



OKLAHOMA
Transportation



I-40 and SH-100 Bridge Replacement Bundle at Webbers Falls Project Narrative

Bridge Investment Program—
Large Bridge Project Grants
Opportunity # 693JJ323NF00019
August 1, 2025

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I. Basic Project Information

Project Description

The Oklahoma Department of Transportation (ODOT) is requesting \$81.5 million in Bridge Investment Program (BIP) for Large Bridge Projects funding to support the I-40 and SH-100 Bridge Replacement Bundle at Webbers Falls (Project), which will replace Interstate 40 (I-40) and State Highway 100 (SH-100) bridges over the Arkansas River. The

I-40 (NBI Bridge Number 17051) and the SH-100 (NBI Bridge Number 17611) bridges over the Arkansas River at Webbers Falls span from Muskogee County (western terminus) and Sequoyah County (eastern terminus) in eastern Oklahoma and traverse the McClellan-Kerr Arkansas River Navigation System (MKARNS).

Both bridges are fracture critical and do not meet ODOT's current geometric design standards. The bridges support Oklahoma's local and regional economy, serving as a crucial connector for freight and passenger vehicles. The realization of the Project will deliver an array of benefits to ODOT and passengers that traverse I-40 and SH-100 for business, personal travel, and other recreation purposes. The bridges are shown in Figure 1 and Figure 2 and features are listed in Table 1.

Figure 1: I-40 over the Arkansas River



Figure 2: SH-100 over the Arkansas River



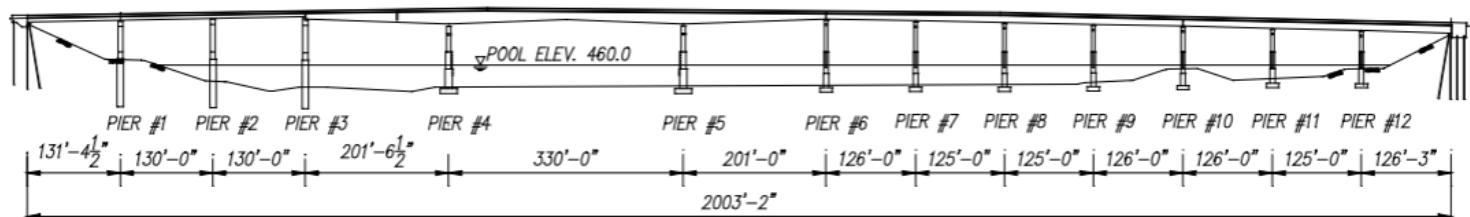
Table 1: Bridge Features

| Characteristic | I-40 | SH-100 |
|--|---|---|
| Segment Features | <ul style="list-style-type: none"> • 2,003 feet long • 69 feet wide • 13 spans • 2 dolphins | <ul style="list-style-type: none"> • 1,928 feet long • 35 feet wide • 15 spans • 2 dolphins |
| Bridge History | Designed in 1967, built in 1968 | Designed and built in 1969 |
| Fracture-Critical? | Yes | Yes |
| Bridge Location | In between Muskogee and Sequoyah counties | In between Muskogee and Sequoyah counties, near Webbers Falls |
| MKARNS Location | Main Span is 330 feet long at river mile 360.3 | Main Span is 334 feet long at river mile 363.1 |
| Condition Rating (deck, superstructure, substructure) | 6, 6, 6 | 6, 5, 6 |
| Design Life | 75 years | 50 years |
| Anticipated Closure to Trucks | 2038 | 2038 |
| Anticipated Closure to All Traffic | 2052 | 2047 |

Interstate-40

Construction was completed for the existing I-40 bridge in 1968. The bridge is 2,003 feet long¹ and 69 feet wide² and consists of 10 composite steel plate girder spans and three prestressed concrete bulb tee girder spans on concrete piers (Figure 3). The main span is 330 feet long over the MKARNS navigation channel at river mile 360.3.³ For safety reasons, bicycle and pedestrian accommodations cannot be made along the I-40 given that the roadway is part of the Interstate Highway System.

Figure 3: Existing Bridge Elevation for I-40



The original bridge design was completed in 1965 prior to the development of criteria for vessel collision design. Two dolphins on the upstream side of the bridge were provided in 1983 to protect the piers adjacent to the navigation channel. The additional pier protection was designed for an impact load of 2,400 kips from a three barge long loaded hopper barge tow traveling at six mph (5.2 knots), or from larger barge tows through plastic deformations.

The Arkansas River at the I-40 bridge is approximately 1,400 feet wide, and the navigation channel is 300 feet wide. The MKARNS is maintained as a nine-foot-deep draft navigation channel. There are bends in the channel on both the upstream and downstream sides of the bridge, and the bridge is aligned slightly skewed relative to the channel. The vessel types on the MKARNS include mainly hopper and tanker barge tows. An image of the I-40 bridge looking east is displayed in Figure 4. The bridge is fracture-critical, meaning it is more susceptible to collapsing than other types of bridges because it does not have redundant structural elements to compensate load bearing for areas where cracks exist. Stated otherwise, fracture-critical bridges do not have redundancies in load-bearing structure, meaning the failure of a single tension element could lead to the bridge's collapse. Due to the presence of Nonredundant Steel Tension Members (NSTM) main span girders, lapsed fatigue life, and historical precedence, the I-40 bridge has a high likelihood of becoming structurally deficient. Fatigue cycles are driven by the amount of heavy truck traffic that uses the structure daily, which accounts for 36 percent⁴ of the 2024 average daily traffic (ADT) count of 19,800.⁵ Given that this structure is a major river crossing on I-40, the fatigue cycles

¹ ODOT, Vessel Collision Risk Assessment Update (Interstate 40 Bridge), 2022

² ODOT, Bridge Inspection Report (Interstate 40 Bridge), 2023

³ ODOT, Vessel Collision Risk Assessment Update (Interstate 40 Bridge), 2022

⁴ ODOT, Bridge Inspection Report (Interstate 40 Bridge), 2023

⁵ ODOT, Traffic Viewer, 2025. Retrieved https://okdot.public.ms2soft.com/TDMS.UI_Core/trafficviewer

it receives are staggering. The most recent (2023) fracture critical report for the I-40⁶ lists several fatigue cracks that have been arrested with cored holes. Currently, the cracks appear to be mostly dormant, or inaccessible to repair. Given the uncertain nature of the fatigue life cycle (i.e., initiation, propagation, failure), there is a degree of uncertainty about if or when these cracks will reinitiate and propagate further, or if new cracks will initiate elsewhere. Additionally, there is uncertainty about remaining fatigue life, as there is no definitive way to know how much has lapsed or how much remains. ODOT has prioritized the replacement of the I-40 bridge due to the uncertainties surrounding the bridge's future serviceability and the sensitive nature of the structure.

On May 26, 2002, a barge collided with a pier supporting the I-40 (Figure 5). The captain of the towboat suffered a medical emergency and lost control of the tow, which in turn caused the barges he was towing to collide with the bridge. The resulting failure of the supports caused a section of the bridge to collapse, resulting in 14 fatalities and five injuries in addition to \$30.1 million in structural damages (2002\$).⁷ Around 20,000 vehicles per day were rerouted for about two months while crews rebuilt the bridge for safe travel in future, resulting in additional travel costs for detoured traffic and additional operations and maintenance costs for ODOT to maintain the detoured route. Following the barge collision with Pier 3, several modifications were made to the bridge as part of the emergency repair plans. Spans 1, 2, and 3 were replaced with prestressed concrete beams. A section of Span 4 was also replaced, with new plate girders spliced onto the remaining existing ones. Also, Piers 1, 2 and 3 were replaced with bents consisting of three 108-inch diameter drilled shafts with a web wall. Abutment 1 and the west approach slab were also replaced. The

**Figure 4: Interstate 40 Bridge
(shown from the west looking east)**



Figure 5: I-40 Bridge Collapse on May 26, 2002



⁶ ODOT, Fracture Critical Bridge Inspection Report (Interstate 40 Bridge), 202

⁷ NTBS, U.S. Towboat Robert Y. Love Allision With Interstate 40 Highway Bridge Near Webbers Falls, Oklahoma, 2002. Retrieved <https://www.nts.gov/investigations/AccidentReports/Reports/HAR0405.pdf>

emergency repairs were later followed by the construction of additional pier protection consisting of 12-foot diameter drilled shafts placed at selected locations upstream and downstream of the bridge.

The current I-40 bridge railing is 33 inches above the raised section of deck, well under the minimum standard of 42 inches above the deck. The Project will accommodate a 4-foot-wide inside shoulder, two 12-foot-wide driving lanes, and a 10-foot-wide outside shoulder on each side of a median barrier located at the centerline of the bridge. In addition, the new bridge will have a railing height of 42 inches above the deck, improving safety along the bridge.

Absent the Project, ODOT will post load limits on I-40 that restrict truck access between Exit 287 and Exit 291 by 2038, closing to all vehicles by 2052.⁸ SH-100, the closest detour route for I-40, is anticipated to close to trucks in 2038 and to all vehicles by 2047. Resultantly, I-40 traffic will be diverted north to US Highway 62 following the simultaneous closures of I-40 and SH-100.

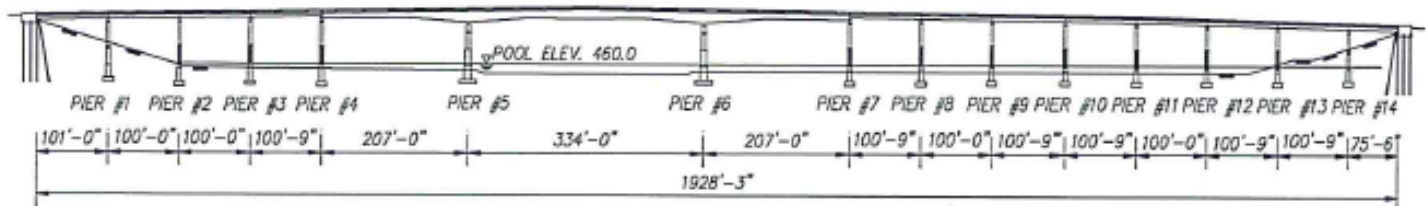
Following the implementation of the Project, the I-40 bridge over the Arkansas River at Webbers Falls will continue operations. In addition, the bridge will not be load posted to trucks or be closed to all vehicles, resulting in detour time and detour distance avoided.

State Highway-100

Designed for a 50-year service life, the SH-100 bridge was completed in 1969 and rehabilitated in 2014. The bridge is approximately 1,928 feet in length and 35 feet wide,⁹ about 2.8 miles upstream from the I-40 bridge.¹⁰ The SH-100 bridge serves as a vital route between Oklahoma communities, connecting both Webbers Falls in Muskogee County located west of the bridge and Gore in Sequoyah County located east of the bridge.

The bridge segment is a two-lane highway with driving lanes that are 11 feet wide and outside shoulders that are 3 feet wide. The bridge includes two different surface elevation benchmarks used to measure the height of the bridge, including an elevation of 528 feet at benchmark one and an elevation of 517 feet at benchmark two (Figure 6). The bridge consists of fifteen spans. The main span is 334 feet long over the MKARNS navigation channel at river mile 363.1. In addition to the 15 spans, the bridge consists of two 40-foot diameter steel sheet pile dolphins located at Piers 5 and 6.

Figure 6: Existing Bridge Elevation for SH-100



⁸ USDOT, National Bridge Investment Analysis System (NBIAS), 2025. Retrieved <https://www.fhwa.dot.gov/policy/23cpr/appendixb.cfm>

⁹ ODOT, Underwater Inspection of SH 100 over the Arkansas River, 2022

¹⁰ ODOT, SH-100 Vessel Collision Risk Assessment, 2005

The bridge design was completed in 1966 prior to the development of criteria for vessel collision design. Two dolphins on the upstream side of the bridge were provided in the original design to protect the piers adjacent to the navigation channel.

SH-100 serves as a critical relief route for all users of I-40. SH-100 provides a major vehicular crossing over the Arkansas River, facilitating the movement of goods and people across eastern Oklahoma. This contributes to regional economic activity, some of which is tied to industries that depend on the river, particularly agriculture. As a result, SH-100 is heavily relied upon to transport agricultural inputs across the Arkansas River. If SH-100 were shut down, the agricultural industry would suffer significant losses. The ADT for SH-100 was 3,700 in 2024 with 15 percent truck traffic.¹¹

Due to the urgency of addressing defects as a fracture-critical bridge, SH-100 is currently on ODOT's annual inspection schedule as it approaches the end of its intended useful life. The existing bridge is considered narrow, with 11-foot driving lanes and 3-foot-wide outside shoulders. The bridge is also at-risk of becoming structurally deficient. By replacing the bridge, the Project will avoid any costs associated with the deteriorating structural conditions of the existing bridge and add substandard functional aspects for improved safety. The Project will replace the bridge with a wider section, featuring 12-foot driving lanes as well as 8-foot-wide outside shoulders going in each direction. The Project will also reduce the existing bridge's 15 spans in half and implement the use of a 42-inch-tall railing to further increase safety.

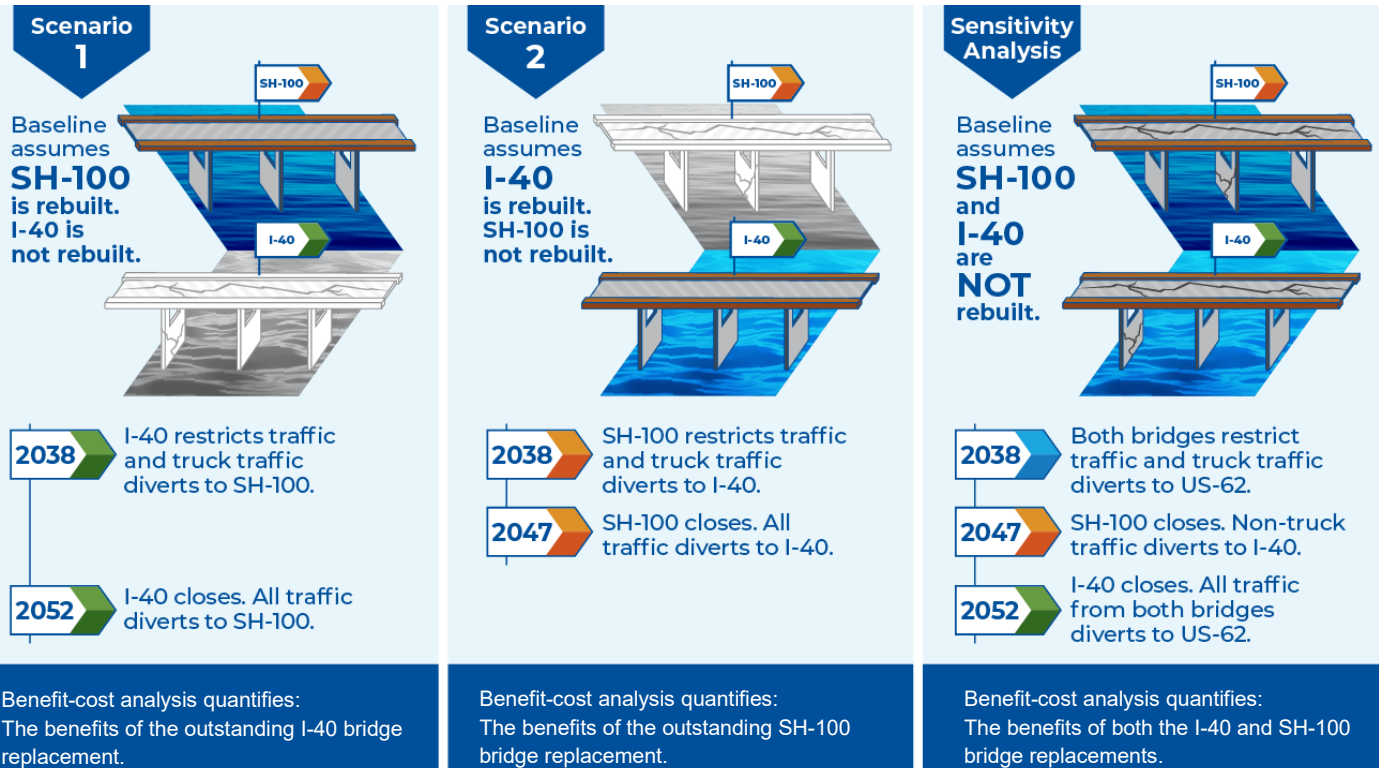
Absent the Project, ODOT will post load limits on SH-100 that restrict truck access by 2038, closing to all vehicles by 2047. As I-40 will also be load posted by 2038, truck movements will be diverted north to US Highway 62 while personal vehicles will be diverted to I-40 between 2047 and 2052. Following the anticipated closure of I-40 in 2052, all traffic will be diverted to US Highway 62.

¹¹ ODOT, Traffic Viewer, 2025. Retrieved <https://okdot.public.ms2soft.com/TDMS.UI/Core/trafficviewer>

Benefit Analysis Framework

Figure 7 outlines the benefit analysis framework scenarios. The benefit analysis framework quantifies benefits associated with the following three scenarios: SH-100 bridge is rebuilt and I-40 is not; I-40 bridge is rebuilt and SH-100 is not; and I-40 and SH-100 bridges are both not rebuilt.

Figure 7: Benefit Analysis Framework Scenarios



Project Location

Both Project elements connect Muskogee and Sequoyah Counties in eastern Oklahoma, as shown in Figure 8.

I-40 crosses the Arkansas River at the town of Webbers Falls. The SH-100 bridge is located approximately 2.8 miles upstream from the I-40 bridge. It crosses the Arkansas River section of MKARNS situated at river mile 363.1. Geospatial data for the Project is presented in Table 2.

Figure 8: Project Location



Table 2: Geospatial Data for the Project

| Bridge | Latitude | Longitude | Census Tracts |
|--------|-----------|------------|--|
| I-40 | 35.484891 | -95.102126 | <ul style="list-style-type: none"> • 40135030202 (302.02) • 40101001500 (15) |
| SH-100 | 35.519054 | 95.1264113 | <ul style="list-style-type: none"> • 40135030202 (302.02) • 40101001501 (15.1) |

Neither Muskogee nor Sequoyah Counties, which bound both the I-40 and SH-100 bridges, are within 2020 Census-designated Urbanized Area and as such, the Project is considered rural.¹²

Per the US Census American Community Survey, Muskogee and Sequoyah Counties have a combined population of 106,100. Muskogee County has a fertility rate of 67 births per 1,000 women and Sequoyah County has a fertility rate of 60 births per 1,000 women, for a weighted fertility rate of 64 births per 1,000 women, compared to fertility rates of 57 and 52 per 1,000 women in Oklahoma and the United States, respectively. These demographic statistics suggest the Project will provide significant benefits to young families. Muskogee and Sequoyah County have a combined employment rate of the population 16 years and over in the agriculture, forestry, fishing and hunting, and mining industry that is 69 percent greater than the population of United States at large, demonstrating the Project will further support the agriculture community.

I-40 connects two USDOT Opportunity Zones in Sallisaw and Checotah (Figure 9). Opportunity Zones are special geographic areas designated to encourage investment and revitalization in underserved communities. The goal is to spur economic development and job creation by incentivizing private investment. This creates a great importance for I-40 connectivity as in the case of bridge closure, the Opportunity Zones do not stay connected and suffer from lack of development.

Figure 9: Proximity to Opportunity Zones


¹² FHWA HEPGIS, MPO and 2020 Census Urban Areas, 2025. Retrieved <https://hepgis-usdot.hub.arcgis.com/apps/72bcd861285c423c9d4aec6b8e48a496/explore>

I-40 is part of a major east-west transcontinental interstate highway spanning over 2,500 miles from California to North Carolina, functioning as the third-longest Interstate Highway in the US. SH-100 is the only other roadway in the area crossing the Arkansas River, providing a major connection for the movement of people, goods, services, and freight. The Project is essential to ensure the functioning of the regional and national economy and ensuring freight connectivity. The I-40 bridge in eastern Oklahoma serves as a vital regional travel corridor, providing access to key destinations such as Camp Gruber, Greenleaf State Park, and Tenkiller State Park. As a major east-west route, the bridge plays a critical role in linking rural and tribal areas to larger urban centers, making it a significant trip generator in the region, supporting tourism and recreational travel, while also facilitating movement within the Cherokee Nation for cultural, economic, and community purposes.

Project Parties

Lead Applicant

As the Project sponsor, ODOT has the technical capacity to successfully deliver the Project, along with decades of experience with receipt and expenditure of federal transportation funds. ODOT has the technical expertise and resources dedicated to the Project to provide quality control throughout implementation, keep the public informed of the Project's progress, and confirm the Project meets all federal requirements. ODOT has a successful track record collaborating with various entities, including local governments and tribal nations, to deliver projects to construct, improve, and maintain Oklahoma's transportation infrastructure. ODOT has also received hundreds of millions of dollars in federal discretionary funding and has experience managing large and complex projects funded in part by USDOT, including the US-75/I-44 Tulsa Project which received 2018 INFRA, 2022 RAISE and Mega awards. Additionally, in 2025, ODOT was awarded funds through the Rural Surface Transportation Program (MPDG) for the MidAmerica Connectivity Project and the US-259 widening Project.

ODOT is committed to improving its bridge conditions. Oklahoma improved its national ranking in highway bridge conditions from 49th place in 2004 to 5th place in 2021. The agency's eight-year plan marks the continuation of ODOT's commitment to improving bridges at risk of becoming structurally deficient. The plan addresses 290 bridges currently at risk of becoming structurally deficient. This Project will align with ODOT's progress to date of addressing safety and capacity improvements.

Other Public and Private Parties

No additional public or private parties will be involved in delivering the Project. No private or non-private entity will receive a direct and predictable financial benefit if the Project is selected for award.

Additional Eligibility Requirements

Maintenance

ODOT will uphold the maintenance of the constructed bridges in alignment with the organization's Transportation Asset Management Plan (TAMP).¹³ As documented in ODOT's TAMP (2022-3031),¹⁴ maintenance and preservation funds come from state and federal sources. ODOT forecasts future funding based on historical data and allocates this revenue to its field districts. Maintenance funds are allocated based on a lifecycle analysis of existing assets to determine the most cost-effective uses of those funds. ODOT currently has \$43.7 million in the TAMP for bridge maintenance and preservation. ODOT will allocate the funding for the Project's maintenance costs through their dedicated maintenance fund.

In addition to the TAMP, ODOT's comprehensive \$500 million Asset Preservation Plan strategically targets issues pertaining to bridges, roadways, and accessibility. Leveraging funding support from the state legislature through the ODOT Rebuilding Oklahoma Access and Driver Safety (ROADS) initiative, ODOT has successfully reduced the number of structurally deficient bridges on Oklahoma highways. The commitment to ensuring that fewer than one percent of bridges in Oklahoma are structurally deficient has resulted in a remarkable reduction, from 1,068 in 2006 to 49 by 2023.

Consistency with an Asset Management Plan

As stated in the ODOT Transportation Asset Management Plan, ODOT defines the most cost-effective life-cycle plan given any budget, assessing the minimum investment needs to achieve desired targets, and identifying the budget allocation needed to achieve realistic targets. Key steps in bridge life-cycle planning are to apply deterioration and improvement models, evaluate life-cycle costs, and optimize the scheduling of general work to identify specific treatments. ODOT bridge treatments range from relatively low-cost preservation treatments that can extend the life of a bridge, rehabilitation treatments for bridges in Fair or Poor condition, and component or full bridge replacement. The size and extent of the I-40 and SH-100 bridges limit the viability of rehabilitation treatments to the bridges as their size restricts maintenance crews from accessing the structures. This necessitates their replacement in alignment with the ODOT Transportation Asset Management Plan.

II. National Bridge Inventory Data

National Bridge Inventory (NBI) condition data for the I-40 and SH-100 is presented in

Table 3. More information on NBI data for the Project can be found in Large Bridge User Application Template.

¹³ ODOT, Transportation Asset Management Plan 2022-2031, 2022. Retrieved https://oklahoma.gov/content/dam/ok/en/odot/programs-and-projects/programs/transportation-programs/odot_tamp.pdf

¹⁴ ODOT, Transportation Asset Management Plan 2022-2031, 2022. Retrieved https://oklahoma.gov/content/dam/ok/en/odot/programs-and-projects/programs/transportation-programs/odot_tamp.pdf

Table 3: National Bridge Inventory Data: I-40 and SH-100

| I-40 | |
|--|---------------------------------------|
| Item 58 – Deck Condition | 6 - Satisfactory Condition |
| Item 59 – Superstructure Condition | 6 - Satisfactory Condition |
| Item 60 – Substructure Condition | 6 - Satisfactory Condition |
| Item 61 – Channel and Channel Protection | 6 – Bank Slumping |
| SH-100 | |
| Item 58 – Deck Condition | 6 - Satisfactory Condition |
| Item 59 – Superstructure Condition | 5 - Fair |
| Item 60 – Substructure Condition | 6 - Satisfactory Condition |
| Item 61 – Channel and Channel Protection | 6 – Bank Slumping |
| Item 112 – Scour | 8 – Calculated Scour Above Foundation |

III. Project Budget – Grant Funds, Sources, and Use of all Project Funding

The total cost for the Project is \$165.0 million, of which, \$2.0 million has been previously incurred. Of the remaining \$163.0 million of future eligible Project costs, ODOT is requesting \$81.5 million (50 percent) in BIP grant funding, matched by \$48.9 million (30 percent) from other Federal funds and \$32.6 million (20 percent) in state funding. Table 4 presents Project costs and funding sources. ODOT is confident there will be no challenges providing the specified non-federal match for the Project and has attached documentation to this application demonstrating its commitment of the local match (see Attachment 6 - Letter of Financial Commitment).

ODOT has committed substantial resources to the Project to advance it to 65 percent design, however without the assistance of USDOT, the bridge is at risk of deteriorating condition and requiring additional maintenance work, as ODOT is unable to fully fund the replacement in the near future. Federal funding is needed to deliver this critical Project.

ODOT is committed to the long-term maintenance of its infrastructure assets and conducts regular maintenance on its assets to ensure they remain in a state of good repair. ODOT allocates funding to budget maintenance activities and plans to allot the appropriate amount to maintain the Project.

Table 4: Project Costs and Funding Sources (YOE\$)

| Project Component | BIP | | Other Federal Funds | | State | | Total |
|-------------------|--------------|-----|---------------------|-----|--------------|-----|---------------|
| | Cost (YoE\$) | % | Cost (YoE\$) | % | Cost (YoE\$) | % | |
| I-40 | \$58,500,000 | 50% | \$35,100,000 | 30% | \$23,400,000 | 20% | \$117,000,000 |
| SH-100 | \$23,000,000 | 50% | \$13,800,000 | 30% | \$9,200,000 | 20% | \$46,000,000 |
| Total | \$81,500,000 | 50% | \$48,900,000 | 30% | \$32,600,000 | 20% | \$163,000,000 |

IV. Merit Criteria

As per the FY 2023-2026 BIP Large Bridge Project Grants NOFO, all merit criteria, including 1) State of Good Repair, 2) Safety and Mobility, 3) Economic Competitiveness and Opportunity, 4) Sustainability, Resilience, and the Environment, 5) Quality of Life, and 6) Innovation are met with this Project. Each criterion is discussed in further detail below.

Criterion #1: State of Good Repair

In bringing the bridges to a state of good repair, the Project will result in maintenance costs avoided.

Bridge Condition

The Project will contribute to a state of good repair by replacing both fracture critical bridges that are more susceptible to collapsing than other types of bridges because they lack redundant structural elements to compensate load bearing for areas where multiple cracks exist. Due to the presence of NSTM main span girders, lapsed fatigue life, and historical precedence, the I-40 has a high likelihood of becoming structurally deficient. Fatigue cycles are driven by the amount of heavy truck traffic that uses the structure daily. Given that I-40 is a major river crossing, the fatigue cycles it receives are staggering. The existing bridge is also at-risk of becoming structurally deficient. The purpose of the Project is to improve safety by addressing the narrow width and the structural deficiencies of the existing bridge.

The 2023 fracture critical report for I-40 lists several fatigue cracks that have been arrested with cored holes. Currently, the cracks appear to be mostly dormant, or inaccessible. Given the uncertain nature of the fatigue life cycle (i.e., initiation, propagation, failure), there is a certain degree of uncertainty about if or when these cracks will reinitiate and propagate further, or if new cracks will initiate elsewhere. The 2023 fracture critical report for SH-100 states that the easternmost rail post along the north barrier at the end of the east approach slab is missing all four anchor bolts, corrosion holes through the steel tube were observed through the south bridge rail near floor beams and the bridge railing does not meet the current standards for non-National Highway system roadways traffic safety. The report identified cracks observed at the ends of the horizontal splice of girders near floor beams.

The 2023 bridge inspection report for I-40 and 2023 fracture critical report SH-100 (see Attachment 7- I-40 Bridge Inspection Report 2023 and Attachment 12- SH-100 Fracture Critical Bridge Inspection Report 2023) found several issues to be repaired. For I-40, a change from the 2021 to the 2023 inspections was the decline of the Deck Joints (NBI Item #58c) from a 5 (fair condition) to 4 (poor condition). Traffic Safety (NBI Item #36), Superstructure Floor Bracing System (NBI Item #59e), and Substructure Bearings (NBI Item #60c) are all in 5 (fair condition) with the potential to decline further. For SH-100, Traffic Safety (NBI Item #36), Superstructure Beams/Girders, Stringers, Floor Beams, Floor Bracing

System (NBI Item #59a, #59b, #59c, #59e), and Substructure Bearings (NBI Item #60c) are all in 5 (fair condition) with the potential to decline further.

Both bridges included in the Project have elements that do not meet current FHWA, AASHTO, or ODOT design standards. I-40's current railing is 33 inches above the raised section of deck, well under the minimum standard of 42 inches above the deck. SH-100 is considered narrow with 11-foot-wide shoulders.

Damage to the I-40 and SH-100 over MKARNS could block navigation, disrupt freight flows, and impact regional commerce. A block in barge traffic could halt the flow of key goods. This would force costly rerouting to truck or rail, delay supply chains, and impact regional industries and ports. Combined with increased highway congestion from diverted traffic, the disruption could cause a significant domino effect on the local and regional economy. If the bridges are forced to close, the region will face serious ramifications, impacting an average ADT of 3,700 vehicles on SH-100 and 19,800 vehicles on I-40.¹⁵

The new bridges will be constructed to ODOT's design standards, resulting in a service life of over 75 years, which creates a more viable and safe transportation network. See page 11 for information on how the Project is consistent with the objectives listed in the ODOT Transportation Asset Management Plan.

Operations and Maintenance Costs

Replacing the bridges will enable ODOT to avoid major near-term operations and maintenance (O&M) costs needed to maintain current elements and keep operations moving effectively. The deteriorating condition of the bridges requires ODOT to continually reevaluate the condition of the bridges to ensure it is still safe to use. Following any of these more frequent inspections, results could reach the likely conclusion that the bridge has degraded to "critical" condition, and the heightened risk to safety will require it to be closed. If the Project were delayed or unable to be implemented, and the bridges were deemed unsafe, traffic would not be able to use the bridge. Without replacement of the bridges, there is a significant threat to the mobility of goods nationally, as well as to economic growth in the region. As a result, the closure will cause severe travel time and reliability impacts for the traveling public. The detoured routes increase travel time and will lead to more congestion, safety and reliability challenges. The Project can also lead to cost savings through shared mobilization, bulk material purchasing, and reduced administrative and inspection expenses. Services like maintenance and inspection can be performed simultaneously, improving efficiency and lowering labor and equipment costs. It also streamlines planning and minimizes traffic disruption compared to handling each bridge separately.

As described under Additional Eligibility Requirements, the Project is consistent with ODOT's TAMP. The implementation of the Project will result significant O&M cost savings for ODOT while also bringing the critical I-40 and SH-100 to a state of good repair. Under the baseline,

¹⁵ ODOT, Traffic Viewer, 2025. Retrieved https://okdot.public.ms2soft.com/TDMS.UI_Core/trafficviewer

the poor condition of the bridges will require ODOT to allocate funds towards the following over the 30-year analysis period: annual O&M costs, biannual special inspection costs, biannual NBI and NSTM inspection costs, under water inspection costs (every five years), and rehabilitation. As described in Attachment 2 – BCA Technical Memorandum, the I-40 (Scenario 1) portion of the Project will result in \$19.6 million in maintenance costs avoided while the SH-100 (Scenario 2) portion of the Project will result in \$7.8 million in maintenance costs avoided over the 30-year analysis period (2022\$, discounted at 3.1 percent).

Criterion #2: Safety and Mobility

The Project will deliver significant safety benefits. As described in Attachment 2 – BCA Technical Memorandum, the I-40 (Scenario 1) portion of the Project will provide \$71.0 million in safety benefits while the SH-100 (Scenario 2) portion of the Project will provide \$30.1 million in safety benefits over the 30-year analysis period (2022\$, discounted at 3.1 percent).

Bridge Design

The I-40 and SH-100 Project component's contributions to safety and mobility are described below.

Interstate-40

The I-40 replacement bridge requires the bridge superstructure to be widened sufficiently to accommodate a four-foot wide inside shoulder, two 12-foot-wide driving lanes and a 10-foot-wide outside shoulder on each side of a median barrier located at the centerline of the bridge. The widening will increase the total width of the deck slab from 68 feet 6 inches to 81 feet. This widening will require the deck slab to be extended approximately 6 feet 3 inches on each side of the bridge. In addition, the new bridge will have a railing height of 42 inches above the deck, which is significantly higher than the current 33 inches above the raised section of deck, which will improve safety along the bridge.

State Highway-100

For SH-100, the new bridge includes 12-foot driving lanes and eight-foot-wide outside shoulders in each direction. The new bridge will be wider by adding eight feet wide shoulders to each side, increasing the roadway width from 28 feet to 40 feet through the bridge. Also, modern 42-inch-tall railings will be incorporated into the design to increase safety for all bridge users. The widened shoulders will increase safety for bicyclists and pedestrians in areas where crossings are feasible for the SH-100.

The existing bridges 15 spans will be reduced to seven spans along the new structure. The reduction in the number of spans will provide increased safety for both boaters and highway users. The new bridge will incorporate scour protection innovation to provide long-term resiliency to extreme weather events, flooding, and other natural disasters.

Structurally, state-of-the-art hybrid steel plate girders incorporating High-Performance Steel will be utilized to achieve the longer spans. The new bridge piers will implement concrete

walls between columns to better resist debris and incidental impacts. The existing dolphin pier protection measures will remain in place for the new bridge.

Crash Reduction Benefits

Using ODOT crash data, between 2014 and 2023, there were a total of 39 crashes, with 1 fatal crash on I-40 (Figure 10). Figure 11 presents collision severity by year data and Figure 12 illustrates road condition by year data for I-40. For SH-100, there were a total of three collisions reported along the roadway project area that comprised of two property-damage only (PDO) and one possible injury.

Figure 10: 2014-2023 Crash Data

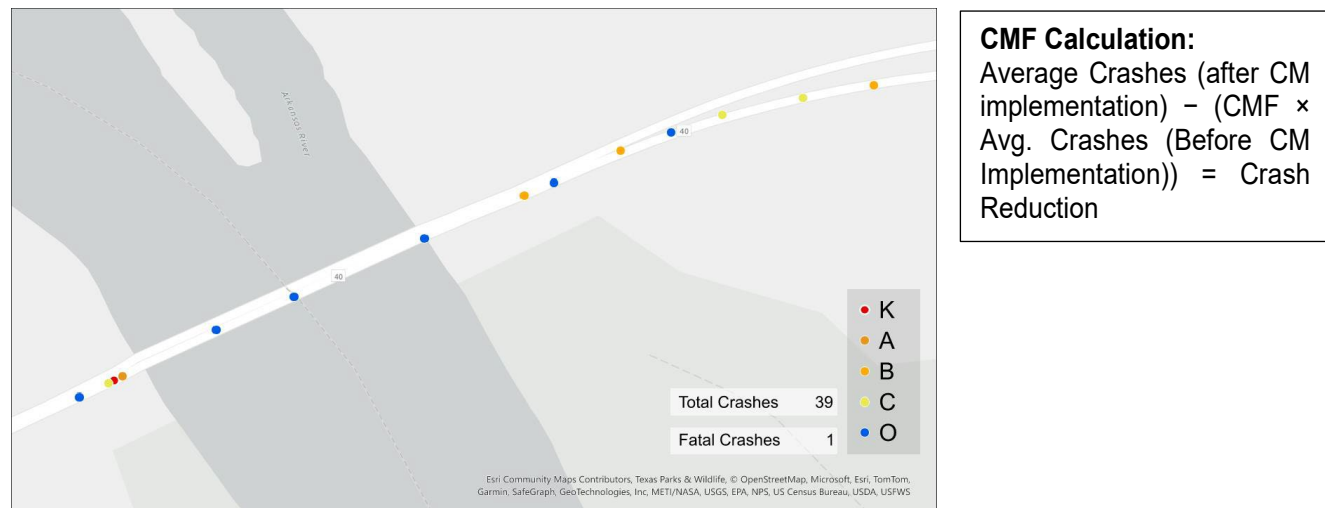


Figure 11: Collision Severity by Year

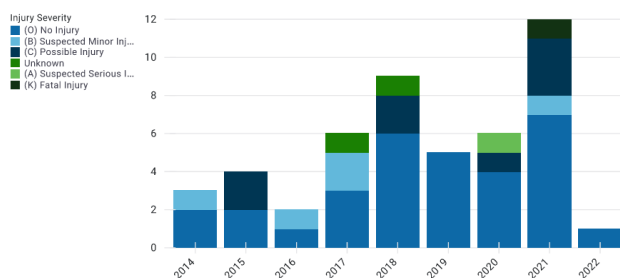
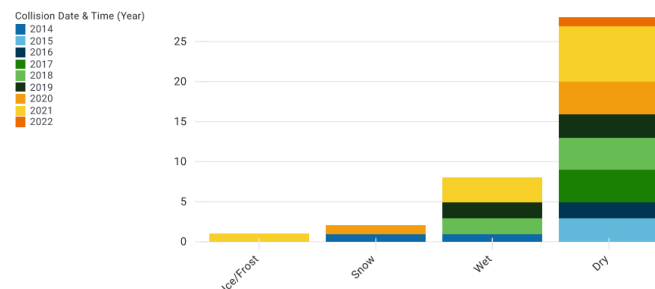


Figure 12: Road Condition by Year



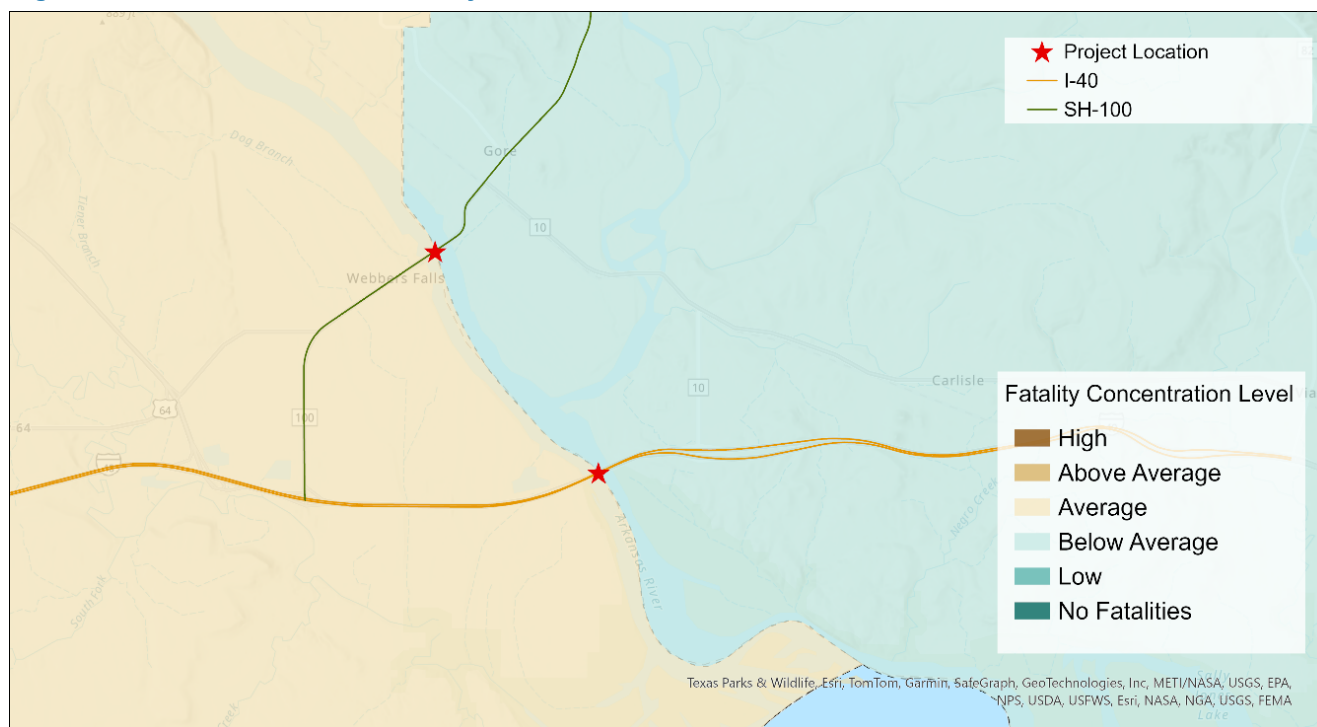
Using FHWA’s database and methodology for Crash Modification Factors (CMFs)¹⁶, it is expected that for I-40, widening the inside shoulders (3 feet to 4 feet) and widening the outside shoulders (3 feet to 10 feet) of the bridge will result in an average crash reduction of 0.2 (all severities) accidents per year. Increasing the lane and shoulder widths will result in additional safety improvements.

¹⁶ USDOT. 2025. Crash Modification Factors accessed at <https://highways.dot.gov/safety/other/crash-modification-factors-cmfs>

National Roadway Safety Strategy

USDOT's National Roadway Safety Strategy (NRSS) outlines the Department's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets and is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities. According to the Our Nation's Roadway Safety Crisis StoryMap Tool,¹⁷ Muskogee County had an average fatality concentration level with a total of 65 fatalities between 2017 and 2021, and Sequoyah County had a below average fatality concentration level with a total of 37 fatalities between 2017 and 2021 (Figure 13). The tool illustrates that both Muskogee and Sequoyah Counties have been identified as target areas for reducing fatalities, as Muskogee County has a high fatality rate and high population, and Sequoyah County has a high fatality rate and low population.

Figure 13: Concentration of Roadway Fatalities



Criterion #3: Economic Competitiveness and Opportunity

The Project provides significant economic benefits. As described in Attachment 2 – BCA Technical Memorandum, the I-40 (Scenario 1) portion of the Project will provide \$235.2 million in vehicle operating cost savings while the SH-100 (Scenario 2) portion of the Project will provide \$67.6 million in vehicle operating cost savings over the 30-year analysis period (2022\$, discounted at 3.1 percent). The I-40 (Scenario 1) portion of the Project will provide \$146.8 million in travel time savings while the SH-100 (Scenario 2) portion of the Project will

¹⁷ USDOT. 2023. Our Nation's Roadway Safety Crisis accessed at <https://storymaps.arcgis.com/stories/9e0e6b7397734c1387172bbc0001f29b>

provide \$17.9 million in travel time savings over the 30-year analysis period (2022\$, discounted at 3.1 percent).

Freight Movement

I-40 is a major east-west transcontinental interstate highway spanning over 2,500 miles from California to North Carolina. Truck traffic accounts for 36 percent of traffic counts at the Project location. It is the third-longest Interstate Highway in the US and passes through many major cities including Flagstaff (AZ), Albuquerque (NM), Amarillo (TX), Oklahoma City (OK), Little Rock (AK), Memphis (TN), Nashville (TN), Knoxville (TN), Asheville (NC), Durham (NC), and Raleigh (NC). This Project is essential to ensuring the functioning of the regional and national economy and ensuring freight connectivity.

The SH-100 interchange plays a key role in supporting agricultural and industrial freight from eastern Oklahoma to national markets, with truck traffic accounting for 15 percent of traffic counts at the Project location. This two-lane highway facilitates the movement of livestock, feed, and equipment between farms, processing facilities, and regional markets. It provides farmers and freight haulers with critical east–west shipping access across the southern U.S., linking Oklahoma to markets in Texas, Arkansas, and beyond.

Damage to the I-40 and SH-100 over MKARNS could disrupt freight flows, and impact regional commerce. A block in barge traffic could halt the flow of key goods. This would force costly rerouting to truck or rail, delay supply chains, and impact regional industries and ports. This could cause a significant effect on freight movement leading to delays.

ODOT has explicitly considered the impact of the Project on freight movement and supply chains, specifically how the Project will improve reliability for both passengers and freight. The Project is listed in ODOT's Freight Transportation Plan, 2023-2030 (page 6-29).¹⁸

Economic Strength and Land-use Productivity

The Project contributes to the economic competitiveness of the U.S. by providing a safe transportation network and improving mobility for people and goods. The Project is expected to directly and indirectly support the creation of hundreds of good-paying jobs throughout the design, construction, and ancillary phases. All jobs created through this Project will comply with prevailing wage requirements under the Davis-Bacon Act, ensuring that workers are compensated fairly and competitively.

The I-40 corridor is one of the most critical freight and travel arteries in the U.S., serving as a coast-to-coast connection for commerce, defense logistics, and passenger movement. The SH-100 interchange also plays a key role in supporting freight movement. It is especially important for agricultural and industrial goods from eastern Oklahoma. This infrastructure

¹⁸ ODOT. 2023. Oklahoma Freight Transportation Plan | 2023–2030 accessed at <https://oklahoma.gov/content/dam/ok/en/odot/federal-grants/raise/2023/multimodal-connections-on-i-35-over-the-oklahoma-river/reports-and-technical-info/Oklahoma%20Freight%20Plan%202023-2030.pdf>

helps connect those goods to national markets. By doing so, it enhances supply chain resilience and reduces costly disruptions.

These supply chains serve ports, warehouses, and distribution centers. The interchange also ensures safe and uninterrupted travel on a nationally significant highway. This highway carries over 3,700 vehicles per day. By replacing aging and functionally obsolete bridge infrastructure, the Project will improve safety and increase regional competitiveness.

The I-40 bridge connects two USDOT Opportunity Zones in Sallisaw and Checotah. Both bridges provide critical economic corridors for the community. The bridge is a catalyst of improved access to jobs and services, supply chain and logistics efficiency, disaster resilience and emergency access and support. Absent the Project, there would be increased travel time for connecting residents of rural residents with limited alternative routes, lack in efficient movement of freight, increasing costs to manufacturers, and eventually leaving the communities in those Opportunity Zones isolated.

The Project will act as a catalyst for land-use productivity by supporting industrial growth zones and logistics centers along I-40, especially near Muskogee and eastern Oklahoma counties, encouraging private sector investment in transportation-dependent businesses by improving access and reliability and regional mobility, reducing pressure on urban centers and enabling balanced growth. SH-100 would increase land-use productivity by making surrounding land more accessible, usable, and economically valuable, especially for agriculture and rural development.

Criterion #4: Sustainability, Resiliency, and the Environment

Transportation improvement projects that increase efficiency and reduce vehicle miles traveled deliver air quality benefits. As described in Attachment 2 – BCA Technical Memorandum, the I-40 (Scenario 1) portion of the Project will provide \$6.6 million in benefits associated with non-CO2 emissions reductions while the SH-100 (Scenario 2) portion of the Project will provide \$1.3 million in benefits associated with non-CO2 emissions reductions over the 30-year analysis period (2022\$, discounted at 3.1 percent).

Resiliency

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. 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 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.

Environmental Sustainability

The current configuration of I-40 and SH-100 interchange includes aging bridge infrastructure that contributes to frequent slowdowns, congestion, and vehicle idling, especially by heavy trucks. These conditions lead to localized air quality degradation, including elevated levels of nitrogen oxides (NOx), particulate matter (PM), and volatile organic compounds (VOCs). The replacement and modernization of the bridge will reduce vehicle idling and traffic congestion, particularly in areas near Webbers Falls and Muskogee County, by improving throughput and reducing travel delays, improve air quality for nearby communities, sensitive populations, and tribal lands through enhanced traffic flow and less exhaust buildup, incorporate low-emission construction practices, including the use of cleaner diesel equipment and idle-reduction technologies during construction.

The Project spans the Arkansas River, a vital ecological and economic waterway. Aging bridge components, outdated stormwater drainage, and road runoff contribute to potential nonpoint source pollution in the region. Environmental design elements will aid to ensure continuous monitoring and mitigation of water quality impacts. The Project will enhance water quality by incorporating modern stormwater management systems and minimizing runoff into the Arkansas River.

The I-40 corridor is a major route for heavy freight, and noise pollution from high truck volumes is a persistent issue for surrounding communities and sensitive areas such as schools, residential neighborhoods, and tribal lands. The Project will include updated pavement surfaces and bridge materials designed to reduce tire noise and vibration, evaluate and, where needed, implement noise-reducing barriers or natural buffers in accordance with FHWA noise standards and ODOT's Noise Policy and use quieter construction techniques and scheduling (e.g., limiting night operations) to reduce temporary noise disruption during the build phase.

Criterion #5: Quality of Life

Community Engagement

The Project addresses community engagement throughout the planning and design process. Public input has been gathered through in-person meetings, virtual town halls, and coordination with tribal governments, local elected officials, and community-based organizations. These efforts ensured meaningful engagement with residents, including those historically underserved or impacted by transportation decisions.

Transportation Affordability

Although this Project focuses on a major highway interchange, ODOT has worked to ensure that multi-modal transportation needs are considered in eastern Oklahoma. Design enhancements such as widened shoulders and improved clear zones will increase safety for bicyclists and pedestrians in areas where crossings are feasible for the SH-100. Additionally, ODOT is exploring park-and-ride coordination with regional transit and vanpool services to support rural and low-income commuters who rely on shared transportation options. The Project also involves active coordination regional transit providers such as Muskogee County Transit demand response to ensure continued and safe access for transit users during and after construction. Collectively, these efforts enhance transportation affordability, particularly for individuals without access to personal vehicles, while promoting more inclusive mobility options for the broader community.

Access to Critical Services

The I-40 and SH-100 corridor serves as a vital connection for both local residents and commercial users, providing essential access to a wide range of critical services and opportunities. This includes employment in key sectors such as transportation, agriculture, energy, and logistics throughout eastern Oklahoma and beyond. The corridor also links residents to important healthcare facilities in Muskogee, Fort Smith, and other regional centers, as well as to educational institutions like Connors State College and local K-12 schools. Reliable access to grocery stores, public services, places of worship, and recreational and cultural sites, such as Webbers Falls' riverfront, local parks, and tribal heritage areas, is also supported by this route. The corridor also has fire stations, health centers and police stations supported by this route. Absent the Project, both bridges will close to all traffic in 2052, it would significantly impede emergency responders and mutual aid. The replacement and improvement of the bridges will reduce travel times, enhance route reliability, and significantly lower the risk of emergency detours or closures that often disproportionately affect rural and tribal communities.

Criterion #6: Innovation

Warm Mix Asphalt

The Project will incorporate warm mix asphalt into the paving aspects of the construction. Warm mix asphalt is a proven technology that can offer the following benefits:

- Reduce paving costs
- Extend the paving season
- Improve asphalt compaction
- Allow asphalt mix to be hauled longer distances

3D Digital Project Plans

ODOT commits to providing 3D digital project plans as part of the contracting process. This technology will allow contractors to use state-of-the-art GPS-controlled automated equipment in the construction process, which reduces the risk of human error in establishing grades and elevations while improving efficiency in earthmoving during the construction process and reducing the overall cost of construction.

Accelerated Bridge Construction

ODOT is committed to exploring Accelerated Bridge Construction (ABC) techniques, which combine innovative planning, materials, designs, and construction methods to reduce construction-related impacts, thereby minimizing overall construction completion times. By utilizing ABC methods, such as design using prefabricated materials (such as pre-cast deck panels) or allowing the use of stay-in-place forms, the construction process for the Project may be streamlined, reducing on-site construction requirements. ABC is critically important for minimizing congestion and traffic delays along the I-40 corridor throughout construction.

V. Benefit-Cost Analysis

In compliance with USDOT's guidelines, ODOT has prepared a Benefit-Cost Analysis (BCA) for the Project using FHWA's Benefit-Cost Analysis Tool (BCA Tool). The assumptions and methodology for the BCA are detailed in Attachment 2- BCA Technical Memorandum. Table 5 summarizes the Project's benefits and costs, in 2022 dollars, discounted at 3.1 percent for Scenario 1, Scenario 2, and the sensitivity analysis, as defined in Figure 7. The BCRs for each scenario are as follows:

- Scenario 1: 7.2
- Scenario 2: 5.2
- Sensitivity analysis: 77.5

Table 5: Summary of Benefits and Costs in Millions (2022\$, discounted at 3.1%)

| Benefits Category | Scenario 1 | Scenario 2 | Sensitivity Analysis |
|---------------------------------|------------------------|-------------------|-----------------------------|
| <i>Analysis Years</i> | <i>Q3 2030–Q2 2060</i> | <i>2033–2062</i> | <i>2033–2062</i> |
| Safety | \$71.0 | \$30.1 | \$1,145.3 |
| Travel Time | \$146.8 | \$17.9 | \$2,408.3 |
| VOC | \$235.2 | \$67.6 | \$3,516.5 |
| CO2 Emissions | \$68.1 | \$18.7 | \$1,094.0 |
| Non-CO2 Emissions | \$6.6 | \$1.3 | \$130.3 |
| Other Environmental | \$0.6 | \$0.1 | \$7.8 |
| Maintenance | \$19.6 | \$7.8 | \$27.4 |
| Residual Value | \$17.6 | \$6.6 | \$23.6 |
| Total Benefits | \$565.5 | \$150.2 | \$8,353.2 |
| Total Discounted Costs | \$79.0 | \$28.8 | \$107.8 |
| Benefit-Cost Ratio (BCR) | 7.2 | 5.2 | 77.5 |

| Benefits Category | Scenario 1 | Scenario 2 | Sensitivity Analysis |
|--------------------------------|-------------------|-------------------|-----------------------------|
| <i>Analysis Years</i> | Q3 2030–Q2 2060 | 2033–2062 | 2033–2062 |
| Net Present Value (NPV) | \$486.5 | \$121.4 | \$8,353.2 |

*CO2 emissions discounted at 2-percent

Source: BIP BCA Tool, Results. The analysis does not evaluate Resilience, Health and Amenity, and Other Benefits categories.

VI. Project Readiness and Permitting Risk

a) Technical Feasibility and Technical Competency

As the Project sponsor, ODOT has the technical capacity and competency to successfully complete this Project. ODOT has a close partnership with the FHWA Oklahoma Division through which it receives its federal aid allocation and discretionary grant funding. ODOT has been awarded several discretionary grants from various programs and is familiar with developing grant agreements, administering the funding, and providing the necessary reporting. ODOT has the technical expertise and resources dedicated to the Project to provide quality control over all aspects of design and construction, ensure the Project meets all federal requirements, and keep the public informed of the Project's progress.

The ODOT maintains a Title VI Implementation Plan in accordance with the Civil Rights Act of 1964 and FHWA guidelines. This plan includes active steps that ODOT takes to ensure equitable treatment and participation, as well as procedures for filing a complaint and reviewing complaints. ODOT's Civil Rights Division administers and oversees the department's Title VI, ADA, DBE, and Contractor Compliance programs.

The Project is subject to ODOT design and construction specifications, and the design is required to comply with ODOT's Roadway Design Manual, Drainage Manual, and other standards. The ODOT team will work with the local community to ensure any concerns are documented and evaluated during the design process to mitigate any negative impacts that are discovered.

The ODOT Project management team are familiar with the risk management guidance published by FHWA and have followed those guidelines and best practices for the Project. Cost estimate reviews have been coordinated with FHWA, ODOT, and the consultant team for the Project with the most up-to-date information to identify and manage potential risks for the Project. Cost estimate contingencies, appropriate for the relative level of design completion, have been included since the beginning of the Project's design.

b) Project Schedule

ODOT completed preliminary engineering (PE) activities for the I-40 portion of the Project in the fourth quarter of 2023 and completed PE activities for the SH-100 portion of the Project in the first quarter of 2025.

NEPA activities for the I-40 Project component are expected to conclude in the third quarter of 2025, with an anticipated construction schedule lasting from the fourth quarter of 2027 through the second quarter of 2030, with an opening in the third quarter of 2030. Table 6 displays the anticipated Project schedule for the I-40 Project component.

Table 6: Project Schedule for I-40

| Milestone | 2025 | | | | 2026 | | | | 2027 | | | | ... | 2030 | | | |
|---|------|----|----|----|------|----|----|----|------|----|----|----|-----|------|----|----|----|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | Q1 | Q2 | Q3 | Q4 |
| PE (complete, Q4 2023) | | | | | | | | | | | | | | | | | |
| Survey | | | | | | | | | | | | | | | | | |
| NEPA (Documented Categorical Exclusion) | | | | | | | | | | | | | | | | | |
| Right of Way | | | | | | | | | | | | | | | | | |
| Utilities | | | | | | | | | | | | | | | | | |
| Plans, Specifications, and Elements | | | | | | | | | | | | | | | | | |
| Funding Obligation | | | | | | | | | | | | | | | | | |
| Letting | | | | | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | |

ODOT completed NEPA activities for the SH-100 Project component in the first quarter of 2025. To avoid simultaneous construction activities on both I-40 and SH-100, ODOT anticipates an SH-100 construction schedule beginning in the second quarter of 2030 and ending in the fourth quarter of 2032, with an opening date in the first quarter of 2033. Table 7 displays the anticipated Project schedule for the SH-100 Project component.

Table 7: Project Schedule for SH-100

| Milestone | 2025 | | | | ... | 2027 | | | 2029 | | 2030 | | | | ... | 2032 | |
|---|------|----|----|----|-----|------|----|-----|------|----|------|----|----|----|-----|------|----|
| | Q1 | Q2 | Q3 | Q4 | | Q1 | Q2 | ... | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | Q3 | Q4 |
| PE | | | | | | | | | | | | | | | | | |
| Survey | | | | | | | | | | | | | | | | | |
| NEPA (Documented Categorical Exclusion) | | | | | | | | | | | | | | | | | |
| Right of Way | N/A | | | | | | | | | | | | | | | | |
| Utilities | | | | | | | | | | | | | | | | | |
| Plans, Specifications, and Elements | | | | | | | | | | | | | | | | | |
| Funding Obligation | | | | | | | | | | | | | | | | | |

| Milestone | 2025 | | | | ... | 2027 | | | 2029 | | 2030 | | | | ... | 2032 | |
|--------------|------|----|----|----|-----|------|----|-----|------|----|------|----|----|----|-----|------|----|
| | Q1 | Q2 | Q3 | Q4 | | Q1 | Q2 | ... | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | Q3 | Q4 |
| Letting | | | | | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | |

ODOT is working towards ensuring timely obligation of funds for the BIP Grant ahead of the USDOT statutory deadlines. PE activities are complete for the Project and the initial funding obligation is anticipated in the first quarter of 2027, in advance of the September 30, 2029 deadline, with construction activities to begin within the 18-month deadline. These dates are subject to funding and the Project could be advanced if funding becomes available.

c) Required Approvals

The United States Coast Guard issued a revised Bridge Permit P(6-22-8) on April 12, 2023 to replace SH-100.

Environmental Permits and Reviews

To date, ODOT has submitted the right of way and utility plans for the Project. Upon completion of 65 percent design, ODOT will prepare the environmental documentation, which is expected to be a Categorical Exclusion (CE). The NEPA documents will include a biological assessment, a cultural resources survey, an initial site assessment for hazardous waste, a detailed noise study, and a socioeconomic and environmental justice review. As described under Project Schedule, ODOT completed the NEPA review for SH-100 in the first quarter of 2025 and anticipates completion of the NEPA review for I-40 by the third quarter of 2025.

ODOT is currently considering the addition of some work that would cross U.S. Army Corps of Engineers (USACE) property and rip rap on the refuge property to the south. If that happens, ODOT would add additional studies and coordination with the USACE and the refuge. It is expected that the work on the refuge would presumably require Section 4(f). Additionally, an ARPA permit may be needed to conduct the necessary archeological studies.

ODOT plans to hold an in-person open house to present information about the I-40 Bridge Replacement over the Arkansas River at Webbers Falls and obtain information from the public to further assist in the identification of critical social, economic, and environmental effects that may result from the Project.

State and Local Approvals

Elements of this Project have been included in the 2024-2027 Statewide Transportation Improvement Program (STIP), specifically right-of-way and utilities on I-40.¹⁹ Further,

¹⁹ ODOT, Statewide Transportation Improvement Plan FFY 2024-2027, 2024. Retrieved <https://oklahoma.gov/content/dam/ok/en/odot/programs-and-projects/programs/transportation-programs/stip/2024-2027/2024-2027%20STIP.pdf>

ODOT's 8-Year Construction Work Plan (2025-2032) includes I-40 (page 20) and SH-100 (page 61).²⁰ Per the Work Plan, construction is currently programmed in 2027 for I-40 and 2031 for SH-100, but is not fully funded. Should BIP funding become available this Project will be accelerated and moved into the ODOT Statewide Transportation Improvement Program (STIP). A letter demonstrating ODOT's commitment to provide matching funding and to appropriately program the Project is attached as Attachment 6 - Letter of Financial Commitment to this application.

The Project has broad support and Letters of Support attached as Attachment 5 - Letters of Support to this application.

Federal Transportation Requirements Affecting State and Local Planning

Statewide Transportation Improvement Program

Elements of this Project have been included in the 2024-2027 Statewide Transportation Improvement Program (STIP), specifically right-of-way (page 31, #3433405) and utilities (page 44, #3433406).

The Project is included in ODOT's 8-Year Construction Work Plan (2025-2032) [right of way (page 6), utilities (page 6), construction (page 25)].

Oklahoma Freight Transportation Plan

Both components of the Project, including the I-40 (Job Piece No. 34334(04)) and SH-100 (Job Piece No. 34671(04)) portions, are listed in the ODOT's Freight Transportation Plan, 2023-2030.²¹ Specifically, the Freight Transportation Plan calls for ODOT to pursue Federal grants and alternative revenue sources for these critical freight assets.

Transportation Asset Management Plan (TAMP)

The Project improves system resilience and reliability and is consistent with the goals set out in ODOT's 2022-2031 TAMP²² with the intent of maintaining and preserving Oklahoma's transportation network.

United States Coast Guard Bridge Permit

The Arkansas River at the SH-100 crossing is a navigable waterway regulated by the Army Corps of Engineers and the US Coast Guard. ODOT has secured the Coast Guard permit determining that the proposed bridge design meets navigation and environmental requirements and authorizing construction, under Title 33 of the U.S. Code and the General Bridge Act of 1946.

²⁰ODOT, FFY-2025 through FFY-2032 Construction Work Plan, 2024. Retrieved <https://oklahoma.gov/content/dam/ok/en/odot/programs-and-projects/projects/8-year-construction-work-plan/2025-2032%20CWP%20Book.pdf>

²¹ ODOT, Oklahoma Freight Transportation Plan | 2023-2030, 2023. Retrieved <https://oklahoma.gov/content/dam/ok/en/odot/federal-grants/raise/2023/multimodal-connections-on-i-35-over-the-oklahoma-river/reports-and-technical-info/Oklahoma%20Freight%20Plan%202023-2030.pdf>

²² ODOT, Transportation Asset Management Plan 2022-2031, 2022. Retrieved https://oklahoma.gov/content/dam/ok/en/odot/programs-and-projects/programs/transportation-programs/odot_tamp.pdf

Assessment of Project Risks and Mitigation Strategies

Table 8 assesses the risks that may pose a threat to the ability of the Project to meet its objectives and schedule and identifies mitigation actions for each risk.

Table 8: Project Risks and Mitigation Strategies Matrix

| Risk | Risk Level | Mitigation |
|--|------------|--|
| Construction Materials Costs | Medium | Cost estimates have been developed based on the completion of 65% design. A 10% construction contingency and 6% E&C contingency have been accounted for in the Project, which is standard for all ODOT projects at this stage. |
| Environmental Regulatory Approvals, Permitting, and Clearances | Medium | It is anticipated that the Project will receive environmental approvals well before construction begins. |
| 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. |

VII. DOT Priority Selection Considerations

I-40 and SH-100 are fracture critical bridges that do not meet current geometric design standards. Due to the existing condition, the bridges are at risk of becoming structurally deficient and closure of the bridges would have a catastrophic impact to vehicle and truck traffic. Replacing the bridges will address the BIP goal to reduce the number of bridges that do not meet current geometric design standards and reduce the number of bridges at risk of falling into “poor” condition.

The schedule and budget demonstrate that the Project is currently wrapping up 65 percent design and will allow for construction completion by the second quarter of 2030 for I-40 and the end of 2032 for SH-100, well in advance of the deadline to begin construction within 18 months after BIP funds are obligated. ODOT’s prior experience with similar projects ensures that the agency is confident it will be able to deliver the Project in a timely manner and will spend the funds well in advance of the September 30, 2033, deadline. ODOT has committed substantial resources to advance the Project, however without a FY26 BIP Large Bridge Project grant to assist with funding the Project, construction is unlikely to commence until 2031 or later.