minimize potential water quality impacts.
- Appropriate action will be taken to mitigate any impacts to private drinking water sources should they occur due to this project.
- A wildflower seed mix will be included in the permanent seeding for the project.
- Coordination with the USACE for impacts to the Fourche Creek Bottoms project will continue throughout project development.
- USFWS concurrence/clearance will be obtained prior to final NEPA approval and identification of a Selected Alternative.
- Coordination with the sponsor of the proposed Central Arkansas Mitigation Bank will continue throughout project development.

4.4 Is the NEPA process finished?

If this EA is approved by the FHWA for public dissemination, a Location Public Hearing would be held.

After a review of comments received from citizens, public officials, and public agencies, a FONSI document would be prepared and submitted to the FHWA or the project would be recommended for an EIS study if significant, unmitigable impacts are determined to be present. If FHWA issues a FONSI, it would identify the Selected Alternative and conclude the NEPA process.

Acronyms

AAS Arkansas Archeological Survey

ADA Americans with Disabilities Act

ADEQ Arkansas Department of Environmental Quality

ADH Arkansas Department of Health

ADT Average Daily Traffic

AHPP Arkansas Historic Preservation Program

ANHC Arkansas Natural Heritage Commission

ARDOT Arkansas Department of Transportation

ART Arkansas River Trail

BMPs Best Management Practices

CHSNHS Central High School National Historic Site

CWA Clean Water Act

EΑ **Environmental Assessment**

EJ **Environmental Justice**

EPA **Environmental Protection Agency**

EO **Executive Order**

FAP Federal Aid Project

FHWA Federal Highway Administration

FLAP Federal Lands Access Program

FONSI Finding of No Significant Impact

HSNP Hot Springs National Park

IPaC Information, Planning, and Conservation

LUST Leaking Underground Storage Tank

LWCF Land and Water Conservation Funds

MPO Metropolitan Planning Organization NAAQS National Ambient Air Quality Standards

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

NRHP National Register of Historic Places

OSHA Occupational Safety and Health Administration

OWJ Official with Jurisdiction

RCRA Resource Conservation and Recovery Act

ROW Right-of-Way

State Historic Preservation Officer SHPO

SWP3 Stormwater Pollution Prevention Plan

SWT Southwest Trail

TRI Toxic Release Inventory

USDOT U.S. Department of Transportation

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

USHHS U.S. Department of Health and Human Services

Literature Cited

- ALTA Planning (also "Alta Planning + Design"). 2015. Southwest Trail Corridor and Economic Impact Study. 95 pages.
- Arkansas Department of Transporation (ARDOT), in association with the Arkansas State Police, Arkansas Commission on Law Enforcement Standards and Training, Arkansas Department of Health, and the Arkansas Department of Parks and Tourism. 2017. Arkansas Bicycle and Pedestrian Transporation Plan. 114 pages.
- BBC Research and Consulting. 2018. Economic and Health Benefits of Bicycling in Northwest Arkansas. 33 pages. Available Online at https://8ce82b94a8c4fdc3ea6db1d233e3bc3cb10858bea65ff05e18f2.ssl.cf2.rackcdn.com/d0/97/cf26b21948308adae6 828624729a/march-2018-nw-arkansas-final-report-corrected.pdf.
- Bucchianeri, Grace W., Kevin C. Gillen, and Susan M. Wachter. 2012. Valuing the Conversion of Urban Greenspace. Prudential Financial Inc.: University of Pennsylvania. 20 pages.
- Campbell, Harrison S. and Darla K. Munroe. 2004. The Economic Impact of the Catawba Regional Trail. Department of Geography and Earth Sciences, University of North Carolina at Charlotte. 57 pages.
- Dahl, T.E. 2011. Status and Trends of Wetlands in the Conterminous United States 2004 to 2009. U.S. Department of the Interior; Fish and Wildlife Service, Washington, D.C. 108 pages.
- Economy League for Greater Philadelphia, Econsult Corporation, and Keystone Conservation Trust. 2010. The Economic Value of Protected Open Space in Southeastern Pennsylvania. 72 pages.
- Econsult Corporation and Greenways Incorporated. 2007. The Potential Economic Impacts of the Proposed Carolina Thread Trail. 67 pages.
- Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative (administrator), Jane Fitzgerald (Principal Investigator), 2014-10-30 (creation), 2017-11-13 (lastUpdate), 2014-10-30 (creation), 2017-11-07 (lastUpdate), 2014 (Publication), 2016 (Publication), Natural Glades in Missouri and Arkansas (2016).
- Jayroe, Dustin. 2019. Bicycling's Big Boom on Arkansas Tourism. Arkansas Money and Politics. Available Online at https://amppob.com/bicyclings-big-boom-on-arkansastourism/.
- Landosky, John. 2017. City of Little Rock Central High Corridor Proposal 2.0. Available Online at: https://www.littlerock.gov/media/1863/little-rock-southwest-trail-proposal-jan-6-2017.pdf.

- League of American Bicyclists. 2016. Little Rock, AR Report Card. Available Online at: http://bikeleague.org/sites/default/files/bfareportcards/BFC Spring 2016 ReportCard L ittle Rock AR.pdf.
- National Park Service. 2019. Hot Springs National Park. Website: https://www.nps.gov/hosp/index.htm.
- Powell, Kenneth E., Linda M. Martin, and Pranesh P. Chowdhury. 2003. Places to Walk: Convenience and Regular Physical Activity. American Journal of Public Health 93(9):pp.1519-1521.
- Racca, David P. and A. Dhanju. 2006. Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas. Center for Applied Demography and Research, University of Delaware. 31 pages.
- Riddel, Mary. 2001. A Dynamic Approach to Estimating Hedonic Prices for Environmental Goods: An Application to Open Space Purchase. Land Economics 77(4):494-512.
- The State of Obesity. 2018. Obesity Rates and Trend Data. Robert Wood Johnson Foundation. Available Online at https://stateofobesity.org/data/.
- Tri-Lakes Metropolitan Organization. 2017. Bicycle and Pedestrian Master Plan. Available Online at: http://www.wcapdd.org/images/TLMPO Bikie-PedMaster Plan 070317 C.pdf.
- United Health Foundation. 2019. America's Health Rankings. https://www.americashealthrankings.org/learn/reports/2017-annual-report/findings-staterankings.
- United States Environmental Protection Agency (EPA). 2019. NEPAssist Website. Available Online at https://www.epa.gov/nepa/nepassist.
- Woods A.J., Foti, T.L., Chapman, S.S., Omernik, J.M., Wise, J.A., Murray, E.O., Prior, W.L., Pagan, J.B., Jr., Comstock, J.A., and Radford, M. 2004. Ecoregions of Arkansas (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,000,000).