

Tishomingo Intersection Improvement Project

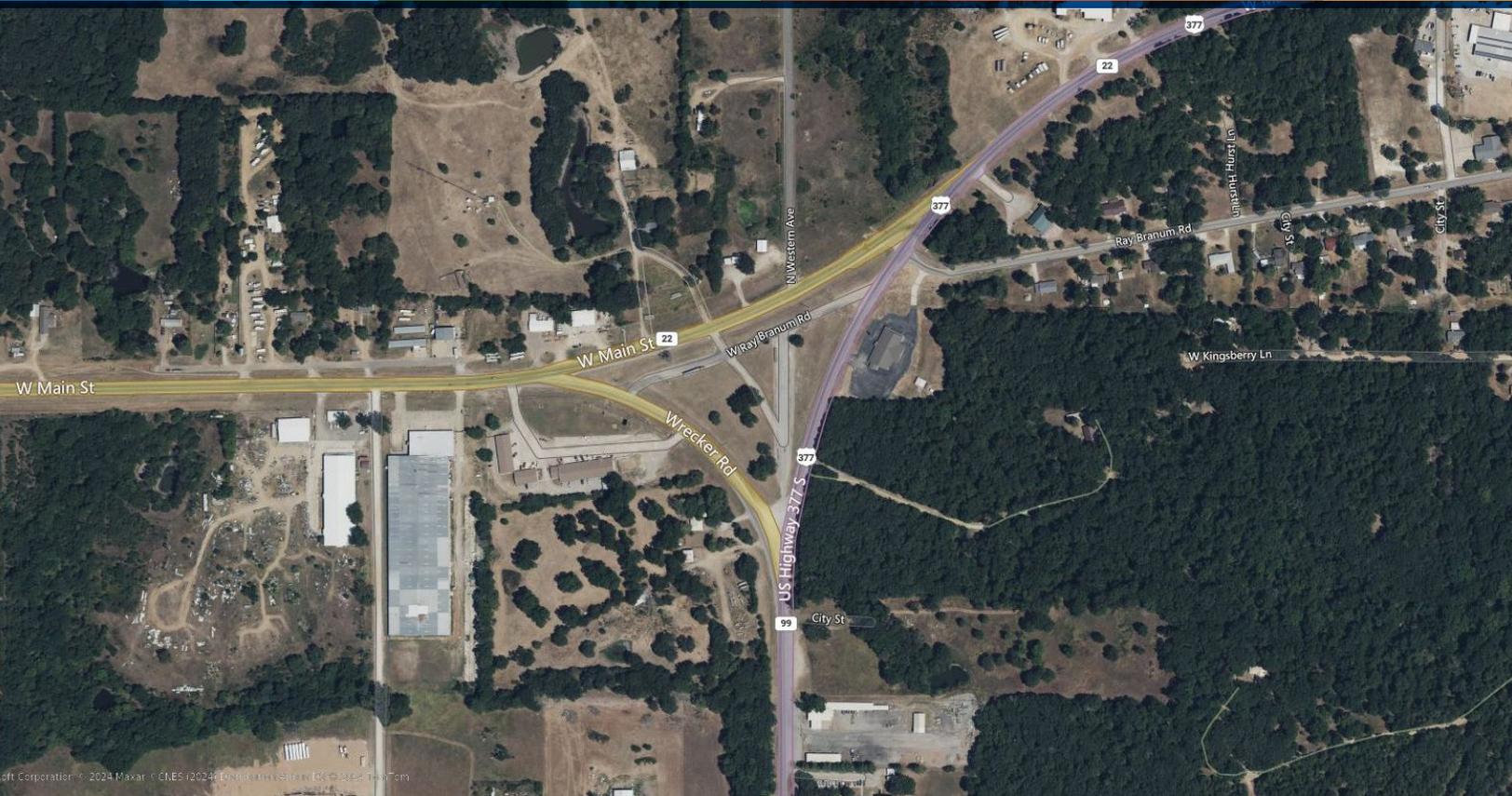
PROJECT DESCRIPTION

May 6, 2024

2025/2026

Multimodal Project Discretionary Grant

Rural



OKLAHOMA
Transportation

PROJECT DESCRIPTION

Statement of Work

The project will resolve traffic conflicts at the crossing point of SH-22, which is currently flowing without interruption to the branch of US-377. This plan was previously satisfactory, but now, due to the growth in population and the impact of large truck traffic nationwide, this previous design does not support local safety or regional growth in the state of Oklahoma. This intersection experiences approximately 7,600 vehicles every year and approximately 874 trucks on a typical traffic day. Traffic volumes for the year 2020 indicated the Annual Average Daily Traffic (AADT) for SH-22 was 7,200 vehicles per day and 3,800 vehicles per day on US-377. The total truck traffic comprised of 23 percent of the volumes indicated on US-377 (ODOT – Highway Factors Report).

Traffic Challenges

According to collision data from the years 2017 to 2021, there have been seven collisions at this particular intersection. Most of these collisions occurred during low visibility hours. The types of collisions that occurred include two side-swipe collisions, two rear-end collisions, two right-angle collisions, and one collision with a culvert. It should be noted that there is no publicly available traffic data past 2021, but the Oklahoma Department of Transportation (ODOT) has more current traffic data on record. It is essential to mention that, in addition to the ongoing analysis of more recent collision data in the state, there have been additional collisions at this intersection resulting in multiple fatalities. It is expected that these unfortunate incidents will be included in forthcoming reports.

Public Outreach

The current public comment period is ongoing to gather input from stakeholders on the various alternatives. From the information gathered to date, each alternative seems to have its own benefits, but Alternative 3: Modern Roundabout stands out as the most advantageous. This design not only addresses the current traffic challenges but also provides the highest level of safety benefits among the design alternatives. We believe that this solution holds great promise for resolving the traffic challenges at this intersection and improving the overall traffic conditions in the area.

Outcome Criteria

Modern roundabouts have a proven safety record as they substantially reduce sideswipe and head-on collisions, which is understood from the alternatives provided. By forcing vehicles to slow down through the traffic movement, the tight circle of the roundabout can reduce the severity and frequency of crashes. Unlike other options, the roundabout offers organic speed control. Additionally, the alternative for the roundabout includes a curb and gutter section at the upstream portions of the three legs entering the roundabout, which promotes traffic calming. This section gives drivers the optics of a more constrained path, which incentivizes them to slow down to make a safe traffic movement. This design enhances driver awareness to proceed through the corridor without installing any traffic calming devices in the travel lanes. ODOT is considering installing transverse rumble strips and advanced warning signage to make drivers aware as they approach the roundabout.

Project History

The intersection where US-377 and SH-22 meet is currently configured in a wye layout. The main flow of traffic moves freely, while the intersecting minor legs are controlled by stop signs. Over the years, the middle of the wye has been reconfigured several times. ODOT has prioritized the improvement of traffic flow and safety at this intersection. To enhance safety recently, the speed limit at the wye intersection has been reduced to 45 mph, and additional measures have been implemented, such as the restriping of pavement markings, installation of rumble strips prior to stop signs, and the addition of flags to traffic signs to increase driver awareness. The intersection improvements have been included in ODOT's 2024-2027 Statewide Transportation Improvement Program ([3617804](#)) to enhance performance measures.

ODOT has taken proactive measures to ensure that the upcoming construction of the roundabout in Tishomingo is carried out in a timely manner. ODOT has completed a design alternative analysis for the intersection, with the aim of receiving feedback from frequent users of the facility.

The alternative analysis has identified three viable options for replacing the current wye intersection. The input received from stakeholders suggests that Alternative 3 would offer the best safety features for this intersection. Once the public comment period is over and assuming the USDOT provides financial investment, ODOT can proceed to the next phase of the project for the construction of the intersection improvements. ODOT is committed to ensuring that the project is carried out efficiently and effectively while resulting in a positive impact for the community.

Previously Completed Work

In 2023, ODOT developed an [Alternative Analysis Report](#) for the wye intersection of US-377 and SH-22. The purpose of the assessment was to identify options for improving the intersection, with a focus on traffic flow and safety. The assessment identified three options for consideration, each of which offered benefits to the residents of Tishomingo, Johnston County, the Chickasaw Nation, and all motorists in the region. After careful analysis, the option that emerged as the most viable and promising was the roundabout.

The roundabout was deemed the most beneficial option due to its ability to provide improved traffic flow and safety benefits. Although all three options were comparable in terms of access management, drainage, and environmental and right-of-way impacts, the roundabout stood out as the most promising option for addressing the intersection's challenges.

Overall, the assessment's findings suggest that the roundabout is the most effective and efficient option for improving the wye intersection of US-377 and SH-22. This conclusion is based on a careful analysis and consideration of all relevant factors and is expected to provide significant benefits to all affected stakeholders.

PROJECT LOCATION

The proposed roundabout is situated within the Tishomingo City limits, approximately 3 miles outside of town, in the tranquil Johnston County of Oklahoma. It is located in the southwest quadrant of the City, precisely where the existing wye intersection for US-377 and SH-22 is positioned. The City of Tishomingo houses the Chickasaw Capitol Building and is also the Johnston County seat.

The proposed project is located within the boundaries of the Chickasaw Nation and is expected to significantly benefit an area identified as economically disadvantaged by both the Economic Justice Screening Tool and the USDOT Equitable Transportation Community (ETC) Explorer. This underscores the project's alignment with the Justice40 initiative introduced by the current administration.

