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# GRANT REQUEST: \$61,250,000

**TOTAL project cost: \$122,500,000** 







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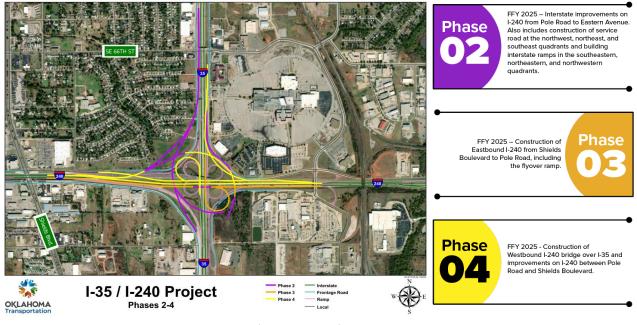
# 1. Project Information

# 1.1 Description

The Oklahoma Department of Transportation (ODOT) requests \$61,250,000 in Bridge Investment Program (BIP) Grant funds for the *Crossroads of America: Replacing Bridges on I-35/I-240 in Oklahoma City Project* ("Project"). The Project will overhaul the I-35/I-240 interchange in Oklahoma City, Oklahoma. This interchange is a critical crossroad for the movement of people and goods. ODOT will replace the current outdated infrastructure with a safer, multilevel interchange featuring dedicated interstate ramps, frontage road turnaround lanes, and service roads for improved access to city streets. The Project will modernize the existing interchange and replace the structurally deficient I-240 bridge that runs over I-35. The Project will address safety issues by constructing new ramps and increasing merging distances, ensuring compatibility with current and anticipated traffic volumes. Furthermore, the transformation will alleviate congestion, improve operational challenges, and replace outdated elements with infrastructure that meets current standards. ODOT has adopted a strategic approach to the comprehensive reconstruction of this interchange, with a projected full build-out anticipated by 2028.

# Project History and Future Phase

The Project's history dates to 1988 when the initial design process began. ODOT has already committed \$140 million to the interchange's overall six-phase development. Two phases are complete (Phase 1 and 1A), which included the work in the southwestern quadrant. Phase 1B began construction on June 5, 2023, and includes work to complete the frontage road system. Funding requested in this application will go toward subsequent construction phases (Phases 2 through 4 - Figure 1) which is set to commence construction in 2026. With BIP funding, these phases will be combined into a single, streamlined Project rather than delivered separately as originally planned, supporting an innovative model that will save costs and speed project delivery.







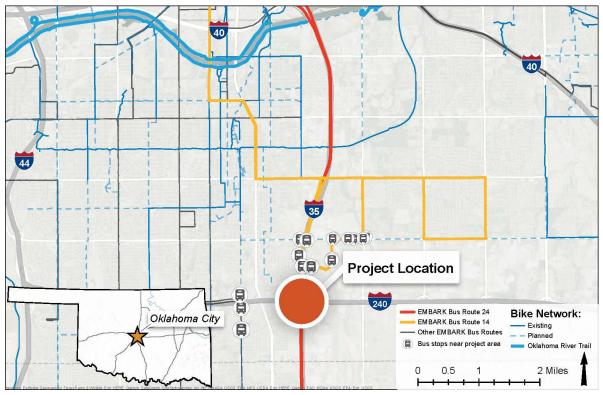


# Advancing Bridge Investment Program Goals

This Project is fully aligned with the BIP objectives. The Project promises substantial infrastructure enhancements and will improve transportation efficiency and reliability of the movement of people and freight through an important corridor. The Project will also enhance safety for commuters and reduce the number of bridges in poor condition in the National Bridge Inventory within the next three years by replacing a bridge currently in poor condition. Additionally, the Project is expected to stimulate economic growth and facilitate the movement of goods and people, thereby contributing to regional prosperity. Within the broader context, the I-35/I-240 interchange serves as a vital component of the Project's efforts to fortify the state's transportation infrastructure.

# 1.2 Location

The Project is in southern Oklahoma City, Oklahoma, in Oklahoma County. The existing interchange will be upgraded to a three-level, semi-directional partial cloverleaf interchange along I-35, from SE 66th to SE 82nd and along I-240 from Santa Fe Avenue to Eastern Avenue (**Figure 2**). The bridge connects to I-240 running east toward Fort Smith, Arkansas, and west toward Lawton, and I-35, which runs north and south toward downtown Oklahoma City and Dallas, Texas. The interchange is a major hub for connecting surrounding cities such as Moore, Norman, and Midwest City, Oklahoma, to the heart of Oklahoma City, including surrounding transit connectivity and bicycle infrastructure.



# Figure 2. Project Location

There are two census tracts within the Project area (401091073.02 and 401091073.03), as seen on **Figure 3**. Both census tracts are classified as Areas of Persistent Poverty, according to USDOT criteria. In the 5-year period from 2014 to 2018, the poverty levels for 1073.02 and 1073.03 were 22.6% and 29.1%, respectively.





According to the Climate and Economic Justice Screening Tool (CEJST), the Project is in a Disadvantaged Community. There are many factors that make the Project area a Historically Disadvantaged Community, according to the USDOT Equitable Transportation Community Explorer (ETC). This includes the high cost of transportation. The average household in the Project-area tract spends around 25% of their household income on transportation, which equates to about \$11,000 a year. The median household income is between \$36,000 to \$38,000, indicating a high cost burden of transportation. According to Federal



Figure 3. Project Location, Areas of Persistent Poverty, and Disadvantaged Communities

Highway Administration's (FHWA's) data from the 2020 census, the Project is in an urbanized area with an urbanized area population of greater than 200,000.

# 1.3 Lead Applicant

ODOT, which is the lead applicant, has a successful track record collaborating with various entities, including local governments and tribal nations, to execute projects to construct, improve, and maintain Oklahoma's transportation infrastructure. ODOT aims to ensure a secure, cost-efficient, and reliable transportation system that serves the needs of Oklahoma's residents, businesses, and communities. ODOT is committed to improving transportation throughout Oklahoma in various areas, including roadway and bridge maintenance and preservation, construction management, and planning.

Beginning in 2024, ODOT will be rolling out its Eight-Year Construction Work Plan, which goes beyond the federally required Four-Year plan. The plan contains 1,738 projects with a total value of nearly \$8.8 billion. ODOT has a commitment to improving its bridge conditions. From 2004 to 2021, Oklahoma has improved from 49<sup>th</sup> to 5<sup>th</sup> in the nation for highway bridge condition. This 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. The plan also calls for addressing 1,100 miles of rural two-lane highways with deficient shoulders, inadequate pavement conditions, as well as other safety upgrades.

# 1.4 Other Public and Private Parties

There will be no additional public or private parties involved in delivering the Project. However, ODOT has previously collaborated with the South Oklahoma City Chamber of Commerce, the City of Oklahoma City, and Oklahoma Gas & Electric (OGE). This collaborative effort aims to facilitate project preparation and address complementary infrastructure needs in the vicinity, ensuring the overall success of the Project.





# 1.5 Additional Eligibility Requirements

# Maintenance Commitment

ODOT will uphold the maintenance of the constructed bridge in alignment with the organization's <u>Transportation Asset Management Plan</u>. 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 diminished the number of structurally deficient bridges on highways. The commitment to maintaining structurally deficient bridges below 1% has resulted in a remarkable reduction, dropping from 1,068 in 2006 to 49 by 2023. The funding for the Project's maintenance costs will be allocated by ODOT through their dedicated maintenance fund. The anticipated annual maintenance expenses for the Project are estimated at \$55,000 per year. The significant rehabilitation costs are projected to reach \$15 million over 20 years in the absence of the Project. However, with the implementation of the Project, these rehabilitation costs are reduced to \$7.5 million, leading to substantial savings of \$7.5 million.

# Bike and Pedestrian Accommodation

For safety reasons, bicycle or pedestrian paths within the interchange itself cannot be accommodated. Therefore, bicycle and pedestrian infrastructure is not included as a component of the Project. However, the Project will still meet bicycle and pedestrian requirements at the terminal locations.

The nearby Oklahoma River Trails, situated north of the interchange along the picturesque Oklahoma River, offer a desirable option for cyclists and pedestrians and connect to internal roads (**Figure 2**). These trails serve as a valuable resource for those looking to explore the area on foot or by bike. The Project will alleviate traffic congestion surrounding the interchange, making it easier for residents to access these nearby trails conveniently.

Furthermore, ODOT has created an inaugural <u>Active Transportation Plan</u>, surpassing ODOT standards. The initiative garnered extensive public engagement, with 893 survey responses and the participation of 170 individuals in online workshops. Additionally, ODOT's recently developed <u>Strategic Highway Safety Plan</u> is notable for incorporating the pioneering Vulnerable Road User Assessment, signifying a substantial stride toward bolstering road safety.

# Asset Management Plan

The three following objectives identified in <u>ODOT's Transportation Asset Management Plan</u> (<u>TAMP</u>) are aligned and consistent with the Project:

- Infrastructure Preservation—Preserve and maintain the condition of Oklahoma's multimodal transportation system in a state of good repair through risk-based, data-driven decision-making processes. See <u>Section 2.1 State of Good Repair</u>.
- Safety and Mobility—Ensure a safe and secure transportation system for all users and facilitate the movement of people and goods while improving connectivity. See <u>Section 2.2</u> <u>Safety and Mobility</u>.
- Economic Vitality—Provide a reliable multimodal transportation system for people and goods that coordinates with land development patterns, strengthens communities, and supports a healthy and competitive Oklahoma economy. See <u>Section 2.3 Economic</u> <u>Competitiveness</u> and Opportunity and <u>Section 2.5 Equity and Quality of Life</u>.





# 2. National Bridge Inventory Data

The Project bridge (National Bridge Inventory [NBI] Number 14493) carrying I-240 over I-35 is currently structurally deficient (latest inspection date in August 2022). According to the National Bridge Inventory (NBI), the superstructure substructure condition received a rating of 4 - Poor, while both the deck condition and superstructure condition received a rating of 5 – Fair (At-Risk). Project <u>NBI data</u> is available for further insight.

# 3. Project Budget – Grant Funds, Sources, and Uses of all Project Funding

The total cost of the Project is \$122,500,000, as shown in **Table 2**. The total cost includes Phase 2 through Phase 4, which will be combined into a single Project with the availability of BIP funds to streamline Project delivery and save costs. The cost of the Project includes 6% for construction management activities and a 20% contingency, both based off of the engineer's estimate. Project cost estimates are based on final design for Phases 2-3 and 60% design for Phase 4.

Item	Federal	State	Total
ROW and UT	\$38,326,670	\$6,121,000	\$44,447,670
Previous construction	\$95,936,256	\$900,000	\$96,836,256
Engineering	\$7,676,758	\$1,919,189	\$9,595,947

#### Table 1. Previously Incurred Costs

JP No.	Description	Engineer's Estimate	Construction Management (6%)	Contingency (20%)	Cost
09032(06)	I-35 @ the I-240 Junction (Phase 2) Reconstruct Interchange	\$38,888,900	\$2,333,320	\$7,777,780	\$49,000,000
09032(07)	I-35 @ the I-240 Junction (Phase 3) Reconstruct Interchange SMC 90/10	\$14,777,780	\$886,664	\$2,955,556	\$18,620,000
09032(08)	I-35 @ the I-240 Junction (Phase 4) Reconstruct Interchange	\$43,555,555	\$2,613,334	\$8,711,111	\$54,880,000
	Estimated Total Project Cost \$122,500,000				

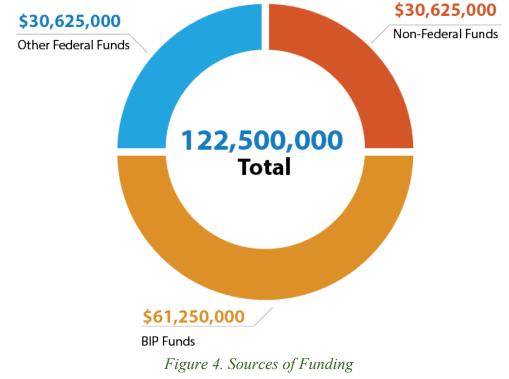
# Table 2. Cost by Project Phase

The estimated total Project cost of \$122,500,000 is for construction activities only. ODOT is requesting \$61,250,000 in BIP funds, 50% of the total Project cost for Phase 2 through Phase 4. ODOT will allocate an additional \$30,625,000 (25%) from other federal funds. These other federal funding sources include formula programs such as the Surface Transportation Block





Grant, the National Highway Performance Program, and the Bridge Formula Program. The remaining \$30,625,000 (25%) of Project funding will come from a local match that ODOT will contribute using ROADS funds. A complete breakdown of the costs and percentages are shown in **Figure 4**. The inclusion of BIP funding is instrumental in advancing the Project's completion. Rather than waiting for funding in each phase, the BIP funds enable simultaneous progress across all phases, enhancing overall Project efficiency and ensuring a more seamless and timely completion.



# 2. Merit Criteria

# 2.1 State of Good Repair

The I-35/I-240 bridge needs significant upgrades and repairs because of its age, outdated design, and poor condition. The original I-35 bridge was constructed in 1959 and later reconstructed in 1981 to repair various components, widen the structure, and replace the deck. In addition to the bridge being rated as "Poor" and structurally deficient as of the 2022 inspection, the existing pier locations reducing shoulder widths along I-35 (not meeting current geometric design standards) result in the bridge listed as "Functionally Obsolete." This condition presents a safety risk, and because of the bridge's current pier spacing, the ability of I-35 to be widened,

Because of the bridge's current pier spacing, the ability of I-35 to be widened, limits mobility for both people and goods passing through this critical corridor

limits mobility for both people and goods passing through this critical corridor. Work to overhaul the interchange is a necessity because of inadequate capacity, poorly spaced access, substandard bridge and ramp configurations, and accommodation for future traffic projections.

The proposed bridge will be perpendicular over I-35, an adjustment to the bridge orientation that will require reconfiguring the roadway approaches on either end of the bridge to smooth out the existing horizontal curvature, accommodating ease in design and fabrication/construction





methods. Furthermore, the pavement condition is notably poor, evident from visible cracks and spalling. As per the 2022 Bridge Inspection report, the bridge deck showcases spalls and patches in the westbound lanes, along with extensive areas of asphalt patching identified at the west end of the span. Addressing these issues promptly is crucial to enhancing safety and providing a smoother driving experience for commuters.



Figure 5. Existing Bridge Condition

# Transportation Network Efficiency and Mobility of Goods

Though I-35 is vitally important to the state of Oklahoma in many ways, its importance for freight traffic in particular cannot be overstated. I-35 carries the highest volume of truck traffic in the state, with more than 8,000 trucks traversing the interstate daily, linking Oklahoma to neighboring states Texas and Kansas and connecting Mexico to Canada. ODOT is actively updating programming to address future needs for this busy corridor, a key player in interstate mobility, economic development, and freight traffic in the central United States. Similarly, I-240 is an essential connector for citizens of the Oklahoma City Metropolitan Area because it provides access to major employers and destinations such as Tinker Air Force Base, the largest single-site employer in Oklahoma, and Will Rogers World Airport. If the I-240 bridge over I-35 shuts down for any reason, it would not only interrupt local and regional traffic in south Oklahoma City but also disrupt interstate and international commerce. These two Interstate Strategic Highway Network (STRAHNET) routes play a crucial role to the economy, defense, and mobility of the U.S. Therefore, replacing the bridge before the poor condition worsens or becomes load-posted is crucial for the communities and economies of Oklahoma, the region, and the nation.

The Project design includes improvements to modernize the infrastructure to provide more efficient mobility for people and goods. Traffic will exit the interstate before approaching a crossroad to avoid congestion caused by slowing speeds or last-minute lane changes of exiting vehicles. Clear and straightforward signs will be posted to avoid congestion and accidents from directional confusion. Speed and spacing guidelines will be followed for freeway ramps and entrances so approaching vehicles do not disrupt the flow of traffic on the interstate.

# **Resilience Elements**

Seismic activity across the state has increased in frequency since the early 2010s, and the new bridge is designed to endure these ever more common seismic events. Additionally, ODOT has recently changed their bridge inspection response following seismic activity. Previously, ODOT bridge inspection crews would inspect all bridges within a certain radius of an earthquake epicenter, with the radius determined simply from the magnitude of the earthquake. In 2017, ODOT began using ShakeCast to generate a bridge inspection priority order based on factors such as proximity to the epicenter, bridge condition and age, and U.S. Geological Society





seismic data. ShakeCast has enabled ODOT to enact a faster, more pinpointed response targeting the bridges most susceptible to damage caused by earthquakes.

# Reducing Maintenance Costs

If the existing bridge is not entirely replaced with a new structure, substantial rehabilitation efforts would be needed within a decade. Replacing this bridge with one that meets current design standards defers major repair and rehabilitation costs into future years. The Project is expected to save almost \$7 million in planned repair and rehabilitation work on the roadway and bridge.

#### Consistency with Asset Management Plan

One of the major asset management objectives found in the <u>ODOT Transportation Asset</u> <u>Management Plan</u> is to improve and maintain bridge condition levels on the state highway system. From 2004 to 2021, Oklahoma improved from 49<sup>th</sup> to 5<sup>th</sup> in the nation for highway bridge condition. This Project aims to build on ODOT's success and continue addressing bridges that are structurally deficient or are at risk of becoming structurally deficient. The Project bridge condition had been classified as "Fair" until the most recent inspection in 2022, when it became classified as "Poor" after the substructure condition rating dropped. Additionally, reconstructing this structurally deficient bridge is consistent with one of the TAMP's State Key Performance Indicators to achieve and sustain less than 1% structurally deficient bridges.

# 2.2 Safety and Mobility

The I-35/I-240 interchange suffers from outdated design, including an inadequate number of lanes for accelerating and decelerating and tight turns on looped exit and entrance ramps. The surrounding area has seen continuous development over the last decade, which has contributed to population growth and a significant increase in traffic within the interchange. Greater traffic volume and inefficient design have contributed to the interchange's issues in recent years, with 2,585 reported crashes from 2012 to 2021 in the Project area, or almost one collision per day. The Project will address these concerns to dramatically improve safety and mobility on the roadway.

#### Geometric Design Improvement

The Project aims to transform the existing interchange into a contemporary urban design, as the cloverleaf, once suitable in the 1970s, is now outdated and ineffective. The new bridge layout will feature a three-level, partial cloverleaf interchange system designed to facilitate smooth and consistent driver performance. This design adheres to guidelines and design criteria in the latest edition of AASHTO's A Policy on Geometric Design of Highways and Streets. The existing design faces deficiencies in acceleration and deceleration lanes, along with tight radii in exit and entrance loop ramps. The Project addresses these issues by ensuring all entrance and exit ramps are well-designed, providing safe and acceptable merge and diverge lengths throughout the interchange area. Additionally, the Project includes two new loop ramps – I-240 eastbound to I-35 northbound and I-240 westbound to I-35 southbound – aiming to enhance traffic flow. Further improvements right exits and entrances only, maintaining single exits (except for eastbound I-240 requiring two exits for northbound and southbound I-35 movements). The design also includes two directional flyovers that facilitates seamless northbound I-35 to westbound I-240 and southbound I-35 to eastbound I-240 movements. Overall, the proposed design is poised to improve traffic operations on the interstate highways, fostering a more harmonious and efficient interaction with adjacent interchanges.









Figure 6. Existing Bridge

# Existing Bridge Condition

As of the 2022 inspection date, the overall bridge condition has been rated as "Poor" and was determined to be Structurally Deficient. The inspection conducted in August 2022, as documented in the <u>ODOT Bridge Inspection Report</u>, revealed numerous instances of moderate to large delamination on each cap in several areas. Consequently, the reduction in condition of the substructures resulted in the Structural Deficiency rating for the bridge. This, as well as the superstructure and deck elements being At-Risk in terms of condition assessment, has led to the need for reconstruction. <u>Section 2.1 State of Good Repair</u> provides further details.

# Effects of Traffic Collisions

In 2020, the high-volume I-35/I-240 interchange's reported average daily traffic (ADT) was 99,100 (ODOT Bridge Inspection Report [NBI No. 14493]). According to the ODOT traffic study map from Traffic and Engineering Division – Collision Analysis and Safety Branch, there were 2,585 reported crashes from 2012 to 2021 in the Project area. This equates to slightly more than 0.7 collisions per day during that period.

**Table 3** provides an outline of the types of collisions during this period. The main type of collision on the interchange was rear-end (front--to-rear) collisions, which account for 1,676 of the 2,585 crashes during this period. Of the 1,676 rear-end crashes, 387 caused injuries. One of the main reasons rear-end collisions occur on freeways is because of high levels of congestion; for example, these accidents occur when traffic is forced to stop while attempting to merge onto the interstate when other drivers are attempting to make their exit. These unsafe weaving zones are a result of the limited spacing between adjacent loop ramps. These rear-end crashes have lasting effect on the operational performance of traffic traveling throughout the interchange. As seen in **Figure 7**, during a severe crash that occurred along I-35 NB in December 2021 at 4pm, traffic speeds in the NB direction dipped 40mph and effects of queuing and speed reduction persisted for three hours after the incident. **Figure 7** shows traffic speed over time in mph, including mean mph (white); the 85<sup>th</sup> percentile (yellow) and 5<sup>th</sup> to 95<sup>th</sup> percentile (brown).

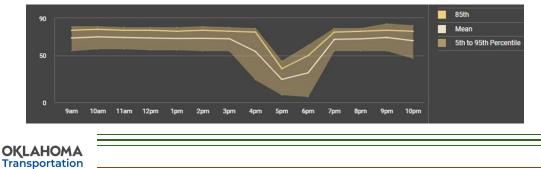


Figure 7. Streetlight Data Analysis of I-35 NB accident



Congestion is a concern at this location and will be addressed by the Project by increasing merging areas. Based on the expected changes in roadway geometry and lane capacity, the Project is expected to avoid 6 fatalities, 1,160 injuries, and 3,531 instances of property damage resulting from vehicle collisions over the 20-year analysis period. Because there is direct correlation between Oklahoma City's growing population and the continuously increasing ADT, it is imperative to reconstruct and improve the interchange to accommodate usage and improve safety.

Collision Type	Fatal	Injury	Property Damage
Rear-End (front-to-rear)	0	387	1,289
Head On (front-to-front)	0	1	0
Right Angle (front-to-side)	0	5	5
Angle Turning	0	0	5
Other Angle	0	0	0
Sideswipe, Same Direction	0	72	373
Sideswipe, Opposite Direction	0	0	3
Fixed Object	5	101	215
Pedestrian	0	0	1
Pedal Cycle	0	0	0
Animal	0	2	0
Overturn/Rollover	0	45	27
Vehicle-Train	0	0	0
Other Single Vehicle Crash	0	4	5
Other	0	5	35
Totals	5	622	1,958

Table 3. Total Crashes 2012 to 20	021
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# Mobility of People and Freight

The Project seeks to enhance mobility, efficiency, and reliability in the movement of both people and freight by reducing congestion and improving traffic flow with the proposed design. The Project aims to provide faster and more predictable commutes while benefiting the

movement of goods, including freight transported in large trucks. These improvements can boost the local and regional economy at this critical crossroads by reducing transportation delays and supporting a safer, more productive transportation system.

The Project's design aims to eliminate a crucial freight bottleneck in Oklahoma City, located within the National Highway Freight Network and Strategic Highway Network. The enhanced mobility is expected to decrease travel times for freight on I-35 through Oklahoma City, consequently facilitating smoother supply chain

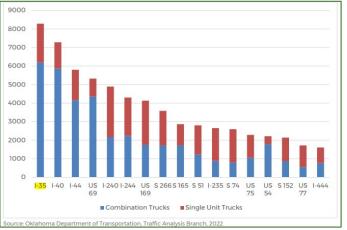


Figure 8. Major Oklahoma Truck Traffic Highways (2021)





movement because of reduced congestion and more predictable travel times. This improved traffic flow is anticipated to contribute to a robust and thriving economy in Oklahoma City, enhancing access to local and regional labor markets as well as recreational venues. Given the Project area falls within a Historically Disadvantaged Community, residents can also anticipate enhanced and fair access to good-paying jobs. Refer to <u>Section 2.5 Equity and Quality of Life</u> for more details. Furthermore, as shown on **Figure 8**, I-35 has the greatest truck volume in the state; therefore, it is critical to eliminate operating hindrances because of capacity restrictions. The Project will remove these deterrents by meeting design standards.

Based on a Build versus No-Build analysis, the Project will reduce annual vehicle-hours traveled (VHTs) for automobiles by 43,700 and by 3,800 for trucks. The Project will reduce annual person-hours traveled (PHTs) by 73,100 for automobiles and by 3,800 for trucks. The total number of vehicle-trips and related vehicle-miles traveled will be comparable for both the Build and No-Build scenarios. Consequently, no anticipated difference is expected in the person-miles traveled in the project area. Based on the Build versus No-Build results, the Project will improve mobility and access for local and regional traffic and freight, commuters, residents, and businesses. Refer to the BCA Memo for more details.

# 2.3 Economic Competitiveness and Opportunity

# Freight and Supply Chain Improvements

The I-35/I-240 interchange is critical to the local and national economy. In 2017, the movement of goods by truck accounted for 48% of Oklahoma's domestic transportation by tonnage and supported the Oklahoma economy in exporting 1.6 million tons of commodities worth \$5.5 billion, while receiving \$12 billion worth of imported <u>commodities</u>. In the opening year for the Project about 5.7 million freight trips will use the Project area, as described in the <u>BCA Memo</u>. Over the 20year analysis period in the BCA, the Project will see an average of over 20,000 freight trips per day.

Nationally, I-35 carries the most truck traffic in the state, providing a direct connection to Mexico to the south, through Texas, and Minnesota to the north,

#### Local Economy: Tinker Air Force Base

Tinker Air Force Base is the largest single-site employer in Oklahoma, employing more than 26,000 military and civilian employees. The installation has an annual statewide economic impact of \$3.51 billion, creating an estimated 33,000 secondary jobs. Tinker owns 4,048 acres, leases 810 acres, has 642 acres of easements, and is 6 miles east of the Project area, just north of I-240.

Source: <u>tinker.af.mil</u>, Tinker Air Force Base Fact Sheet

through six states. I-240 provides interchange connection to I-40, which spans the country east and west, and I-44, which connects to the Midwest.

Key Employment Centers	Approximate Distance from Project Area (measured on roadway network)	Nearest Interstate(s)	Number of Employees
Will Rogers World Airport	5.7 miles west	I-44, I-240	10,000
Oklahoma City Community College	5.5 miles west	I-44, I-240	1,000
Amazon Warehouse and Distribution	5.6 miles west	I-44, I-240	8,000
Hobby Lobby Corporate Offices, Warehouse and Distribution Center	10 miles west (northwest of Airport)	I-44	6,500
Tinker Air Force Base	6 miles east	I-240, I-40	26,000

#### **Table 4. Key Employment Centers**





Locally, this interchange, providing access to I-240, serves as a critical interstate connection for Oklahomans traveling in and around the region. Accessing employment opportunities drives Oklahoma's economy, and the Project will support economic opportunity for Oklahomans as this interchange and associated interstates are used to access many of the area's largest employment centers. **Table 4** and **Figure 9** identifies some of the key employers relative to the Project and the interstates that connect to the I-35 and I-240 Interchange area.

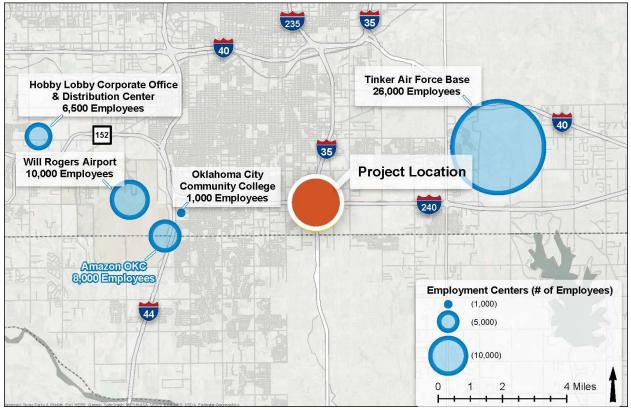


Figure 9. Key Employment Centers

# Anticipated Improvements and Benefits

A safe, reliable, well-performing interstate network is critical to maintaining Oklahoma's local economy and its contribution to the national economy. The I-35/I-240 interchange design, however, is outdated, consisting of too few lanes for accelerating and decelerating and exit and entrance ramp loops that are challenging to safely operate through. Increasing development around the interchange has led to an increase in population and daily activity, resulting in greater traffic volumes. When paired with an outdated design, this growth in volume contributes to unsustainable traffic congestion and unsafe driving conditions for all users.

Table 5. Basic Freeway Analysis (Existing & Proposed Design) Level of Service Utilizing				
Capacity				

Freeway Direction of	Location	LOS (Existing, 2013)	LOS (No Build, 2040)	LOS (Build, 2040)
Travel	Location	AM/PM Peak Hour	AM/PM Peak Hour	AM/PM Peak Hour
I-35 Northbound	South of SE 89 <sup>th</sup> St.	v/c = 0.97-0.79	v/c = 1.02-0.99	E/E
I-35 Northbound	North of On Ramp from SE 89th St.	v/c = 0.79-0.65	v/c = 0.86-0.82	D/D





I-35 Northbound	South of SE 59 <sup>th</sup> St.	E/D	E/E	E/E
I-35 Southbound	South of SE 59 <sup>th</sup> St.	D/E	E/E	E/E
I-35 Southbound	South of Off Ramp to SE 66 <sup>th</sup> St.	E/D	E/E	D/D
I-35 Southbound	North of SE 89 <sup>th</sup> St.	C/D	D/D	D/D
I-35 Southbound	South of SE 89 <sup>th</sup> St.	v/c = 0.79-0.97	v/c = 1.02-1.04	E/E
I-240 Eastbound	West of Shields Blvd.	C/D	E/F	C/D
I-240 Eastbound	East of Pole Rd.	D/D	F/F	B/C
I-240 Westbound	East of Pole Rd.	C/C	D/E	C/C
I-240 Westbound	East of Shields Blvd.	C/C	C/D	C/C

The Project's goal is to redevelop the interchange using current standards, featuring a three-level, partial cloverleaf interchange system designed to facilitate smooth, reliable, and predictable performance for drivers. The design will adhere or exceed the guidelines and design criteria in the latest edition of AASHTO's A Policy on Geometric Design of Highways and Streets and include features such as improved lane distribution, auxiliary lanes, and route connectivity. The design will deploy proper interchange form that reduces weaving movements within the interchanges, providing right-only exits and entrances.

The Project also proposes two loop ramps: I-240 eastbound to I-35 northbound and I-240 westbound to I-35 southbound. ODOT anticipates increased mobility, reduced congestion, and safer conditions for drivers with the development of the new ramps by separating merging movements, controlling speeds to adjust to traffic flow, and supporting consistent vehicle speeds for all drivers.

Table 6. The 2040 Level of Service (LOS) – Eight Primary Moven	nents, Existing &			
Proposed Design				

The Eight Prin	mar	y Movements	<b>Existing Conditions</b>	Proposed Design
Diverging		Merging	LOS AM/PM Peak Hour Diverging(Merging)	
I-35 Northbound	4-	I-240 Eastbound	E/E(E/E)	D/C(B/A)
	to	I-240 Westbound	F/F(F/F)	D/C(C/D)
I-35 Northbound	4-	I-240 Eastbound	B/C(E/F)	C/C(B/A)
1-55 Inormbound	to	I-240 Westbound	E/F(E/F)	C/C(C/D)
I-240 Eastbound t	to	I-35 Northbound	E/F(F/F)	C/C(E/E)
		I-35 Southbound	F/F(F/F)	A/B(v/c < 1)
I-240 Westbound	to	I-35 Northbound	C/D(E/E)	B/B(D/D)
		I-35 Southbound	F/F(B/C)	B/B(D/D)

# Supporting a Strong Economy and Labor Market

The Project supports a strong and growing economy by serving as a major connector between multiple interstates and providing access to thousands of local jobs for Oklahomans across the region.

In addition, the construction spending from the Project will support an estimated 425 professional services job-years and 1,300 construction job-years. ODOT has a comprehensive plan to promote equal opportunity to ensure those opportunities are distributed equitably, including removing barriers to hiring and preventing harassment on work sites. The plan





demonstrates action to create an inclusive environment with a commitment to equal opportunity, including the following:

- Affirmative efforts to remove barriers to equal employment opportunity above and beyond complying with federal law
- Proactive partnerships with the U.S. Department of Labor's Office of Federal Contract Compliance Programs to promote compliance with EO 11246 Equal Employment Opportunity requirements
- No discriminatory use of criminal background screens and affirmative steps to recruit and include those with former justice involvement, in accordance with the Fair Chance Act and equal opportunity requirements
- Efforts to prevent harassment based on race, color, religion, sex, sexual orientation, gender identity, and national origin
- Training on anti-harassment and third-party reporting procedures covering employees and contractors
- Maintaining robust anti-retaliation measures covering employees and contractors

ODOT uses FHWA Required Contract Provisions (FHWA-1273) to ensure all contractors, subcontractors, vendors, and materials suppliers who hold federal or federal-aid contracts of \$10,000 or more do not discriminate in employment and contracting. FHWA-1273 provisions incorporate civil rights provisions, including nondiscrimination, non-segregated facilities, equal employment opportunity and affirmative action requirements, minimum wage rates, payroll certifications and Occupational Safety and Health Administration accident prevention and jobsite safety.

ODOT Contract Compliance Division (CCD) implements and oversees the <u>ODOT</u> <u>Disadvantaged Business Enterprise (DBE) Program</u> and the Unified Certification Program for USDOT-funded recipients, assuring compliance with 49 Code of Federal Regulations (CFR) Part 26. Both consultants and construction contractors are required to meet the stated DBE commitments. ODOT CCD conducts reviews of contractors and subcontractors at any time to ensure compliance. In addition, ODOT requires the verbatim attachment of Appendices A and E of the Title VI Program Manual to all federally assisted contracts. The appendices specifically and directly address the nondiscrimination efforts required.

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

The reconstruction of the I-35/I-240 interchange will reduce air pollution and greenhouse gas emissions because of safety improvements and travel time reduction throughout the interchange. The Project is expected to result in higher throughput speeds for vehicles from less congestion during peak hours, resulting in an average reduction in total travel time of over 47,500 vehicle--hours per year. From 2012 to 2021, there was a total of 2,585 reported collisions in the Project area. Each of these crashes can cause traffic to back up or even come to a complete stop for extended periods of time. Avoided congestion from reduced collisions will result in a reduction in annual fuel consumption by an average of 9,400 gallons. By rebuilding this outdated cloverleaf interchange to a safer, more efficient design, a significant reduction of collisions and an increase in vehicular flow is expected, which will help eliminate some of the negative





environmental impacts to the surrounding communities caused by slow-moving and idling vehicles.

# Improving Resiliency of At-Risk Infrastructure

This Project will improve resiliency of at-risk infrastructure by reconstructing an interstate interchange with outdated geometrics, which includes replacing a structurally deficient bridge. While the current bridge is at the end of its useful life, the replacement bridge will bolster the structural and functional resiliency of this interchange for decades to come, with ODOT aiming for newly constructed bridge to have a 75-year service life.

The proposed bridge replacement and overall interchange reconstruction present noteworthy resiliency improvements compared to the existing condition. In addition to the pronounced risk posed by poor infrastructure conditions, the Project area also faces risks from many natural hazards, as outlined by the Federal Emergency Management Agency (FEMA) National Risk Index. According to the National Risk Index, both census tracts surrounding the I-35/I-240 interchange, 401091073.02 and 401091073.03, are at relatively high to very high risk for hail, heat waves, and tornadoes. These weather events, combined with structurally deficient infrastructure, can present serious impacts to the health, safety, mobility, and resiliency of the regional and national transportation system. The impact of these natural weather events was factored into the design of the new bridge and interchange, as was the ability to withstand seismic events that begin increasing in frequency in the state in the early 2010s, as referenced in the State of Good Repair section.

#### Addressing Disproportionate Impacts on Disadvantaged Communities

Two census tracts surround the I-35/I-240 interchange, with both classified as disadvantaged because they meet more than one burden threshold and the socioeconomic threshold. In fact, both tracts face a particularly high economic burden because they are both above the 95th percentile for low-income residents, according to the CEJST. In addition, residents in the census tract just northwest of this interchange experience asthma rates in the 95th percentile and heart disease rates in the 94th percentile. Residents living adjacent to the interchange to the south and east experience asthma and heart disease rates at similarly high rates (91st and 93rd percentiles, respectively).

The Project will improve safety and mobility for these low-income communities that use I-35 and I-240 to access central Oklahoma City, job opportunities at major employers such as Tinker Air Force Base and the Will Rogers International Airport, educational opportunities at institutions such as the Oklahoma City Community College, and daily destinations, including parks, healthcare facilities, schools, and grocery stores. In addition, the Project will reduce congestion at the interchange, leading to a reduction in air pollution in the adjacent communities, which face high levels of asthma and heart disease. Refer to the Level of Service tables (**Table 5** and **Table 6**) to review the expected change in congestion in the interchange. The resulting reduction in pollution could improve health outcomes in these communities.





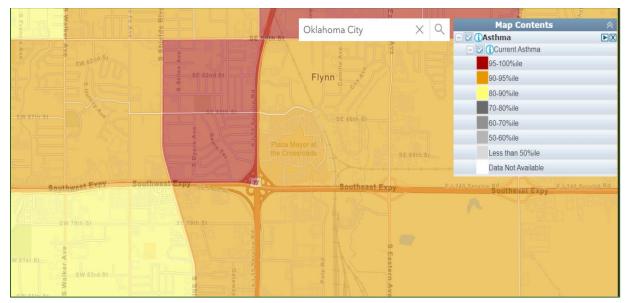


Figure 10. Asthma Rates in Census Tracts Surrounding Project Area (EPA EJ Screen)

# 2.5 Equity and Quality of Life

# Project Benefit to Other Transportation Options

Automobiles, both personal vehicles and large commercial trucks, are the predominant transportation mode through the Project area. The I--35/I-240 bridge does not accommodate designated bicycle or pedestrian paths within the interchange, and because of the nature of the Project, these "active, alternative" modes are restricted for safety reasons. While bicycles and pedestrians are not included within the interchange or along the interstates, there are clear benefits to improving transportation choices with the development of a safer, more reliable interchange. **Figure 2.** Project Location shows the local bus network, as well as the existing and future bike network within the study area.

#### Expanding Transportation Choices

- Embark, Oklahoma City public transit agency, operates two bus routes through and around this interchange. A safer and more reliable interchange will improve transit performance by reducing route travel times and also improve system performance by reducing delays and potentially missed connections with other Embark bus routes.
- Alleviating traffic congestion leading to and through the interchange will result in fewer detours onto adjacent, local streets, improving air quality for adjacent communities and neighborhoods.
- Improved travel times and traffic flow through the interchange will improve and potentially increase active transportation options, such as walking, biking, and using a mobility device on the local streets surrounding the interchange.





# Improving Access

The Project will improve access to daily destinations to jobs, educational opportunities, medical appointments, essential services, entertainment events, and more—by reducing traffic congestion and improving travel times. It will also improve safety by reducing the number of vehicle crashes. While active modes are not included into the Project because of the nature of access-controlled interstate roadways, the Project does support public transportation operations.

Embark Route 24 uses I-35 to operate as an express route from Norman, Oklahoma, to downtown Oklahoma City to north Oklahoma City. Route 24 will better maintain its on-time performance with safer and improved traffic flows that will result from this Project. Embark Route 14 also operates around the interchange and within the Project area, running on I-35 just north of the interchange and on adjacent, local streets. Congestion that originates from the interchange impacts the rest of the transportation network and the way in which transit operates, as well as the transportation on local streets around the interchange.

#### Future High-capacity Transit

Future high-capacity transit is set to run parallel with the project area, increasing future transit-oriented development, leading to increased vehicle trips to retail, housing, and park-and-ride lots for transit access. A safer and more accessible interchange will better facilitate all related future automobile trips.

Source: Regional Transportation Authority of Central Oklahoma (RTA) North-South Corridor Locally Preferred Alternative Factsheet





This Project could not only improve how well people or goods get from point A to point B but also expand access around the interchange for the local community by improving operations of the interchange and interstate system. The land uses surrounding the Project's interchange is varied and unique and serves a diverse demographic, including children, teenagers, residents, employees and employers, and the area's local electricity provider.

Assessing the interchange in four segments, the northwest quadrant is made up of single-family residential housing and the northwest quadrant is made up of Crossroads Mall, which partially functions as a mall but has evolved over time to

support the operation of Santa Fe South Hills Elementary School and Santa Fe South Charter High School. Dove Science Academy South Middle School, the Crossroads Islamic Center of Oklahoma, and other commercial businesses are just outside of the Mall. Oklahoma Gas & Electricity Company operates a large service center in the southeast quadrant, and land in the southwest quadrant is home to Oklahoma Department of Motor Vehicle facility and an ODOT facility. This unique mix of land uses provides a consistent stream of activity around and through the Project area, and preserving the local functionality by enhancing interstate operations is a critical outcome in maintaining and improving access for all transportation users.

#### Project Public Engagement

ODOT is committed to employing meaningful community engagement strategies that involve and incorporate diverse input for Project planning and decision making. ODOT also understands that, because of this Project's magnitude, successful community engagement will require an





understanding of the surrounding community demographics, strong relationships with impacted communities, an understanding of the communities' wants and needs, broad representation of the communities, tailored engagement techniques for each community, and accessible documentation of the communities' impacts on decisions.

#### Engagement Activities and Ongoing Strategies

ODOT has completed a variety of public outreach efforts for this Project dating back to the early 2000s. More recent outreach has included the following:

- Public meeting in which 70 people attended, asked questions, and provided comment on traffic congestion, safety, Project schedule, funding, noise, and health concerns from construction activities.
  - Public meeting announcement included date, time, and location, as well as background information providing Project detail and context for attendees.
- Written comment from community members.
- Agency comment from Oklahoma Conservation Commission, Oklahoma Water Resources Board, and the Oklahoma Tourism and Recreation Department.

#### Tools and Activities for Public Engagement

ODOT uses a fully equipped toolbox for engagement. Activities are selected and tailored to meet the needs of specific community groups and project type. Tools include the following:

- *Project website*
- Direct mail
- Canvassing project areas
- Visualizations
- Public notices
- Media releases
- Social media
- Stakeholder meetings
- Public meetings and open houses
- Pop-up booths
- Surveys
- Workshops
- South Oklahoma City Chamber of Commerce and local business written comment and feedback.

Outreach is ongoing, and because the Project area is within both an Area of Persistent Poverty and Historically Disadvantaged Community (**Figure 3**), ODOT will continue to engage the surrounding communities and respond with appropriate mitigation solutions.

In addition to following public involvement requirements within Title 23 of the CFR, ODOT's engagement and outreach efforts align with the USDOT's six key features of public involvement outlined in the USDOT's *Promising Practices for Meaningful Public Involvement in Transportation Decision-Making Guide*, as shown in **Table 7**.

USDOT Key Features of Public Involvement	Engagement Strategy Areas
<ul> <li>Understanding community demographics</li> </ul>	<ul> <li>Define Goals and Objectives</li> <li>Defining the goals and objectives for Project engagement helps determine who the audience for engagement is and indicates key milestones.</li> <li>ODOT's goals align with state-wide strategies and the expectations and needs of both the community and road users.</li> </ul>

#### Table 7. Public Engagement Strategy Guide





USDOT Key Features of Public Involvement	Engagement Strategy Areas
Understanding community wants and needs	<ul> <li>Understanding the Context</li> <li>Understanding the context considers the various communities impacted by the Project and how the Project addresses the needs of traditionally underserved and historically marginalized groups.</li> <li>ODOT has paid special attention to area context because of this Project being both in an Area of Persistent Poverty and a Historically Disadvantaged Community. The Project provides an opportunity to improve the financial and physical wellbeing of residents by providing better access to good-paying jobs and reducing air pollution.</li> </ul>
<ul> <li>Building durable community relationships</li> <li>Involving broad representation of community</li> </ul>	<ul> <li>Identify Groups and Stakeholders</li> <li>Identifying the engagement audience into two categories: community members who directly benefit and community members who indirectly benefit (partner agencies or organizations). Considering who may potentially be left out of the public involvement process will be critical to ensuring an inclusive strategy.</li> <li>This process has been ongoing as ODOT has received comments from partner state agencies and will continue to communicate based on the specifics of the Project.</li> </ul>
<ul> <li>Using community preferred engagement techniques</li> </ul>	<ul> <li>Develop Engagement Strategy and Activities</li> <li>Designing engagement activities, along with level of engagement, in ways that best benefit the communities to gather pertinent information and support key Project milestones. Activities might include a mix of both virtual and in-person engagement actions, depending on the most effective approach to promote community engagement.</li> <li>ODOT's Project website, public engagement outreach, and public meetings have all spurred critical feedback for the Project so far.</li> </ul>
<ul> <li>Documenting and sharing community's impact on decisions</li> </ul>	<ul> <li>Analyze Feedback and Data</li> <li>ODOT team members analyze and evaluate feedback received, include follow-up engagement on an as-needed basis, and incorporate it to further refine and improve how the program is developed and managed.</li> <li>ODOT has a strong track record of responding to public comments and providing those questions and responses as part of meeting summaries, posting them, and making them available during public engagement activities.</li> </ul>
	<ul> <li>Provide Updates</li> <li>Providing Project updates through continuous communication will be helpful in keeping the public informed.</li> <li>ODOT has done and will continue to provide these updates in a variety of ways, including email and website updates, newsletters, and coordination across partners.</li> <li>Post-Project Engagement</li> <li>Finally, post-Project engagement activities will allow ODOT, impacted community groups, and other Project partners and supporters to evaluate the effectiveness of a proposed response or mitigation solution.</li> <li>ODOT achieves this through public-facing responses and a commitment to stated solutions.</li> </ul>





# 2.6 Innovation

The Project presents a unique avenue for innovation by bundling various components of the bridge improvement (broken into Phases 2, 3, and 4). This innovative approach translates into significant advantages in cost and time efficiency. By combining these distinct phases into a unified Project, it becomes possible to streamline the entire process, presenting the opportunity to issue a single construction contract.

This consolidated approach stands in contrast to the traditional method of staggering work across multiple projects and relying on the periodic availability of regular state and federal funding. The traditional approach often involves delays as each phase must wait for the allocation of funds, leading to prolonged project timelines. In contrast, the Project's strategy of bundling multiple components accelerates the construction timeline and minimizes the overall Project duration. This not only expedites the completion of the interchange improvements but also contributes to substantial cost savings, making the Project more efficient and financially prudent.

In addition, ODOT will incentivize contractors who deliver construction ahead of schedule and are able to open bridges and roadways to traffic earlier than anticipated through the "No Excuses Bonus" innovative Project delivery approach. ODOT will incentivize contractors to achieve early delivery of the whole Project and stages open to traffic early by deploying no excuses bonuses, including a substantial completion incentive valued at five to 10% of the contract and smaller incentives for internal milestones tied to key Project elements. Finally, ODOT has implemented e-contracting agency-wide to streamline the contract process and deliver projects more quickly.

# 3. Benefit-Cost Analysis

A BCA was conducted for the Project for submission to USDOT as a requirement of the Fiscal Year 2023 to 2026 BIP. The analysis was conducted per the benefit-cost methodology outlined by USDOT in the *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* published in January 2023. The analysis period corresponds to 26 years and includes 6 years of construction and 20 years of benefits after the first full year of operations begins in 2029.

The capital cost for this Project is expected to be \$125.3 million in undiscounted 2021 dollars. At a 7% real discount rate, these costs are \$89.3 million in 2021 dollars. Net operations and maintenance costs are projected to average \$45,000 per year in undiscounted 2021 dollars over the analysis period. Over the entire 20-year operations period, these costs accumulate to a cost of \$0.9 million in undiscounted 2021 dollars, or \$0.3 million when discounted at 7%. Finally, because of deferring planned rehabilitation into future years, the Project generates a cost savings of \$6.8 million in 2021 dollars over this same period, or \$3.1 million when discounted at 7%.

The Project is expected to generate benefits valued at \$100.7 million in discounted 2021 dollars using a 7% discount rate. The construction of the additional ramps and flyovers, and the replacement of the existing bridge will increase available capacity while facilitating the movement of personal vehicles and freight trucks through the I-35/I-240 interchange. In addition to enabling better operational performance of vehicle traffic, the proposed improvements are expected to reduce the risk of fatalities, injuries, and property damage associated with vehicle collisions. These impacts result in an overall Project Net Present Value of \$11.4 million and a Benefit-Cost Ratio of 1.13. As such, the Project is expected to generate economic benefits that outweigh its costs. The summary of the BCA results can be seen in **Table 8** and detailed analysis can be found in the <u>BCA Memo</u>.





BCA Metric	Monetized Value (undiscounted)	Monetized Value (discounted at 7%)
Total Benefits	\$340,239,000	\$100,734,000
Total Costs	\$125,322,000	\$89,346,000
Net Present Value	\$214,918,000	\$11,388,000
Benefit-Cost Ratio	2.71	1.13

#### Table 8. Summary of Benefit-Cost Analysis Results

# 4. Project Readiness and Environmental Risk

# 4.1 Technical Feasibility and Technical Competency

ODOT began evaluating the interchange as early as 1988 for potential improvements. ODOT has completed various studies involving the Project since, including <u>The Preliminary Design Study</u> for I-35/I-240 (1988), Functional Plan Report for the I-35/I-240 Interchange (2002), an <u>Environmental Assessment (EA) (2005) and subsequent reevaluations (2013, 2015), and an Access Justification Report (AJR) (2015)</u>.

The AJR was a request to FHWA for an access revision to the I-35/I-240 interchange in Oklahoma County. The AJR justifies the proposed improvements are truly needed for this interchange because of the lack of proper acceleration and deceleration lanes, exit and entrance loop ramps with tight radii, and substantial traffic growth because of development and linkage to major employment centers in the area. Evaluating traffic operational analyses and the existing accident rate, the AJR affirms traffic growth and design deficiencies have all contributed to the problems this interchange has experienced in recent years.

The EA was developed to show not only the environmental impacts of the reconstruction to the interchange but also the social and economic impacts. The document complies with the National Environmental Policy Act of 1969 (NEPA). A noise study was also conducted as part of the EA. The main purpose of the noise study was to determine the noise impacts and the possible mitigations to these impacts from the proposed interchange improvements. Environmental impacts, threatened or endangered species, and others.

The Project was designed in accordance with the ODOT's 2019 Standard Specifications for Highway Construction, 2019 Roadway Design Standards, 2009 Bridge Standards, 2009 Traffic Standards, and other design documents developed by ODOT, AASHTO, FHWA, and other organizations.

# Basis for Cost Estimate

Costs estimates for the Project were based on the final design plans for Phases 2 and 3 and the 60% preliminary design plans for Phase 4. The estimates include a 20% contingency because of the Project's complexity and importance to the state and National Highway Freight Network.

# Technical Capacity

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 received hundreds of millions of dollars in federal discretionary funding and has experience managing large and complex projects funded in part by USDOT, including projects funded through Better Utilizing Investments to Leverage Development (BUILD), Competitive Highway Bridge Program (CHBP), Infrastructure For Rebuilding America (INFRA), Rebuilding





American Infrastructure with Sustainability and Equity (RAISE), and Transportation Investment Generating Economic Recovery (TIGER) grants.

Furthermore, ODOT manages a large portfolio of federal funds programmed within the <u>FFY-2024 through FFY-2031 Construction Work Plan</u>. This \$8.8 billion program, the largest construction workplan in state history, annually reprioritizes projects based on available state and federal appropriations and is currently 60% federally funded. 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 ensure the Project meets all federal requirements.



Figure 12. Congestion at the current interchange

# 4.2 Project Schedule

**Figure 13** shows the Project schedule and outlines major milestones. ODOT is on track to obligate funds well in advance of the USDOT statutory deadline for the BIP Grant and will begin construction quickly after obligation of grant funds. NEPA has been completed for the Project; an EA was conducted in 2003, and a reevaluation was completed in December 2015. The right of way (ROW) has been acquired for the Project, with most of the ROW acquisition taking place between 2004 and 2006 and final ROW acquisition completed in 2017. No additional ROW is required for the Project. Utility coordination has also been completed for the Project as of February 2023, including coordination with all affected utilities. Permitting will be completed by January 2024, when the U.S. Environmental Protection Agency (EPA) *Clean Water Act* (CWA) 404 Permits for the final phase (Phase 4) of the Project are expected to be obtained. Permits for previous Project phases have been obtained already, and no delays are expected. All state and local approvals have been obtained. Project letting will be in September 2025. Project construction will begin in January 2026 and will be complete in spring 2028.





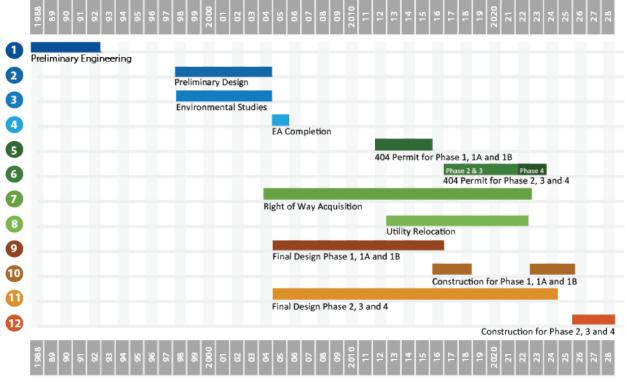


Figure 13. Project Schedule

# 4.3 Required Approvals

# Environmental Permits and Reviews

All environmental work for the Project has been completed, with an EA completed in September 2005 and reevaluations completed in 2013 and 2015. The <u>most recent reevaluation</u> was completed December 1, 2015. EPA CWA 404 Permits have been acquired for Phases 2 and 3 of the Project as of September 15, 2023, and are expected to be obtained for Phase 4 of the Project in January 2024. No delays are anticipated.

# State and Local Approvals

The Project is included on page 18 of the <u>FFY-2024 through FFY-2031 Construction Work Plan</u> as I-35 @ the I-240 Junction Phase 2: 09032(06), Phase 3: 09032(07), and Phase 4 09032(08) Reconstruct Interchange. No additional state or local approvals are anticipated for the Project.

# Federal Transportation Requirements Affecting State and Local Planning

The Project is included in relevant state and local transportation plans, including the ODOT <u>FFY-2024 through FFY-2031 Construction Work Plan</u>, as described in the State and Local Approvals section. In addition, the Project is listed in the <u>FFY 2022-2025 Statewide</u> <u>Transportation Improvement Program</u> (STIP; JP #903208, JP #903207, and JP #903206).

The Project is also included on page 6-14 of the <u>Oklahoma Freight Transportation Plan, 2023-</u>2030, which identifies I-35 as the roadway with the highest volume of truck traffic in Oklahoma.





# Assessment of Project Risks and Mitigation Strategies

ODOT has considered the following Project risks and put mitigation strategies in place to prevent potential delays:

- **Cost Overruns**: Construction prices, including costs of materials and labor, have been trending upward in recent years with inflation. Cost estimates include the most recent escalation factors to accommodate the foreseeable increases. ROW has been acquired already, limiting the impacts of inflation and risk of cost overruns for this Project.
- **Procurement**: The risk of procurement delays will be reduced by bundling the remaining phases into a single Project, allowing ODOT to streamline the procurement process and potentially issue a single construction contract.

# 5. Administration Priorities and Departmental Strategic Plan Goals

# 5.1 Safety

The Project includes substantial safety benefits by bringing an outdated interchange that currently sees an average of <u>0.7 collisions per day</u> up to modern design standards. The upgraded interchange will remove the limitations known to contribute to collisions while simultaneously replacing a bridge listed as structurally deficient on the NBI, avoiding additional potential safety risks from disrepair. Specific safety benefits and improvements are outlined in detail in Section <u>2.2</u> Safety and Mobility. The Project will not negatively impact the overall safety of the traveling public; ODOT follows strict safety protocols in construction projects, and upgrades to the roadway will improve safety for the traveling public as the new bridge layout will feature a three-level, partial cloverleaf interchange system designed to facilitate smooth and consistent driver performance and reduce the risk of collisions.

# 5.2 Climate Change and Sustainability

The Project will reduce greenhouse gas emissions from the transportation sector by reducing congestion and idling vehicles on the roadway that has the highest volume of <u>truck traffic</u> in the state of Oklahoma and is within disadvantaged communities that face <u>high rates of asthma</u> (above the 90<sup>th</sup> percentile nationwide). Evidence-based climate resilience measures, including upgrades to existing drainage structures and new drainage structures, have been incorporated into the Project. Extensive <u>community engagement</u> has addressed environmental justice in the planning stage and will continue to do so during Project delivery. ODOT has <u>completed an EA</u> and received a Finding of No Significant Impact (FONSI), indicating the Project avoids adverse environmental impacts to water quality, wetlands, and endangered species. The Project also addresses <u>disproportionate negative impacts on disadvantaged communities</u> by reducing congestion and the resulting air pollution in census tracts identified as disadvantaged in the CEJST.

# 5.3 Equity

The Project will include an equity assessment to evaluate how the Project will create proportional impacts and remove transportation-related disparities to populations within the Project area. As a preliminary step, the CEJST and USDOT ETC explorer have been consulted, and a preliminary analysis of the burdens faced by adjacent communities has been conducted. Further analysis and assessment of impacts will be conducted as part of the Project. Meaningful public engagement will take place throughout the Project lifecycle, and this approach has been outlined in the Section 2.5 Equity and Quality of Life. The Project will connect Americans to good-paying jobs at critical job centers in the Oklahoma City region and improve access to resources for Americans throughout the region and nation by reducing supply chain bottlenecks





at a critical crossroads. Finally, the Project will dramatically improve safety at a congested interchange with a bridge on the NBI that has been found to be in poor condition.

# 5.4 Workforce Development, Job Quality, and Wealth Creation

The Project, a major infrastructure initiative, requires a diverse range of skilled workers, from engineers to construction laborers, and is set to generate significant employment opportunities, contributing to local economic growth (see details in <u>Section 2.3 Economic Competitiveness and Opportunity</u>). It is expected to create approximately 425 job-years in professional services and 1,300 in construction. ODOT's commitment to equitable employment includes exceeding federal equity laws, ensuring compliance with Equal Employment Opportunity standards, inclusive recruitment, and strong anti-harassment measures, along with training and robust anti-retaliation policies for employees and contractors.

In support of DBE firms, the Project incorporates strategies for non-discrimination and actively promotes local DBE firms in state contracts, adhering to Oklahoma law that requires justifying the selection of non-local companies unless they present the lowest bid.

Furthermore, State of Oklahoma has <u>103 registered apprenticeship programs</u>, overseen by the US Department of Labor, which are pivotal to enhancing workforce skills, particularly in key sectors like transportation. The Project could leverage and benefit from the state's workforce development initiatives, particularly in terms of employing skilled workers from apprenticeship programs and contributing to local economic growth through job creation and infrastructure improvement.

# 6. DOT Priority Considerations

The Project aligns with DOT Priority Considerations by targeting the improvement of a bridge currently rated in poor condition and identified as structurally deficient in the 2022 inspection. While the bridge's original geometric design standards met the requirements at the time of construction, they no longer conform to current standards. For example, the existing pier locations of the bridge reduce shoulder widths along I-35 and fail to meet current geometric design standards. This inadequacy has led to the bridge being classified as "Functionally Obsolete." Furthermore, the existing design is an outdated full cloverleaf interchange connecting the high-volume I-35 and I-240 in Oklahoma City. The proposed redesign adheres to AASHTO's A Policy on Design Standards and ensures the inclusion of the eight primary basic movements essential for a system interchange. This includes the careful design of all entrance and exit ramps to guarantee safe merging and diverging, details provided in Geometric Design Improvement. In terms of project readiness, the Project has advanced to a stage where it is poised for the next phase of delivery. The Project has obtained a Finding of No Significant Impact (FONSI), signaling readiness for construction funding. However, there is a necessity for contractor coordination, which is currently pending. While Project development is fully accomplished, the awaiting factors for Project delivery include securing funds.

