

Bridge Investment Program Grant
Historic Route 66 Bridge Bundle

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Project Description, Location, and Parties

Project Description




The Oklahoma Department of Transportation (ODOT) is seeking Federal Bridge Investment Program (BIP) capital funding to help replace/rehabilitate five bridges and four culverts located in various parts of the state, but all on a historic United States corridor: Historic Route 66. All the structures seeking assistance are classified on the National Bridge Inventory (NBI) as either in “poor” or “fair” (approaching poor) condition. If Federal funds are awarded, ODOT would be in a position to expedite the repair and replacement of most of these structures, many of which are shovel-ready, ahead of the Historic Route 66’s Centennial Anniversary in 2026.

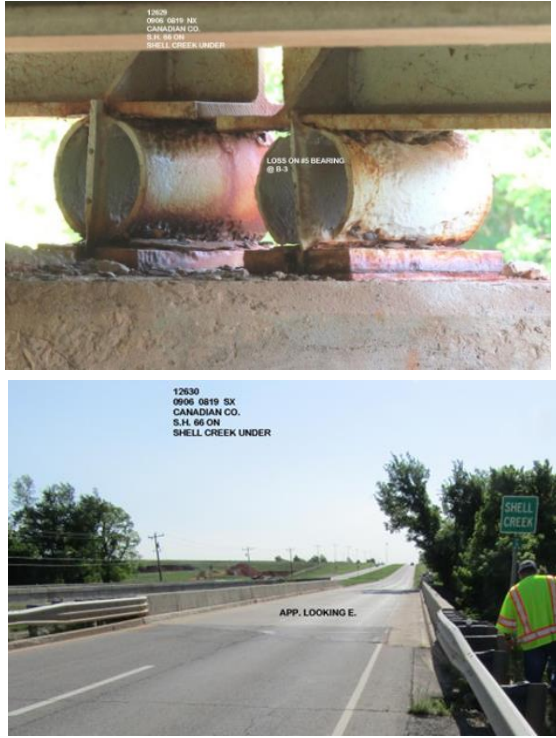

The “**Historic Route 66 Bridge Bundle**”, as this group of projects is referred to, aligns with the Administration’s priorities to proactively prevent and significantly reduce the number of functionally obsolete and structurally deficient bridges while making the infrastructure safer, accessible for all, sustainable and a catalyst for economic development.



Table 1 identifies six projects that are part of the Historic Route 66 Bridge Bundle as well as an image showing some of the deterioration that has led to action on the part of ODOT. Of the six projects, one involves replacing three culverts, while another project consists of rehabilitating twin bridges, for a total of nine structures to be repaired/replaced.



Table 1: Existing Issues with Structures

ODOT Job Number	NBI Bridge No.	Description of Existing Issues	Images
33828(04)	03932* 04781* 04951*	7-Mile corridor Project. NBI numbers 04591 and 03932 culvert's is rated 6 (Fair) and are considered to be deteriorated. NBI number 04781 culvert is considered to have minor deterioration.	 
34318(04)	12596*	This bridge a 54-foot-long reinforced concrete box (RCB) with a 24-foot-wide roadway, and a sufficiency rating of 65.6. The box is narrow and functionally obsolete. The culvert is rated 6 and is considered to be deteriorated.	 <p data-bbox="997 1751 1263 1780">Culvert with leakage</p>

<p>32765(04)</p>	<p>12629 12630</p>	<p>Both bridge's deck, superstructure, and substructure are shown to be 5 (Fair), 6 (Satisfactory), and 5 respectively. The bridges are at risk due to the superstructure rating. The bridges are functionally obsolete due to the narrow clear roadway width of 27 feet.</p>	
<p>20899(09)</p>	<p>13688</p>	<p>The bridge superstructure is rated a 4 (Poor) due to severe corrosion and section loss of the floor beams and stringers, active fatigue cracks in stringer copes, out-of-plane bending in end floor beams, and section loss to the floor bracing system. The bridge does not meet current AASHTO or ODOT vertical clearance standards.</p>	 <p>Looking floor beams and spans. Note: floor beam has 4-foot-long corrosion hole through the north bottom flange. 6-inch x 4-inch x 3/8-inch angle welded to bottom flange of both floor beams.</p>

35601(04)	15089	<p>The deck and substructure are each rated a 5 (Fair). The bridge is considered At Risk of becoming structurally deficient due to map cracking in the concrete deck, pop-outs/potholes with exposed reinforcing throughout, the wearing surface being ineffective and the deck soffit being significantly degraded at joints.</p>	 <p>Pop out with exposed reinforcing steel on underside of deck. Note corrosion.</p>
35217(04)	01751	<p>The bridge spans across rail tracks. The condition of the deck, superstructure, and substructure are shown to be 6, 7, and 4 respectively.</p>	 <p>0181 # 01751 STRUCTURE NUMBER 4108 ON 66K COUNTY LINCOLN FACILITY CARRIED BY 66 HEAVY IMPROVED TO 66/41K UNDER 06/19/2022 PUE # 1 - HOLE IN SOFFIT DUE TO JT FAILURE</p>

Statement of Work

Below describes the type of work that will be completed for each of the structures:

- 03932, 04781, 04951 (part of ODOT Project #33828(04)):** These culverts are being replaced as part of an overall corridor project that is 7 miles in length. The corridor project will improve shoulders, grading, drainage, and condition of US-66 just east of SH-2. ODOT is only seeking BIP funding to replace the three culverts.
- 12596 (part of ODOT Project #34318(04)):** Similar to the project above, ODOT is improving a four-mile corridor of US-66 from SH-102 to US-177. The existing facility consists of a two-lane roadway with 12-foot wide driving lanes and 2-foot-wide shoulders. Proposed improvements include widening and resurfacing the roadway, adding shoulders, repairing the bridge at Captain Creek, and improving or replacing the existing culvert over Spring Creek. For this project, ODOT is exclusively seeking BIP funds to help replace the culvert in Spring Creek only.
- 12629 & 12630 (part of ODOT Project #32765(04)):** This project will rehabilitate twin bridges on US-66. The project will repair the substructures, piers and provide a full deck replacement. For

added resiliency, ODOT will address the slope walls of the bridges and creek bed. These improvements will create a new clear approach roadway width on both bridges that will be 38 ft. wide consisting of two-12-foot driving lanes, a 4-foot paved inside shoulder and 10-foot paved outside shoulder.

- **13688 (part of ODOT Project #20899(09)):** The proposed improvement consists of constructing a new 38-ft wide bridge on the existing alignment. The new bridge will be a slab on girder bridge that consists of two 12-foot wide travel lanes with 10-ft wide paved outside shoulder and 4-foot wide inside shoulder. The new bridge will be constructed within the existing right-of-way. Traffic will be maintained using the existing median crossovers.
- **15089 (part of ODOT Project #35601(04)):** The proposed improvements will rehabilitate the structure. The existing superstructure will be replaced with a widened deck. The beams, diaphragm, and bearings in the superstructure will be replaced. The deck will be widened to 32 feet with new expansion joints at the piers and a new traffic railing will be installed. Additionally, abutments and piers will be repaired and new rip rap will be installed to limit erosion impacts.
- **01751 (part of ODOT Project #35217(04)):** The proposed improvement will replace the existing bridge with a new two-lane bridge with 12-foot lanes on the same footprint over Stillwater Central Railroad (SLWC) rail tracks.

Considerations for Bicycle and Pedestrian Facilities

Bike considerations have been taken into account for the entirety of Historic Route 66, including the nine structures seeking funds. In 2023, the American Cycling Association (ACA) announced a [new US Bike Route \(USBR66\)](#) across 429 miles of Historic Route 66 in Oklahoma. The first [USBR 66 sign](#) in Oklahoma was placed in Tulsa and more signs are planned along the entire corridor. It's important to note that USBR 66 runs along or parallel to Historic Route 66 whenever possible but does not strictly follow the road. In some areas, local decisions were made to increase cyclist safety by choosing nearby alternate corridors. In Oklahoma, the most notable section where USBR66 diverts from the historic alignment between El Reno and Bridgeport.

Figure 2: First USBR 66 Sign Installed in Tulsa

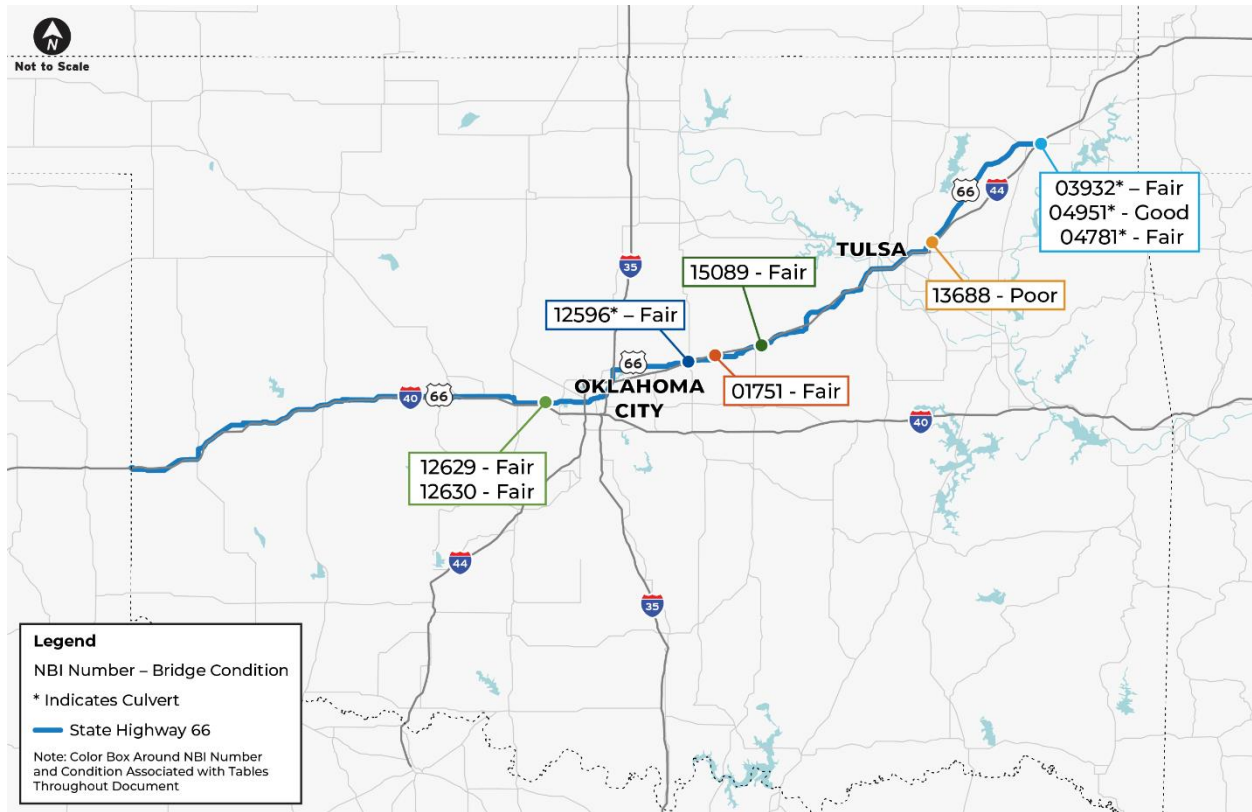


Photo Credit: Oklahoma Route 66 Association

Project Location

The nine structure locations are situated in Canadian, Craig, Lincoln, Oklahoma, and Rogers Counties along historic US-66 (Figure 2). Table 1 identifies the projects located in Census Tracts that are designated Areas of Persistent Poverty (APP) or Historically Disadvantaged Communities (HDC). Most of the projects are also located on federally recognized as Tribal land. To help the reader associate projects and NBI structures, colors have been assigned to each project and are reflected in Figure 2 as well as many of the tables throughout the narrative.

Figure 4: Location of Bridge Projects on US-66



Source: ODOT

Table 2: Urban/Rural, APP and HDC Designations

NBI Bridge No.	Census Tract	Urban/Rural	APP	HDC
03932* 04781* 04951*	3735	Rural	Yes	Yes
12596*	9613	Urban	No	Yes
12629 12630	3013.2	Urban	No	No
13688	504.08 506.02	Urban Urban	No	Yes
15089	9611	Urban	No	Yes
01751	9617	Urban	No	Yes

Source: CEJST and ETC Explorer

Note: NBI bridge numbers have been shortened throughout the document. Each bridge number is preceded by ten zeros (0) to make up it’s 15 digit NBI number.

The **Economic Opportunity and Competitiveness** section of the merit criteria describes how the entire Historic Route 66 and structures associated in this grant application affect the overall economy in the small towns that the corridor runs along, many of which are considered HDC. The improvements that are occurring on Historic Route 66 will go a long way towards spurring additional investment in main street revitalization for many towns along the corridor.

Project Parties

ODOT is the lead applicant and is investing 100 percent of the non-federal match for the projects. ODOT has a proven track record of successfully delivering competitive federal [grant projects](#) such as the [Bridgeport Bridge](#) along Historic Route 66. ODOT has the technical and financial capacity to deliver the project within the timeframe prescribed in the **Project Readiness** section.

History of Route 66 in Oklahoma

Oklahoma is home to more than 400 miles — the longest stretch of the highway of any state — of Historic Route 66. Over the years, many portions of the road west of Oklahoma City were replaced with the new Interstate 40. Turner Turnpike and Will Rogers Turnpike were built parallel to Historic Route 66 east of Oklahoma City, and Historic Route 66 remained on the old road as a free alternate to the turnpikes. Historic Route 66 is designated as a Scenic Byway and gained the designation of an All-American Road in 2008 from the USDOT Federal Highway Administration (FHWA). The road still maintains many historic and roadside attractions remaining along the route.

Oklahoma's segment of US-66 commemorates its centennial in 2026. This milestone presents an opportunity for Oklahoma to highlight Historic Route 66 ‘s impact on local communities, the evolution of transportation, and its cultural significance both nationally and internationally. The state has established a [Centennial Commission, which includes coordination with ODOT](#), to plan

and execute various events celebrating Historic Route 66's rich history. To support the centennial, the [Oklahoma Route 66 Grant Program](#) was created by the Oklahoma Legislature to revitalize and restore Oklahoma's stretch of Historic Route 66. Projects must support historic preservation or economic development within communities on Historic Route 66.

For decades, a collaborative effort between government agencies, private organizations, and citizens has been dedicated to studying, preserving, and maintaining Historic Route 66 resources in Oklahoma. Numerous Oklahoma properties associated with Historic Route 66, including roadbed segments, bridges, commercial buildings, service stations, and tourist attractions, are listed in the National Register of Historic Places (NRHP).

Bridge #13688 is designated a historic K truss through Truss bridge built in 1956.

[Bridge 13688](#) has been listed on the NRHP as a key resource holding intrinsic value in this section of the Historic Route 66 National Scenic Byway. It is considered a bridge with "High" historic significance. The distinguishing characteristics that convey the historical significance of the bridge are the truss spans and the construction details which emulated the original 1936 construction; rigid connections, use of I-shapes, and built-up members. Plans for this bridge are described further in **Criteria #1: State of Good Repair**.

In 2006, Historic Route 66 was blasted back into the nation's consciousness through an unlikely source: an animated film. The Disney/Pixar movie "Cars" tells the story of hero Lightning McQueen, a sporty red racecar who finds a home and new friends in the faded Historic Route 66 hamlet of Radiator Springs. With a little love and a lot of new asphalt, McQueen helps his buddies bring the fictional town back to life. Real-life characters and Oklahoma landmarks inspired many of the people and places from "Cars," helping spark interest in the legendary personalities and quirky stops along Historic Route 66.

National Bridge Inventory Data

NBI data can be found in the recommended application template.

Project Budget, Sources, and Uses of Funding

ODOT is requesting \$15,835,000 million in BIP funds, which constitutes a 80/20% split between Federal and State funding. The matching funds, totaling \$3,959,000, will come from two funding sources:

- [Rebuilding Oklahoma Access and Driver Safety \(ROADS\) Fund](#) – The funding is made up of a combination of sales tax and fuel tax revenue. The fuel tax revenue is committed 100 percent to ODOT. In 2024, the [ROADS cap increased](#) to a high of \$590 million.
- [Rural Economic Transportation Reliability and Optimization Fund \(RETRO\)](#) - This funding stream, approved by the state legislature in 2023, is a \$200 million allocation for the construction, repair and maintenance of state highways in rural areas where robust economic development is occurring.

No other Federal funding sources have been identified to fund the projects listed in the tables below. The job to replace structures 03932, 04781 and 04951 will utilize RETRO along with Federal dollars to fund the improvements, whereas all other jobs will utilize ROADS funding in combination with BIP dollars. If BIP dollars are not received for the Historic Highway 66 Bridge Bundle, the timeline for replacing/rehabilitating these structures will be pushed and will be unable to be completed in time for the Historic Route 66 Centennial celebration.

ODOT is exclusively seeking construction dollars for each of the nine structures. Any costs associated with a project that do not exclusively impact the bridge/culvert being replaced or repaired has been removed from the construction cost listed in **Tables 3 and 4**. Comprehensive cost estimates for each of the projects can be found in the **Supporting Documents**. A 10 to 15 percent contingency has been accounted for in each of the projects listed below, dependent on the level of design completed. In the event of cost overruns, ODOT will be covering 100 percent of the cost through state ROADS funding.

Table 3: Project Budget by Fiscal Year

JP No.	NBI Bridge No.	Construction	Total	Percent of Total Cost
33828(04)	03932* 04781* 04951*	\$1,555,000	\$1,555,000	8%
34318(04)	12596*	\$1,903,000	\$1,903,000	10%
32765(04)	12629 12630	\$4,091,000	\$4,091,000	20%
20899(09)	13688	\$8,955,000	\$8,955,000	45%
35601(04)	15089	\$959,000	\$959,000	5%
35217(04)	01751	\$2,331,000	\$2,331,000	12%
Total		\$19,793,000	\$19,793,000	100%

Table 4: Funding Sources and Uses Splits

JP No.	NBI Bridge No.	Non-Federal		Other Federal		BIP		Total	
33828(04)	03932* 04781* 04951*	\$311,000	20%	\$0	0%	\$1,244,000	80%	\$1,555,000	8%
34318(04)	12596*	\$381,000	20%	\$0	0%	\$1,522,000	80%	\$1,903,000	10%
32765(04)	12629 12630	\$818,000	20%	\$0	0%	\$3,273,000	80%	\$4,091,000	20%
20899(09)	13688	\$1,791,000	20%	\$0	0%	\$7,164,000	80%	\$8,955,000	45%
35601(04)	15089	\$192,000	20%	\$0	0%	\$767,000	80%	\$959,000*	%
35217(04)	01751	\$466,000	20%	\$0	0%	\$1,865,000	80%	\$2,331,000*	12%
	Total	\$3,959,000	20%	\$0	0%	\$15,835,000	80%	\$19,794,000	100%

Note: Structures 03982, 04781, 04951 and 12596 are a part of an overall corridor project. Costs shown in the table reflect the structures only, not the cost of the entire project. See cost estimates in **Supporting Documents**. Numbers may not add up due to rounding.

* A 10% contingency has been added for all projects except for bridge 15089 and 01751, where the contingency amount added is 15%.

Criterion #1: State of Good Repair

Structure Conditions

Bridge and culvert inspection reports provided in the **Supporting Documents** all show that the structures are already in poor or at risk of falling into poor condition within three years, see **Figure 3** as an example. All of the structures were constructed prior to 1960, so many of the design standards, including lane widths, shoulder widths and

Figure 8: Excerpt from Bridge Inspection Report for NBI Bridge 15089 – Fair Condition

Oklahoma Department of Transportation	Bridge Assessment Report CI-2216A November 2022
e. Plan Requirements	
The design plans for this project will resemble a set of PS&E documents for a standard ODOT project.	
f. Recommended Actions	
The classification of this bridge as "At Risk" is due to the deteriorated condition of the deck, superstructure, and substructure. The following recommended actions consist of the general repairs to the substructure required to improve the bridge rating, as well as two options to address the condition of the deck and superstructure. Options for Deck Replacement with Superstructure Repair, Superstructure Replacement, and Superstructure Replacement with Widening are proposed and will be discussed with the Department at the Preliminary Assessment Report meeting.	

Source: ODOT

vertical clearances are not up to date. Because of this, coupled with the corridor's proximity to the interstate, freight movements are not prominent on US-66 facilities. ODOT intends to

maintain the historic nature of the Historic Route 66 corridor as a scenic byway, while also ensuring that the roadway is maintained in a state of good repair.

The plans described for each of the structures in the **Project Description** Section are all feasible projects that will replace or rehabilitate important assets to a historic corridor. A unique part of the construction for one of the bridges, 13688, includes repurposing the old cross section as a centerpiece for a park located just off the Historic Route 66 corridor. **Figure 4** shows how the previous southbound cross

Figure 10: Example of Repurposing Bridge Cross Section – Molly’s Landing Adjacent to Historic Route 66



Source: ODOT, Google Maps

section was repurposed leading to a park area. The northbound cross section of structure 13688 is shown in the background.

Reduce Maintenance Costs

The Operation & Maintenance (O&M) costs will see a sharp reduction on the completion of the Project. The O&M cost methodology was dependent on rehabilitation or replacement of the respective structure. ODOT conservatively indicated that if a bridge was unable to be replaced, half the cost would be put towards a major rehabilitation. For the BCA calculations, if the structure indicated the need for replacement, 50% of the total project cost was used in year 10 of the analysis period. If the structure indicated the need for a rehabilitation, the no-build scenario would include major bridge maintenance and surveillance costs at around \$450 thousand every 5-years until bridge failure. ODOT anticipates the Build scenarios for each structure to include roughly \$7,500 in annual maintenance due to minimal stripping, weather clearing, and other various baseline tasks.

Exact Project maintenance cost savings are shown in **Table 5** below:

Table 5: Project Maintenance Cost Savings

Bridge	Maintenance Cost Savings
Shell Creek EB	\$391,524
Shell Creek WB	\$391,524
Spring Creek	\$528,515
Stillwater Central RR	\$668,337
Salt Creek	\$298,479
Bird Creek NB	\$2,827,703
Little Cabin Creek 1	\$72,783
Little Cabin Creek 2	\$111,974
Little Cabin Creek 3	\$237,944
Total Costs	\$5,528,782

Asset Management Plan

The Project is consistent with objectives an asset management plan. ODOT has a [Transportation Asset Management Plan \(2022-2031\) \(TAMP\)](#) outlining the strategic approach to enhancing the movements of people and goods by cost effectively maintaining the state’s transportation network at the best condition levels possible given available resources. The plan clearly identifies how all Oklahoman infrastructure assets go through evaluations to determine when maintenance must occur to maintain a state of good repair. It also summarizes how ODOT’s assets are managed throughout their life cycle and identifies a diverse, reliable funding stream from three different sources and additional programs, ensuring assets can be maintained into the future. ODOT currently has \$43.7 million in the TAMP for bridge maintenance and preservation.

While the TAMP does not list specific projects, the Project is consistent with the TAMP in that replacing bridges that have lower lifecycle cost (over 30 years) than continued maintenance and preservation activities.

Criterion #2: Safety and Mobility

Crash Reduction Benefits

Five-year crash data was referenced for the corridors where all nine structures are located to determine if there were any that occurred on or surrounding the structures. Given the small size of all the structures and the limitations allowed to examine the cause of crashes, engineering judgement was used to quantify the total crashes surrounding each structure. For the majority of bridges, no crashes could be reasonably quantified on or around them. There were a few instances where crashes were considered around structures. These have been included in the BCA calculations.

However, all the bridges and roadway over top of the selected culverts are being modernized to AASHTO and ODOT design standards. This consists of widening the deck or roadways to 12 foot lanes and adding shoulders for vehicles to pull over. In addition, ODOT will be working with local and national artists to try to implement a "singing highway" similar to Route 66 in New Mexico. Some of the selected locations in this application would be good candidates for that treatment and will be decided at a later time.

Impacts to Traffic and Mobility for Non-Motorized Vehicles

The structures contained within this grant are a part of the Scenic Byway of US-66, which differentiates these projects from others with more pronounced commuter and supply chain implications. The average annual daily traffic (AADT) across all nine structures is just over 5,000 vehicles, with the high being 7,800 and lowest being 2,100. This calculates to a person miles travelled (PMT) of less than 1,000. Truck traffic is less than 1 percent. Regardless, the improvements to all the structures will reduce the PMT over bridges in poor condition or considered at-risk of falling into poor condition.

Mentioned in the **Project Description**, the US-66 roadway benefits from being a [USBR across 429 miles](#) of Historic Route 66 in Oklahoma, which includes navigating along the nine structures described in this grant. It's important to note that USBR 66 runs along or parallel to Historic US-66 whenever possible but does not strictly follow the road. In some areas, local decisions were made to increase cyclist safety by choosing nearby alternate corridors. The structures that are being rehabilitated or replaced lack adequate shoulder width, meaning bicyclists travelling across the structures are in the driving lane. The new designs will provide enough shoulder width for bicyclists to utilize the shoulder.

Criterion #3: Economic Opportunity and Competitiveness

Economic Opportunity

Throughout Oklahoma, Historic Route 66 parallels several interstates including I-40 and I-44. Therefore, major freight movement is located on interstate and not along Historic Route 66. However, it is not a limitation for local communities, as over [52 percent of sales taxes](#) collected in Oklahoma is from communities along Route 66.

“Fifty-two percent of sales tax collected in Oklahoma is from our communities along Route 66.”

-Lt. Governor Matt Pinnell

Preserving Historic Route 66 brings well-documented economic and community benefits to the state, and the projects outlined in this grant are critical to those benefits. A [Route 66 Economic Impact Study](#) by Rutgers University found that the Route provided an annual gain of 2,400 jobs, \$90 million in income, \$262 million in overall output, \$127 million in gross domestic product and \$37 million in tax revenues for communities along US-66. Additionally, this study found that the success of the corridor is dependent on preserving the roads, bridges, and signage that are crucial to Historic Route 66.

Continued Investment along the Route

In 2023, ODOT received a \$1 million National Scenic Byways grant from the [FHWA](#) to improve safety along roughly 1.3 miles of the Historic Route 66 National Scenic Byway in Oklahoma County.

Workforce Development, Job Quality and Wealth Creation

ODOT has read through the table in the NOFO in Section D.2.c under VII, Administration Priorities and Departmental Strategic Plan Goals and can commit to the following items:

1. *The applicant has adopted or intends to adopt the use of registered apprenticeships in the overall delivery and implementation of the project.*

The State of Oklahoma currently has [193 registered apprenticeship programs](#), overseen by the US Department of Labor, which are pivotal to enhancing workforce skills, particularly in key sectors like transportation. ODOT is exploring leverage the state’s workforce development initiatives, particularly in utilizing existing apprenticeship programs and contributing to local economic growth thorough job creation and infrastructure improvement.

2. *The applicant will provide **training** and placement programs **for underrepresented workers** in the overall delivery and implementation of the project. AND The applicant*

*will provide supportive services and cash assistance to address systemic barriers to employment to be able to participate and thrive in training and employment, including childcare, emergency cash assistance for items such as tools, work clothing, application fees and other costs of apprenticeship or **required pre-employment training**, transportation and travel to training and work sites, and **services aimed at helping to retain underrepresented groups such as mentoring, support groups, and peer networking.***

ODOT has launched a Small Enterprise Training (SET) Program to facilitate increased participation in construction contracting opportunities by Oklahoma's small businesses. SET will offer free training to Oklahoma-based companies that meet National Small Business Administration (SBA) size guidelines and are actively pursuing ODOT contracting opportunities. SET's goal is to assist certified DBEs, and other small businesses currently involved in or interested in expanding their operations, in the road construction industry. These workshops will help to increase the participants' business expertise and their capacity to acquire and perform contracts both in the public and private sectors. The training program will include technical subjects such as bidding and estimating costs in addition to business skills like networking and using social media as an outreach tool.

Through the DBE Supportive Services Program, ODOT is increasing efforts to improve the viability of existing firms by offering tailored assessments, specific training and technical assistance. Related activities include recruitment of DBE firms with concentration on underutilized minority groups and underutilized areas of work, aiding in business development, increasing contract success opportunities, and improving overall DBE performance. ODOT will target recruiting efforts toward areas of subcontracting previously underrepresented by the existing DBE population such as bridge repair and painting. By increasing the pool of certified DBEs in areas of work not currently performed by DBEs, ODOT forecasts that the availability of DBEs for subcontracting will increase.

ODOT has training facilities across the state that will provide workers the opportunities for necessary pre-employment training. The main training center is centrally located in Oklahoma City and trainings are also provided at each district office. This effort will help reduce barriers to entry for employees across the state.

- 3. The applicant has documented agreements or ordinances in place to hire from certain workforce programs that serve underrepresented groups.*

As documented in the [2023 ODOT DBE Manual](#), ODOT has instituted equity-focused policies related to project procurement and construction to ensure equity in the overall project delivery and implementation. The mission of ODOT's Contract Compliance Division (CCD) is to ensure equal employment opportunity within ODOT, to level the playing field for DBE by providing full and meaningful participation opportunities in ODOT's federally funded highway projects and to plan, implement and provide guidance to prevent discrimination in federal aid programs and activities. ODOT CCD implements and oversees the ODOT DBE Program and the Unified

Certification Program for USDOT funded recipients, assuring compliance with 49 CFR Part 26. Both consultants and construction contractors are required to meet the stated DBE commitments. ODOT CCD conducts reviews of contractors and subcontractors at any time to ensure compliance.

Criterion #4: Climate Change, Sustainability, Resiliency, and the Environment

All of the structures proposed to be rehabilitated or replaced will be done on existing alignment without adding additional capacity to the network. Also, described in **Criteria #2 – Safety and Mobility**, the PMT in the areas surrounding these structures is relatively minimal. Because of this, there are no documented impacts to wildlife or any disproportionate impacts to disadvantaged communities. The disproportionate impacts would be prevalent if the structures were allowed to fall into a state of disrepair, thus causing closures and detour routes to be set up, increasing emissions and creating negative economic impacts to the local residents and business owners along Historic Route 66.

Resiliency of At-Risk Infrastructure

The structures being rehabilitated or replaced are increasingly vulnerable to damage caused by streamflow in the creek beds. The latest bridge inspections showed erosion and wear on piers and

Figure 13: Deterioration of Structures Caused by Stormwater Runoff



Source: ODOT Inspection Reports for Structures 12596 and 15089

abutments. The new design and rehabilitations account for an appropriate flood event for the facility type and will use HEC-RAS modelling for determination of flood characteristics, scour depths and appropriate scour mitigation measures for single and multiple opening analyses. This will provide the greatest level of hydraulic accuracy and reduce conservatism of previous design

methods and account for long-term changes in stream geomorphology, thus increasing the resiliency of the network beyond the infrastructure in place today. Culverts will be constructed using a Class AA concrete. This mix, which is now standard on ODOT’s bridge sized culvert construction, utilizes a 4000 PSI concrete mix compared to the previously used 3,000 PSI concrete. This concrete is more resistant to cracking and is more resistant to freeze thaw cycles, chloride penetration, and other environmental elements, increasing durability and longevity. It will also allow for improved freeze / thaw durability and less cracking of the bridge deck in the future. [06]

Due to its geology, rivers, and flood plains, ODOT has long recognized the vulnerability of its transportation assets to extreme weather and the risks it can present to the condition and performance of pavements and bridges; therefore, ODOT has integrated resiliency considerations into its life cycle planning and project programming processes. ODOT has developed well-regarded resiliency focused design guidelines for bridges and roadways in flood-prone areas to reduce potential damage from extreme weather events and minimize overall life cycle costs and is increasingly incorporating resiliency and redundancy considerations into its decision making.

Replacing and rehabilitating the existing bridges with new infrastructure and modern materials would address concerns regarding the structural deficiency of the existing bridges and offer an opportunity to improve resiliency to natural and man-made hazards and disasters.

Criterion #5: Equity and Quality of Life

The improvements described within this narrative will not displace any persons and is not intended to reduce vehicle dependence. Rather the improvements will contribute towards maintaining a historic roadway in a state of good repair, while improving safety for those traveling on the corridor and supporting the economies of the small, eclectic businesses surrounding it. Non-vehicular transportation is considered across the entire Historic Route 66 in the state of Oklahoma. Refer to the **Project Description** section for more information.

Figure 6: El Reno Mother Road Monument



Source: Travel OK

Referenced in the Location section of the **Project Description**, the majority of the tracts surrounding Historic Route 66 are considered historically disadvantaged (HDC). In addition, the bridges are located on the lands of Federally Recognized Tribes. For those living along the route, Historic Route 66 is a major contributor to their livelihood. Mentioned in the **Economic Opportunity and Competitiveness** Criteria, 52 percent of sales tax collected in Oklahoma occurs around Historic Route 66. Because the structures being improved are on existing alignment and the importance of Historic Route 66 to the economic vitality of the towns along the route, support for improving all the structures has been consistent and positive. ODOT will be conducting public engagement efforts leading up to construction of each of the structures to inform people about potential detours and the timeline for construction. ODOT has already begun the engagement process for the largest of the nine structures likely to have the most significant impact to traffic.

Figure 7: Rock Cafe in Stroud



Source: Route Magazine

Unlike the other eight structures, the two-lane northbound bridge over Bird Creek (NBI 13688) required early engagement because of potential alignment changes. A virtual open house was conducted between June 13, 2022, and June 27, 2022, to provide information regarding the various alternatives under consideration and obtain input from the public. A total of 44 written comments and verbal questions/comments were received from the public during the comment period.

Improving Access to Daily Destinations

Historic Route 66 is a nationally recognized Scenic Byway that is a vital component to the economic vitality of most every business that is located along the route. Maintaining the roadway and associated bridge structures is critical so that the tourist and leisure traffic can continue to access the roadway rather than detour onto the primary interstate system that parallels much of the US-66 corridor.

Criterion #6: Innovation

ODOT plans to utilize multiple innovations in terms of construction delivery and financing. Given the size of the bridge/culvert structures, the projected traffic on US-66 and the historic nature of the corridor, innovative technologies surrounding the structures are not considered a necessity.

Innovative Construction Techniques

Accelerated Bridge Construction – ODOT will use Accelerated Bridge Construct (ABC) to improve site constructability, total project delivery time, and work-zone safety for the public, as well as reduce traffic impacts, onsite construction time, and weather-related delays. ABC uses innovative planning, design, materials, and construction methods safely and cost-effectively to reduce the onsite construction time that occurs when building new bridges or replacing and rehabilitating existing bridges.

ODOT will look at all different types of ABC methods including stay-in-place forms for the new decks, allowing for prefabricated/precast materials to be used in construction and by working as best as possible to find small impact detours to allow full closure of bridges for expedited construction. This will be seen at both Shell Creek and Bird Creek where ODOT will construct crossovers to move traffic completely off of the bridges to allow for more seamless construction.

Figure 8: Classic Route 66 Signage in Tulsa



Source: Google Maps

Because of the two-lane nature of the Historic Route 66 roadway, there may be instances where temporary route detours are set up so that construction crews can operate safely and efficiently. Smart Work Zones and Intelligent Transportation Systems (ITS) will be utilized during construction to ensure work zones are safe and to minimize travel delays for drivers. The projects will follow ODOT’s Special Provisions for Smart Work Zone Systems and utilize cameras, mobile Dynamic Message Signs (DMS), and probe data to monitor travel speeds and congestion and support incident management. The messaging sign will communicate with drivers and provide alerts due to incidents, congestion, or special roadway conditions.

“No Excuses Bonus” – For construction, ODOT will incentivize contractors to achieve early delivery of the whole project and minimize traffic closures by deploying no excuses bonuses, including a substantial completion incentive valued at 5 to 10 percent of the contract and smaller incentives for internal milestones tied to key project elements.

Innovative Financing

In 2023, the Oklahoma State Legislature approved the largest one-time appropriation in state history to ODOT to address rural areas with substantial economic impact. The [Rural Economic Transportation Reliability and Optimization Fund \(RETRO\)](#) is a new funding source that allocates \$200 million for the construction and upgrade of state highways in rural areas where robust economic development has or is occurring. The project to replace structures 03932, 04781 and 04951 will utilize RETRO along with Federal dollars to fund the improvements.

Project Readiness

Project Schedule

The schedule outlined below identifies the timeline that each project can proceed to construction if BIP funds are awarded. A funding obligation agreement is proposed by the first quarter of 2025. ODOT is interested in entering into grant agreement discussions shortly after awards are announced to begin construction on several projects ahead of Historic Route 66's Centennial Celebration in 2026. Construction starts and completion for all structures is scheduled to be well in advance of statutory deadlines outlined in the NOFO.

Figure 9: Bridge Bundle Schedule

Task	2022	2023	2024	2025	2026	2027	2028	2029
Environmental Review								
03932, 04781, 04951								
12596	Completed 12/14/2023							
12629, 12630	Completed 2/20/2020							
13688	Completed 9/18/2023							
15089								
01751								
Preliminary Design								
03932, 04781, 04951	Completed Q1 2024							
12596								
12629, 12630	Completed 1/31/2019							
13688	Completed 8/1/2022							
15089	Completed 11/2023							
01751								
Final Design								
03932, 04781, 04951								
12596								
12629, 12630								
13688								
15089								
01751								
Permitting								
03932, 04781, 04951								
12596								
12629, 12630								
13688								
15089								
01751								
ROW/Utility Relocation								
03932, 04781, 04951								
12596								
12629, 12630								
13688								
15089	No ROW/Utility Relocation							
01751								
BIP Funding Obligation								
Route 66 Centennial								
Construction								
03932, 04781, 04951								
12596								
12629, 12630								
13688								
15089								
01751								

State and Local Approvals – Federal Transportation Requirements Affecting State Environmental Permits and Reviews

All structures being rehabilitated or replaced will occur on existing alignment, reducing the environmental risk associated with the projects. The text below describes the required approvals and permits, their status and timeline for receiving the necessary documentation:

- Environmental Approvals
 - **Bridges #12629 & 12630:** Received an Automatic Categorical Exclusion (ACE) in February 2020. ACE's do not require further National Environmental Protection Act (NEPA) approvals by FHWA. ODOT will complete a checklist re-evaluation prior to construction, no issues are foreseen.
 - **Bridge #15089:** Documents submitted. Expected to be a Programmatic Categorical Exclusion (PCE). Approval expected in July of 2024.
 - **Bridge #13688:** Received an Individual Categorical Exclusion (ICE) from ODOT in September 2023. ICE's do not require further NEPA approvals by FHWA.
 - **Bridge #1751:** Is anticipated to receive a Categorical Exclusion (CE) in July of 2024.
 - **Culvert #12596:** Received an Individual Categorical Exclusion (ICE) from ODOT in December 2023.
 - **Culverts #3939, 4951, & 4781:** Documents submitted. Expected to be a PCE. Approval expected in July of 2024.

This application is consistent with the Oklahoma Long Range Transportation Plan (LRTP) 2020-2045, specifically the policy calling to:

“Improve safety and bridge conditions by replacing or rehabilitating structurally deficient bridges on the state highway system and averting growth in the share of structurally deficient bridges.”

Additionally, the application supports the safe and secure travel, economic vitality, and infrastructure preservation goals of the [Oklahoma Freight Transportation Plan, 2023-2030](#).

These bridge improvements are part of ODOT's [2041-2031 8-year Construction Work Plan](#) with construction currently programmed to begin in 2024. [Project 20899\(09\)](#) (NBI 13688) is also included on ODOT's latest State Transportation Improvement Program (STIP). If Federal funding were received, it would allow many of these shovel-ready projects to move accelerate, allowing ODOT to amend their STIP to include Bridges 03932, 04781, 04951, 12596, 12629, 12630, 15089, and 01751.

The Project has received significant support from both state and local officials. The proposed project bundle is supported by affected local municipalities and adjacent Tribal nations. No additional required state or local approvals are necessary.

B: Public Involvement Completed

Engagement will occur leading up to construction of all bridges. The types of engagement will vary depending on the work being completed. ODOT will utilize a combination of Virtual Public Engagement and in-person meetings. Unlike the other eight structures, the two-lane northbound bridge over Bird Creek (NBI 13688) required early engagement because of potential alignment changes. A virtual open house was conducted between June 13, 2022, and June 27, 2022, to provide information regarding the various alternatives under consideration and obtain input from the public. A total of 44 written comments and verbal questions/comments were received from the public during the comment period.

C: Technical Capacity

Oklahoma is strategically focused on improving bridge conditions throughout the state as part of its long-range transportation plan. As evidence of that commitment, ODOT has reduced the number of structurally deficient bridges across the state, totaling 49 in 2022 down from a high of 1,168 in 2004.

Assessment of Project Risks and Mitigation Strategies

Table 6: Project Risks and Mitigations

Project Risk	Risk Level (High, Medium, Low)	Description/Mitigation Strategies
Right-of-Way/Property Acquisition	Low	All bridges and culverts undergoing replacement or rehabilitation will be constructed on the existing alignment which has reduced many concerns with ROW acquisition.
Construction Materials Costs	Low	Cost estimates have been developed based on the completion of preliminary design and the start of final design. A 10 to 15 percent contingency has been accounted for in each of the projects dependent on the level of design completed. These contingency percents are standards for all ODOT projects at these stages.
Environmental Approvals	Low	It is anticipated that all bridges and culverts will receive environmental approvals well before construction begins.
Public Support	Low	ODOT will complete public engagement efforts prior to construction of each of the structures.
Procurement, Contracting, and Labor Agreements	Low	ODOT will procure a construction team well in advance of the identified construction date through a competitive process meeting federal requirements.
Schedule	Low	The ODOT team will complete preliminary design of all structures by Q2 of 2024 and will then advance into final design and will be ready to begin construction of the first structures by Q1 2025.

Administrative Priorities and Departmental Strategic Plan Goals

The project supports all the Administration Priorities and Departmental Strategic Plan Goals. These are listed below with the corresponding narrative section that substantiates it:

- Safety: See **Merit Criterion #2**
- Climate Change and Sustainability: See **Merit Criterion #4**
- Equity: See **Merit Criterion #5**
- Workforce Development, Job Quality, and Wealth Creation: See **Merit Criterion #3**

DOT Priority Selection Considerations

The narrative has established that the structures are in poor condition or at risk of falling into poor condition within three years (see **Merit Criterion #1**) and that ODOT needs Federal BIP funding to complete the projects ahead of the Historic Route 66 Centennial Celebration in 2026. If funding were not received, projects would be delayed until additional funding becomes available. ODOT is prepared to get a grant agreement in place and proceed towards construction upon receiving a Federal award. Environmental has been or is close to being cleared for each of the projects. The entire Historic Route 66 corridor accounts for bicycle and pedestrian accommodations including the area surrounding the bridge projects.