

Tishomingo Intersection Improvement Project

PROJECT REQUIREMENTS

May 6, 2024

2025/2026

Multimodal Project Discretionary Grant

Rural



OKLAHOMA
Transportation

STATUTORY PROJECT REQUIREMENTS

Project Generates Regional Economic, Mobility, and Safety Benefits

The City of Tishomingo is becoming a destination for tourists because of local attractions. The intersection serves as the largest access point for the City and leads directly to Main Street. The implementation of this intersection improvement will proactively support regional growth in the area by allowing safer and more efficient transport of travelers and freight. As shown in the alternatives analysis, the roundabout alternative has the highest reduction of collisions. It had a collision reduction factor 25.1% greater than the preceding alternative. Additionally, it provided the best decrease in peak hour delay among all the considered alternatives.

Project will be Cost Effective

The BCA calculates a benefit-cost ratio of 5.044, showing that this project's public benefits are anticipated to outweigh costs

Project will Contribute to National Goals

Table 1: Expected Benefits

Discounted Benefits	Dollars	%
Travel Delay Savings	\$5,051,558	14.2%
Emissions Benefits (CO2)	\$499,123	1.4%
Emissions Benefits (All Other)	\$48,466	0.1%
Fuel Cost Savings	\$235,210	0.7%
Crash Reduction Benefits	\$29,723,634	83.6%
TOTAL	\$35,557,990	100%

Safety

As proven in the alternatives analysis, a roundabout design for this project will greatly reduce the collision rate of the existing interchange. Roundabouts remove many conflict points that make crashes more likely. This is especially salient for this interchange, because 57% of the crashes that occurred between 2017-2021 were reported as right angle or angle turning crashes. Roundabouts also increase visibility, promote lower speeds, and operate as a one-way circulation pattern, all of which improve safety for users. Overall, the alternatives analysis showed a crash reduction factor of 71%.

Congestion Reduction and System Reliability

In addition to greatly enhancing the safety of roadway users, a roundabout can improve the congestion and efficiency at the intersection. According to FHWA, roundabouts are a preferred design because they "lead to improved operational performance." The alternatives analysis bore out these results, finding that the roundabout had the lowest peak hour delay across all evaluated designs (pg-36). Less traffic enables roadway users to more easily rely on the intersection and improves efficiency.

Environmental Sustainability

The alternatives analysis determined that there are “no known significant adverse impacts within the footprint of the conceptual alternatives”. The roundabout will also include a 25% decrease in impervious area, this will lessen the impact of water runoff on the surrounding natural environment.

Project is Based on the Result of Preliminary Engineering

In 2023, ODOT contracted an engineering firm to conduct an alternative analysis for the project. After going through preliminary engineering, ODOT has decided to move forward with the project. They have procured a consultant to begin the design process and move the project forward.

Project will Begin Construction Within 18 Months of Date of Obligation of Funds

ODOT is moving forward steadily to keep the project on track to advertise the bid by July 2026 with and expectations to break ground and start construction within six months of project advertisement. ODOT understands the urgency of keeping this project moving forward it is a testament to their mission statement to provide a safe, economical and effective transportation network for the people, commerce and communities of Oklahoma.