



**OKLAHOMA**  
Transportation



November 2024

**FY2025 BRIDGE INVESTMENT PROGRAM (BIP)**

# **Over and Through Waterloo:**

**Solutions for Freight and Community Mobility on I-35**

# TABLE OF CONTENTS

- 1. Project Information: Description, Location, and Parties ..... 1
  - 1.1 Project Description ..... 1
  - 1.2 Project Location ..... 3
  - 1.3 Lead Applicant ..... 4
  - 1.4 Other Public and Private Parties ..... 5
  - 1.5 Additional Eligibility Requirements ..... 5
- 2. National Bridge Inventory Data ..... 5
- 3. Project Budget—Grant Funds, Sources, and Uses of Project Funding ..... 6
  - 3.1 Funding Sources ..... 6
  - 3.2 Satisfying Federal Requirements ..... 7
  - 3.3 How All Project Funds May Be Used ..... 7
- 4. Merit Criteria ..... 8
  - 4.1 State of Good Repair ..... 8
  - 4.2 Safety and Mobility ..... 10
  - 4.3 Economic Competitiveness and Opportunity ..... 12
  - 4.4 Climate Change, Sustainability, Resiliency and the Environment ..... 14
  - 4.5 Equity and Quality of Life ..... 17
  - 4.6 Innovation ..... 19
- 5. Benefit-Cost Analysis ..... 21
- 6. Project Readiness and Environmental Risk ..... 21
  - 6.1 Technical Feasibility and Technical Competency ..... 21
  - 6.2 Project Schedule ..... 21
  - 6.3 Required Approvals ..... 22
  - 6.4 State and Local Approvals ..... 23
  - 6.5 Assessment of Project Risks and Mitigation Strategies ..... 23
- 7. Administration Priorities and Departmental Strategic Plan Goals ..... 24
  - 7.1 Considerations to Support Good-Paying Jobs and Strong Labor Standards ..... 24
- 8. DOT Priority Selection Consideration ..... 25

## LIST OF FIGURES

Figure 1   Waterloo Road Underpass at I-35: Low Clearance Prone to Bridge Strikes .....	2
Figure 2   No Build vs. Build Design Features .....	2
Figure 3   Bridge Detour Route .....	3
Figure 4   Project Area Map .....	4
Figure 5   Impact damage on Southbound I-35 Bridge over Waterloo Road .....	5
Figure 6   Rush Hour Congestion on Waterloo Road .....	10
Figure 7   Project’s Position within the Regional Freight Network.....	12
Figure 8   The Landing at Waterloo Aerial Map .....	13
Figure 9   Project Area Surpasses Environmental Burden Disadvantaged Threshold .....	14
Figure 10   Project’s Estimated CO <sub>2</sub> Air Quality Benefits .....	15
Figure 11   Project at the Nexus of the Alternative Fuel Transition .....	15
Figure 12   Project Location Sets Upper Boundary in National Transportation Insecurity Ranking.....	17
Figure 13   Origins of Weekday Trip Using I-35 Bridge over Waterloo Road .....	18
Figure 14   Project Site’s Rendering of the Diverging Diamond Interchange .....	19

## LIST OF TABLES

Table 1   Project Budget by Funding Source .....	6
Table 2   Project Budget by Activity Type.....	7
Table 3   Costs by Standard Form 424C Classification .....	8
Table 4   Project Evaluation Measures .....	21
Table 5   Project Schedule .....	22
Table 6   Risk Mitigation Strategies .....	24
Table 7   Administrative Priorities and Departmental Strategic Plan Goals.....	24

## APPENDICES

- Benefit-Cost Analysis Narrative
- Benefit-Cost Analysis Spreadsheet
- BIP Application Template
- Letters of support, reports, and other technical information supporting this application available via [ODOT’s website](#).

# 1. PROJECT INFORMATION: DESCRIPTION, LOCATION, AND PARTIES

## 1.1 Project Description

The Oklahoma Department of Transportation (ODOT) is pleased to submit this application for the reconstruction of two bridges that carry I-35 over Waterloo Road, located in central Oklahoma. This application requests **\$12,511,200** of FY 2025 Bridge Investment Program (BIP) funding to replace the existing I-35 bridges over Waterloo Road with two 60-foot-wide bridges on the existing alignment. The vertical profile of I-35 will be raised to provide 16 feet 11 inches of vertical clearance consistent with current design standards, and the new horizontal clearance will be 107 feet. **Over and Through Waterloo: Solutions for Freight and Community Mobility on I-35** (the Project) will improve safety and mobility for trucks, passenger vehicles, and pedestrians at the bridge, and is part of a broader project designed to address congestion and conflict points at the I-35 and Waterloo Road interchange (see Figure 4 for visualization of this Project inlaid in the greater interchange buildout). This Project is designed to tackle three key transportation challenges:

**Key Project Features**

- Raises and widens the I-35 bridges to meet current design standards and **save \$1.5M in maintenance costs.**
- Targets known safety problem of **bridge strikes by over-height trucks** due to low vertical clearance.
- Uses a temporary bridge during construction to avoid a costly detour, allow for **faster project delivery, \$442M in crash reduction savings,** and elimination of **529 metric tons of excess annual CO<sub>2</sub> emissions.**
- Improves localized **air quality and health outcomes** for a region experiencing severe pollutant exposure.
- Increased bridge capacity improves reliability, congestion, and **daily access to lifeline facilities** like jobs, schools, and hospitals.

- According to the National Bridge Inventory (NBI), the current southbound and northbound I-35 bridges are in **Fair** condition. **However, ODOT considers both at risk of becoming structurally deficient within the next 3 years due to the current condition ratings of the deck, superstructure, and substructure, as well as the risk of additional bridge strikes by over-height vehicles.** Both bridges have a vertical clearance of 13 feet 11 inches (Figure 1), which is significantly less than the current standard of 16 feet 9 inches.
- **Congestion is common at the I-35 and Waterloo Road interchange** during the peak hours, with queuing present at the Waterloo Road interchange ramp terminals due to heavy peak-hour commuter traffic to and from Oklahoma City to the south.
- **Freight and commercial activity at I-35 and Waterloo Road is growing.** The Landing at Waterloo development, directly northwest of the interchange, has plans for nearly 110 acres of mixed-use commercial development, industrial development, and residential properties. There is also a large industrial complex nearby that uses the

interchange daily, contributing to the 11% of truck traffic on I-35. Nearly 59,000 vehicles per day (vpd) traverse I-35, and ODOT projects that to grow to more than 81,000 vpd with 16% trucks by 2040—a 38% increase. According to the Association of Central Oklahoma’s (ACOG) [Encompass 2045](#), the region is expected to add 430,000 more residents and 320,000 more jobs by 2045.

The Project is a bridge replacement focused on **servicing and bettering the community**, and is part of a larger plan for the I-35 and Waterloo Road interchange designed to address significant safety, mobility, and congestion concerns. Planned upgrades to this interchange include:

- Replacing the existing I-35 bridges over Waterloo Road to address state of good repair and insufficient vertical clearance to better accommodate trucks (this application);
- Widening approximately 1.4 miles of I-35 to increase Interstate capacity, and 1.3 miles of Waterloo Road to provide additional capacity, improve operations, and allow for sidewalks, which are currently nonexistent; and
- Reconfiguring the I-35 & Waterloo Road interchange to a Diverging Diamond Interchange (DDI) to eliminate the need for left-turning vehicles, improving traffic flow by reducing the number of signal phases and improving safety by significantly reducing the number of conflict points compared to conventional diamonds (interchange reconfiguration is not included in this application, but part of the larger build out).

**Figure 1 | Waterloo Road Underpass at I-35: Low Clearance Prone to Bridge Strikes**



Recently installed temporary traffic signals at the ramps have helped reduce queuing. However, this is a stopgap measure and alone does not accomplish the purpose of the overall interchange project, which is to improve safety, accommodate existing and future traffic demand at I-35 and Waterloo Road, and improve the vertical and horizontal clearance of the current bridges.

Both bridges were constructed in 1958. Per the latest inspection report, both are considered to be “At Risk”

**Figure 2 | No Build vs. Build Design Features**

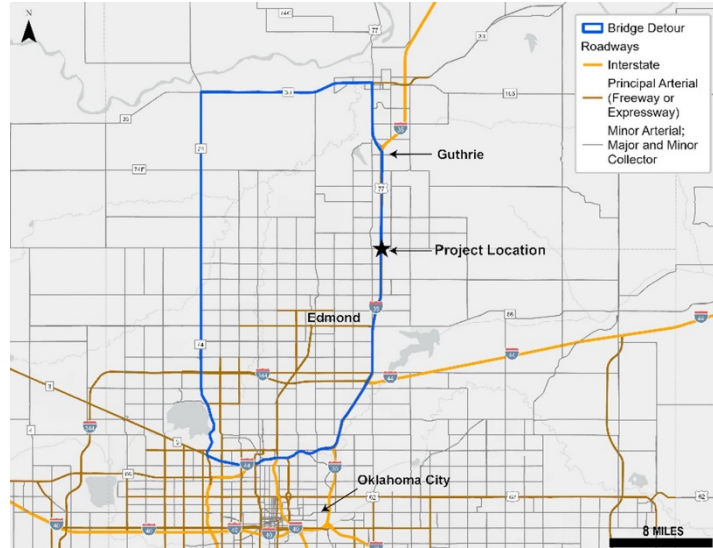
Design Features	No Build	Build
Vertical Clearance	13' 11"	16' 11"
Width of Bridge/ Approaches	38'	60'
Bridge Span/ Horizontal Clearance	38'	107'

due to the condition ratings of the deck, superstructure, and substructure. The existing bridges have a substandard vertical clearance of 13 feet 11 inches (Figure 2). Each bridge is 38 feet wide with a 38-foot-wide approach roadway consisting of two 12-foot-wide driving lanes with 10-foot-wide outside shoulders and 4-foot-wide inside shoulders. Waterloo Road is a two-lane roadway without shoulders and poor visibility due to deficient horizontal and vertical curves.

All roads will remain open during construction, and **ODOT will utilize temporary pavement and a temporary bridge to maintain traffic and avoid rerouting traffic via a 72-mile detour.**

If these bridges were to go out of service, all motorists (freight and passenger) will follow a circuitous, 72-mile detour (Figure 3) that would lead to substantial increases in vehicle-miles traveled, crashes, travel time and vehicle operating costs, as well as an intensification and accumulation of emissions.

**Figure 3 | Bridge Detour Route**



Source: ODOT

## 1.2 Project Location

This Project will replace the existing I-35 bridges over Waterloo Road (NBI Structure Numbers 14103, 14104). The Project Area is partially located in Edmond, at the border of Oklahoma and Logan counties, and is part of the Oklahoma City metropolitan area in central Oklahoma (Figure 4).

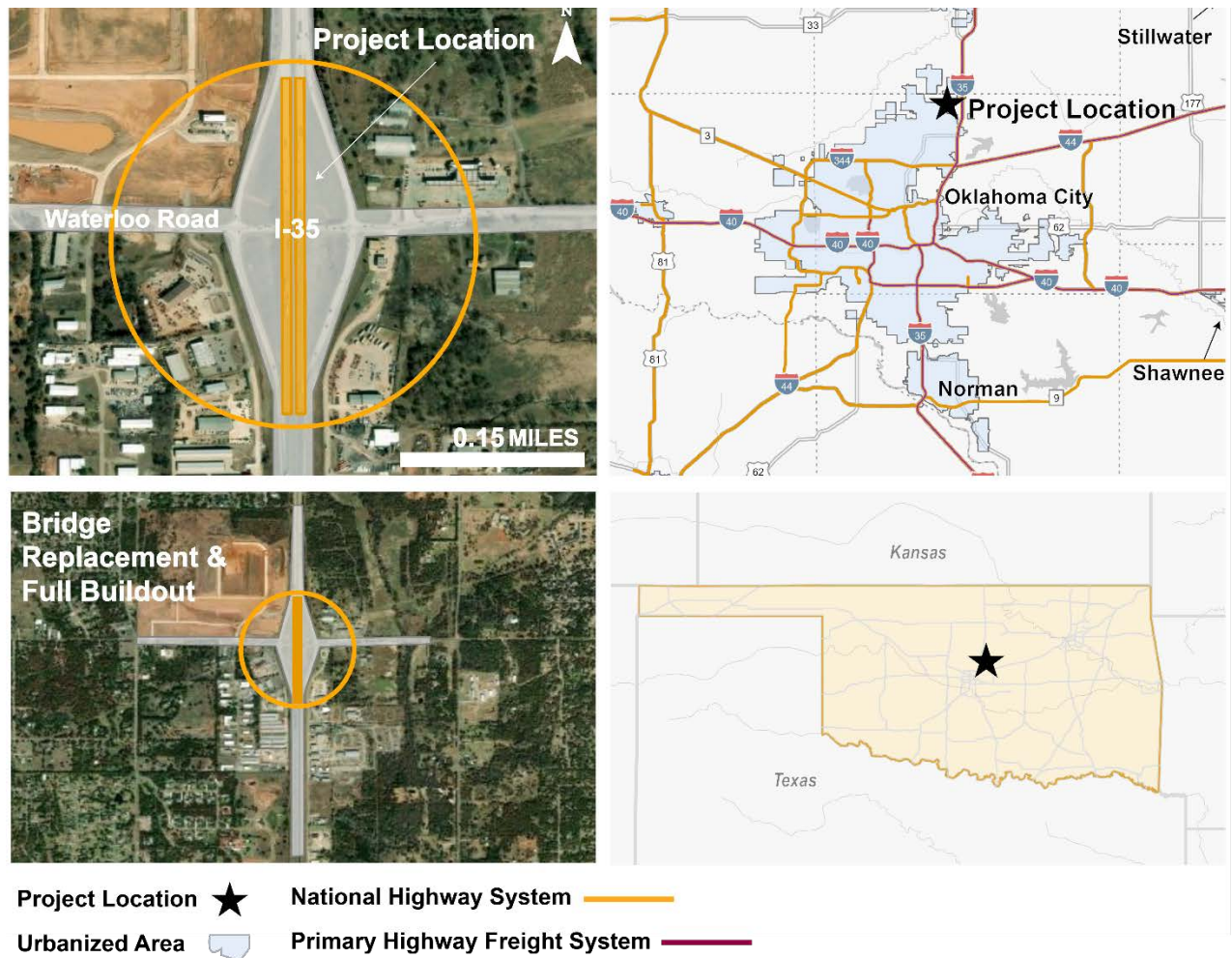
The Project’s extents are not located in an Area of Persistent Poverty (APP) nor a Historically Disadvantaged Community (HDC). However, the Project is in proximity to multiple Tribal areas including the Iowa Tribe (nine miles from the Project); the Kickapoo Tribe, the Potawatomi—Shawnee Nation, the Cheyenne—Arapaho Tribes, and the Chickasaw Nation (Figure 12). Despite its lack of Federal designation, the five census tracts directly adjacent to the Project are identified as **Severely Transportation Insecure** according to U.S. DOT’s Equitable Transportation Community (ETC) Explorer (see Equity and Quality of Life).

The Project is bisected across a 2020 Census-designated Urbanized Area (see Figure 4), but the community is definitively rural. Sitting in the heart of the state surrounded by swathes of land, I-35 is the most significant access point to lifeline services and socioeconomic opportunity in the area.

I-35 is a corridor of regional, statewide, and national significance. It begins in Laredo, Texas and extends north through Texas, Oklahoma, Kansas, Missouri, and Iowa before ending in

Duluth, Minnesota. It is a critical national corridor, as it is on the National Highway System (NHS), the Strategic Highway Network (STRAHNET), and the National Highway Freight Network (NHFN), and its subset, the Primary Highway Freight System (PHFS). I-35 has the highest volume truck traffic in the state according to the [Oklahoma State Freight Plan](#), with this set of bridges serving a crosscutting of rural, urban, and Interstate motorists. This segment is central to the state and is beginning to see private investment, particularly in the industrial and retail sectors. The region’s growth, however, leads to concerns over surmounting transportation challenges as described in this application.

**Figure 4 | Project Area Map**



Source: [FHWA HEPGIS](#), [Oklahoma DOT](#), and Garver

### 1.3 Lead Applicant

The Oklahoma Department of Transportation (ODOT) is the lead applicant for the Project. ODOT routinely receives and expends Federal-aid highway program funds under Title 23, U.S.C. ODOT has a successful history of partnering with other agencies, including local governments and Tribal nations, to complete projects. As a grantee of the FY 2022 and FY 2024 Bridge Investment Program for two Planning projects, one Bridge project, and one

Large Bridge project, ODOT has previous experience successfully receiving and administering funds from this specific FHWA grant program.

ODOT’s successful management of billions of dollars’ worth of Federally funded projects is indicative of ODOT’s experience with the receipt and expenditure of Federal-aid Highway Program funds. ODOT’s excellence in asset management of its extensive transportation network reflects its ability to receive and administer funds from FHWA.

## 1.4 Other Public and Private Parties

ODOT is the primary and sole responsible party for the replacement of the I-35 bridges. ODOT will oversee and manage all aspects of the Project, ensuring compliance with relevant standards and regulations. 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 and Environmental Risk** section. There are no other public or private entities involved in the delivery of this project. Furthermore, it is important to note that no private or non-private entities will receive a direct and predictable financial benefit from the completion of this project. The Project is solely a public infrastructure endeavor, designed to improve transportation efficiency and safety.

## 1.5 Additional Eligibility Requirements

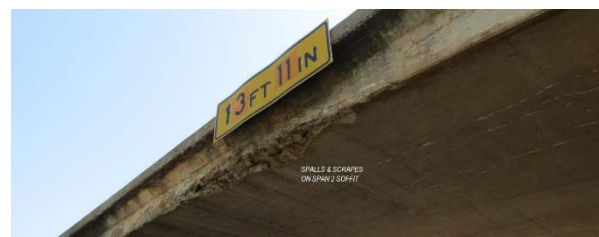
Because the I-35 bridges carry Interstate highway traffic, state law prohibits pedestrians and bicyclists from traversing the bridge. As such, the design for the new bridge does not provide accommodations for pedestrians or bicyclists on I-35. However, given the number of residential neighborhoods bordering the interchange and the future development planned for the northwest quadrant as part of [The Landing at Waterloo](#), space for sidewalks was included in the proposed design along Waterloo Road to accommodate potential future pedestrian movements.

ODOT is responsible for maintenance for on-system facilities throughout the state, including over 30,000 lane-miles. As such, ODOT has a \$494M 4-Year [Asset Preservation Plan](#) and a 10-Year [Transportation Asset Management Plan](#), which are both federally and state funded to address pavement and bridge condition throughout the state.

## 2. NATIONAL BRIDGE INVENTORY DATA

According to the National Bridge Inventory (NBI), the I-35 southbound bridge over Waterloo Road (NBI Number 14104, Structure Number 5509 1312WX) is currently in Fair condition (as of 2024). The deck, superstructure, and substructure are in Fair condition. Impact damage has occurred to

Figure 5 | Impact damage on Southbound I-35 Bridge over Waterloo Road



Source: ODOT, May 19, 2022



the west edge of the deck and has not been repaired (Figure 5). The I-35 northbound bridge over Waterloo Road (NBI Number 14103, Structure Number 5509 1312EX) is currently in Fair condition (as of 2024). The deck and substructure rating is in Fair condition, noting section loss, deteriorating soffit conditions, and cracking. More detailed National Bridge Inventory information can be found in the Bridge Project Application Template submitted with this application.

### 3. PROJECT BUDGET—GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDING

#### 3.1 Funding Sources

ODOT is requesting **\$12,511,200** in BIP funding for construction of the two critical highway bridges (80% share). Non-Federal funds will be utilized for the remaining **\$3,127,800** balance of the total construction costs (20% share), which will come from two funding sources:

- [Rebuilding Oklahoma Access and Driver Safety \(ROADS\) Fund](#), which is comprised of a combination of sales tax and fuel tax revenue. The fuel tax revenue is committed 100% to ODOT. In 2024, [the ROADS cap](#) increased to a high of \$590 million.
- [Rural Economic Transportation Reliability and Optimization Fund \(RETRO\)](#), 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 grant funds will be used for this Project. This Project has not been previously submitted for U.S. DOT discretionary grant funding. Table 1 shows a detailed breakdown of funding for the Project. Any costs associated with the broader I-35 and Waterloo Road interchange project that do not exclusively impact the I-35 bridges/culvert being replaced are not included in the construction costs presented in this application.

**Table 1 | Project Budget by Funding Source**

Funding Source	Funding Amount	Cost Share
BIP Funds	\$12,511,200	80%
Other Federal Funds	\$0	0%
Non-Federal Funds	\$3,127,800	20%
<b>Total Future Eligible Cost</b>	<b>\$15,639,000</b>	<b>100%</b>

This Project is long overdue, initially programmed to begin construction in 2019. However, ODOT was forced to delay the replacement of these bridges to let other high priority projects. Now, **ODOT is at the point where it can no longer delay the replacement of these bridges, and will proceed with construction regardless of whether BIP dollars are received, potentially delaying other priority projects if necessary.** The

reconstruction of this bridge and the supporting interchange reconfiguration will open up additional space to expand I-35 to six lanes, which is a key ODOT program funding priority to meet continuously increasing traffic demands on I-35. The additional space will also enable significant safety improvements to the interchange by allowing for longer acceleration and deceleration lanes for the I-35 exit and entrance ramps.

### 3.2 Satisfying Federal Requirements

This project satisfies the BIP statutory maximum Federal involvement requirements in 23 U.S.C. 120 limiting total Federal share to 80%, or 90% for off-system bridges. If awarded, BIP funds will comprise 80% of the Project’s construction budget, with other Federal funds making up 0% and non-Federal funds covering the remaining 20%.

ODOT has budgeted **\$2,482,353** for contingencies (represents about **20%** of the estimated construction cost or **16%** of the overall budget) to cover unanticipated cost increases. This contingency allows for inflation and future labor and supply chain-driven cost increases. In the event of cost overruns, ODOT will cover 100% of the additional cost through state ROADS funding.

### 3.3 How All Project Funds May Be Used

This grant application is seeking **\$12,511,200** in BIP funds to support construction costs of the I-35 replacement bridges and approaches only. Total future eligible construction costs, including structures, grading and paving, traffic control, mobilization, and overhead are estimated to total **\$15.6 million** (Table 2). Previously incurred project development costs for the I-35 Bridge over Waterloo Road total nearly **\$3 million**, including design and environmental permitting costs.

**Table 2 | Project Budget by Activity Type**

Activity	Estimated Cost
Bridge Construction Cost	\$6,611,609.90
Roadway Approach Cost	\$4,833,466.00
Earthwork Estimated Cost	\$966,693.20
Contingencies (20%)	\$2,482,353.82
Construction Management (6%)	\$744,706.15
<b>Grand Total (Rounded)</b>	<b>\$15,639,000.00</b>

Table 3 provides a breakdown of costs for each cost classification used on the Standard Form 424C as required on pages 29 and 35 of the BIP NOFO. The budget information provided in this section is based on the most recently available estimates (January 2023) and assumptions at the time of submission.

**Table 3 | Costs by Standard Form 424C Classification**

Field Item	Field Name	Costs Not Allowable	Allowable Costs	Total Cost
1	Administrative and Legal	\$0	\$0	\$0
2	Land, Structures, Rights-of-Way, Appraisals, etc.	\$1,906,400	\$0	\$1,906,400
3	Relocation Expenses and Payments	\$0	\$0	\$0
4	Architectural and Engineering Fees	\$0	\$0	\$0
5	Other Architectural and Engineering Fees	\$0	\$0	\$0
6	Project Inspection Fees	\$0	\$744,706	\$744,706
7	Site Work	\$0	\$966,693	\$966,693
8	Demolition and Removal	\$0	\$132,000	\$132,000
9	Construction	\$1,027,419	\$11,313,076	\$12,340,495
10	Equipment	\$0	\$0	\$0
11	Miscellaneous	\$0	\$0	\$0
<b>12</b>	<b>SUBTOTAL (Lines 1-11)</b>	<b>\$2,933,819</b>	<b>\$13,156,475</b>	<b>\$16,090,294</b>
13	Contingencies	\$0	\$2,482,354	\$2,482,354
<b>14</b>	<b>SUBTOTAL</b>	<b>\$2,933,819</b>	<b>\$15,638,829</b>	<b>\$18,572,648</b>
15	Project (Program) Income	\$0	\$0	\$0
<b>16</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$2,933,819</b>	<b>\$15,639,000</b>	<b>\$18,572,819</b>

## 4. MERIT CRITERIA

### 4.1 State of Good Repair

The I-35 corridor links Oklahoma to its northern and southern neighbors and plays a pivotal role in catalyzing Interstate mobility, economic development, and the movement of freight and passenger traffic. The two I-35 bridges over Waterloo Road are key conduits for freight and local mobility. The corridor serves as the regional backbone connecting other major highways in Oklahoma, including I-40, I-44, I-235, and U.S. 77. However, given the bridges’ suboptimal geometry and capacity issues, this Project seeks to upgrade the corridor to match population growth and roadway demand.

#### Bridge Condition and Improving Compliance with Current Design Standards

According to NBI, the I-35 bridges are currently in Fair (approaching poor) condition. NBI-14103 has a sufficiency rating of 88.1 and NBI-14104 has a sufficiency rating of 77.0. Both bridges are considered at risk of becoming structurally deficient within the next three years due to the current condition ratings of the deck, superstructure, and substructure, as well as the risk of additional bridge strikes by over-height vehicles.

The current design of the bridges does not adhere to modern standards, resulting in several safety, capacity, and freight movement problems. Both bridges have a vertical clearance of 13 feet 11 inches, which is significantly less than the [current standard of 16 feet 9 inches](#). The low clearance leads to vehicle access issues and potential bridge strikes, particularly for over-height commercial vehicles. The horizontal clearances under the bridges are 38 feet and do not accommodate planned future widening of Waterloo Road nor the provision of shoulders and sidewalks through the underpass.

The northbound and southbound structures were both built in 1958 but have different lifecycle deterioration projections. The northbound bridge is not projected to reach useful life until 2043, while the southbound bridge is projected to reach useful life by 2033. According to ODOT inspection reports, the southbound bridge has dealt with at least one bridge strike as recently as 2022, which has accelerated the decline of its condition. The strike is a result of the bridge's substandard clearance; further strikes will send the bridge into poor condition. The Project will raise the clearance of the reconstructed bridges by three feet to 16 feet 11 inches. Despite NBI rating the bridges in Fair condition, the combination of outdated design and collision history underlies why ODOT considers them to be at risk of reaching poor condition within the next three years.

### Threat to Future Transportation Network Efficiency

The I-35 bridges, and the entire interchange with Waterloo Road, are a key concern among residents and passersby. [According to ODOT](#), the existing (2022) average annual daily traffic (AADT) volumes on I-35 were 58,981 vehicles per day (vpd) and 11% trucks, with a future (2040) AADT projected to be 81,212 vpd and 16% trucks. The 2022 AADT on Waterloo Road was over 18,000 vpd with a 2040 projection of over 33,000 vpd. Originally

“In 2040, if no changes are made to the network, the growth in traffic volumes will overwhelm Waterloo Road, resulting in severe LOS F conditions when considering the basic two-lane capacity and the intersections. **On I-35, the mainline section will also erode to LOS F conditions** south of I-35 while the segments to north will remain at LOS C/D conditions”

- ODOT Preliminary Engineering Report, November 2015

designed to serve a rural area, the I-35 bridges and Waterloo interchange have insufficient capacity to meet existing and future demand. According to engineering estimations, the segment of I-35 south of Waterloo Road is presently at level of service (LOS) D, while the segment to the north is at LOS B/C conditions. In parallel, Waterloo Road is currently at LOS D east and west of I-35 in terms of basic capacity for a two-lane facility. LOS on I-35 and Waterloo Road is anticipated to erode to E/F conditions in certain segments. If the Project is completed, it is forecasted to reduce total vehicle-hours of intersection delay from the No-Build scenario by approximately 85-90% in the design year. **Expanding the horizontal clearance of the I-35 bridges from 38 feet to 107 feet is critical to adding capacity to Waterloo Road (additional lane in each direction plus shoulders and sidewalks); failure to do so will increasingly threaten transportation network efficiency as adjacent development increases and LOS declines.**

Congestion is ever apparent on this corridor and has persisted over many years. Public engagement for this Project began in January of 2016. However, the congestion and safety issues that these undersized bridges are exacerbating began before. Today, eight years later, [residents are lamenting](#) that this Project has still not been completed.

## Maintenance Cost Reductions

**This Project will reduce ongoing maintenance and operation costs by replacing the aging bridges with new structures.** While no significant capital investments are expected in the No-Build scenario, operations and maintenance will be conducted as needed for the aging bridge structures; this includes a \$700,000 rehabilitation every 25 years (which would occur in the 5<sup>th</sup> and 30<sup>th</sup> years). The Build scenario assumes that routine maintenance will occur but at a lesser average annual cost (less than \$1,000 annually). **ODOT estimates that the discounted maintenance cost savings for the new structures to be \$1.5 million.** Since the new bridge will have a useful service life of 75 years, there will be residual asset value (60%) beyond the 30-year analysis period. This residual value is estimated at \$1.9 million in discounted 2022 dollars.

## 4.2 Safety and Mobility

The existing interchange at I-35 and Waterloo Road features twin I-35 bridges that are considered at risk of becoming structurally deficient. The bridges have vertical clearances of 13 feet 11 inches, which is below the current standard (see State of Good Repair). With a 38-foot horizontal clearance under the bridges, additional lanes on Waterloo Road are not possible. The current design creates safety concerns, congestion and delays for travelers on I-35 and Waterloo Road.

Figure 6 | Rush Hour Congestion on Waterloo Road



Source: [ODOT](#)

## Crash Reduction Benefits

According to ODOT, from 2017 to 2021, there were a total of 171 crashes within the Project study area. Of these, 79% were property damage-only and 21% had a possible injury. The top three types of collisions were rear-end (front-to-end) (32.7%), sideswiped same direction (22%), and fixed object (19%). More information available on [ODOT’s website](#).

The Project’s safety benefits stem from the potential reduction in crashes linked to avoided detour Vehicle Miles Traveled (VMT) under the “Build” scenario, plus crashes reduced in the project area as a result of the bridge safety improvements. As detailed in the **Benefit-Cost Analysis Report**, the Project is expected to reduce potential crash costs by **\$442.4 million** (discounted to 2022 dollars) over the years 2052 through 2056 by avoiding a net detour of 17 miles (additional over existing traffic flows) as the traffic will be routed on the closest Interstate highways (Figure 3). In addition, the Project yields additional crash reduction benefits from an additional travel lane in each direction, wider shoulders, and improved vertical and horizontal clearances for Waterloo Road. Over the 30-year analysis

period for the Project, the potential safety benefit of the additional travel lanes is estimated at **\$6.4 million** discounted to 2022 dollars in total.

### Vertical Clearance Improvements

The two existing I-35 bridges have a posted vertical clearance of 13 feet 11 inches. The low clearance of the bridges has caused at least one bridge strike by over-height vehicles, which was discovered on the southbound bridge during a routine inspection. ODOT officials note that bridge strikes often go unreported, yet the damage accelerates the decline of the bridge's condition. Due to strikes, **the I-35 southbound bridge is forecasted to reach the end of its useful life a full 10 years earlier than the northbound bridge.** The Project will help address the documented safety concerns of the existing I-35 bridges. The vertical profile of I-35 will be raised by three feet to provide 16 feet 11 inches of vertical clearance consistent with current design standards.

### Protection for Non-Motorized Travelers

Currently, the local roads within the project area do not include sidewalks. The proposed development in the northwest quadrant of the study area (see Figure 7) will increase the volume of pedestrian traffic. Space for sidewalks is included in the proposed design along Waterloo Road to accommodate potential future pedestrian movements. The new horizontal clearance of the bridges will be 107 feet. This will allow for the widening of Waterloo Road to include four 12-foot driving lanes, a 14-foot-wide center turn lane, and 5-foot sidewalks on each side of Waterloo Road.

### Mobility Impacts

Existing traffic volumes through the interchange currently create congested conditions, including queuing on the northbound I-35 mainline in the PM peak as traffic attempts to exit Waterloo Road. It is anticipated that with no improvements, LOS on I-35 and Waterloo Road is anticipated to erode to E/F conditions in certain segments. The proximity of Boucher Road on the west and Industrial Boulevard on the east also creates congestion and conflict points with traffic utilizing the I-35 and Waterloo Road interchange. The Project will reduce congestion and bottlenecks on the bridge and expand mobility access for freight carriers, emergency personnel, and decrease vehicle conflict points.

The I-35 Waterloo Preliminary Engineering Report found that the Waterloo Road corridor is currently LOS D east and west of I-35. The segment of I-35 south of Waterloo Road is presently at LOS D while the segment at the north is at LOS B/C conditions. Furthermore, the existing Waterloo Road has two 11-foot-wide driving lanes with 2-foot outside shoulders. Narrow shoulders and steep vertical curves create limited sight distance.

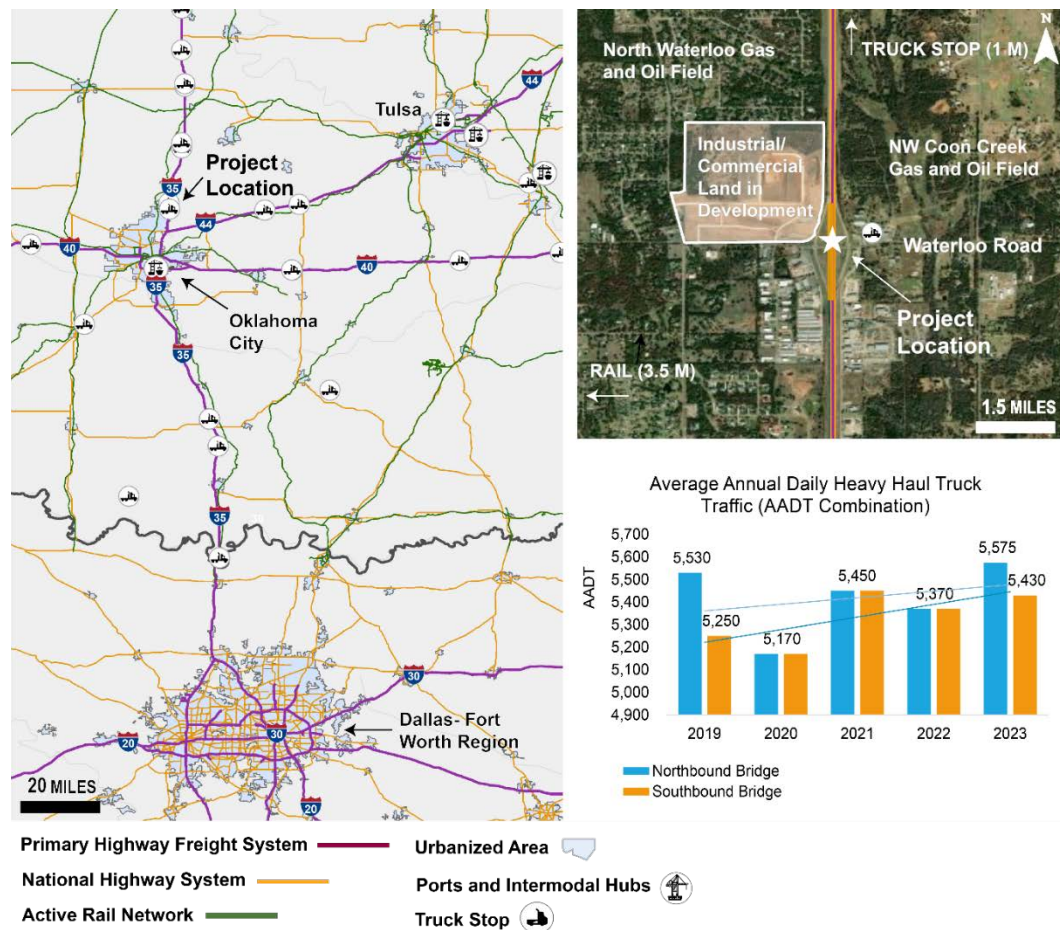
Due to the projected economic and population growth of the region, person miles traveled (PMT), AADT and truck AADT are all expected to increase through 2040 and beyond. The existing (2022) average annual daily traffic (AADT) volumes on I-35 are 58,981 vpd with a future (2040) AADT projected to be 81,212 vpd with 16% trucks. Existing AADT on Waterloo Road is 18,171 vpd with a future (2040) AADT at 33,180 vpd. The five lanes of Waterloo Road provide LOS C through 2040. The proposed bridges' improvements will support the

region's growth by expanding the bridges to include six 12-foot-wide driving lanes, two 12-foot outside shoulders, and two 12-foot inside shoulders. The six lanes of I-35 will provide LOS D or better conditions through 2040.

### 4.3 Economic Competitiveness and Opportunity

I-35 is the highest-trafficked north-south truck freight corridor in the central U.S, traversing six states on the NHS and NHFN. The Oklahoma State Freight Plan identifies I-35 as part of the PHFS. I-35 is one of the most significant truck freight corridors in the U.S. and Oklahoma's highest volume truck corridor. Over 16,000 trucks per day cross the I-35 NB and SB with average daily truck traffic at 11%; however, as seen in Figure 7, 9% of that truck traffic is from heavy haul combination trucks i.e., freight vehicles. The large proportion of freight vehicles denotes the criticality of this segment to Interstate freight.

**Figure 7 | Project's Position within the Regional Freight Network**



Source: [FHWA HEPGIS](#), [Oklahoma DOT](#), and [USDOT Truck Stop Parking](#)

I-35 is essential both for Oklahoma and the nation. In Oklahoma City, I-35 intersects two other major east-west freight corridors, I-40 and I-44, serving as a critical backbone for major economies through the transportation of goods, services, and people. This corridor facilitates critical intercontinental goods movement, linking goods to major urban centers

throughout the U.S., Mexico, and Canada. As seen in Figure 7, this area also specializes in energy production with multiple gas and oil fields due north of the project location and wind farms.

To the south of the project area lies a substantial consumer base in Oklahoma City, which includes several neighboring freight and intermodal hubs. The large industrial complex at the Waterloo Road exit relies on the bridge daily, while several distribution centers and truck stops are situated around the project area. Development in this community is expected to grow significantly, leading to an ongoing rise in truck traffic, as has been the trend historically. This Project aims to alleviate bottlenecks in goods movement while prioritizing the interests of the community.

### Verifiable Impact on Development

The Project supports the significant increase in residential development in the area and provides easier access to I-35 to facilitate daily commutes to surrounding employers. I-35 is a major highway that is used by freight and by residents in the rural project area traveling to essential services. Commercial and residential developers are attracted to the area because of its proximity to the cities of Guthrie (population 11,661) and Oklahoma City (population 655,057). The large portions of undeveloped land will increase the tax revenue for Logan and Oklahoma Counties.

Figure 8 | The Landing at Waterloo Aerial Map



Source: *The Landing at Waterloo Development Brochure*

The most notable development near the project area is The Landing at Waterloo (Figure 8), which consists of residential, commercial, and industrial uses. The development will have frontage along I-35, Waterloo Road, and Sooner Road with no zoning restrictions. There are 108 acres of land available for development, and 50 acres are set aside for commercial establishments like CAT, Taco Bell, Starbucks, and a 280-unit multifamily residential development. The Landing at Waterloo brings job opportunities to the project area but also strains the current capacity of the interchange. The two-lane highway system currently experiences congestion. The Oklahoma Department of Commerce commented that the continued congestion on I-35 would impede development. The outcomes of the transportation improvements at the I-35 Bridge at Waterloo will alleviate congestion and strengthen connectivity by adding capacity to Waterloo Road at the interchange.

### Job Creation and Workforce Development

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 a 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. 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. The effort will help reduce barriers to entry for employees across the state.

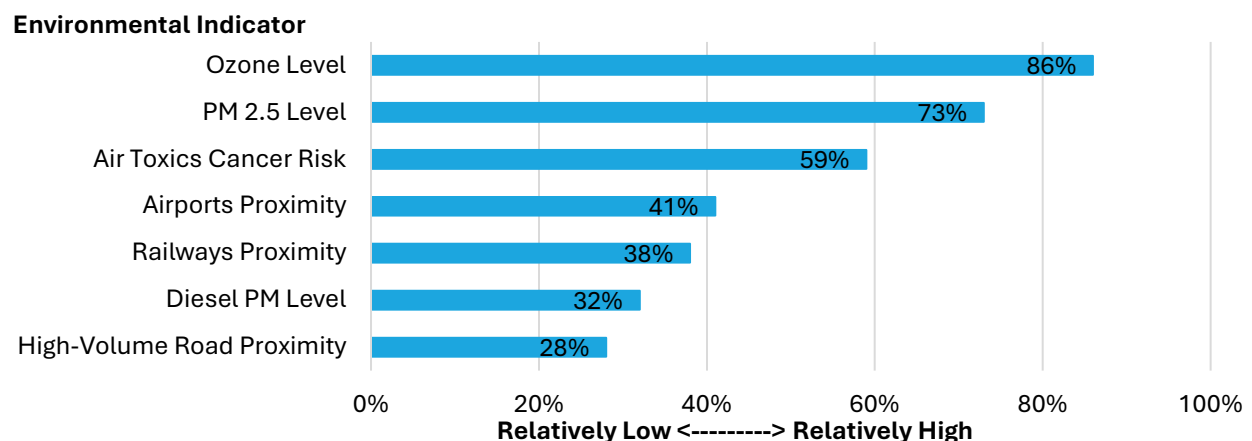
## 4.4 Climate Change, Sustainability, Resiliency and the Environment

One of the fundamental reasons to replace the I-35 bridges (and rehabilitate the entire interchange) is to reduce congestion and vehicle emissions on this section of I-35 as passenger and freight traffic volumes continue to increase.

### Reduction in Freight and Passenger Emissions

**Reduction of vehicle emissions is particularly salient for this urban fringe community given the existing local environmental burden.** The five census tracts surrounding the Project demonstrate a “disadvantaged” status in respect to ozone and particulate matter (PM) 2.5 exposure (Figure 9). Asthma and air toxics cancer risks are prevalent in this community. As discussed in **Safety and Mobility**, this stretch of I-35 accommodates nearly 59,000 vehicles per day, with 11% comprising trucks. The localized impacts of that level of traffic are felt acutely in through congestion and the accumulation of air pollutant emissions exposure, creating life threatening air quality and health outcomes.

**Figure 9 | Project Area Surpasses Environmental Burden Disadvantaged Threshold**



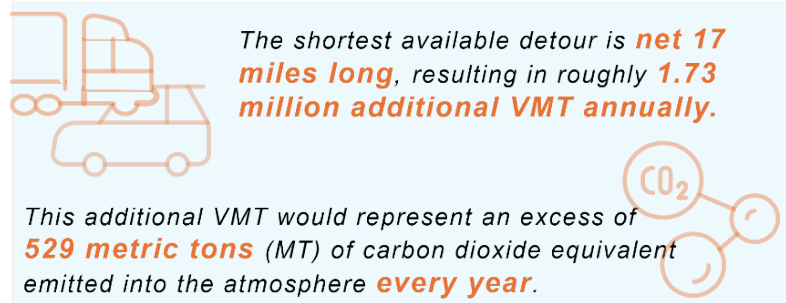
Source: ETC Explorer National Results

Notably, the nearby urban area of Oklahoma City is one of the few major metropolitan areas in the U.S. to remain in EPA air quality attainment. The disproportionate air quality impacts on the project area’s rural counterparts, particularly residents in areas of

persistent poverty and those living in adjacent Tribal lands, is a product of this I-35 segment being a “**heavy-haul route.**” This is an ODOT term for highway locations where travel by heavy commercial motor vehicles (including agriculture, energy, mining, or timber cargo) is projected to substantially erode the condition of the roadways.

The reconstruction of the I-35 bridges not only equates to lower tailpipe emissions by reducing VMT from existing congestion but reduces emissions from future traffic volumes and prospective detoured traffic (see Figure 3). Figure 10 summarizes the estimated CO<sub>2</sub> air quality benefits of this Project.

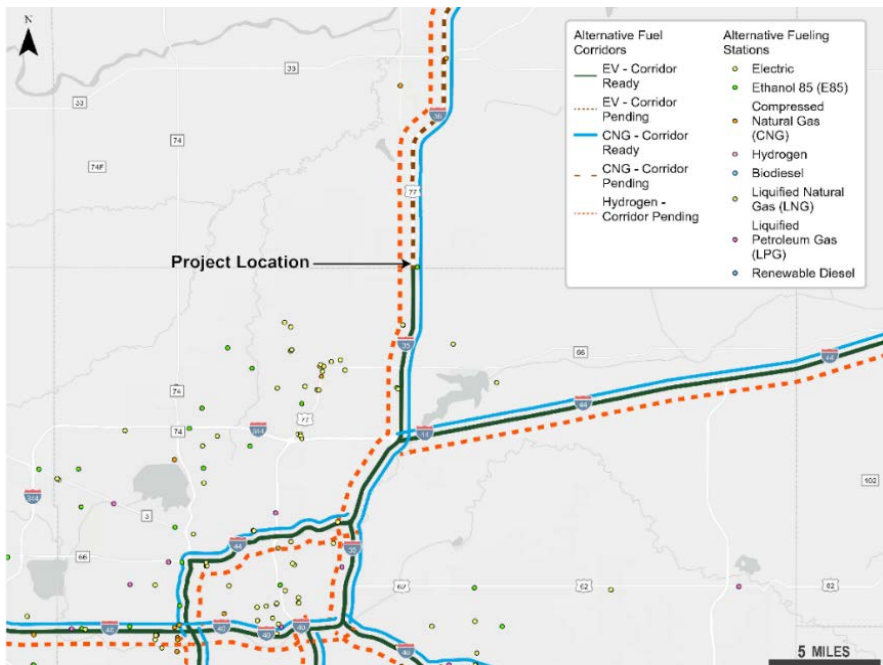
**Figure 10 | Project’s Estimated CO<sub>2</sub> Air Quality Benefits**



## Greening the Transportation Network

While Oklahoma City holds a favorable Federal air quality standard, transportation remains the largest source of greenhouse gas emissions and the projected volume of vehicles on this segment of I-35 raises concern. Residents and motorists in this area do not have as many transportation options, leading to a reliance on gas-powered automobiles for travel. **Projects like the one presented in this application offer opportunities to enhance transportation sustainability in Oklahoma.**

**Figure 11 | Project at the Nexus of the Alternative Fuel Transition**



Source: [FHWA HEPGIS](#), [U.S. DOT Bureau of Transportation Statistics](#)

Oklahoma is ranked [third in the nation](#) in electricity net generation from wind in 2023 (with many wind farms surrounding the project) and is ranked top five in other fuel types like natural gas (see Figure 7). The state has made progress in developing alternative fuel corridors (AFCs) to provide cleaner energy options to freight and passenger vehicles, including multiple types of fueling stations, such as electric vehicle (EV) charging stations, ethanol (E85) stations, and compressed natural gas (CNG) stations. This Project sits at a visible transition point

### Over and Through Waterloo:

Solutions for Freight and Community Mobility on I-35

(Figure 11). Currently, all of I-35 is designated as a CNG AFC and a pending hydrogen AFC, while Waterloo Road bisects the EV AFC in half. The truck stop on Waterloo Road, directly adjacent to the Project, has an E85 pump for the heavy duty freight vehicles that frequent this stop, with additional EV and CNG chargers scattered throughout the area. However, the [Oklahoma NEVI Plan](#) denotes the corridor from Edmond to Stillwater (see Figure 4) as an Interstate gap in EV charging access. **With projects like these completed, future investments in green transportation infrastructure can be made, enabling all users, particularly freight, to participate in a clean transportation transition.**

### Improved Resiliency of At-Risk Infrastructure

Due to the state's geology and abundance of 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. As such, ODOT has integrated resiliency considerations into its lifecycle planning and project programming processes. ODOT has developed well-regarded resiliency focused design guidelines for bridges and roadways to reduce potential damage from extreme weather events and minimize overall lifecycle costs (see State of Good Repair).

A key flaw in the design of the existing structure is its substandard vertical clearance (see State of Good Repair), leading to one documented vehicle-bridge strike. Future strikes have the potential to shut or slow down the flow of people and goods, forcing users to take the circuitous detour seen in Figure 3. With the reconstruction, the bridges will be heightened and there will be less likelihood of bridge strikes to occur. This decrease in man-made hazards will augment the physical resiliency of the bridge.

Replacing the existing bridges with new infrastructure and modern materials would not only address concerns regarding the structural deficiency, but also offer an opportunity to improve resiliency to both natural and man-made hazards. The bridges will be designed in accordance with the latest AASHTO Specifications for Bridge Design. Modern design specifications rely on regional seismic and wind distribution maps to provide site-specific data to help engineers design structures with local design conditions in mind. This adherence to updated standards will ensure that the bridges are better equipped to withstand extreme events. By incorporating these advanced design requirements, the new structure will not only meet current engineering standards but also help to provide a solution to address future environmental challenges and safety concerns.

The bridges will be constructed using a Class AA concrete. This mix, now standard on ODOT construction, utilizes a 4,000 PSI concrete mix vs. the current structures' 3,000 PSI concrete mix. 4,000 PSI concrete allows for increased pavement performance due to its stronger resistance to deck cracking, freeze thaw cycles, chloride penetration, and other environmental elements. The increased durability and longevity is salient given the volume of heavy duty trucks that traverse this segment. Warm mix asphalt technology will also be utilized due to its carbon savings among other benefits such as reduced costs and improved working conditions.

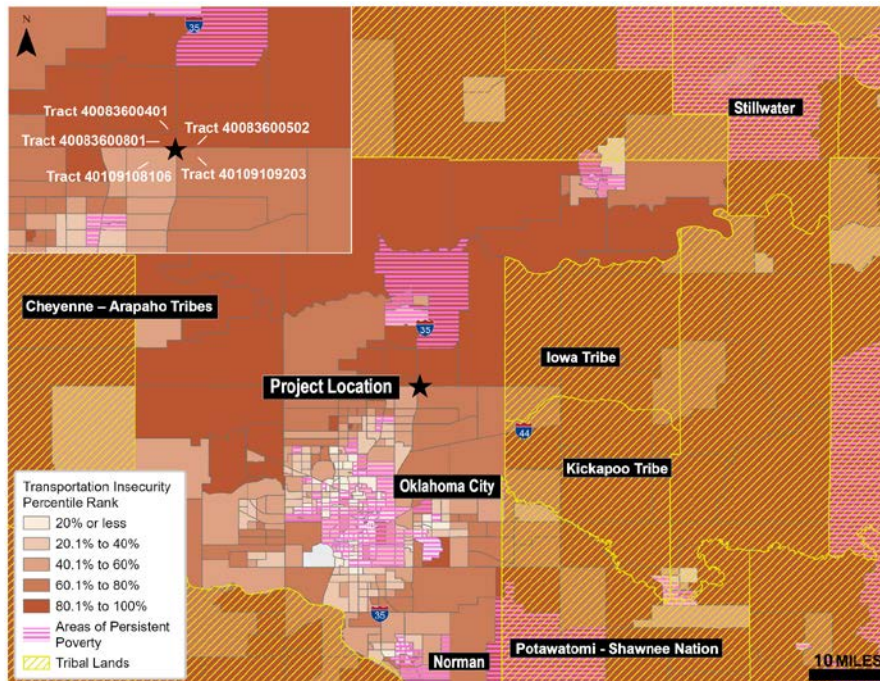
## 4.5 Equity and Quality of Life

The Project will improve the quality of life for local and regional users. As a vital north-south corridor, the new bridges will provide a safe, viable mode that provides sufficient capacity for current and future demand and improves mobility. The increased bridge capacity will improve reliability, congestion, and traffic flow, resulting in a safer roadway with more space for emergency services to complete incident management.

### Equity

I-35 at Waterloo is located at Exit 146, approximately three miles north of the Covell Road interchange and five miles south of the Seward Road interchange. The Project abuts five census tracts (Figure 12). To the east, Waterloo Road serves mostly rural and residential land uses and terminates at Anderson Road approximately 5.5 miles east of the interchange. To the west, Waterloo Road provides a connection to the northern portion of the City of Edmond (population 94,054) approximately 2.0 miles from the interchange. Further west, Waterloo Road provides a direct connection to SH-74 (approximately 9.5 miles) and U.S. 81 (approximately 31.5 miles). The Project provides residents with access to the City of Guthrie (population 11,661), approximately 13 miles to the north, and to Oklahoma City (population 655,057), which is located approximately 8 miles to the south (21 miles to the central business district).

**Figure 12 | Project Location Sets Upper Boundary in National Transportation Insecurity Ranking**



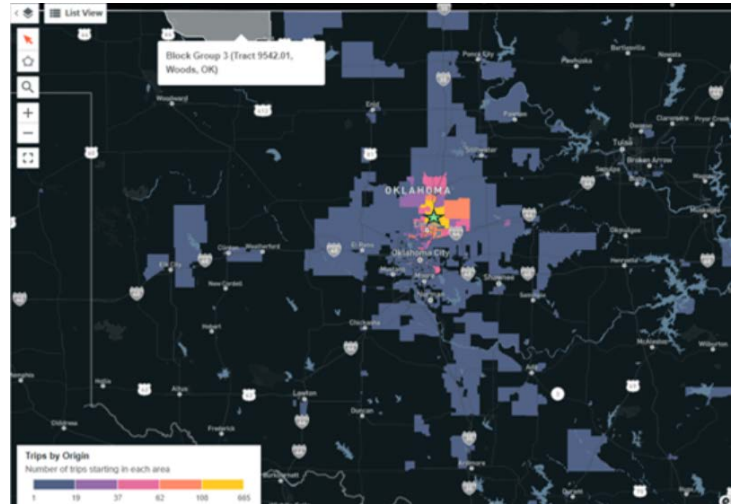
Source: [Climate and Economic Justice Screening Tool](#), [U.S. DOT ETC Explorer National Results](#), [FHWA HEPGIS](#), and [Oklahoma DOT](#)

Community data cited in the [Interstate 35 at Waterloo Road Access Justification Report](#) indicate that the project area has a relatively low percentage of minority individuals in comparison to the State of Oklahoma, Oklahoma County, or Logan County. The Project is

located in rural census tracts of Logan and Oklahoma counties. **According to the ETC Explorer, residents within the Project’s impact area are transportation insecure.**

Cumulatively, the five surrounding tracts rank in the 78<sup>th</sup> percentile nationally for transportation insecurity, with three of the tracts seen in Figure 12 in the 85<sup>th</sup> percentile. Three tracts (40083600502, 40083600401, 40083600801) are in the 93<sup>rd</sup>, 92<sup>nd</sup>, and 87<sup>th</sup> percentiles, respectively, displaying outsized disadvantages in transportation access, cost burden, and safety compared to state and national counterparts. These five tracts cumulatively rank in the 82<sup>nd</sup> percentile for transportation access and 33<sup>rd</sup> in transportation safety, underscoring the critical need to bolster safe mobility and redundant connectivity to jobs, housing, and other resources in the region.

**Figure 13 | Origins of Weekday Trip Using I-35 Bridge over Waterloo Road**



Source: [Replica, Fall 2024](#)

The Project serves as a connector from rural and urban communities to work, home, and retail; the census tracts that intersect I-35 (Figure 13) show that traffic across the I-35 bridges originates in all parts of the state, but primarily in Oklahoma City. Some users travel from Oklahoma City and the surrounding suburban area as far as 64 miles to the project area. The average user of the bridge travels about 13 miles, and they spend about 30 minutes in the car. The impact of the detour will adversely affect residents of this project area by increasing travel time and distance, thus increasing the transportation burden.

## Public Engagement

A public meeting was held on January 28, 2016 at the Waterloo Road Baptist Church to solicit input from stakeholders about the Project. A total of 375 attendees signed in for the meeting. English, Spanish, and Vietnamese versions of materials were available for the attendees. The presentation at the public meeting discussed the purpose and need for the project, existing conditions and environmental constraints, construction details, project alternatives, and project timeline. Comments from the public generally agreed with the need for improvements at the interchange.

Several state and regional agencies, such as the National Park Service, Bureau of Land Management, Oklahoma Department of Commerce (ODC), Oklahoma Department of Environmental Quality (ODEQ), and the Oklahoma Conservation Commission (OCC), shared comments on the Project. ODC stated its support of solutions to help the I-35 and

Waterloo Road interchange develop to its full potential of manufacturing and industrial growth, as continued congestion could impede new development in the area.

### Improved Access to Daily Destinations

By adding capacity to the I-35 Bridge over Waterloo, the Project is improving access to daily work, home, and retail destinations in Oklahoma City and Guthrie (Figure 8) and increasing LOS. The Landing at Waterloo will bring a significant number of jobs and residents to the area, including a multi-family development (280 units), 256 single-family residential lots, 40 commercial lots, and a walking trail. The Project will also facilitate access to Oklahoma City, which is an important source of jobs, medical services, schools, and recreation. The primary mode of transportation in the area is car/truck (Figure 13).

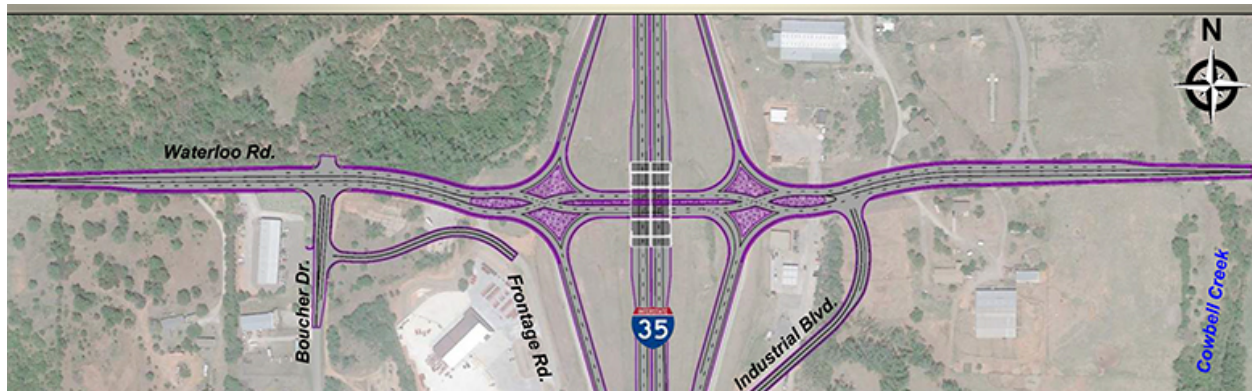
## 4.6 Innovation

The reconstruction of the I-35 bridges integrates innovative features in the planning and construction process. This bridge has been designed to incorporate future volumes of traffic and the surrounding area, including land use and growth. As such, the planning process has been proactive towards design, rather than reactive. For example, in accordance with the ODOT Rural Functional Classification (RFC) Map for Logan and Oklahoma counties, the interchange is not within city limits and would normally follow rural criteria. However, given the level of development in the area and the volume of traffic at the interchange, ODOT recommended urban criteria be used for this Project. Adding capacity now demonstrates that the DOT is progressively accounting for growth on this segment and preparing for forecasted volumes before they fully realize.

### Stakeholder-Driven Redesign

As part of the public involvement process, three bridge design alternatives were presented to over 375 community members (see Equity and Quality of Life). **Participants supported much of what ODOT presented, noting major improvements needed to the segment, with many citing a need for further widening and a desire for interim improvements.** To help alleviate some issues, ODOT installed temporary traffic signals.

Figure 14 | Project Site’s Rendering of the Diverging Diamond Interchange



Source: [ODOT](#)

Additionally, a consensus was reached to install a **Diverging Diamond Interchange (DDI)**. DDIs are a relatively new interchange solution in the U.S. **This Project would be one of the first DDI locations in Oklahoma** (Figure 14). The DDI allows left turning traffic to avoid crossing oncoming traffic with traffic signals to help manage traffic flow, fostering a safer turning environment.

## Construction and Technological Innovations

ODOT will utilize the **construction of a temporary bridge (one of the first in ODOT history)** in the median of I-35 to simplify the phased construction of the new bridges while maintaining four lanes of traffic at all times. Without the temporary bridge, only one lane of traffic would remain open during construction leading to a significant rise in emissions from idling vehicles and congestion, exacerbating traffic concerns even more. **This simplified phasing allows for a shorter construction duration, perpetuating strong stewardship of resources and mitigating impacts from construction for all roadway users, particularly since community members are awaiting the completion of this project.** ODOT intends to purchase the temporary bridge structure for use in future projects.

As part of a FY 2022 & 2023 Advanced Digital Construction Management Systems (ADCMS) Grant Program win, ODOT is piloting the use of **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. **All of the above innovations enable ODOT to use new bridge construction and project delivery techniques, driving the DOT into a new era of innovation.** The Project will also adhere to [ODOT's Special Provisions for Smart Work Zone Systems](#), utilizing cameras, mobile Dynamic Message Signs (DMS), and probing 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. This technology is also used to keep work zones on I-35 safe.

## Innovations in Project Financing and Delivery

ODOT recognizes the criticality of funding this Project to ensure Oklahoma's rural areas have the necessary infrastructure for increased economic growth. Given this Project's benefits to rural mobility and goods movement, ODOT is providing unique, one-time [RETRO funding](#) (see Funding Sources). This Project met certain criteria and identified as an area for robust economic development with a population less than 75,000 (Logan County). The targeted state investment is an example of nontraditional funding that complements traditional Federal sources such as BIP. For construction, ODOT will incentivize contractors to achieve early project delivery and minimize traffic closures by deploying no excuses bonuses, including a substantial completion incentive valued at 5% to 10% of the contract and smaller incentives for internal milestones tied to key project elements.

## 5. BENEFIT-COST ANALYSIS

A benefit-cost analysis (BCA) was conducted in accordance with the methodology outlined by U.S. DOT in the Benefit-Cost Analysis Guidance for Discretionary Grant Programs (December 2023). The period of analysis corresponds to 32 years and includes 2 years of construction and 30 years of benefits after operations (replacement bridge) begin. Project capital costs (2023-dollar estimate), including previously incurred costs, are expected to be **\$18,572,819**. At a 3.1% discount rate, the discounted capital costs are estimated at **\$14.0 million** in 2022 dollars.

The Project will generate \$8.3 billion in net benefits over the 30-year analysis period, yielding a **BCR of 158.1** and a NPV of **\$2.2 billion** (Table 4). This extremely high BCR reflects the significant safety, economic, and environmental benefits of avoiding the detour on an Interstate with high AADT, which strongly justifies the investment. Additional BCA information and explanation on the sensitivity analysis scenarios is provided in the separate **Benefit-Cost Analysis Report**.

**Table 4 | Project Evaluation Measures**

Evaluation Measures	Value (discounted 2022\$)
Project Benefits = PB	\$2,216,215,048
Total Project Costs = PC	\$14,021,857
Net Present Value = PB—PC = NPV	\$2,202,353,025
Benefit-Cost Ratio = BCR = PB / PC	158.1

## 6. PROJECT READINESS AND ENVIRONMENTAL RISK

### 6.1 Technical Feasibility and Technical Competency

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. The ODOT project management team is 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 Project’s consultant team with the most up-to-date information to identify and manage potential risks. Cost estimate contingencies, appropriate for the relative level of design completion, have been included since the beginning of the Project’s design.

### 6.2 Project Schedule

The schedule presented in Table 5 demonstrates that this Project will meet all required milestones in the 2025 BIP NOFO. Specifically:



- All necessary activities will be complete to allow BIP funds to be obligated by the obligation deadline of **September 30, 2028**. This will allow sufficient time for unexpected delays, ensuring no funding is at risk of expiring before it is obligated.
- The Project secured NEPA approval as a CE on March 3, 2021; and
- The Project can begin construction within 18 months of obligation.

ODOT has sought community input through early coordination with local stakeholders, including from Federal, state, and local government agencies and elected officials, and a public meeting held in January 2016 (see Equity and Quality of Life). **NEPA is complete, design is close to 90% complete, and this project will move quickly.**

**Table 5 | Project Schedule**

Milestone	Start Date	End Date
State and Local Planning Approvals	N/A	N/A
NEPA	October 2020	March 2021
Other Environmental Approvals	January 2021	March 2021
Permitting	March 2021	August 2022
Preliminary Design	August 2014	June 2016
Right-of-Way Acquisition/Utility Relocation	January 2021	March 2025
Plans, Specifications, and Estimates	September 2018	March 2025
Bidding	August 2025	November 2025
Letting	November 2025	December 2025
Project Partnership and Implementation Agreements	N/A	N/A
Construction	March 2026	July 2027
Substantial Completion	July 2027	October 2027
Punchlist and Closeout	October 2027	January 2028

### 6.3 Required Approvals

ODOT has completed the environmental analysis and review of the referenced project. Environmental studies were completed and a [Categorical Exclusion \(CE\) document](#) under the National Environmental Policy Act (NEPA) was approved by the FHWA on March 3, 2021. No significant environmental impacts are anticipated as a result of the project, and there is no significant public controversy on environmental grounds. ODOT has determined that this project does not individually or cumulatively have a significant impact of the environment as defined by the NEPA or involve unusual circumstances as defined in 23 CFR 771.117(b) and is, therefore, excluded from the requirements to prepare an Environmental Assessment or Environmental Impact Assessment.

## Right-of-Way Acquisition and Relocation Plan

Relocations will not be required for this Project. Minor right-of-way acquisitions are identified in the ongoing preliminary study. All right-of-way acquisitions will be completed according to the Uniform Relocation Act and applicable regulations.

## Public Engagement

Detailed information is provided in the **Equity and Quality of Life** section.

## 6.4 State and Local Approvals

**The structures being rehabilitated or replaced will occur on existing alignment, reducing the environmental risk associated with the Project.**

This application is consistent with the [2045 Oklahoma Long Range Transportation Plan](#), 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](#), and is listed under ODOT’s 8-Year Financially Constrained Freight Investment Plan, totaling \$3.5 billion for FY2023-FY2030.

These bridge improvements, as part of the larger interchange reconstruction, are part of ODOT’s [2025-2032 8-year Construction Workplan](#) with construction currently programmed to begin in 2025. Project is included in ODOT’s latest [State Transportation Improvement Program \(STIP\)](#) (listed as Job Piece 2984304). The interchange improvements are also listed in the Association of Central Oklahoma’s (ACOG) Metropolitan Transportation Plan (MTP), [Encompass 2045](#).

The Oklahoma Pollution Discharge Elimination System (NPDES) includes requirements for discharges to surface waters. The contractor will obtain the OKR10 permit for Construction Stormwater and prepare any needed Stormwater Pollution Prevention Plan (SWPPP) prior to construction. Section 404 Nationwide Permit 14 is applicable to the Project, but pre-construction notification to the U.S. Army Corps of Engineers is not required in order to commence.

**The Project has received significant support from both state and local officials. No additional required state or local approvals are necessary.** See [ODOT website with Letters of Support](#).

## 6.5 Assessment of Project Risks and Mitigation Strategies

The risks associated with the Project are well understood and clearly defined. ODOT will ensure that every major risk factor is carefully mitigated as early in the project planning process as possible. Table 6 summarizes the primary project risks and mitigation strategies associated with the replacement of the I-35 bridges over Waterloo Road.

**Table 6 | Risk Mitigation Strategies**

Risk (Risk Level)	Mitigation Strategy
Significant delays from closure or failure of the existing bridge (Low)	Project schedule will be carefully managed to include clear communications and documentation regarding inclement weather, and early and frequent communication with Project contractors.
Procurement delays (Low)	ODOT will manage design and clearance and permitting processes concurrently to reduce time from award to bidding.
Cost increases (Medium)	Project is included in ODOT’s 8-Year Workplan. ODOT remains committed to adjusting as needed to meet all BIP statutory deadlines for funding obligation and expenditure. Construction cost estimates contain 20% contingency.

## 7. ADMINISTRATION PRIORITIES AND DEPARTMENTAL STRATEGIC PLAN GOALS

**Table 7 | Administrative Priorities and Departmental Strategic Plan Goals**

Administrative Priorities and Departmental Strategic Plan Goals	Section Addressed
Safety	Section 4.2 Safety and Mobility
Climate Change and Sustainability	Section 4.4 Climate Change, Sustainability, Resiliency and the Environment
Equity	Section 4.5 Equity and Quality of Life
Workforce Development, Job Quality, and Wealth Creation	Section 4.3 Economic Competitiveness and Opportunity

### 7.1 Considerations to Support Good-Paying Jobs and Strong Labor Standards

ODOT is committed to supporting good paying jobs and strong labor standards while complying with both Federal and Oklahoma laws.

#### Oklahoma Unified Certification Program for Disadvantaged Business Enterprises

ODOT serves as the Unified Certification Program (UCP) for the State of Oklahoma, providing a one-stop-shop where disadvantaged businesses that meet the Disadvantaged Business Enterprises (DBE) certification requirements and become certified are eligible to be used to meet the DBE goal requirements on any project with funding from the U.S. DOT. ODOT’s 2023-2025 Triennial DBE goal is 16.0% and the FFY2023 goal attainment was

17.33%. Total dollars to DBEs increased almost 40% from 2022 to 2023. Oklahoma's project-level goal setting is data-driven utilizing current DBE certification information and historical DBE pay item performance to identify the project goal achievement possibility. ODOT offers DBE Supportive Services to help certified DBE firms in Oklahoma develop into self-sufficient businesses, capable of competing on federally funded highway projects. These services, provided under FHWA guidelines, aim to increase the number of active minority businesses in the highway program and contribute to their growth and self-sufficiency. ODOT's commitment includes offering various forms of training and technical assistance, all free of charge.

ODOT strives to ensure equal opportunities and to level the playing field for DBEs by providing full and meaningful participation opportunities on federally funded projects. ODOT conducted a [Disparity Study](#) in 2021 to evaluate DBE opportunities, and is using the input to develop innovative solutions to strengthen the DBE program.

ODOT's Contract Compliance Division oversees the Department's DBE program and ensures that ODOT and all its consultants and contractors comply with applicable Civil Rights requirements.

### Transportation Assistance Program

The ODOT Contract Compliance Division hosted a Transportation Assistance Program (TAP) at Eastern Oklahoma County Technology Center on Oct. 30-Nov. 3, 2023, with another training anticipated in 2025. TAP is a free, week-long job training program that prepares women and people of color seeking jobs for entry into the transportation and construction job market. TAP provides valuable certification training opportunities that businesses look for when hiring individuals in the transportation and construction trades. The program includes hands-on experience and free certification in forklift operation/safety, work zone flagging, CPR/First Aid/Bloodborne Pathogen training, OSHA 10-Hour Construction, and workforce skills.

## 8. DOT PRIORITY SELECTION CONSIDERATION

This project meets the criteria set forth as U.S. DOT priorities:

- The I-35 bridges are currently in Fair condition and are at risk of falling into Poor condition within the next 3 years.
- ODOT owns and maintains the I-35 bridges at Waterloo Road.
- NEPA review is complete for this project. No significant environmental impacts are anticipated as a result of the project, and there is no significant public controversy on environmental grounds.
- The design for this project will allow sidewalks to be constructed on Waterloo Road beneath the bridge, which was previously not feasible due to horizontal and vertical clearance restrictions on the existing bridges.