



Multimodal Project Discretionary Grant Application

CROSSROADS-OF-AMERICA:

Replacing Bridges on I-35/I-240 in Oklahoma City

Project Outcome Criteria

Grant Request:
\$61,250,000

Total Project Cost:
\$122,500,000

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OKLAHOMA
Transportation

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1. Project Outcome Criteria

This section describes how the Crossroads of America: Replacing Bridges on I35/I-240 in Oklahoma City Project (Project) aligns with each of the six Project Outcome Criteria for the Multimodal Project Discretionary Grant Program (MPDG), as summarized in Table 1.

Table 1. Project Outcome Criteria and Project Benefits

MPDG Project Outcome Criteria	How this Project Addresses the MPDG Project Outcome Criteria
Safety	<ul style="list-style-type: none"> ▪ Is expected to avoid 4 fatalities, 712 injuries, and 2,170 instances of property damage resulting from vehicle collisions over the 20-year analysis period
State of Good Repair	<ul style="list-style-type: none"> ▪ Addresses transportation vulnerabilities and restores a critical bridge to a state of good repair
Economic Impacts, Freight Movement, and Job Creation	<ul style="list-style-type: none"> ▪ Creates beneficial long-term efficiencies for reduced travel time, increases travel time reliability, and expands job opportunities in the region ▪ Addresses a critical freight bottleneck and encourages supply-chain efficiency ▪ Supports the creation of high-quality jobs along with Disadvantaged Business Enterprise (DBE) and apprenticeship programs so economic benefits are distributed equitably
Climate Change, Resiliency, and the Environment	<ul style="list-style-type: none"> ▪ Reduces congestion and idling vehicles on the roadway that has the highest volume of truck traffic in the state of Oklahoma and is within disadvantaged communities that face high rates of asthma ▪ Improves the resilience of the infrastructure by designing to withstand seismic events in a state with increasing seismic activity ▪ Includes evidence-based climate resilience measures, including upgrades to existing drainage structures and new drainage structures
Equity, Multimodal Options and Quality of Life	<ul style="list-style-type: none"> ▪ Enhances mobility and improves access to daily destinations, such as jobs, healthcare, and parks, in a disadvantaged community, including through reduced transit route travel times ▪ Improves freight access within a disadvantaged community
Innovation	<ul style="list-style-type: none"> ▪ Technology: Incorporates Warm Mix Asphalt, which offers a range of benefits that align with modern sustainability and performance goals while also addressing environmental concerns ▪ Project Delivery & Financing: Results in a 15% overall cost savings each for Phases 2, 3, and 4 of the Project through bundling ▪ Project Delivery: Uses e-contracting to reduce errors, improve efficiency, enhance transparency, and contribute to substantial cost and time savings

1.1 Safety

PROMOTES SAFER SPEEDS THROUGH CONTEXT-APPROPRIATE ROADWAY DESIGN

The Project improves safety by bringing an outdated interchange that currently sees an average of 0.7 collisions per day 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 National Bridge Inventory (NBI), avoiding additional potential safety risks from disrepair. ODOT

follows strict safety protocols in construction projects, and upgrades to the roadway will improve safety for the traveling public.

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 1 collision per day. The Project will address these concerns to dramatically improve safety and mobility on the roadway.

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 American Association of State Highway and Transportation Officials' *A Policy on Geometric Design of Highways and Streets*. The existing design (Figure 1) faces deficiencies in acceleration and deceleration lanes, along with tight radii in exit and entrance loop ramps. The Project addresses these issues through well-designed entrance and exit ramps, providing safe and acceptable merge and diverge lengths throughout the interchange area. Additionally, the Project includes two new loop ramps—the I-240 eastbound to I-35 northbound and the I-240 westbound to I-35 southbound—aiming to enhance traffic flow. Further improvements include 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 facilitate 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 1. Existing Bridge



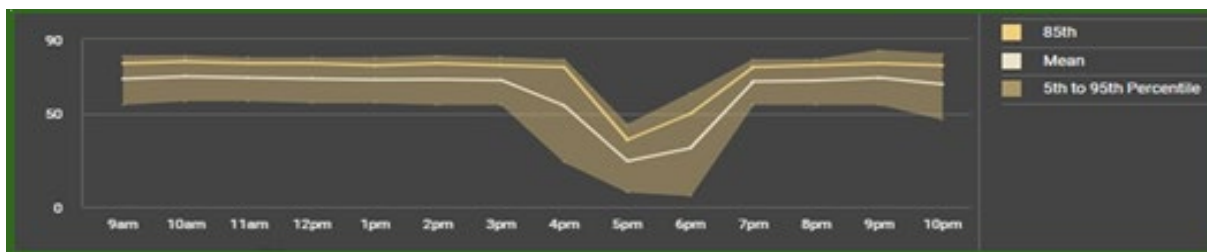
SIGNIFICANTLY REDUCES FATALITIES OR SERIOUS INJURIES

The Project is expected to avoid 4 fatalities, 712 injuries, and 2,170 instances of property damage resulting from vehicle collisions over the 20-year analysis period as determined by the [benefit-cost analysis](#). Because of the high average daily traffic (ADT) and current roadway configuration, there have been frequent collisions at this location. In 2020, the high-volume I-35/I-240 interchange's reported 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 2 outlines 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 crashes occur when traffic attempting to merge onto the interstate is forced to stop when other drivers are attempting to exit. These unsafe weaving zones are a result of the limited spacing between adjacent loop ramps. These rear-end crashes have lasting effects on the operational performance of traffic traveling throughout the interchange. As seen on Figure 2, during a severe crash that occurred along I-35 northbound in December 2021 at 4 p.m., traffic speeds in the northbound direction dipped 40 miles per hour (mph), and effects of queuing and speed reduction persisted for 3 hours after the incident. Figure 2 shows traffic speed over time in mph, including mean mph (white), the 85th percentile (yellow), and 5th to 95th percentile (brown).

Figure 2. Streetlight Data Analysis of I-35 NB Accident



Congestion is a concern at this location, and the Project will address congestion by increasing merging areas. The Project’s expected changes in roadway geometry and lane capacity are anticipated 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.

Table 2. Total Crashes 2012 to 2021

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

Collision Type	Fatal	Injury	Property Damage
Other Single Vehicle Crash	0	4	5
Other	0	5	35
Totals	5	622	1,958

PROTECTS NON-MOTORIZED TRAVELERS FROM SAFETY RISKS

Transit riders living and working near the Project area will benefit from improved safety and reduced congestion resulting from the Project. While bicycles and pedestrians are not included within the interchange or along the interstates for safety reasons, improved travel times and traffic flow through the interchange could decrease traffic on local streets surrounding the interchange, allowing pedestrians and cyclists to more safely access daily destinations on local streets, as discussed in [Section 1.5](#).

1.2 State of Good Repair

RESTORES EXISTING CORE INFRASTRUCTURE TO A STATE OF GOOD REPAIR

The I-35/I-240 bridge needs significant upgrades and repairs because of its age, outdated design, and poor 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 [ODOT Bridge Inspection Report](#), revealed numerous instances of moderate to large delamination on each cap in several areas. Consequently, the reduction in substructure condition resulted in the bridge’s Structural Deficiency rating. This, as well as the superstructure and deck elements being At Risk in terms of condition assessment, has led to the need for reconstruction.

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’s 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’s being listed as “Functionally Obsolete.” This condition presents a safety risk and will be remedied by the Project.

Furthermore, the pavement condition is notably poor, as evident from visible cracks and spalling (Figure 3). According to 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 western end of the span. Addressing these issues promptly is crucial to enhancing safety and providing a smoother driving experience for commuters.

ADDRESSES CURRENT AND PROJECTED VULNERABILITIES THAT THREATEN FUTURE TRANSPORTATION NETWORK EFFICIENCY

The bridge’s current pier spacing limits mobility for both people and goods passing through this critical corridor for freight and access to opportunities. 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, which is 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.

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.

This Project will address projected vulnerabilities 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 the newly constructed bridge to have a 75-year service life.

Figure 3. Existing Bridge Condition: Pavement



LOWER LONG-TERM MAINTENANCE COSTS

The anticipated annual maintenance expenses for the Project are estimated at \$53,200 per year. The significant rehabilitation costs are projected to reach \$14.5 million over 20 years in the absence of the Project. 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 over \$7 million in planned repair and rehabilitation work on the roadway and bridge.

Figure 4. Existing Bridge Condition: Spalling



INCLUSION IN AN ASSET MANAGEMENT PLAN

One of the major asset management objectives found in the [ODOT Transportation Asset Management Plan](#) is to improve and maintain bridge condition levels on the state highway system. From 2004 to 2021, Oklahoma improved from 49th to 5th 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 Transportation Asset Management Plan's State Key Performance Indicators to achieve and sustain less than 1% structurally deficient bridges.

ODOT will align the maintenance of the constructed bridge with the organization's Transportation Asset Management Plan. 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 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. Funding for the Project's maintenance costs will be allocated by ODOT through their dedicated maintenance fund.

1.3 Economic Impacts, Freight Movement, and Job Creation

ECONOMIC IMPACTS

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. I-35 is a major north-south corridor, while 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. The improved traffic flow resulting from the Project 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. These two Interstate Strategic Highway Network routes play a crucial role to the economy, defense, and mobility of the United States. The Build versus No-Build results demonstrate that the Project will improve mobility and access for local and regional traffic and freight, commuters, residents, and businesses. Refer to the [BCA Narrative](#) for more details. Given the Project area falls within a Historically Disadvantaged Community, residents can also anticipate enhanced and fair access to good-paying jobs.

JOB CREATION

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 so that 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

Furthermore, the state of Oklahoma has [103 registered apprenticeship programs](#), overseen by the U.S. 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.

ODOT uses Federal Highway Administration (FHWA) Required Contract Provisions (FHWA-1273) to verify that 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.

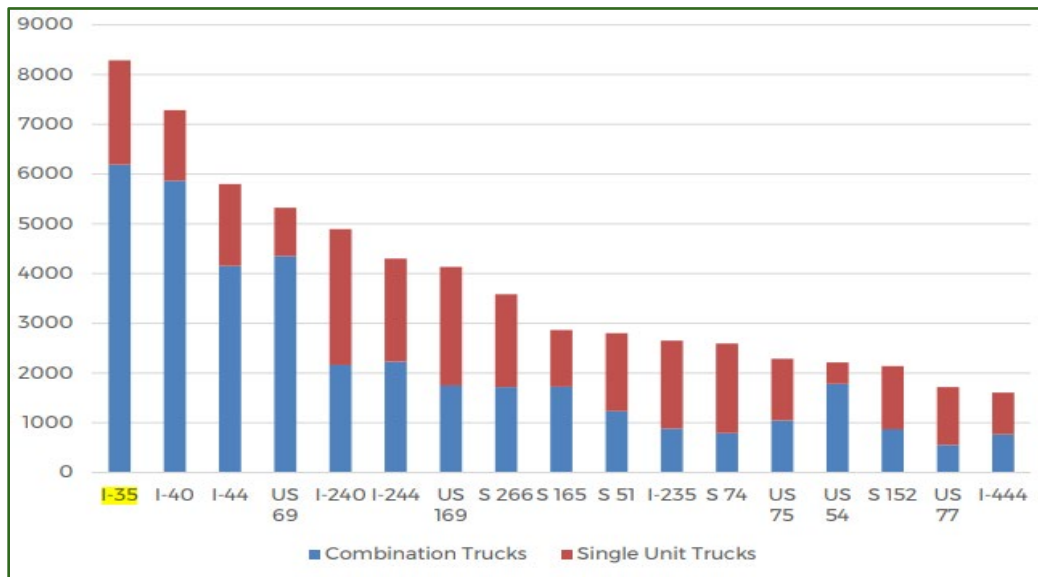
In support of DBE firms, the Project incorporates strategies for nondiscrimination and actively promotes local DBE firms in state contracts, adhering to Oklahoma law that requires justifying the selection of non-local companies unless they present the lowest bid. ODOT Contract Compliance Division implements and oversees the ODOT DBE Program and the Unified Certification Program for U.S. Department of Transportation (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 Contract Compliance Division conducts reviews of contractors and subcontractors at any time to verify 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.

IMPROVING FREIGHT MOBILITY

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 by 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.

Figure 5 shows the truck volume on major roads in Oklahoma in 2021.

Figure 5. Major Oklahoma Truck Traffic Highways (2021)



Source: ODOT, Traffic Analysis Branch, 2022

The Project’s design aims to eliminate a critical 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 movement because of reduced congestion and more predictable travel times. As shown on Figure 4, I-35 has the greatest truck volume in the state; therefore, it is critical to eliminate operating hindrances caused by capacity restrictions. The Project will remove these deterrents by meeting design standards.

Though I-35 is vitally important to the state of Oklahoma in many ways, its importance for freight traffic in particular cannot be overstated, and the I-35/I-240 bridge has been identified as a critical freight bottleneck in the [ODOT Freight Plan](#). Congestion is so severe at this location that the estimated cost is \$10,000 to \$20,000 per day. 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 component in interstate mobility, economic development, and freight traffic in the central United States. 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. 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.

1.4 Climate Change, Resiliency, and the Environment

EMISSIONS REDUCTION

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 [truck traffic](#) in the state of Oklahoma and is within disadvantaged communities that face [high rates of asthma](#) (above the 90th percentile nationwide). The reconstruction of the I-35/I-240 interchange will reduce air pollution and greenhouse gas emissions by improving safety and reducing travel time 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 47,000 vehicle-hours per year. From 2012 to 2021, there were 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 4,500 gallons. By rebuilding this outdated cloverleaf interchange to a safer, more efficient design, a significant reduction of collisions and an increase in vehicular flow are expected, which will help eliminate some of the negative environmental impacts to the surrounding communities caused by slow-moving and idling vehicles.

The Project is not expected to change the number of vehicle-miles traveled in the project area, but the change in travel speed in the No Build and Build scenarios allows vehicles to consume fuel more efficiently. The emissions factors by vehicle travel speed vary by emissions type and the standardized social costs of vehicle emissions vary by year. Based on the Project's improvement of connectivity between the I-35 and I-240 highways and local arterial roadways, future users would likely be able to take more direct routes to complete their trips, further avoiding vehicle emissions. The attached [BCA Narrative](#) contains additional detail on emissions benefits.

Finally, the Project includes the use of Warm Mix Asphalt, which results in reduced greenhouse gas emissions and better working conditions with lower exposure to harmful air quality. The benefits of this technology are detailed in the [Innovation](#) section.

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.

Evidence-based climate resilience measures, including upgrades to existing drainage structures and new drainage structures, have been incorporated into the Project. The proposed bridge replacement and overall interchange reconstruction present noteworthy resiliency improvements compared with 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 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.

ODOT has [completed an EA](#) and received a Finding of No Significant Impact, indicating the Project avoids adverse environmental impacts to water quality, wetlands, and endangered species.

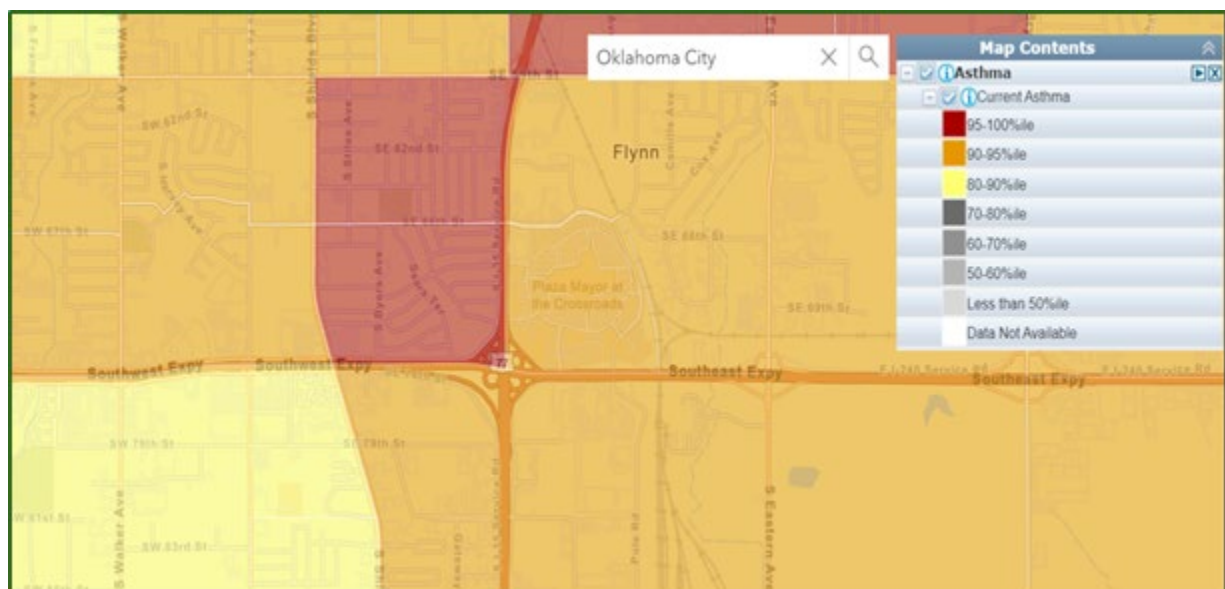
1.5 Equity, Multimodal Options, and Quality of Life

BENEFITS FOR DISADVANTAGED COMMUNITIES

Two census tracts surround the I-35/I-240 interchange; both are 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 Climate and Economic Justice Screening Tool. In addition, residents in the census tract just northwest of this interchange experience asthma rates in the 95th percentile (Figure 5) 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. 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. This is especially critical given the high rates of asthma in the community. The resulting reduction in pollution could improve health outcomes in these communities.

Figure 6. Asthma Rates in Census Tracts Surrounding Project Area



Source: EPA EJ Screen

EQUITY-FOCUSED POLICIES

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 Climate and Economic Justice Screening Tool and USDOT Equitable Transportation Community Explorer have been consulted, and a preliminary analysis of the burdens faced by adjacent communities has been conducted. Further analysis and impact assessments will be conducted as part of

the Project. Meaningful public engagement will take place throughout the Project lifecycle. The Project will connect Americans to good-paying jobs at critical job centers in the region and improve access to resources for Americans throughout the region and nation by reducing supply-chain bottlenecks at a critical crossroads. The Project will also dramatically improve safety and transit speeds at a congested interchange with a bridge on the NBI that has been found to be in poor condition, which will help residents of adjacent disadvantaged communities reach essential services and daily destinations.

ODOT uses equity-focused procurement policies and offers apprenticeship programs to provide equitable access to jobs and economic opportunities created by major projects such as the Crossroads of America: Replacing Bridges Project. These policies are described in the [Economic Impacts, Freight Movement, and Job Creation](#) section.

Extensive community engagement has addressed environmental justice in the planning stage and will continue to do so during Project delivery. 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 affected communities, an understanding of the communities' wants and needs, broad community representation, tailored engagement techniques for each community, and accessible documentation of the communities' impacts on decisions.

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 that 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
- 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, ODOT will be especially attentive to the needs of these communities and has a robust plan for continuing to engage the surrounding communities and responding 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 USDOT's six key features of public involvement outlined in the USDOT's *Promising Practices for Meaningful Public Involvement in Transportation Decision-Making Guide*.

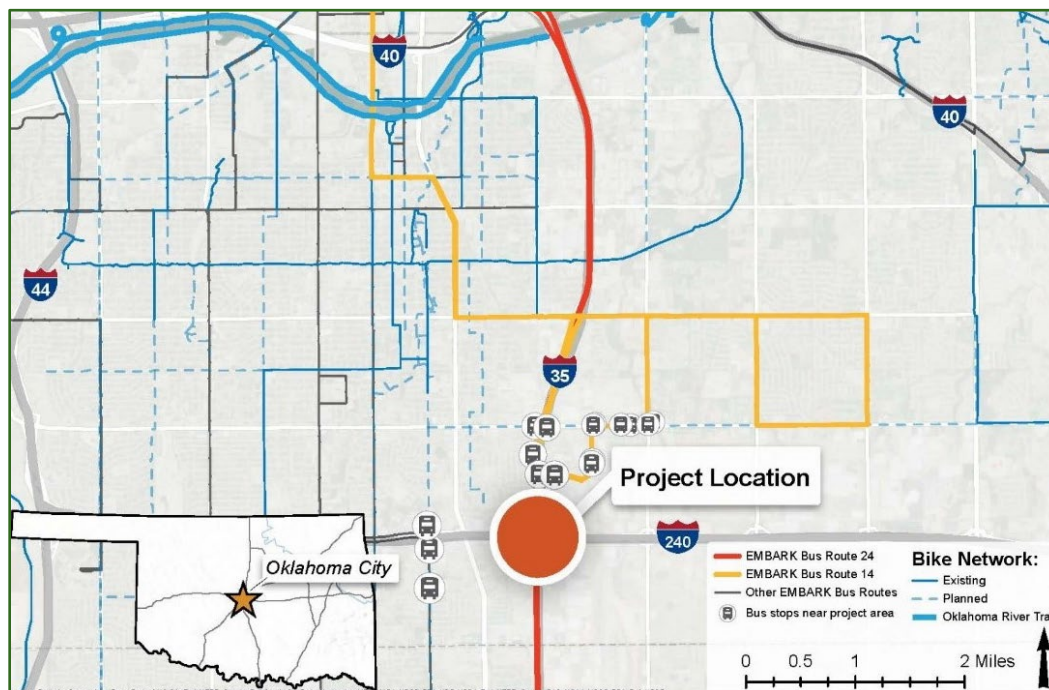
MULTIMODAL OPTIONS

While bicycles and pedestrians are not included within the interchange or along the interstates for safety reasons, there are clear benefits to improving transportation choices with the development of a safer, more reliable interchange. Figure 6 shows the local bus network, as well as the existing and future bike network within the study area. Improved travel times and traffic flow through the interchange could potentially decrease traffic on local streets surrounding the interchange, allowing residents to

more easily access daily destinations using local streets, including by walking, biking, and using a mobility device.

Transit riders living and working near the Project area will benefit from improved safety and reduced congestion resulting from the Project. Embark, the 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. Improved transit performance will allow residents of the surrounding disadvantaged communities to better access jobs and daily destinations through affordable bus transportation. [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 transit operates, as well as the transportation on local streets around the interchange. With better performance for this bus route, students, area residents, and workers who commute between the project area and Norman will have improved access to educational opportunities, employment, and other destinations.

Figure 7. Project Location and Adjacent Bus Routes

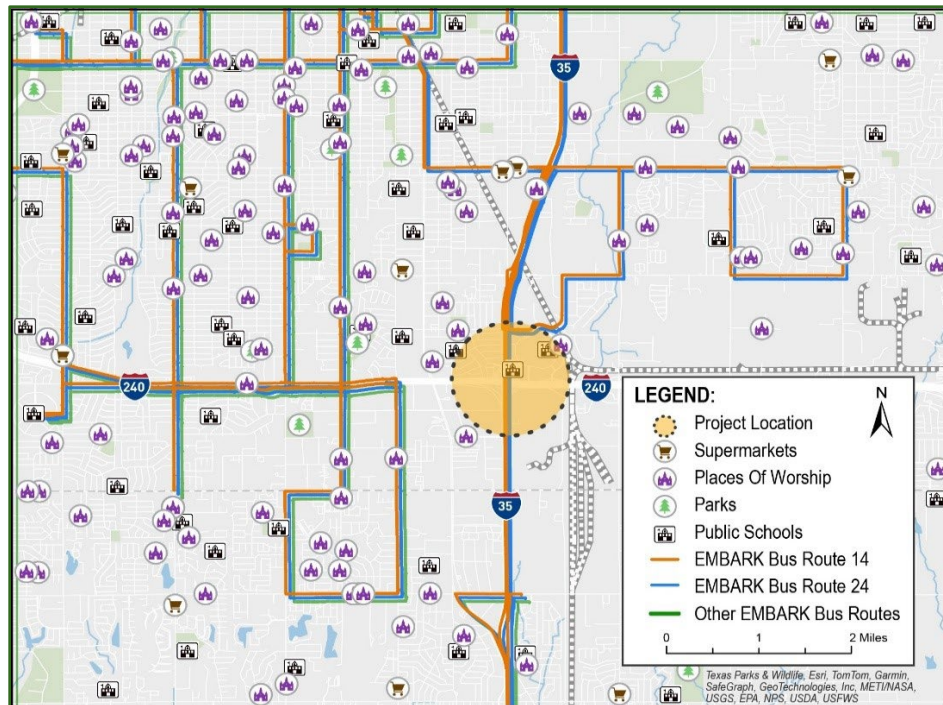


The Project will improve access to daily destinations (Figure 7), including jobs, educational opportunities, medical appointments, essential services, entertainment events, and parks and recreation opportunities, by reducing traffic congestion and improving travel times for transit riders as well as drivers. The Project supports public transportation operations, resulting in more efficient bus service to these destinations, which will be especially critical for the low-income and disadvantaged communities surrounding the Project area.

IMPROVED FREIGHT ACCESS TO UNDERSERVED COMMUNITIES

The Project will improve mobility of people and goods and expand access by improving interstate system operations. The Project will address a critical freight bottleneck to better connect disadvantaged communities in the Project area to opportunities throughout the region, as discussed in [Section 1.3](#).

Figure 8. Access to Daily Destinations



1.6 Innovation Areas: Technology, Project Delivery, and Financing

INNOVATIVE TECHNOLOGY

The Project will incorporate Warm Mix Asphalt into the paving aspects of this Project. Warm Mix Asphalt is a proven technology that can offer the following benefits:

- Reduce paving costs
- Extend the paving season
- Improve asphalt compaction
- Allow asphalt mix to be hauled longer distances
- Improve working conditions by reducing exposure to fuel emissions, fumes, and odors and reduce greenhouse gas emissions

INNOVATIVE PROJECT DELIVERY

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 accelerates delivery, reduces costs, and increases efficiency by merging multiple project components into a single contract. Project bundling streamlines design, contracting, and construction, creating value for the agency, contractors, and public. By considering allowable administrative costs, bundling will result in a 15% overall cost savings each for Phases 2, 3, and 4 of the Project compared with not bundling, as shown in Table 3. Although the first phase necessitates payment, subsequent phases will benefit from

this reduction. In total, bundling enables substantial cost and time savings during three out of the four phases. Combining these distinct phases streamlines the entire process, allowing for the issuance of 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.

Table 3. Summary of Benefits of Bundling Projects

Cost Savings	Bundling projects allows for economies of scale, reducing overall costs by streamlining administrative processes.
Efficiency	Combining multiple projects into a single contract simplifies management, design, and construction.
Accelerated Delivery	Bundling accelerates project timelines by eliminating delays associated with waiting for funding allocations for each phase.
Risk Mitigation	A consolidated approach minimizes risks related to project coordination, scheduling, and unforeseen challenges.
Improved Quality	By bundling, agencies can attract more experienced contractors, resulting in better quality work.
Enhanced Collaboration	Bundling fosters collaboration among stakeholders, leading to better decision making and project outcomes.

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 5 to 10% of the contract and smaller incentives for internal milestones tied to key Project elements. The bonus encourages contractors to proactively address challenges and unforeseen issues, minimizing delays. The No Excuses Bonus contributes to expediting project completion, benefiting both agencies and the public.

Finally, ODOT has implemented e-contracting agency-wide to streamline the contract process and deliver projects more quickly. Implementing e-contracting across the agency streamlines the entire contract process, leading to faster Project delivery. By digitizing paperwork, automating workflows, and pushing real-time collaboration, ODOT can achieve greater efficiency. Additionally, e-contracting reduces errors, enhances transparency, and contributes to substantial cost and time savings.

INNOVATIVE FINANCING

In addition to bundling projects to result in significant cost savings of 15% per phase, the State of Oklahoma has taken an innovative approach to addressing the nationwide funding gap due to diminishing gas tax revenue. The [Oklahoma ROADS Fund](#) that makes up the local funding portion for the Project is partially funded by the gas tax. ODOT has performed a [road user charge study](#) to research how decreasing revenue from the gas tax will affect funding to identify alternative funding streams and ensure that this Project and all Oklahoma transportation projects continue to have a sustainable funding source to support the state of good repair of Oklahoma roadways in future years.