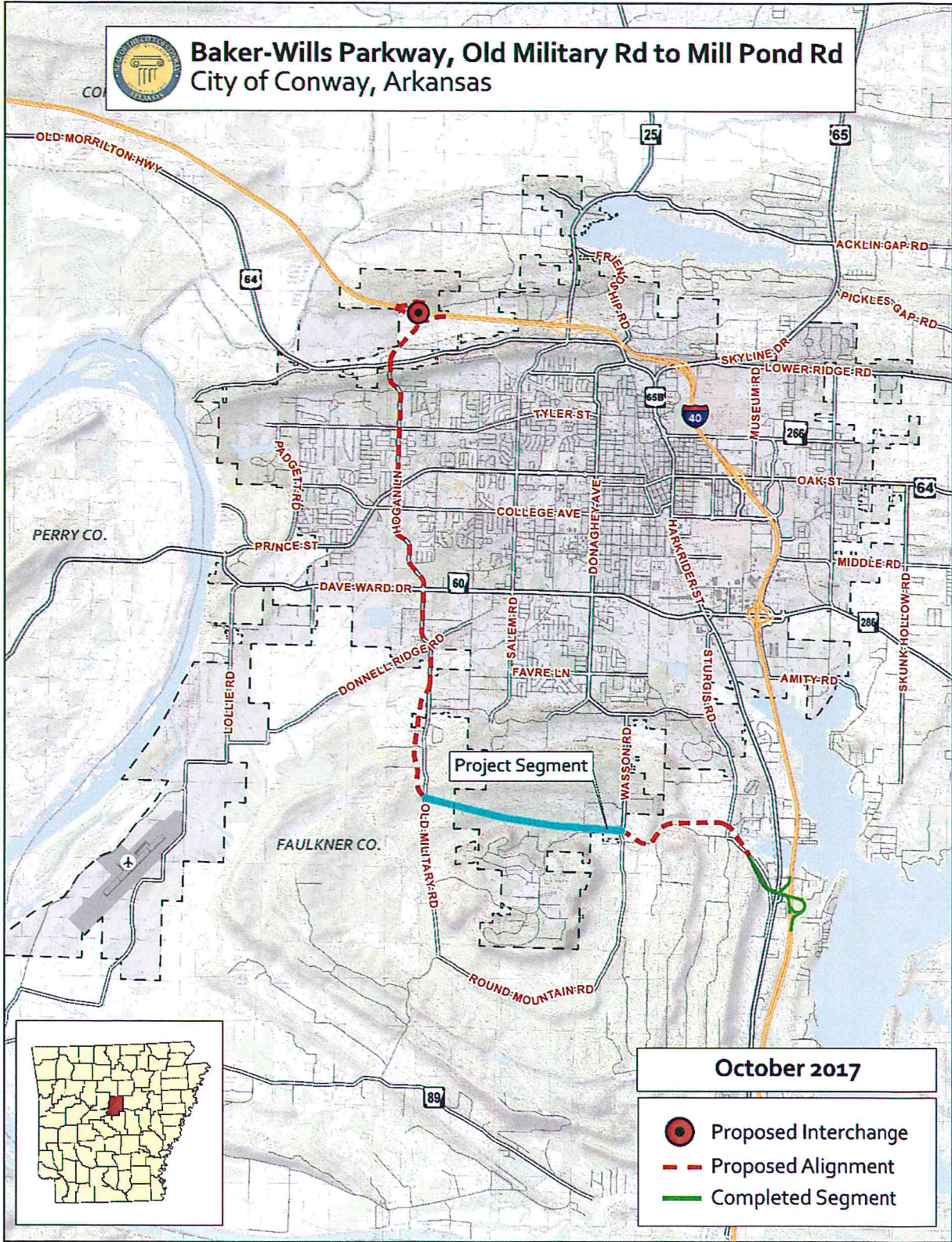







# Baker-Wills Parkway, Old Military Rd to Mill Pond Rd City of Conway, Arkansas



October 2017

-  Proposed Interchange
-  Proposed Alignment
-  Completed Segment

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## I. Project Description

Funding will be used to construct Baker-Wills Parkway from Old Military Road to Mill Pond Road. The Baker-Wills Parkway (Parkway) is being built in phases as funding permits, in many cases by upgrading existing roadways to meet the ultimate corridor design criteria. The proposed 2.5 mile section will provide a critical entirely new link in the Parkway, in effect making the Parkway a functional and very desirable alternative to travel through the central, highly congested part of Conway. Two of the future four lanes will be constructed at this time, operating as a two lane facility in the short-term. A shared-use path will be included to increase bicycle connectivity within the City of Conway and southwestern Faulkner County. To preserve the benefit and functionality intended for the completed Baker-Wills Parkway, right of way acquisition for the interim project will accommodate the ultimate four lane median divided arterial section. Additionally, to bolster connectivity and provide a more continuous flow of traffic, specific intersection improvements are proposed along the existing two lane roadway network connecting the completed portion of the Parkway to the proposed segment from Old Military Road to Mill Pond Road. Unlike other segments of the ultimate corridor that closely follow existing roadways, this particular segment is located in a relatively rural and undeveloped area with little existing connectivity to the City of Conway or west toward the Arkansas River.

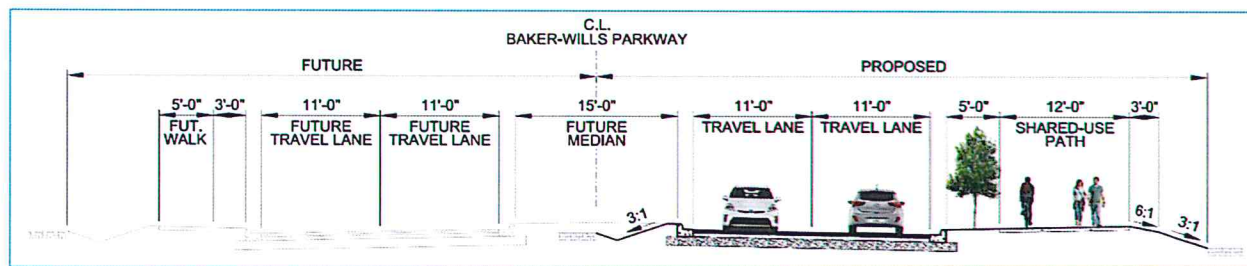


Figure 1 Proposed Cross Section

The Project is just one phase of construction of the Baker-Wills Parkway (formerly known as the Conway Western Arterial Loop). This arterial route will eventually be a four lane, median divided, facility utilizing existing and new location alignments within the City of Conway and southwestern portions of Faulkner County. The total project is 11.9 miles in length and will provide two new access points to Interstate 40 at interstate log mile 122 on the northwest side of Conway and log mile 132 on the south side of Conway. Construction of the south interchange was just completed in 2017. A non-traversable median is planned for non-urban areas, with access limited as established by an Access Management Plan. Highly limited adjacent property access will be provided within the non-urban section of the alignment so that the road can truly function as a parkway.

The project is a result of phenomenal population growth in Conway, starting in the 1980s/1990s and continuing to this day. From 2000 to 2010, the population grew at an average annual rate of 3.65%. Since 2010, growth has continued at an average annual rate of 1.53%, at this rate the

population of Conway will be over 100,000 people by 2040. Conway is the Faulkner County seat and center of commerce for the county; the outlying towns of Vilonia, Greenbrier and Mayflower are also growing and bringing additional people to town for work and shopping. All of these people mean more cars and traffic than the roads of Conway can handle.

In an attempt to solve congestion, a study of alternative routes for a western arterial loop was initiated by the City of Conway in 1999, resulting in distribution of the Draft Environmental Impact Statement to the public on February 15, 2004. The Preferred Alternative (Alternative A), was selected on June 15, 2004. Numerous actions followed, culminating with approval of the Final Environmental Impact Statement on April 27, 2010. A record of these actions can be found in Section V.

During the course of development of the Baker-Wills Parkway, the project was deemed to be necessary because critical segments in the current arterial system are at or near capacity. Additionally, a three year safety analysis indicated that a majority of the crash rates along the arterial segments in the study area are above the statewide average when compared to similar facility types.

The purpose of the Baker-Wills Parkway is to provide alternate arterial route capacity within the vicinity of western Conway and the southwest corner of Faulkner County to meet both current and future traffic demands. Additional purposes for the project were identified:

- To provide relief for an existing transportation system that is already suffering a reduction in Level of Service due to traffic overloading;
- To reduce vehicle travel times;
- To reduce the number of transportation-related crashes within the study area;
- To provide relief of traffic congestion in the Conway Central Business District;
- To provide improved access to regional medical facilities, the new regional airport, and the Meadows Corporate Center; and
- To improve the response times of the City's emergency service units.

The Baker Wills Parkway (formerly Conway Western Arterial Loop) was designated a High Priority Project in SAFETEA-LU for the 5 year period 2005-2009, and was included in the Central Arkansas Regional Transportation Study (CARTS) *METRO 2030* Metropolitan Transportation Plan. *METRO 2030* rated the Loop as a high to medium priority within the Roadway Vision Plan and ranked the Loop first within the new facilities category. *METRO 2030* also identified the proposed facility as a future regional arterial on the Regional Arterial Network map. The most recent metropolitan transportation plan, *Imagine Central Arkansas*, continues to rate the project as a high to medium priority.<sup>1</sup> The project is also shown on the City of Conway Master Street Plan.<sup>2</sup>

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<sup>1</sup> <http://www.cityofconway.org/pages/tiger-grant-application/> and at <http://www.metroplan.org/content/long-range-plan>

<sup>2</sup> <http://www.cityofconway.org/pages/tiger-grant-application/>

## II. Project Location

Beginning latitude/longitude

35.0328512° N

92.4913471° W

Ending latitude/longitude

35.0269453° N

92.4475622° W

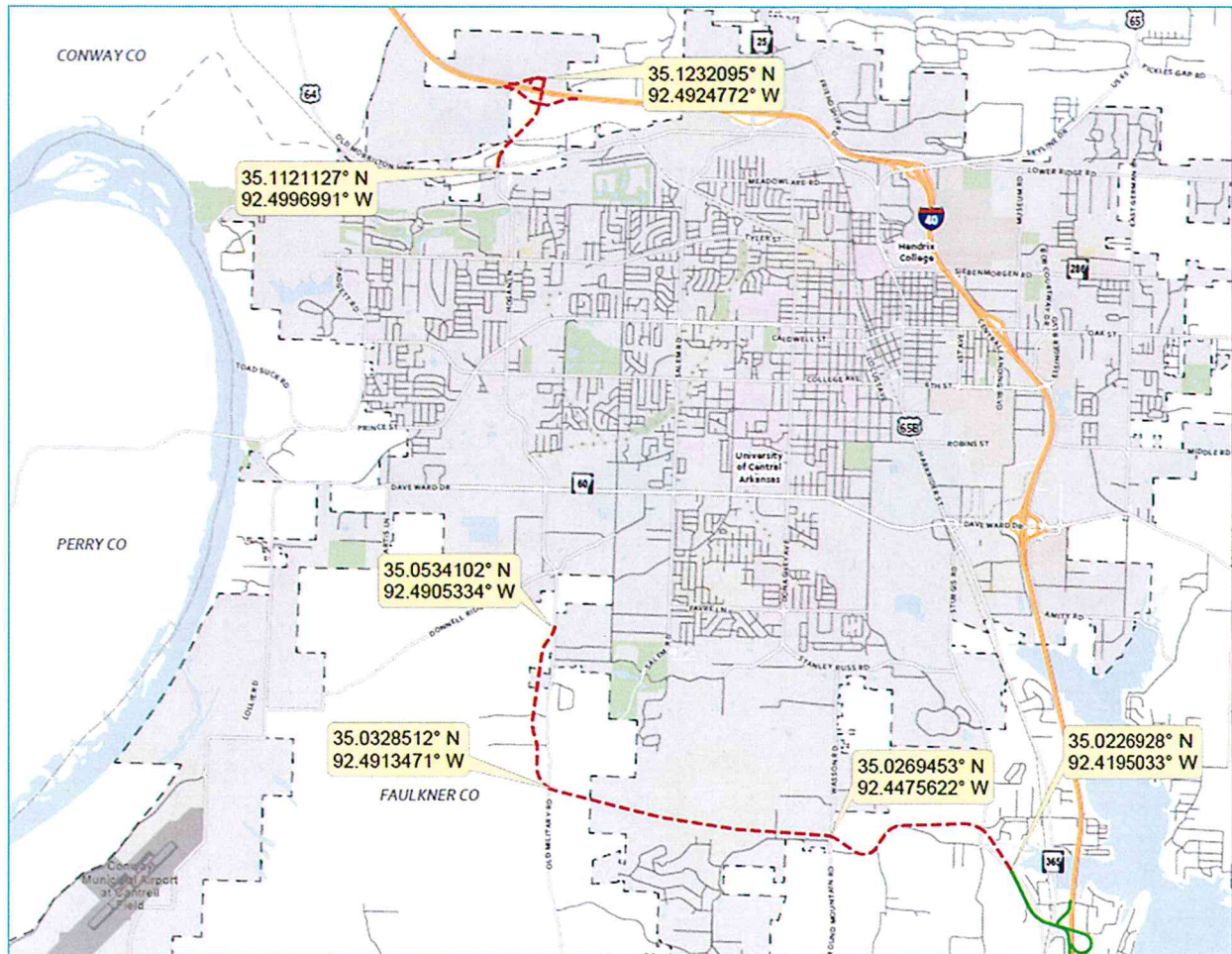


Figure 2 Latitude and Longitude of Project Segment

The Project is located in Conway, Arkansas in the Little Rock-North Little Rock-Conway MSA.

As explained further below, the proposed section of Baker-Wills Parkway will provide a much-needed additional east-west arterial in the south part of Conway, greatly reducing congestion on the existing clogged arterials.

The City of Conway is currently served by the following highways (Figure 3):

- Interstate 40, which is a divided freeway, now six lanes from Little Rock to Conway and four lanes from Conway to Ft. Smith.
- Highway 64 (Oak Street)
- Highway 65 (Skyline Drive)
- Highway 60 (Dave Ward Drive)
- Highway 25
- Highway 65B (Harkrider Street)
- Highway 365
- Highway 286
- Highway 266 (Siebenmorgen Road)

Interstate 40 traverses Conway through the north and east sides, which minimizes the distance between Interstate 40 and any point within the city. However, due to natural and manmade obstacles, the existing interchanges and street network make Interstate 40 easily accessible only from the easternmost section of Conway. As a result, the concentration of commercial development has until recently been limited to an area within two or three miles of Interstate 40, particularly in the area between the original Central Business District and Interstate 40. This location of commercial development has created increasing traffic congestion due to the competition between commercial and residential traffic needs for access to the interstate.

The residential areas on the south and west sides of Conway are separated from Highway 64W and Interstate 40 on the north by Cadron Ridge. East of these residential areas, the Central Business District separates them from Highway 65, Highway 64 E and Interstate 40. There are no arterial routes to the south through the undeveloped agricultural land or across Round Mountain. The Union Pacific Railroad generally parallels Interstate 40 and because of the limited number of crossings and conflicts with rail traffic, the railroad provides a serious constraint to traffic desiring to move between the residential areas and Interstate 40. Highway 64W and Highway 60 are the only east/west arterial routes that do not intersect the railroad with at-grade crossings.

Traffic from these residential areas in the south and west uses one of four primary east-west arterial routes to access Interstate 40. These are:

- Highway 64W (west of Highway 65B)
- Prince Street/Caldwell Street
- College Avenue
- Highway 60, also known as Dave Ward Drive (Highway 286 until 1998)

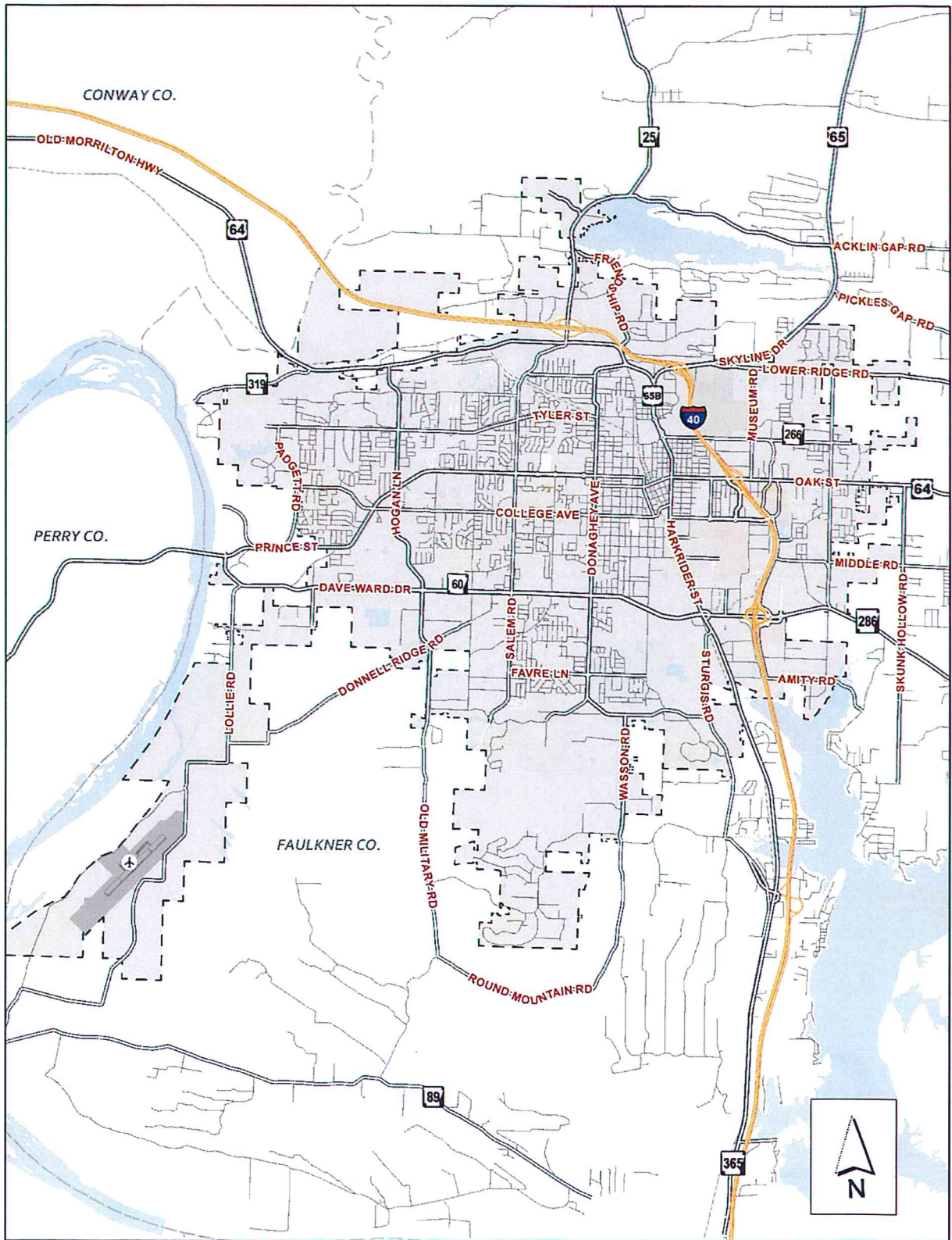


Figure 3 Existing Road Network



Two principle north/south arterial routes provide access between the residential areas and Interstate 40: Highway 65B (Harkrider Street) and Hogan Lane. Salem Road and Donaghey Avenue are also used for north/south travel.

Hogan Lane has historically been the only north/south road that crosses Cadron Ridge; however, an extension of Salem Road across the Ridge was completed in July 2009, along with an overpass of the Union Pacific Railroad track.

### III. Grant Funds, Source & Uses of Project Funds

The total project is expected to cost \$17,300,000, with 20% from the City of Conway and 80% from TIGER. No other federal sources have been identified at this time.

A copy of the funding commitment from the City of Conway is attached in Appendix A. Funding comes from a ¼ cent sales tax, plus an impact fee directed to construction of new streets. This funding is available now and has been set aside as a match for the project, with no constraints.

The Baker-Wills Parkway is being built as funding permits. Development and construction of the south interchange at log mile 132 cost \$25.4 million. Additionally, the City of Conway has spent \$920,000 for initial planning and development of the overall project.

Table 1 Sources and Uses of Funds

	Total Cost	TIGER Share 80%	Other Federal	City of Conway 20%
<b>Project Costs</b>				
<b>Construction Costs</b>				
<u>Intersection Improvements</u>				
Scenic Hill Rd.	\$350,000		N/A	
Wasson Rd.	\$350,000		N/A	
Mill Pond Rd.	\$350,000		N/A	
Old Military Rd.	\$350,000		N/A	
<u>Arterial Improvements</u>				
Two Lane Arterial at New Location (2.5 Miles)	\$11,000,000		N/A	
Shared-Use Path (2.5 Miles)	\$700,000		N/A	
<b>Total Estimated Construction Costs</b>	<b>\$13,100,000</b>	<b>\$10,480,000</b>	<b>N/A</b>	<b>\$2,620,000</b>
<b>Miscellaneous Costs</b>				
Planning & Engineering Services	\$1,310,000	\$1,048,000	N/A	\$262,000
Construction Engineering & Inspection Services	\$1,310,000	\$1,048,000	N/A	\$262,000
Right of Way Acquisition	\$1,180,000	\$944,000	N/A	\$236,000
Utility Relocation	\$400,000	\$320,000	N/A	\$80,000
<b>Total Miscellaneous Costs</b>	<b>\$4,200,000</b>	<b>\$3,360,000</b>	<b>N/A</b>	<b>\$840,000</b>
<b>Total Cost</b>	<b>\$17,300,000</b>	<b>\$13,840,000</b>	<b>N/A</b>	<b>\$3,460,000</b>

## IV. Merit Criteria

### 1. Primary Selection Criteria

#### A. Safety

##### Improved Access to Medical Facilities

Safety benefits of the Project come from improved emergency response times due to reduced congestion and from alternative access to medical facilities when other roadways may be blocked by congestion or disaster. Until recently, the majority of medical services for the region served by Conway were located along College Avenue between Donaghey Avenue and Salem Road. Conway Regional Medical Center is located on College Avenue just west of the intersection with Donaghey Avenue. College Avenue, a two-lane street through the downtown

area, is a primary east-west arterial route for cross-town traffic. The 2016 Average Daily Traffic in the vicinity of this hospital was 16,000 vehicles per day<sup>3</sup> on a street with an estimated capacity of 16,900 vehicles per day.<sup>4</sup> Diverting traffic away from College Avenue by use of an alternate route between the western portion of Conway and Interstate 40 is needed to provide for improved access to the medical services during emergency situations.

A second area for medical services presented when Baptist Health Medical Center-Conway opened in September 2016. It is located at 1855 Exchange Avenue near the Interstate 40 / Dave Ward Drive interchange, an area that is thoroughly congested many periods of the day. Re-directing traffic to the Baker-Wills Parkway will also reduce emergency response times to this facility.

### Crash Reductions

Safety benefits will also come from the reduction in crash rates that is expected to occur as traffic on existing roadways is redistributed and reduced. Analysis of crash rates for the years 2005-2007 performed for the Environmental Impact Statement shows a crash rate above the state average (primarily property damage only) on many Conway arterials (Appendix B). Since this analysis, the population in Conway has dramatically increased, and presumably the traffic with it, so that the current crash rates on area roadways are expected to be even higher. At the time of the analysis, seven fatal crashes were reported. Four fatalities occurred on Interstate 40. Two fatalities occurred on Highway 60/Dave Ward Drive and one on Highway 65B, areas that will be directly improved by construction of the Parkway from Old Military Road to Mill Pond Road.

Crash reductions will also result from improved lane width and road geometry. Typical roads in this rural area feature ten foot lanes with no shoulders.

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<sup>3</sup> Arkansas Department of Transportation

<http://ahtd.maps.arcgis.com/apps/webappviewer/index.html?id=8deb09579210490bafb97bd03c3c0792>

<sup>4</sup> Final Environmental Impact Statement, Section 1.4.3, found at: <http://www.cityofconway.org/pages/tiger-grant-application/>



Figure 4 Old Military Road

### B. State of Good Repair

The project does not directly address State of Good Repair.

### C. Economic Competitiveness

The primary benefits of this project come from Economic Competitiveness, both from increased efficiency of movement of goods and people and from the standpoint of business attraction.

#### Business Attraction

Completion of the Wills-Parkway Interstate 40 interchange at log mile 132 was key factor in the decision of Hewlett-Packard to locate a facility in the Meadows Office and Technology Park in 2010. Ready access to an interstate was specified by site locators in the requests for qualifications they disseminated when seeking a location for the new facility. Many technology workers employed at the Meadows, like Crafton Tull Energy Services and Hewlett-Packard, work in Conway, but live in Little Rock because of two career family situations. Located two miles from the south Baker-Wills Parkway Interstate 40 interchange, the location of the facility in southeast Conway facilitates this two-way commute.

Although Conway and Faulkner County have a strong employment base, with 65% of workers staying in Faulkner County, most of the other 35% commute to Little Rock each day. Both the current Project from Old Military Road to Mill Pond and the whole of the Baker-Wills Parkway will help ease this commute, taking vehicles off other Interstate 40 interchanges, and distributing the traffic to the south and west of Conway.

### Movement of Goods

Conway is home to around twenty existing manufacturers.<sup>5</sup> These companies rely heavily on access to the interstate system to receive raw materials and ship manufactured goods to markets. Sixty freight carriers also serve the Conway area, with five trucking companies located in town.<sup>6</sup> Maintaining satisfactory access to the interstate system is an important factor in the continued health of these manufacturers and freight carriers.

### Access to the Airport

For safety reasons and to accommodate the need for expansion, in September 2014 the Conway Municipal Airport was relocated from its Downtown Conway location to Cantrell Field, a 431 acre site in Southwest Conway, ten miles southwest of the City's center. The remote location, 10.3 miles west of I-40, along U.S. Highway 60 (Dave Ward Drive), certainly allows for both safety and expansion, but it also makes for inefficient movement of both goods and people by ground. Because Highway 60 is currently the most direct path, during peak travel times it can easily take 25-30 minutes to get from the interstate to the airport. Accessing the airport by the southern route of the Baker-Wills Parkway, with the Mill Pond to Old Military Road link, could reduce that time by either reducing congestion and/or providing a more convenient route. Additional travel time reductions will occur when the northern interchange by Hogan Lane is built.

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<sup>5</sup> <http://www.conwayarkansas.org/pages/develop-conway/industries/>

<sup>6</sup> Final Environmental Impact Statement, Section 1.4.5, found at: <http://www.cityofconway.org/pages/tiger-grant-application/>.

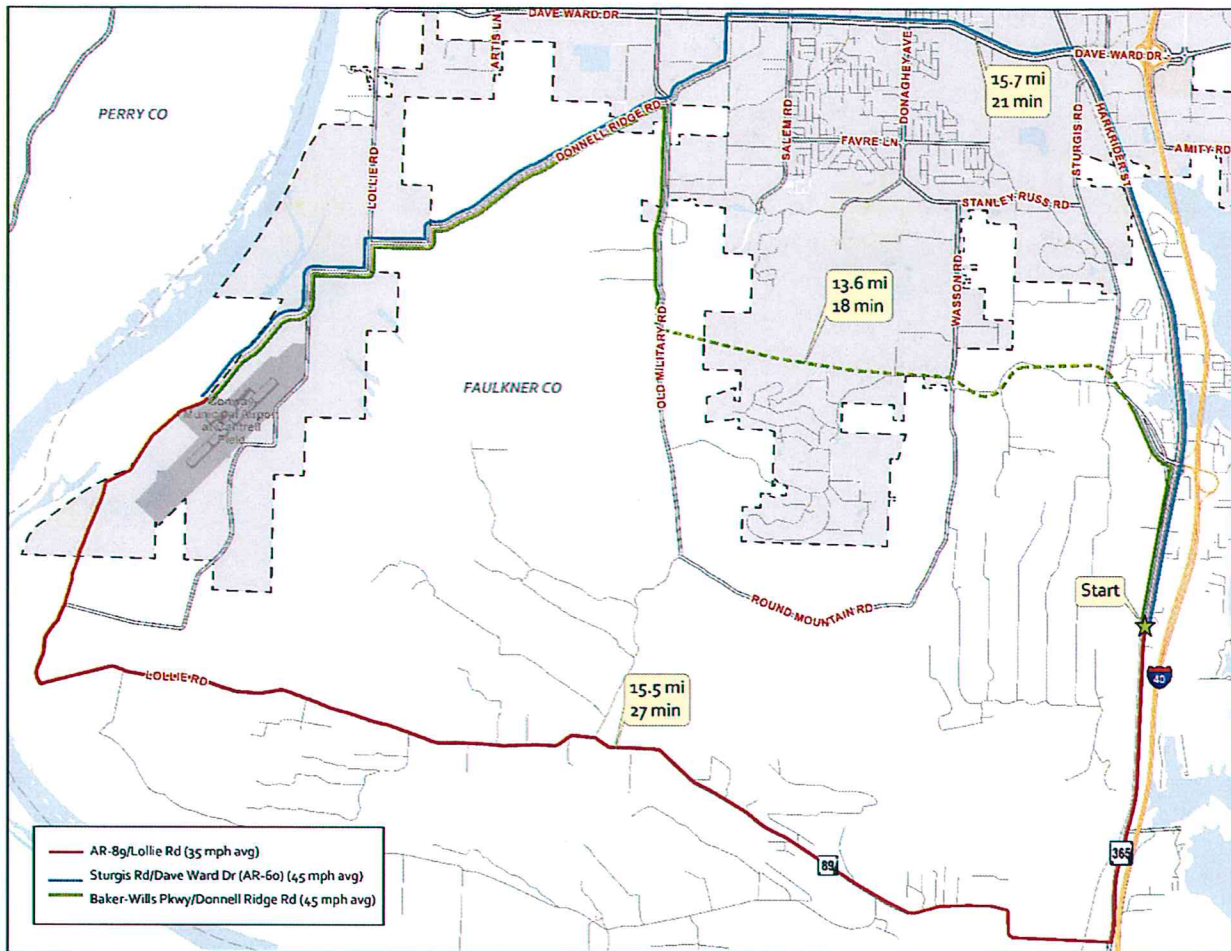


Figure 5 Routes and Travel Times to Conway Airport

### System Reliability

The remoteness of the Cantrell Field is not the only problem. Figure 6 shows the only access to the Airport from southern Faulkner County/Mayflower area without taking an extensive detour. The picture also provides an example of the insufficient infrastructure for accessing the airport. The Lollie Road area is prone to flooding, especially when the Arkansas River is at flood stage because the Tupelo Bayou flood gates are shut. Tupelo Bayou drains a majority of western Conway and the water is stored in the Lollie Bottoms area until the Arkansas River levels recede. Construction of the proposed segment from Old Military Road to Mill Pond Road will make travel to the airport more reliable.



*Figure 6 Flooding in the Lollie Road area*

### Movement of People

Although much of Conway is laid out in grid pattern, at one time in its history, cul-de-sac development ruled the day, and Conway drivers have had to live with the results for a long time. Transportation woes created by this type of development were exacerbated by the presence of Interstate 40 and the Union Pacific Railroad tracks, the two lane roads through the heart of Downtown Conway, and Cadron Ridge. Providing connectivity by building an arterial like the Baker-Wills Parkway is one way Conway is attempting to address current congestion and improve connectivity for the future.

As part of the process to develop the Environmental Impact Statement, an analysis of arterial capacity was performed, looking at the Level of Service in 2008 versus 2033 with Interstate 40 at both four and six lanes. In 2008, Levels of Service were C or D for the arterials examined; with

both the four lane and six lane scenarios, by 2033, the Levels of Service were F for all but one location.<sup>7</sup>

Analyses of reductions in vehicle travel time and improvement of operations on existing arterials were also performed for the preferred alignment of the Baker-Wills Parkway (formerly Conway Western Arterial Loop) as part of the Environmental Impact Statement. The Analysis Section 2.4 details the results.<sup>8</sup> Compared to the No-Action Alternative, each measure (VMT, VHT, and Average Speed) was found to improve with the Parkway. The freeway/ramps showed the least improvement (less than 2% in VMT and VHT), but for the principal arterials, the Parkway was found to cause a 13% improvement in VMT and 17% improvement in VHT. Other arterials and collectors showed improvement in VMT by 18% and VHT by 23%.<sup>9</sup>

Arterial Traffic Volumes were also analyzed in the Environmental Impact Statement. The analysis found reductions in all locations examined, finding that the most significant decreases were expected “along the critical section of Highway 65B/286 (Dave Ward Drive) located west of Interstate 40. This reduction in traffic is a direct result of providing an alternate arterial route that directly connects western Conway to Interstate 40.”<sup>10</sup> **The proposed project, construction of a two lane arterial from Old Military Road to Mill Pond Road, will allow this reduction in congestion to begin.**

#### D. Environmental Sustainability

The decrease in congestion and travel times that will result from the project will reduce the amount of harmful emissions to the environment. Emissions of carbon dioxide will be reduced by at least 28,932 tons over the life of the project, using the most conservative scenario.

#### E. Quality of Life

##### Improving Connectivity and Access

Unlike other segments of the ultimate corridor that closely follow existing roadways, the proposed segment of the Baker-Wills Parkway from Old Military Road to Mill Pond Road is located in a relatively rural and undeveloped area with little existing connectivity to the City of Conway or west toward the Arkansas River. This project will greatly enhance connections for people in this part of Conway and Faulkner County. Therefore, it is extremely important to acquire the four lane right of way for the Old Military Road to Mill Pond Road section of the

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<sup>7</sup> Final Environmental Impact Statement, April 27, 2010, p. 1-12, Table 1-1. Found at <http://www.cityofconway.org/pages/tiger-grant-application/>

<sup>8</sup> Final Environmental Impact Statement, April 27, 2010, p. 2-23 thru 2-27. Found at <http://www.cityofconway.org/pages/tiger-grant-application/>

<sup>9</sup> Final Environmental Impact Statement, April 27, 2010, p. 2-24, Table 2-3. Found at <http://www.cityofconway.org/pages/tiger-grant-application/>

<sup>10</sup> Final Environmental Impact Statement, April 27, 2010, p. 2-25, Table 2-4. Found at <http://www.cityofconway.org/pages/tiger-grant-application/>



Parkway and construct the two lanes with shared use path before development occurs to ensure that this critical link remains available.

The urgency for the project comes because the rate at which the population of Conway is increasing; an additional 40,000 new residents are expected by 2040. Because most areas of the city have been previously developed, absent major annexations across the Arkansas River and to the east of Conway, the area most likely for development next is south Conway, the area proposed for this project. Figure 7 shows the large tracts of available land that will readily accommodate 40,000 people at current development patterns. The only ingredient missing is utilities.

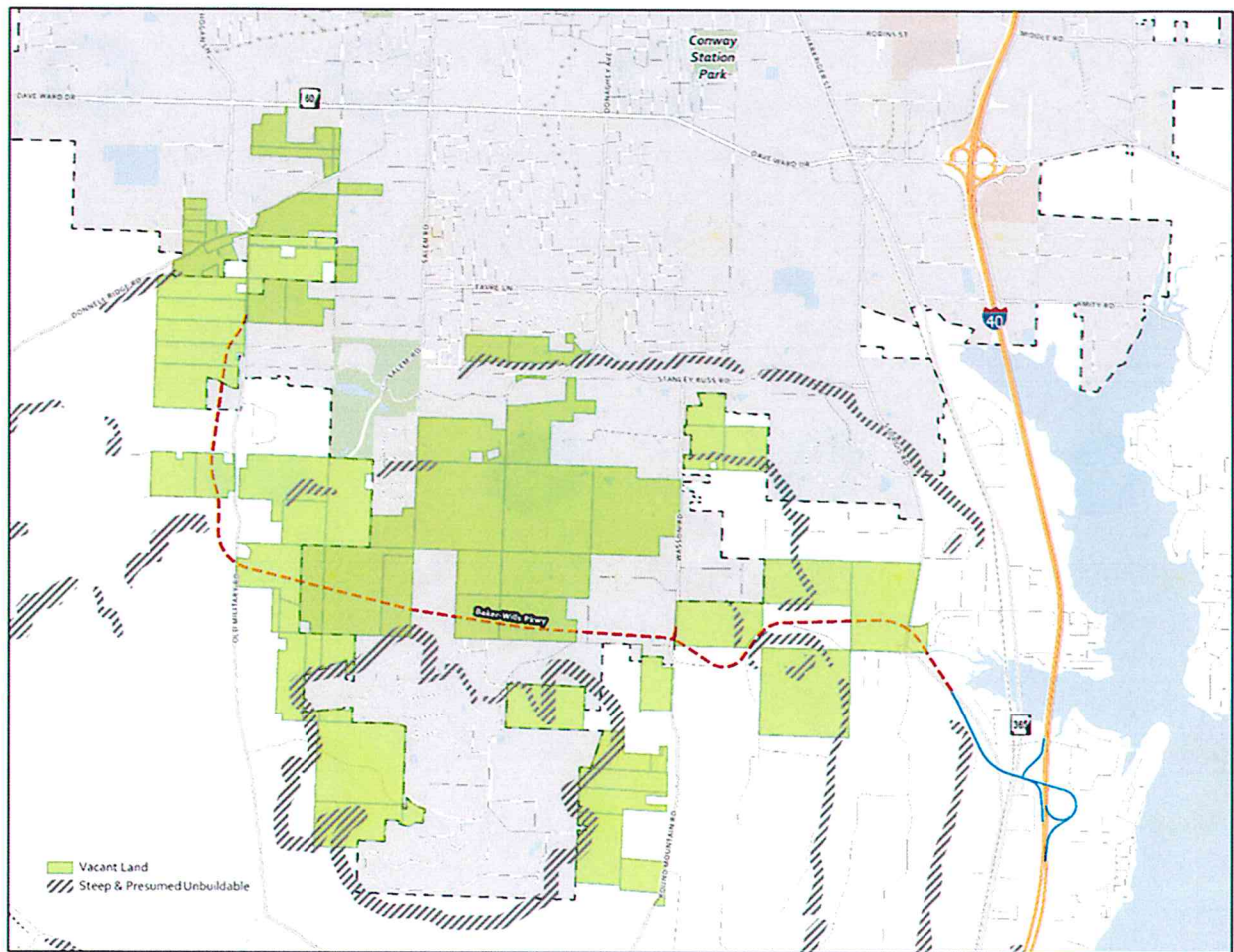


Figure 7 Developable Land in the Project Area

### Service Gaps in Rural Areas

Students in the project area, both Conway residents and Faulkner County residents, live in the attendance zone for Carolyn Lewis Elementary and Carl Stuart Middle School. For some students located inside the 2 mile radius for which the school does not provide bus

transportation, the trips to school can be time-consuming and there is certainly no way to walk or ride bicycles.

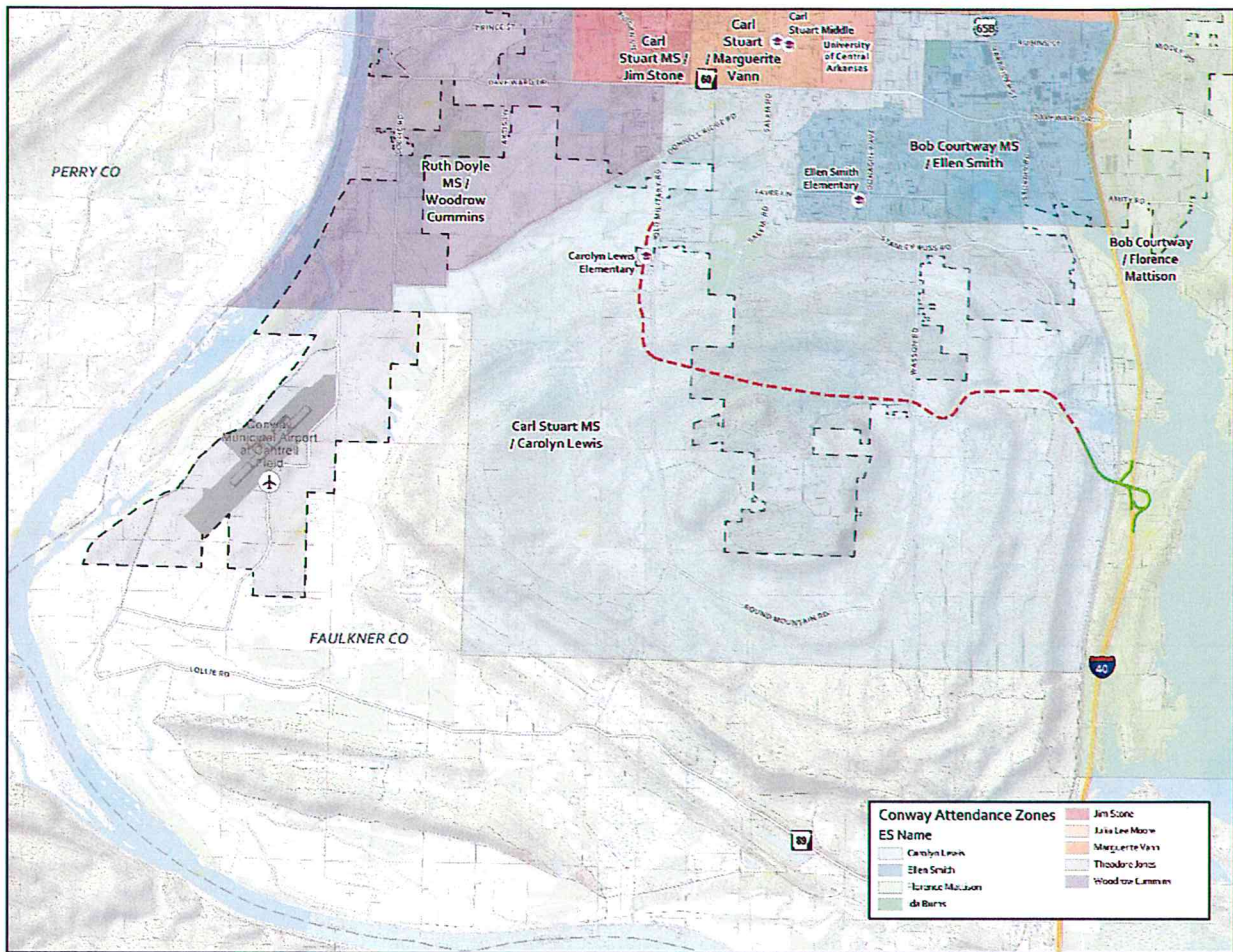


Figure 8 Conway Public School Attendance Zones

For example, the shortest route to elementary school for a student who lives at 3125 Majestic Circle is 5.1 miles, taking 9 minutes on country roads, longer in peak times. The grandmother at the same home would require a 6.6 mile trip, taking 15 minutes on country roads, to get to Conway Regional Medical Center. Excess miles traveled and time spent can mount up to unacceptable levels.

Transportation service gaps like these are common in rural areas, and they are often the result of lifestyle choices--some people like the remoteness of the country. However, in other cases people cannot afford to live in the more urbanized areas, so when transportation choices are limited to the point that housing plus transportation costs exceed the recommended level, this is a problem. And when an area becomes populated so that it is no longer rural and the connectivity is not there, causing congestion to build to an unacceptable level, this is a problem.

The proposed section from Old Military Road to Mill Pond Road will directly help eliminate service gaps to rural and less urbanized areas in Faulkner County and Conway.

### Transportation Choices

The City of Conway passed a Complete Streets Ordinance in 2008, and became a bronze level Bicycle Friendly Community in 2011. As new roadways are built or re-built throughout the city, facilities for bicycles are included. For the section of the Baker-Wills Parkway from Old Military Road to Mill Pond Road, a shared use path will be included. The shared use path will connect to Old Military Road, which is on the route of the Arkansas River Trail through Faulkner County. The Arkansas River Trail is an 88 mile loop that begins in Downtown Little Rock/North Little Rock on both sides of the Arkansas River, traveling west to Pinnacle Mountain State Park, through Maumelle, Mayflower and Conway and into Perry County. The communities along the route of the Arkansas River Trail are committed to building off-road facilities as time and money permit; each off-road section that is built, such as the one from Old Military Road to Mill Pond Road, encourages bicycling as a mode of transportation, and enhances safety of riders.

## **2. Secondary Selection Criteria**

### A. Innovation

The project does not directly address innovation.

### B. Partnership

Portions of the proposed Baker-Wills Parkway lie in Faulkner County. The County Judge has agreed to assist with construction costs for sections in the County as funds become available (see Appendix C, partnership letter from Judge Jim Baker).

## V. Project Readiness

The whole of the Baker-Wills Parkway has cleared one of the biggest hurdles, approval of the Final Environmental Impact Statement, making construction of 2.5 mile section from Old Military Road to Mill Pond Road in an undeveloped part of Conway an achievable goal based on TIGER funding obligation deadlines. Other details about project readiness follow.

### A. Technical Feasibility

The technical feasibility of the project has been demonstrated through completion of the National Environmental Policy Act (NEPA) process, establishment of project design criteria, and development of functional plans including line and grade evaluation, available at: <http://www.cityofconway.org/pages/tiger-grant-application/>. The project design criteria for the initial segment of the Baker-Wills Parkway, which opened to traffic in 2017, will be consistent with the proposed segment from Old Military Road to Mill Pond Road. Through the planning process, the City of Conway has also developed functional plans for the entire corridor to assist in verifying roadway geometrics and constructability according to the minimum design criteria.

The proposed segment from Old Military Road to Mill Pond Road traverses a relatively rural, undeveloped, area within the City of Conway. The proposed segment of the Parkway is

approximately 2.50 miles long and will be classified as a major arterial. The staged nature of the proposal includes building two of the four lanes initially with the additional two lanes to be constructed in future projects to complete the ultimate parkway typical section. The phased typical section includes two - 11 foot lanes with curb and gutter and a 12 foot shared-use path. Drainage will be accommodated with typical concrete crossing structures including reinforced concrete pipe culverts and/or reinforced concrete box culverts. Street drainage will be accommodated with curb inlets with a pass through feature to open ditches behind the shared-use path eliminating the need for a typical storm sewer network.

No FEMA Flood Hazard Areas are present within the proposed segment and no bridge structures are anticipated. As a result, hydraulic modeling required for no-rise certification will not be necessary and the budget is not dependent on undefined bridge lengths. The existing terrain is rolling and drainage design is considered typical for this type of facility.

Estimated costs per mile published by the Arkansas Department of Transportation, along with actual construction costs from the completed portion of Baker-Wills Parkway, were used as a basis for the cost estimate. The planning level costs were used to determine the turnkey, per mile, cost of a two lane arterial on new location with average drainage features. The estimated costs per mile included averages from the state of Arkansas during 2014, 2015, and 2016. Actual Parkway construction costs from I-40 to Sturgis Road were used to normalize the estimated costs per mile to this particular site in Faulkner County. In addition, the undeveloped nature of the area allows room for adjustments to mitigate potential costly conflicts identified during detailed final design.

## B. Project Schedule

Table 2 shows the expected project schedule should funding be awarded.

Table 2 Project Schedule

**Baker-Wills Parkway - Old Military Rd. to Mill Pond Rd.**

Description	Quarter	2018				2019				2020				2021				2022				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
TIGER Grant Award Selection																						
ARDOT Notice to Proceed																						
Planning and Environmental																						
Evaluate NEPA Status																						
Permitting																						
Preliminary Design																						
Surveys																						
Geotechnical Studies and Report																						
30% Plans																						
Develop 30% Roadway Plans																						
ARDOT Review and Approval																						
Pavement Design																						
60% Plans																						
Develop 60% Roadway Plans																						
ARDOT Review and Approval																						
Design Public Hearing																						
Right of Way																						
Strip Map																						
ARDOT Review and Approval																						
Acquisition																						
ARDOT Certification																						
Final Design																						
90% Plans																						
Develop 90% Roadway Plans																						
ARDOT Review and Approval																						
100% Plans																						
Develop 100% Roadway Plans																						
TIGER Funding Obligation																						
Advertising/Bid Letting																						
Construction																						

Right of Way

Right of way acquisition will take place according to the Uniform Relocation Assistance and Real Property Acquisition Policies Act. Acquisition of the needed property is expected to take place relatively easily due to the fact that there are only eight parcels, with six owners, in the project area.

C. Required Approvals

Environmental Permits and Reviews

NEPA

The Baker-Wills Parkway, formerly known as the Conway Western Arterial Loop, has been through an extensive National Environmental Policy Act (NEPA) approval process. The documentation includes a Draft Environmental Impact Statement (EIS), a Draft EIS reevaluation, a Final EIS and the Record of Decision. The Final EIS was approved on April 27, 2010 followed by the Record of Decision on August 10, 2010. A summary of the approvals is shown below and is available at: <http://www.cityofconway.org/pages/tiger-grant-application/>. Final design and/or construction has continued on the project since October 2010 through the 3<sup>rd</sup> quarter of 2017.

Based on federal regulations, major steps to advance the project are required within three years of the FEIS approval or a written evaluation is required. The first segment, consisting of a new interchange with I-40, railroad grade separation, and approximately 1.37 miles of four lane parkway, was opened to traffic in 2017. As a result of this project advancement, a formal

reevaluation of the FEIS is not anticipated, although through collaborative efforts with the Arkansas Department of Transportation, Federal Highway Administration, the public and other stakeholders, the City of Conway will evaluate the existing conditions within the proposed project area related to environmental constraints. In this predominantly rural environment, the natural and social environment over the past seven years has not changed substantially, consequently many impacts are similar to the published impacts in the FEIS. However, since regulations, guidance, and impact evaluation requirements have changed for certain constraints, such as, but not limited to cultural resources and wetlands, additional more comprehensive studies may be required before the FHWA can validate the previous NEPA decision in the FEIS. An appropriate amount of time is included in the proposed project schedule for evaluating the NEPA validity.

Table 3 Planning and Environmental Reviews

<b>NEPA Document</b>	<b>Approval Date</b>
Draft Environmental Impact Statement	2/4/2004
Reevaluation of Draft Environmental Impact Statement	12/21/2009
Final Environmental Impact Statement	4/27/2010
Record of Decision	8/10/2010
<b>Planning Document</b>	
Engineering and Operational Acceptability Review	3/22/2010

Other Agency Reviews

Several permits are anticipated for the project to proceed to construction in addition to, or to supplement, the approved NEPA documentation. The review and permit process will be implemented in cooperation with the appropriate regulatory agencies. For example, the jurisdictional determination provided in the NEPA documentation is valid for five years. Therefore, an updated wetlands determination will be necessary to identify the impacts and permitting requirements. Below is a summary of anticipated study and/or permit approvals required for construction. A similar list can be found within the Summary of Future Actions section of the Record of Decision which details commitments during final design.

Table 4 Required Permits and Reviews

<b>Permits and Reviews</b>	<b>Reviewing Agency</b>
Section 401 Certification <i>Short Term Activity Authorization (STAA) Permit</i>	ADEQ
Section 402 (NDPES) Permitting <i>Storm Water Pollution Prevention Plan (SWPPP) for Large Sites</i>	ADEQ
Section 404 Permitting <i>Jurisdictional Determination</i>	USACE

## Public Engagement

In conjunction with the NEPA process, an extensive public engagement process was completed on this project. Outreach has involved public meetings, public notices, website postings and attendance at community events. Throughout the process, current project information, including an interactive scoping questionnaire, was maintained on the Conway Planning Department website. Appendix D provides a summary of all public involvement throughout the environmental and planning phase of the project. Additionally, a design public hearing was held on September 15, 2011 for the initial segment from Interstate 40 to Sturgis Road.

## Planning Approvals

The Baker Wills Parkway (formerly Conway Western Arterial Loop) was designated a High Priority Project in SAFETEA-LU for the 5 year period 2005-2009, and was included in the Central Arkansas Regional Transportation Study (CARTS) *METRO 2030* Metropolitan Transportation Plan. *METRO 2030* rated the Loop as a high to medium priority within the Roadway Vision Plan and ranked the Loop first within the new facilities category. *METRO 2030* also identified the proposed facility as a future regional arterial on the Regional Arterial Network map. The most recent metropolitan transportation plan, *Imagine Central Arkansas*,<sup>11</sup> continues to rate the project as a high to medium priority. The project is also shown on the City of Conway Master Street Plan.

If funding is awarded, the project is eligible for inclusion on the Transportation Improvement Plan for the Central Arkansas Regional Transportation Study area, as indicated in the attached letter from Metroplan (Appendix E), the metropolitan planning organization for Central Arkansas.

### D. Assessment of Project Risks and Mitigation Strategies

No major obstacles to construction of the 2.5 mile roadway from Old Military Road to Mill Pond Road in an undeveloped part of Conway are anticipated. Environmental constraints should be minimal, since extensive studies have already been completed and right of way acquisition should be fairly straightforward due to the small number of property owners in this section. There is good support for the project on a local, regional, and state level.

## VI. Benefit Cost Analysis

The primary information for the Benefit Cost Analysis was obtained from the Travel Demand Model for the Central Arkansas Regional Transportation System (CARTS), courtesy of Metroplan, the metropolitan planning organization for Central Arkansas. The CARTS Travel Demand Model is a conventional trip-based 4 step model with feedback loop from trip assignments to trip distribution and transit components. It uses land use scenarios but adds a transportation network in order to evaluate impacts on Vehicle Miles Traveled, Transit Ridership, Vehicle Emissions, etc.

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<sup>11</sup> <http://www.metroplan.org/content/long-range-plan>

The CARTS Model was used to forecast travel demand in Faulkner County for the period 2010 to 2040. Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) were estimated for 2010 and 2040, for the following scenarios:

**Baseline (Existing Conway Loop, South Interchange Only)**

Assumes that the South Baker-Wills Parkway Interstate 40 Interchange was operational in 2010, and estimates VMT and VHT from that point to 2040. Only the South Interchange to Sturgis Road improvements are functional during that time period.

**Old Military Road to Mill Pond Road Only (Existing Conway Loop + Segment 2 (two lanes))**

Assumes that only Segment 2 (Old Military Road to Mill Pond Road) is built to two travel lanes and the existing roadway provides the link between Segment 2 and the South Interchange to Sturgis Road.

**Old Military Road to South Interchange (Existing Conway Loop + Segments 1 & 2 (two lanes))**

Assumes that Segment 2 (Old Military Road to Mill Pond Road) is built to two travel lanes and that intersection and operational improvements to Segment 1 (Mill Pond Road to Sturgis Road) make travel from the South Interchange to Old Military Road more desirable.

The CARTS Travel Demand Model takes into consideration population projections, existing places of employment and housing, and projections of future places of employment and housing; no adjustments were made to the data other than to distribute it equally from 2010 to 2040.

Vehicle Hours Traveled from the Baseline Scenario were compared with those from just Segment 2 versus Segments 1 & 2. The CARTS Transportation Study Director advised that with the proposed intersection improvements to Segment 1, the VHT numbers from Segment 1 & 2 could fairly reliably be used to estimate benefits for the project. The Benefit/Cost ratio was computed with and without the addition of Segment 1. Additionally, a Benefit/Cost ratio was calculated that included 50% of the benefits from Segment 1 plus the whole of Segment 2.

Table 5 Summary of Results of Benefit Cost Analysis

	<b>Total Discounted Benefits</b>	<b>Total Discounted Costs</b>	<b>Benefit/Cost Ratio</b>
<b>Scenarios</b>			
Segment 2 Only	\$11,090,750	\$14,447,555	0.77
Segment 2 with Segment 1 Intersection Improvements	\$19,403,940	\$14,447,555	1.34
Segment 2 with 1/2 Value Segment 1 Intersection Improvements	\$15,247,345	\$14,447,555	1.06



It should be noted that project benefits were only calculated for twenty years due to uncertainty of travel demand past 2040. The project will have a residual benefit for many more years that will outrun its costs.

## VII. Cost Share

The City of Conway will provide \$3,460,000, (twenty per cent) in match for the project, as documented in Appendix A. This money has already been collected and set aside. The funds have come from collection of a ¼ cent sales tax and street impact fees.

Without TIGER funding for the project, at the current rate it will take the City of Conway twelve years to accumulate enough money to build the project, at which time the valuable right of way needed to build and control access to this section of the Baker-Wills Parkway may be developed.

An estimated \$20,000 per year will be required to maintain the project once it is built. This funding is readily available as part of the City's street maintenance budget.

## VIII. Federal Wage Rate Certification

The City of Conway will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (Federal Wage Requirements), as required by the FY 2017 Appropriations Act (see Appendix F).

## Appendices

Appendix A - City of Conway Funding Commitment Letter

Appendix B - Crash Rates 2005-2007

Appendix C - Partnership Letter from Faulkner County Judge

Appendix D - Agency and Public Input Opportunities

Appendix E - Metroplan Letter

Appendix F - Federal Wage Rate Certification

Appendix A  
City of Conway Funding Commitment Letter



CITY OF CONWAY  
*Office of the Mayor*

Mayor Bart Castleberry

[www.cityofconway.org](http://www.cityofconway.org)

October 11, 2017

Ms. Elaine L. Chao  
US Department of Transportation  
Office of the Secretary  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: Financial Commitment  
Baker-Wills Parkway from Old Military Road to Mill Pond Road

Dear Ms. Chao:

The City of Conway is committed to providing the matching funds for the improvements on the Baker-Wills Parkway from Old Military Road to Mill Pond Road. The City of Conway will have two funding sources available for use. The first source is a permanent  $\frac{1}{4}$  cent sales tax and additionally we have Street Impact Fees that we collect that can be used as match funds. **Our commitment is for \$3,460,000.**

The project will establish a vital segment of the proposed Baker-Wills Parkway westward from Old Military Road to Mill Pond Road on the South side of the City of Conway. The proposed improvements include constructing two of the future four lanes which will operate as a two lane facility in the interim condition. A shared-use path is proposed to be included within the interim typical section to increase bicycle connectivity within the City of Conway and southwestern Faulkner County. To preserve the benefit and functionality intended for the completed Baker-Wills Parkway, right of way acquisition for the interim project will accommodate the ultimate four lane median divided arterial section. This particular segment is located in a relatively rural and undeveloped area with little existing connectivity to the City of Conway or west toward the Arkansas River. Whereas, remaining segments along the ultimate corridor closely follow existing roadways with at least two lanes of vehicular travel. The project will also include intersection improvements at Scenic Hill Road, Wasson Road, Mill Pond Road and Old Military Road.

Sincerely,

Bart Castleberry  
Mayor

Appendix B  
Crash Rates 2005-2007

	Location	Number of Reported Crashes A	Crash Rate Rsec (Crash / MVM)	AHTD Avg. Rate RAHTD (Crash / MVM)	Comments
A	I-40 – LM 124.32 to 125.11 - Sec 32 (Exit 124 to Exit 125)	57	2.39	0.86	Above Average
B	I-40 – LM 125.11 to 126.76 - Sec 32 (Exit 125 to Exit 127)	87	1.05	0.86	Above Average
C	I-40 – LM 126.76 to 128.74 - Sec 32 (Exit 127 to Exit 129)	112	1.17	0.86	Above Average
D	US 64 - LM 1.42 – 4.44 - Sec 8 (Hogan Lane to Hwy. 25)	43	2.06	3.57	
E	US 64 - LM 4.44-4.59 - Sec 8 (Hwy. 25 to Ridge Road)	10	4.51	3.57	Above Average
F	US 64 - LM 4.59-5.06 - Sec 8 (Ridge Road to Junction US 65/65B)	159	13.09	6.02	Above Average
G	US 64 - LM 0.00 – 0.26 - Sec 9 (US 65/65B to Ingram Rd.)	83	12.35	6.02	Above Average
H	US 64 - LM 0.26 – 0.80 - Sec 9 (Ingram Rd. to I-40)	250	15.21	6.02	Above Average
I	US 65B - LM 0.00 - 0.32 - Sec 9B (Junction US 65/65B to US 64)	135	14.71	6.02	Above Average
J	US 65B - LM 0.32 - 1.05 - Sec 9B (US 64 to Siebenmorgan)	160	6.97	6.02	Above Average
K	US 65B - LM 1.05 - 1.56 - Sec 9B (Siebenmorgan to Oak)	121	26.42	6.02	Above Average
L	US 65B - LM 1.56 - 2.06 - Sec 9B (Oak to Sixth)	148	13.65	6.02	Above Average
M	US 65B - LM 2.06 - 2.33 - Sec 9B (Sixth to Bruce)	22	3.61	6.02	
N	US 65B - LM 2.33 - 3.37 - Sec 9B (Bruce to Highway 60)	67	4.71	6.02	
O	US 65B - LM 3.37 - 4.22 - Sec 9B (Highway 60 to Amity)	138	5.86	6.02	
P	SH 60 - LM 0.00 to 2.67 - Sec 0 (US 65B to Salem)	249	3.19	2.72	Above Average
Q	SH 60 - LM 2.67 – 3.94 - Sec 0 (Salem to Hogan Lane)	38	1.06	2.72	
R	Prince Street – LM 0.48 - 1.10 (Harkrider to Donaghey)	38	11.66	3.57	Above Average
S	Prince Street – LM 1.10 - 1.61 (Donaghey to Western)	12	1.73	3.57	
T	Prince Street – LM 1.61 - 2.12 (Western to Salem)	72	8.32	3.57	Above Average
U	Prince Street – LM 2.12 - 3.81 (Salem to Hogan Lane)	42	2.41	3.57	

Source: Arkansas State Police and Arkansas State Highway and Transportation Department

Appendix C

Letter from Faulkner County Judge Jim Baker



**FAULKNER COUNTY**

**JIM B. BAKER**  
**COUNTY JUDGE**

801 LOCUST STREET • CONWAY, AR 72034

October 11, 2017

Mayor Bart Castleberry  
City of Conway  
1201 Oak Street  
Little Rock, AR 72032

RE: Support Letter  
Baker-Wills Parkway from Old Military Road to Mill Pond Road

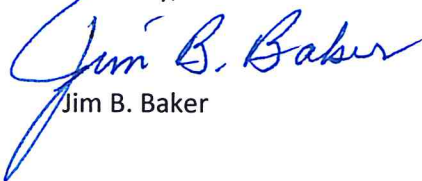
Dear Mayor:

Faulkner County supports the City of Conway's application to the Department of Transportation for a 2017 TIGER Discretionary Grant for the Baker Wills Parkway from Old Military Road to Mill Pond Road.

The project will establish a vital segment of the proposed Baker-Wills Parkway westward from Old Military Road to Mill Pond Road on the South side of the City of Conway. The proposed improvements include constructing two of the future four lanes which will operate as a two lane facility in the interim condition. A shared-use path is proposed to be included within the interim typical section to increase bicycle connectivity within the City of Conway and southwestern Faulkner County. To preserve the benefit and functionality intended for the completed Baker-Wills Parkway, right of way acquisition for the interim project will accommodate the ultimate four lane median divided arterial section. This particular segment is located in a relatively rural and undeveloped area with little existing connectivity to the City of Conway or west toward the Arkansas River. Whereas, remaining segments along the ultimate corridor closely follow existing roadways with at least two lanes of vehicular travel.

In the future, Faulkner County will be researching areas of funding for the Sturgis Road to Wasson Road construction. If funding ever becomes available and affordable, the proposed Segment 1 construction from Sturgis Road to Wasson Road will be considered as a future project for Faulkner County.

Sincerely,

  
Jim B. Baker

Appendix D  
Agency and Public Input Opportunities.

Meeting Description	Date	Location	Number in Attendance	Number of Responses
Agency Scoping Meeting	March 17, 2000	Conway City Hall	26	
Citizen Scoping Meeting	May 25, 2000	Chamber of Commerce	100	68
Public Information Meeting	April 23, 2001	Ellen Smith Elementary	53	17
Public Information Meeting	April 24, 2001	Mayflower Middle School	18	4
Public Information Meeting	May 5-6, 2001	Toad Suck Daze	34	2
Report to Conway City Council	March 27, 2001	City Hall	11	
Meetings with Chamber of Commerce Transportation Committee	August 22, 2001	Chamber of Commerce Building	9	
Conway Planning Website				28
<a href="mailto:Conwayloop@garverinc.com">Conwayloop@garverinc.com</a>				3
Signed DEIS	February 4, 2004			
DEIS Distributed for Public and Agency Review	February 15, 2004			
Legal Notice in Local Paper	February 15, 2004			
DEIS Public Hearing	March 18, 2004	Ellen Smith Elementary School	186	71
End of Comment Period	April 5, 2004			13 Additional
Public Meeting with City Council	June 15, 2004			Approx. 75
Council Selection of Preferred Alternative	August 10, 2004			
Signed Reevaluation of DEIS	December 21, 2009			

Appendix E  
Metroplan Letter





## METROPLAN

SMART PLANNING MAKES SMART PLACES.

Wednesday, October 10, 2017

Mayor Bart Castleberry  
City of Conway, Arkansas  
1201 Oak Street  
Conway, AR 72032

RE: TIGER Grant Application for Baker-Wills Parkway  
Phase II

Dear Mayor Castleberry:

Metroplan is glad to offer this letter of support for the City of Conway's 2017 TIGER Discretionary Grant application. The Baker-Wills Parkway is a designated route on Metroplan's Regional Arterial Network and its extension and ultimate completion achieves a more complete transportation system between local roadways and the interstate highway system in Central Arkansas.

The City of Conway has previously partnered with the Arkansas Department of Transportation undertaking a massive Phase I investment to complete a new interstate interchange connecting the Baker-Wills Parkway to the Interstate 40. In addition to providing interstate connectivity, Phase I also provided a grade separated connection to Hwy 365, a grade separated crossing of the Union Pacific Railroad mainline, and connection into the under built roads on southern Conway and Faulkner County. The extension of the Baker-Wills Parkway into this under built road system will activate this previous public investment by improving traffic flow and safety response times across a broader area and offer motorists a sensible and safe travel alternative. The proposed improvements include an interim construction of two of four travel lanes, but acquiring all right-of-way for the full build out. Also included in this proposal is a shared use pathway to increase bicycle connectivity through these areas.

Metroplan enthusiastically supports this smart and strategic investment in the City's infrastructure. Inclusion in the MPO Transportation Improvement Program (TIP) would require Board approval, but with funding this Regional Arterial Network project will be strongly endorsed by Metroplan. We look forward to working with the City as it improves the quality of life for its residents.

If I can be of further assistance, please do not hesitate to call me.

Yours truly,

Tab Townsell  
Executive Director

Appendix F  
Federal Wage Rate Certification



CITY OF CONWAY  
*Office of the Mayor*  
Mayor Bart Castleberry  
[www.cityofconway.org](http://www.cityofconway.org)

October 3, 2017

Ms. Elaine L. Chao  
US Department of Transportation  
Office of the Secretary  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: Federal Wage Rate Certification

Dear Ms. Chao:

The City of Conway, Arkansas, will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code [Federal Wage Requirements], as required by the FY 2017 Appropriations Act.

Sincerely,

  
Bart Castleberry  
Mayor