# Bridging the Gap: Multimodal Connections on I-35 over the Oklahoma River

Oklahoma Department of Transportation RAISE Grant Application February 28, 2023



#### **PROJECT DESCRIPTION**





### **Table of Contents**

Project Description	2 3 3 4
Project Location	
Historically Disadvantaged Communities and Areas of Persistent Poverty	
Federally Designated Opportunity Zones	
Connecting OKC Multimodal River Trails to Address Public Comments	
Transportation ChallengesEngineering Aspects	
Engineering Aspects	
Project History and Incurred Costs	
Project History and Incurred CostsProject Parties	5
FIGURES	
Figure 1: Project Location	
Figure 2: Historically Disadvantaged Communities and Areas of Persistent Poverty	3
Figure 3: Construction of the Oklahoma River North Trail and approximate Project location (facing North)	



#### **Project Description**

The Oklahoma Department of Transportation (ODOT) is dedicated to supporting a safe and effective transportation system that provides multimodal opportunities for active transportation users of all ages, abilities, and backgrounds. Consisting of sidewalks, bikeways, multimodal trails, and other infrastructure, Oklahoma's growing active transportation system provides and promotes health and safety for users which benefits Oklahoma's environment and economy.

ODOT is requesting \$14,113,528 in Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant funds to construct a 10-foot separated multimodal path ("Project") on the south bound (SB) I-35 bridge located 1.5 miles east and 0.5 miles south of downtown Oklahoma City. A rendering of the proposed I-35 multimodal path is shown on the cover. The Project cost totals \$17,641,910; ODOT will contribute \$3,528,382 (20%) of state funds (Funding Commitment Letter). The multimodal path on the SB I-35 bridge is a critical missing component of Oklahoma City's active transportation system.

The I-35 river bridge replacement project is a marquis project in Oklahoma City that will have tremendous community impacts. The I-35 river bridge replacement project includes the construction of 2 new mainline bridges on I-35 and a ramp bridge connection spanning the Oklahoma River. The I-35 southbound bridge will include the multimodal pathway on a shared substructure connecting the recently constructed Oklahoma River Trail system. In consultation with stakeholders in the Project area, ODOT identified a terrific opportunity to include a multimodal path on the I-35 bridge:

- This multimodal path on the I-35 bridge would provide unique and needed access for the
  largely Hispanic Capitol Hill district, located on the south side of the Oklahoma River. For
  non-automobile owners located in this Historically Disadvantaged Community and Area of
  Persistent Poverty adjacent to and near the Project, the Project will provide walking and
  biking access to jobs, healthcare, and increased transit options on both sides of the river.
- The Oklahoma River trails are located north and south of I-35; adding a multimodal path to the I-35 bridge would connect this area of Oklahoma City to the entire Oklahoma City trails system that offers a network of 10 inter-connected trails that cover over 80 miles and can take residents and visitors to almost every point in Oklahoma City.
- Since the I-35 bridges were built over three decades ago, the Oklahoma River has been dammed and now hosts elite national rowing races. In addition, the new Riversports Complex, near the edge of the river, is home to the U.S. Olympic Team Training.. The Project will provide a viewing area so spectators can have a bird's eye view of events on the river.
- Increased access to multimodal transportation will make Oklahoma City a better, more equitable and accessible place to live, work, and visit.

The I-35 northbound (NB) and southbound (SB) bridges cross both the scenic Oklahoma River and the Oklahoma River trails that provides 13 miles of paved trails along both sides of the river. The Project would accommodate bicycles and pedestrians on the I-35 bridge for the first time, separated from traffic with a protective barrier. The Project will connect to the Oklahoma



River trails on both sides of the river and provide direct bicycle and pedestrian access to jobs, healthcare, shopping, and other opportunities in downtown Oklahoma City.

Since the Project does not have independent utility as it is part of the design for the new I-35 bridges, ODOT is submitting relevant information about the I-35 river bridge replacement project. The I-35 river bridge replacement project is a priority project for ODOT and it is in the eight-year Construction Work Plan (CWP) and scheduled for construction in 2028. In addition to the Project, the new I-35 bridges would provide six 12-foot lanes in each direction, and a minimum of 12-foot inside and outside shoulders.

#### **Project Location**

As shown in **Figure 1**, the Project is in the Census-designated Urbanized Area of Oklahoma City, Oklahoma. Oklahoma City is in central Oklahoma, is the state capital, and is the state's largest city. There are numerous employers, restaurants, parks, and entertainment districts in the Project area, as shown in the map below. Additional information about the Project Area is provided in the **Improves Mobility and Community Connectivity** section in the Merit Criteria.

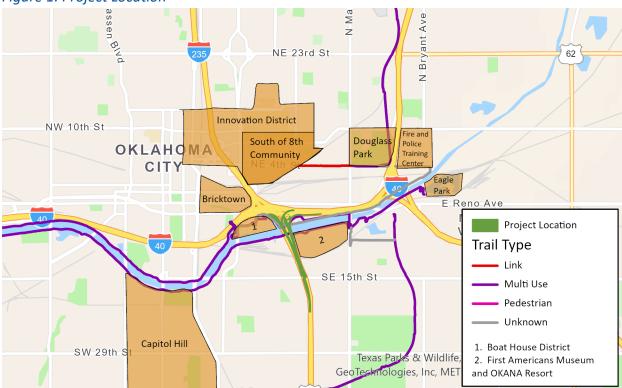


Figure 1: Project Location

Source: OKC Trail Map and Google Maps

## **Historically Disadvantaged Communities and Areas of Persistent Poverty**

Based on USDOT's Transportation Disadvantaged Census Tract mapping tool and as shown in **Figure 2**, 100 percent of the Project area is in Census tract 1053 which is a Historically Disadvantaged Community and an Area of Persistent Poverty. Contiguous to this Census tract



are 11 other Census tracts (1072.07, 1073, 1073.03, 1073.05, 1073.06, 1074, 1078.01, 1054, 1048, 1049, and 1050) that are also Historically Disadvantaged Communities and Areas of Persistent Poverty. The 10-foot multimodal path on the new I-35 bridges would provide unique and needed access to the largely Hispanic Capitol Hill district, a Historically Disadvantaged Community, and an Area of Persistent Poverty located on the south side of the Oklahoma River.

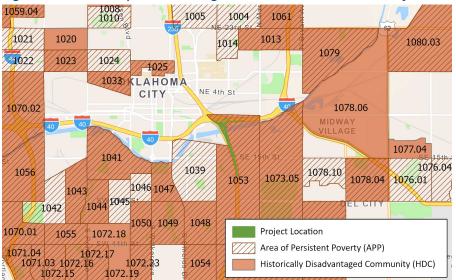


Figure 2: Historically Disadvantaged Communities and Areas of Persistent Poverty

Source: DOT DataHub APP and HDC List

#### **Federally Designated Opportunity Zones**

Based on data provided by the Department of Housing and Urban Development (HUD) and the White House Opportunity and Revitalization Council, the Project location is in Opportunity Zone 40109105300. There are also 11 Opportunities Zones in downtown Oklahoma City just north of the Project area. Also present in the Project area are Oklahoma City Empowerment Zones, which are part of an economic development initiative created by the Department of Housing and Urban development (HUD) to facilitate self-sustaining, long-term revitalization. Oklahoma City Empowerment Zones encompass nearly 20 square miles of Oklahoma City's most urban area, and the Project area is in an Empowerment Zone (Tract 1031.01).

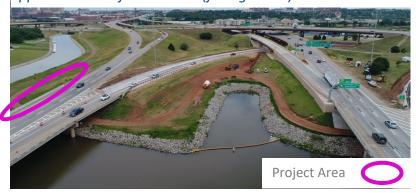
## Connecting OKC Multimodal River Trails to Address Public Comments

As shown in **Figure 3**,Oklahoma City is currently constructing the Greenway Trail which will provide connectivity between the Oklahoma River Trail-North, the Oklahoma River Trail-South (both trails are in the Project area) the Eagle Lake Trail, the Grand Trail, and the Katy Trail.

Due to the proximity of the new trail to the Oklahoma River and other features, including but not limited to trails, parks, lakes, the First Americans Museum, and the Riversport Adventures in the Boathouse District as shown in Figure 1, stakeholder involvement and feedback was essential during preliminary trail design. Thus, an integral part of this project development process has been the consistent continued discussion with key stakeholders to arrive at a



Figure 3: Construction of the Oklahoma River North Trail and approximate Project location (facing North)



"consensus built" bridge solution for the Oklahoma River crossing that not only meets the needs of each stakeholder, but also meshes with the financial abilities of the project sponsors.

## Transportation Challenges

Since the I-35 river bridge replacement project was first conceived and particularly during the stakeholder meetings

in 2022, ODOT and its local partners and community stakeholders have emphasized broadening the project's scope beyond replacing the two I-35 bridges to address local and non-motorized transportation challenges. Currently, the Oklahoma River is a barrier for residents to access jobs, healthcare, shopping, and events on the Oklahoma River. Over 20 percent of households near the Project area do not have access to a vehicle and therefore can't safely utilize the existing I-35 bridge crossing nearest their homes to access jobs, education, healthcare, and other opportunities in central Oklahoma City by non-motorized means. As a result, the Project now includes a 10-foot multimodal path that reflect priorities in Oklahoma City's regional transportation plans, and that will better connect local neighborhoods and improve local non-motorized travel options for this Historically Disadvantaged Community and Area of Persistent Poverty.

#### **Engineering Aspects**

The Project will be located on the west side of the I-35 SB bridge. The bridges will utilize three spans with plate girder steel beams. The spans will be configured to have one simply supported span tying to the north abutment ( $^{150}$  span length) and two continuous spans over the river and to the south abutment ( $^{360}$  and  $^{265}$ , respectively). The continuous spans will allow the longest span over the center of the river to have a less deep section than if simply supported spans were used.

The central span of the bridge is designed to meet Class A course dimensions according to U.S. Rowing regulations. Between the piers, there will be room for seven 13.5-meter lanes (or eight 12-meter lanes) with a 5-meter buffer between the outer lanes and the piers. A minimum of 14-foot clearance will be provided over the normal water surface elevation to allow for motorized boat traffic. The multimodal path design includes viewing platform sites along the path so pedestrians can view the rowing events from the bridge.

To connect the Project to the Oklahoma River Trail system, ADA-compliant ramps will branch off the existing Oklahoma River trail to provide pedestrians and cyclists access to the multimodal path on the bridge. Vertical abutments will be used at the north bank for each bridge to allow adequate clearance and spacing for the trail to run under the bridge. The Mechanically Stabilized Earth (MSE) walls will be used to tie to the vertical abutments so that



the alignment of the existing trail will not require extensive alteration. The MSE walls will also assist in minimizing the amount of additional right-of-way acquisition needed for the Project. Handrailing will be used along the extent of the paths under the bridges on both banks of the river to deter pedestrians from straying toward the I-35 traffic. Lighting and other aesthetic enhancements will be provided on the multimodal path on the bridge and along the trail pathway to enhance the user experience and provide additional safety.

#### **Project History and Incurred Costs**

The following provides the ODOT work history to address these challenges. Currently, the design status is at 30 percent.

- August 2016: ODOT commissioned an Interchange Capacity Study.
- **September 2017**: Interim I-35 ramp improvement plans developed.
- October 2017: Preliminary river bridge concepts introduced to stakeholders.
- **December 2017**: Stakeholder meeting to review bridge concept options.
- Spring 2018 Interim I-35 Ramp improvement project striped an additional lane on both the NB and SB bridges using the shoulders to provide additional capacity. However, this resulted in both bridges being functionally obsolete due to the insufficient shoulder width on the bridges.
- August 2018: Began traffic operational analysis on bridge concepts.
- **January 2019**: The Oklahoma City Boulevard Exit Ramp off the I-35 NB bridge traffic opens connecting I-35 to the newly constructed OKC boulevard.
- **Spring 2020**: ODOT initiated a Long Span Bridge Study to evaluate bridge concepts to span the Oklahoma River.
- October 2021: Long Span Bridge Study completed.
- February 2022: Stakeholder Meeting #1
- November 2022: Stakeholder Meeting #2

ODOT has incurred \$7.3 million to date studying and improving the I-35 NB and SB bridges, which includes \$148,000 in maintenance costs.

#### **Project Parties**

The Project is led by ODOT. As a state transportation agency, ODOT plans, constructs, and maintains the highway system in Oklahoma and manages a large portfolio of Federal funds that are programmed within its <a href="Eight-Year Construction Work Plan">Eight-Year Construction Work Plan</a>. Specific to competitive federal grant funding, ODOT has experience with multiple large infrastructure projects funded in part by the United States Department of Transportation (USDOT), such as INFRA, RAISE, BUILD, CHBP, and TIGER grants. While ODOT will lead the Project, there is significant support from local, regional, and Tribal officials as evidenced from the following <a href="Letters of support">Letters of support</a> from The Chickasaw Nation, EMBARK transit, Greater Oklahoma City Chamber, First American Museum, Oklahoma City Riverfront Development Authority, and Riversport.