

Grady County US-81 Realignment INFRA Grant Application

Oklahoma Department of Transportation
March 2021

DUNS #: 8247000740000 | EIN #: 73-6017987

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Supporting information can be found at:

<https://oklahoma.gov/odot/progress-and-performance/federal-grant-awards/infra-grants/2021-grady-county-us-81-realignment>



BASIC PROJECT INFORMATION

Project Name: **Grady County US-81 Realignment**
Sponsor: **Oklahoma Department of Transportation**
Was an INFRA application previously submitted?
YES; Previously submitted in 2020, 2019 and 2018.

PROJECT COSTS

INFRA Request Amount	\$100,000,000
Estimated Federal Funding (excl. INFRA)	\$20,100,000
Estimated Non-Federal Funding	\$139,900,000
Future Eligible Project Cost (sum of previous rows)	\$260,000,000
Previously Incurred Project Cost	\$48,631,437
Total Project Cost	\$308,631,437
Are matching funds restricted?	OTA \$ YES US-81/1-44 RAMPS

PROJECT ELIGIBILITY

Approximately how much of the estimated future eligible project costs will be spent on components...	
...on the NHFN?	\$0
...on the NHS?	\$260,000,000
...constituting railway-highway crossing or grade separation projects?	\$13,500,000
...constituting intermodal or freight projects?	\$0

PROJECT LOCATION

State(s) in which project is located:	Oklahoma
Small or large project:	Large
Urbanized area in which project is located:	N/A
Population of urbanized area:	N/A
Located in an Opportunity Zone?	YES - Partially ID: 40037021000
Currently programmed in the:	
• TIP	N/A
• STIP	Consistent
• MPO LRTP	N/A
• State LRTP	Consistent
• State Freight Plan	Yes



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GRADY COUNTY US-81 REALIGNMENT	
Basic Project Information	Realignment of US-81 from downtown Chickasha to an approximately 8.5-mile 4-lane divided facility with 2 grade separated rail crossings.
What is the Project Name?	Grady County US-81 Realignment
Who is the Project Sponsor?	Oklahoma Department of Transportation (ODOT)
Was an INFRA application for this Project submitted previously?	2018: US-81 INFRA 2019: Grady County US-81 Realignment 2020: Grady County US-81 Realignment
Project Cost	\$308,631,437
INFRA Request Amount	\$100,000,000
Estimated Federal Funding	\$20,100,000
Estimated non-Federal funding anticipated to be used in INFRA funded future Project...	\$139,900,000
Future eligible Project Cost (Sum of previous three rows)	\$260,000,000
Previously incurred Project costs (if applicable)	\$48,631,437
Total Project Cost (Sum of ‘previous incurred’ and ‘future eligible’)	\$308,631,437
Project Eligibility	
Are matching funds restricted to a specific Project component? If so, which one?	Yes, OTA funds US-81/I-44 Ramps
Approximately how much of the estimated future eligible Project costs will be spent on components of the Project currently located on the NHFN?	Pending
Approximately how much of the estimated future eligible Project costs will be spent on components of the Project currently located on the NHS?	100%
Approximately how much of the estimated future eligible Project costs will be spent on components constituting railway-highway grade crossing or grade separation Projects?	\$13.5M (5% of total project cost) Bridge "H" Location No. 2654P 0284WX / NBI No. 32634 Bridge "I": Location No. 2654P 0284EX / NBI No. 32635
Approximately how much of the estimated future eligible Projects costs will be spent on components constituting intermodal/freight rail projects or freight projects within the boundaries of a public or private freight, rail, water, or intermodal facility.	None
Project Location	
States(s) in which Project is located	Oklahoma
Small or large Project	Large
Urbanized Area in which Project is located, if applicable	N/A
Population of Urbanized Area (according to 2021 Census)	N/A
Is the Project located (entirely/partially) in Federally designated community development zones	Partially; Opportunity Zone 40051000100
Is the Project currently programmed in the: (specify as applicable)	
• TIP	N/A
• STIP	Consistent (see pages 39, 58, and 68)
• MPO Long Range Transportation Plan	N/A
• State Long Range Transportation Plan	Consistent (see Plan)
• State Freight Plan	Yes (Chapter 6; see pages 63, 64, and 66)

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All supplemental information for this application is provided on the ODOT US-81 INFRA Grant website, <https://oklahoma.gov/odot/progress-and-performance/federal-grant-awards/infra-grants/2021-grady-county-us-81-realignment.html>. References within this application document are hyperlinked directly to the website, clicking on the highlighted reference will take readers directly



Downtown Chickasha, Oklahoma

Project Description

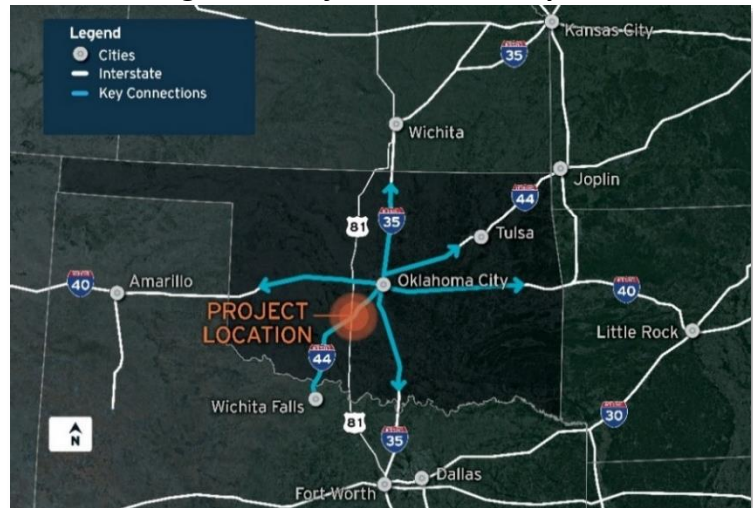
The Oklahoma Department of Transportation (ODOT) is seeking funding for a realignment of US Highway 81 (US-81), a rural freight corridor critical to the local, state and national economy. The Grady County US-81 Realignment Project (Project) will transform an existing 8.5-mile undivided four-lane section of US-81 through downtown Chickasha, Oklahoma into a seamless four-lane divided facility; matching the character of the existing four-lane divided US-81 south of Chickasha.

By upgrading and realigning US-81 in to a four-lane divided, fully access controlled highway, transportation safety and freight flow along this National Highway System route will benefit from improved access, eliminated signal delays, and eliminated 90-degree turns. The Project:

- reduces travel time and delays on the National Highway System;
- improves safety and corridor conditions through Downtown Chickasha;
- provides better access for underserved communities; and
- and offers opportunities for revitalization of the existing corridor and new access locations.

Located immediately southwest of the Oklahoma City metropolitan area, the corridor is essential for the transportation of supplies, equipment, and products to support wind energy, oil and gas, military operations, and agricultural industries that sustain people and communities throughout the state and greater Midwest region. US-81 is a multi-national freight corridor linking Oklahoma to Canada, Mexico, and domestic markets within the United States – and plays a vital role in transporting supplies, equipment, and products to market.

Figure 1: Project Location Map



This INFRA Grant application requests funding for realigning the section of US-81 that currently bisects Downtown Chickasha. The new corridor will have design speeds of 65 mph and provide full access control, with grade separated interchanges at intersecting corridors and rail crossings. The project is well advanced, 90% engineering is complete and plans are in the **Reports and Technical Information** section on the [ODOT US-81 INFRA Grant website](#).

Table 1: US-81 Project at a Glance

Existing Route through Downtown Chickasha	US-81 Realignment Project
8.5 Miles	8.3 Miles
4-Lane Undivided Facility (with Center Turn Lane)	Access Controlled 4-Lane Divided Facility
14 Signalized Intersections	6 Grade Separated Interchanges
2 90-Degree Turns	2 Grade Separated Rail Crossings
30 mph Average	65 mph Average
14-Minute Average Travel Time	7.5-Minute Average Travel Time

Challenges and Solutions

The existing US-81 undivided four-lane route through downtown Chickasha includes more than a dozen signalized intersections and two 90-degree turns that are difficult for trucks to maneuver. Current speeds on this segment through Chickasha are 30 mph, compared to the posted speeds of 70 mph north and south of Chickasha. This investment will transform this segment of the corridor into a seamless four-lane divided facility, matching the character of US-81 south of Chickasha.

Oklahoma is a growing hub for wind energy and ranks second in the nation for installed wind power capacity.¹ Windmills are constructed in sections due to the large size and heavy weight of each component. The pedestal for each windmill is shipped in three segments, weighing up to 24 tons. Each blade is shipped individually as an over-length load, measuring from 170 feet to more than 200 feet. The “nacelle” that sits atop the pedestal can weigh up to 75 tons.

All parts and assemblies that comprise a windmill are delivered by truck. US-81 through downtown Chickasha is a pinch point in the system. Most of the parts are manufactured overseas, enter the U.S. from the south through the ports, and trucks travel US-81 to access the various developing windfarms to the north. When looking to expand wind energy production in the region, access is a significant challenge. The US-81 realignment will eliminate 90-degree turns and improve efficiency and access for renewable wind energy production in the region.

This corridor is a lifeline for these industries and an estimated 625 “super loads”, often restricted from operating on interstate highways, use and rely on this route annually.^{2,3} These loads cause traffic to be impacted through downtown and can create delays for up to 50 minutes at a time. The realignment eliminates two 90-degree turns and an at-grade crossing at the Union Pacific Railroad line.

High freight volumes create an unsafe environment for pedestrians and bicyclists, as well as diminishes the downtown feel of Chickasha. The new alignment will separate freight and high traffic volumes from downtown, creating a safer and more welcoming environment downtown.



Size and scale of windmill in Oklahoma
photo courtesy of Enel



Windfarms near
project area



Super oversized load from windmill
pedestal on US-81 in downtown
Chickasha

The Project provides better route continuity, improves freight efficiency, and removes conflicts between oversized trucks and pedestrians.

¹ <https://stateimpact.npr.org/oklahoma/2018/09/06/oklahoma-wind-farms-mapped/>. Shows the high density of wind farms surrounding the project.

² Based on analysis from ODOT Division 7, City of Chickasha, and Chickasha Police Department Year

³ Super loads are vehicles 16 feet wide by 21 feet high and 18,000 pounds or more. Energy-related businesses in the area/region rely on this type of shipment (including wind energy components, drilling equipment, mining equipment, and agricultural equipment).

Previous Planning and Design Efforts

ODOT has recognized the growing need to realign this segment of the corridor for decades and has invested in several efforts including traffic modeling, transportation planning, a feasibility study which reaffirms the need to realign US-81,⁴ stakeholder and public engagement, and design.

- 2007: US-81 Corridor Feasibility Study justified the need for a newly aligned route due to the difficulty in accommodating the increasing demand of trucks and other heavy vehicles.
- 2017: Access Justification Report (AJR) identified the US-81 Realignment as the preferred solution and provided justification for the new alignment and new interchange with the exiting US-81 route. The preferred alignment and associated interchange locations were selected with public and stakeholder input over the course of several engagement opportunities and public meetings. The complete 2017 AJR can be found in the Reports and Technical Information section on the [ODOT US-81 INFRA Grant website](#).
- 2017: The US-81 Realignment Project’s Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) was signed February 3, 2017, found in the Reports and Technical Information section on the [ODOT US-81 INFRA Grant website](#).
- 2020: The project has advanced and completed 90% design in June 2020. These plans can be found in the Reports and Technical Information section on the [ODOT US-81 INFRA Grant website](#).

Funding Request

ODOT is requesting \$100 million in INFRA Grant funds; **38 percent of the future eligible total Project cost**. ODOT and private partners have already invested \$48.6 million in previously incurred costs for preliminary Project engineering, environmental studies, and relocation of the Oklahoma Turnpike Authority (OTA) toll booth at I-44, required to facilitate construction of this Project. The OTA will contribute an additional \$14.9 million in future eligible costs. This public/private partnership leverages dollars provided by OTA, which is not funded through any tax dollars. ODOT will contribute an additional \$125.0 million in future state funding (non-federal funds) to the Project. Funding sources are noted in detail in the **Grant Funds, Sources and Uses of all Project Funding** tables.

Why INFRA Funds are Necessary for the US-81 Realignment Project

The US-81 Realignment Project is a top priority for ODOT. This Project is a necessary enhancement to the existing transportation network and is currently included in ODOT’s *8 Year Construction Work Plan*. However, the 8-Year work plan only identifies funding for an interim two-lane facility, rather than the necessary four lanes.

INFRA funds will allow ODOT to construct the four-lane Project more quickly, which will aid in the reduction of travel time and provide community benefits. Constructing the four-lane Project at one time is a more efficient and cost-effective process. Constructing an interim two-lane configuration and then a four-lane configuration at a later time would lead to wasted pavement from temporary tie-ins, longer overall periods of construction for the community, and inefficiencies in two construction periods and use of materials as compared to a single phase of construction.

ODOT cannot complete the four-lane design without financial assistance. INFRA funds will allow full construction of the four-lane build out to be complete by the end of 2026, an accelerated Project schedule (as compared to an alternative two-lane facility opening in 2028).

⁴ <https://oklahoma.gov/content/dam/ok/en/odot/documents/okfreightplan2018-2022.pdf>, p. 82, identifies 8.65 miles of US-81 in Grady County (including the proposed project) as a Critical Rural Freight Corridor.

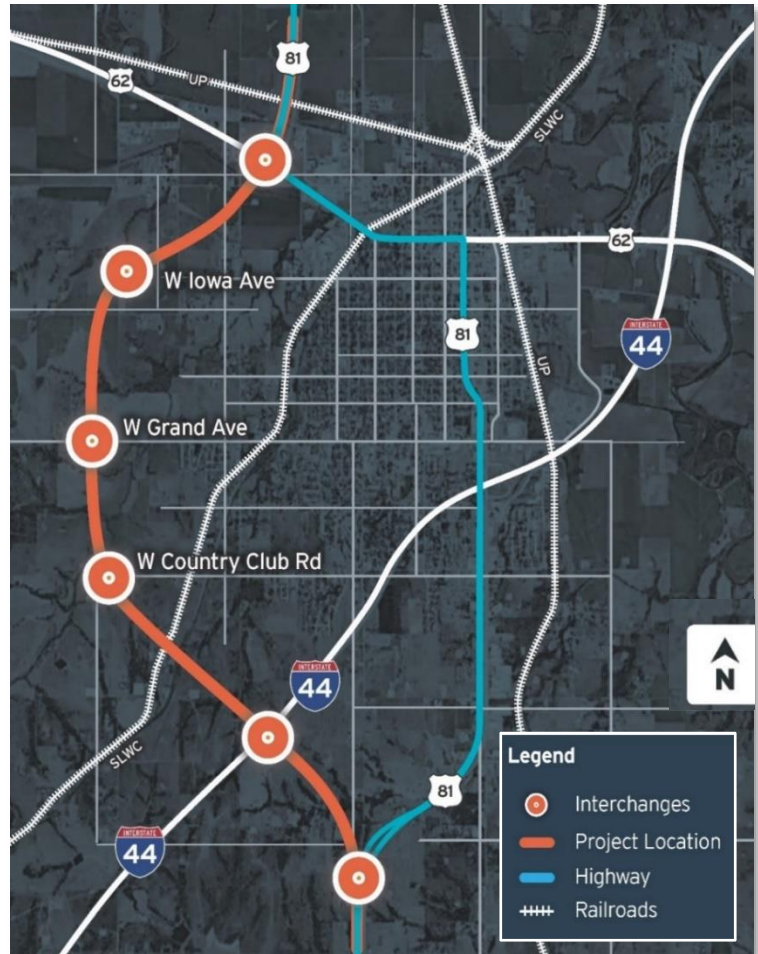
Project Location

The Project is located in a rural area south of Chickasha and begins where US-81 curves east to align with the Chickasha street grid. The Project area is located in a historically underserved area near many native tribal communities. The study area is within the Chickasaw Indian Territory, along the western border of the jurisdiction.

The realignment will extend US-81 from 1.5 miles north of the US-81 and State Highway 19 west (SH-19) junction to 0.75 miles north of the US-81 and US Highway 62 (US-62) junction and realign US-81 on the west side of the City of Chickasha. The northern limit is located at $-97^{\circ}57'42''$ W, $35^{\circ}04'23''$ N and the southern limit is located at $-97^{\circ}57'09''$ W, $34^{\circ}58'30''$ N.

The existing and recommended Project alignment is shown in Figure 2 and included in the **Maps and Graphics** section on the [ODOT US-81 INFRA Grant website](#).

Figure 2: Project Overview Map



Downtown Chickasha, Oklahoma

Project Parties

ODOT is the Project sponsor and is committed to improving conditions and safety on Oklahoma’s transportation network. Several Districts within ODOT as well as Field District 7 are responsible for coordinating the State’s transportation planning efforts with Project partners and municipalities.

OTA, a private partner, will provide an additional \$14.9 million in financial support for the Project, which includes the specific infrastructure improvements at the I-44 interchange. The partnership between ODOT and OTA will maximize the benefits of ODOT and the United States Department of Transportation’s (USDOT) dollars. ODOT and OTA have a history of successfully implementing several projects across the state and do not foresee any issues collaborating on this Project.

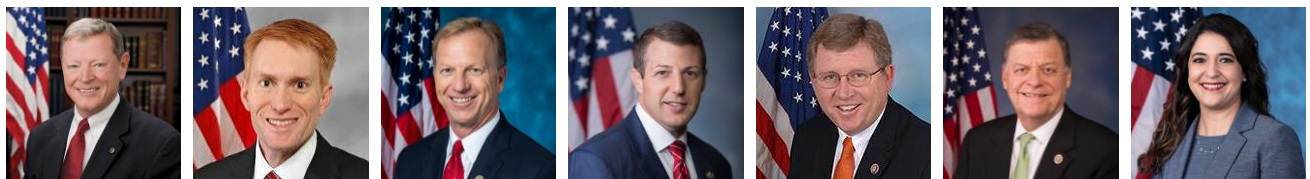
ODOT works closely with many local municipalities, including the City of Chickasha. Once the new alignment of US-81 is fully constructed and open to traffic, the existing corridor through Chickasha will become part of the local road network with the maintenance and operation being transferred to City Chickasha and Grady County.

Various entities in the region have shown their support for the Project by providing letters of support. Financial commitments and additional letters of support are uploaded to grants.gov and can also be found on the [ODOT US-81 INFRA Grant website](#). These partners include:

- Oklahoma Transportation Secretary ⁵
- The Chickasha Nation
- City of Chickasha
- City of Anadarko
- Association of South Central Oklahoma Governments (ASCOG)
- Chickasha Economic Development Council (EDC)
- State Chamber of Oklahoma
- University of Science and Arts of Oklahoma (USAO)
- Standley Systems
- Southwest Oklahoma Regional Transportation Planning Organization (SORTPO)
- Oklahoma Congressional Delegation
- Oklahoma Trucking Association



Oklahoma Congressional Delegation



James M. Inhofe US Senator James Lankford US Senator Kevin Hern Member of Congress Markwayne Mullin Member of Congress Frank D. Lucas Member of Congress Tom Cole Member of Congress Stephanie Bice Member of Congress

⁵ Includes ODOT and OTA funding commitments

Grant Funds, Sources and Uses of Project Funds

The partnership and commitment from ODOT and OTA demonstrate the importance of this Project for Oklahoma and the state’s emphasis to leverage federal funds with private investment. ODOT and OTA have contributed to the Project through previously incurred expenses, in addition to future committed funding. Table 2 includes the total Project costs for the US-81 Realignment Project.

Table 2: Total Project Cost (Previously Incurred and Future Eligible Costs)

	Previously Incurred Expenses	Future Eligible Costs	Percentage of Future Costs	Total Project Cost
Non-Federal Funds	\$ 22,140,644	\$ 139,900,000	53.81%	\$ 162,040,644
Other Federal Funds	\$ 26,490,793	\$ 20,100,000	7.73%	\$ 46,590,793
Grant Funds	\$ -	\$ 100,000,000	38.46%	\$ 100,000,000
Total Project Costs	\$ 48,631,437	\$ 260,000,000	100.00%	\$ 308,631,437

The development of the US-81 Realignment Project is well advanced as the Project team completed 90% design in 2020. All future Project cost estimates are based on 90% design engineering cost estimates. All obligated INFRA funding would be used for construction and construction contingency as shown in Table 3. The table provides a breakdown of sources and uses of funds for each Project component. In total, ODOT requests \$100,000,000 in INFRA funding; a total of 38 percent of future eligible Project costs. In full, the Project will include 54 percent non-Federal funding and 8 percent in other Federal funding.

With design work nearly complete, ODOT is confident that the contingency amounts shown are sufficient to cover the minimal remaining Project risk. ODOT is committed to the Project and should the Project encounter unforeseen costs, ODOT will cover additional costs.

Table 3: Sources and Uses of Funds

	Engineering	Toll Structure	ROW & Utilities	Construction	Contingency
Private Funds (OTA)					
Previously Incurred Cost		\$17,000,000			
Future Cost				\$14,900,000	
State Funds (ODOT) ⁶					
Previously Incurred Cost	\$ 1,986,940		\$ 3,153,704		
Future Cost				\$ 121,359,223	\$ 3,640,777
Other Federal Funds ⁷					
Previously Incurred Cost	\$ 11,009,767		\$ 15,481,026		
Future Cost				\$ 19,514,563	\$ 585,437
Grant Funds (INFRA)					
Future Cost				\$ 97,087,379	\$ 2,912,621
Total Previously Incurred Costs	\$ 12,996,707	\$ 17,000,000	\$ 18,634,730		
Total Future Element Costs				\$ 252,861,165	\$ 7,138,835

⁶ State funds will be sourced from a combination of bonding and the Oklahoma ROADS Fund (discussed under Criterion #6 section)

⁷ Source of other federal funds is a combination of FHWA formula funding

A more detailed breakdown of future eligible Project costs are shown in Table 4. A complete Project budget based on 90% design engineering estimates is included on the [ODOT US-81 INFRA Grant website](#).

Table 4: Future Project Costs and Construction Phasing

	2022	2023	2024	2025	2026
Grading	\$ 31,590,000	\$ 31,590,000	\$ 31,590,000		
Bridge Construction		\$ 24,950,000	\$ 24,950,000	\$ 24,950,000	
Interchange Construction			\$ 11,690,000	\$ 11,690,000	
Surfacing				\$ 11,690,000	\$ 34,900,000
Contingency	\$ 2,697,656	\$ 4,828,283	\$ 5,826,561	\$ 4,127,183	\$ 2,980,316
Total Future Project Costs	\$34,287,656	\$61,368,283	\$ 74,056,561	\$52,457,183	\$37,880,316

The **OTA commitment of \$14.9 million** is included in the Non-Federal Future Eligible Costs for this Project. A letter documenting this funding commitment is uploaded to [grants.gov](#) and can also be found on the [ODOT US-81 INFRA Grant website](#). These funds are to be used for the construction of the ramps for the new interchange of the new US-81 alignment and I-44. ODOT and OTA have partnered successfully on several highway and bridge Projects in the past and their close coordination will continue on this Project.

A letter documenting ODOT’s funding commitment (including availability and commitment of funds) is uploaded to [grants.gov](#) and can also be found on the [ODOT US-81 INFRA Grant website](#).

Merit Criteria

The Grady County US-81 Realignment Project directly addresses all six identified INFRA Grant merit criteria identified in the INFRA grant notice of funding opportunity.

ODOT has incorporated the U.S Department of Transportation and the Federal Highway Administration’s feedback from prior INFRA submittals and refined the BCA based on their feedback. In addition, the BCA has incorporated changes to the revised BCA guidance. The following sections outline how the Project addresses the stated criteria in more detail.

Criterion #1: Support for National or Regional Economic Vitality

US-81 is an important multi-national corridor linking the Texas, Central Plains, and Midwest mega-regions to the Canadian and Mexican border crossings. The corridor intersects with I-44 in the Project area and I-40 further north, giving shippers international north-south and coast-to-coast east-west access to reach seaport facilities, domestic markets, and customers around the world. These connections are crucial to national and regional economic vitality. This Project will improve travel time and reliability for regional and national businesses by reducing costs, improving time-to-market, and providing a safer network for all users.



The US-81 corridor is invaluable to major producers of wind energy, oil and gas, and large-scale agricultural production. The corridor currently provides significant contributions to the economic vitality of the region and the entire state, which would only be enhanced by providing the new alignment of the corridor.

In addition to supporting the regional, state, and national economy – the Project will provide substantial local benefits by connecting historically underserved communities and providing better connectivity and improved travel to jobs, education, and services.

Benefit Cost Analysis

The US-81 Realignment Project substantially supports the national and regional economies by making a critically important improvement for freight and goods movements. Following the USDOT’s guidance for a Benefit-Cost Analysis (BCA), the US-81 Realignment Project generates a **benefit-cost ratio (BCR) of 1.64**. A more detailed BCA technical memorandum, as well as the BCA spreadsheet model are uploaded to grants.gov and can also be found on the [ODOT US-81 INFRA Grant website](http://odot.us-81-infra-grant-website). The BCA results are summarized below and in Table 5, expressed in terms of net present value (NPV) and BCR, using a discount rate of seven percent.

- **Total Project Capital Cost: \$309,596,099 (2019\$)**
All costs for the BCA were converted to 2019\$. Total Project costs in year of expenditure equates to \$308,631,437.
- **Operations and Maintenance Costs: \$35,166,710**
Over the course of the Project life cycle (30 years), the Project will save \$8,300,070 in maintenance.

US-81 Realignment Project Benefits (discounted at 7%)

- **Total Project Benefits: \$369,288,247**
Travel time savings produces the largest quantifiable benefit of the US-81 Realignment Project.

State of Oklahoma Economy

- Oklahoma is known for its growing renewable energy production among other industries.
 - 36% of electricity from renewable resources
 - Second in the nation for wind production
 - Provides one-tenth of US total wind production
 - #4 for wheat production in the US
- The highway system in Oklahoma allows for trade of these growing markets; specifically, US-81 which begins in Texas and routes north to Canada. US-81 also intersects with I-40 (east/west) and I-44 (northeast/southeast) reaching additional markets across the country.

Table 5: BCA Summary

Project	US-81 Project
Total Capital Costs (YOE)	\$308,631,437
Total Project Costs (7% Discounted) (2019\$)	\$225,535,614
Total Net Benefit (7% Discounted) (2019\$)	\$369,288,247
Benefit Cost Ratio (7% Discounted)	1.64

Quality of Life – Qualitative Improvements

- Improved access for local residents
- Expanded economic development opportunities with new interchanges
- Improved access to jobs, education, and services

Criterion #2: Climate Change and Environmental Justice Impacts

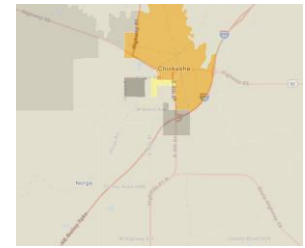
- The Project has incorporated climate change and environmental justice throughout the planning and design process.
- The Project will provide several benefits to surrounding Environmental Justice populations (measured using the EPA’s EJSCREEN) in Chickasha by removing oversized loads through downtown and creating a safer pedestrian and bicycle environment.
- The Project mitigates the impacts of climate change by providing a safer and more resilient transportation network as well as supporting Oklahoma’s renewable energy supply chain. The region is well known for wind production.

Planning and Policy

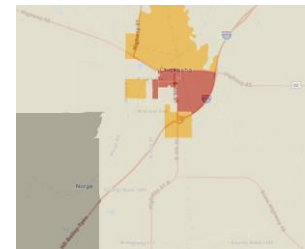
US-81 connects the Chickasha area to several surrounding communities: El Reno to the north, Marlow and Duncan to the south, and Ninnekah (within the Project area). These surrounding communities have major industries that include health and education, oil and gas, trucking and warehousing, farming, wind energy, and entertainment. The Project aims to improve regional mobility for a historically underserved area, and provide access to these opportunities. The Project will also improve the condition, safety, and environment of the existing corridor through downtown Chickasha. An Environmental Justice (EJ) Screening shows Project area has the following environmental indicators, shown in the EJ Maps using the EPA EJ Screening and Mapping Tool.⁸ The Project will provide several benefits to surrounding EJ populations as described in the following sections. The Project area encompasses areas of high percentiles (between 80 and 95) for several EJ indexes including ozone, lead paint, NATA diesel PM, NATA respiratory HI, traffic proximity, superfund proximity, Risk Management Plan (RMP) proximity, hazardous waste proximity, and wastewater discharge indicator.

While the Project most directly serves north-south movements, it will also improve east-west regional connectivity to surrounding areas including the City of Anadarko, another community with significant EJ populations and historically underserved populations, as well as the Chickasaw Nation Tribal Community. The project is located in the Chickasaw Nation tribal jurisdiction.

To further equity considerations and appropriately consider EJ impacts and community needs, the Project included robust stakeholder engagement with ultimately led to design modifications on the southern end of the Project limits to better serve the community’s needs. Direct access to 1405 Section Line Road from US-81 was added to the Project based on stakeholder input.



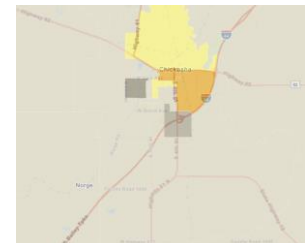
RMP Proximity Count
(State Percentiles)



Wastewater Discharge Indicator
(State percentiles)



Ozone
(US Percentiles)



Lead Paint
(State Percentiles)



Traffic Proximity
(State Percentiles)

⁸ EPA’s Environmental Justice Screening and Mapping Tool (Version 2020). Source: <https://ejscreen.epa.gov/mapper/>

Project Benefits in the Chickasha Community

The Project will provide several benefits to the EJ populations in Chickasha by removing oversized/overweight (OS/OW) loads traveling through downtown which will create a safer environment for multi-modal connectivity. The Project will assist with temporal changes for better and more appropriate asset utilization and reduce congestion downtown. There will be improved access to the Anadarko area, including a large tribal population that is currently required to travel through Chickasha for regional access (heading east or to connect to US-81 or I-44). This Project will improve regional connectivity and reduce travel times.

Energy Corridor

By committing funding to the US-81 realignment, the corridor will gain vital improvements to aid in its continued support for Oklahoma's renewable energy production. The region is well known for its large wind farms, such as Minco Wind LLC and Redbed Plains. Redbed Plains Wind Farm alone saves more than 176 million gallons of water each year and displaces carbon emissions from fossil fuel power plants, which is a major contributor to climate change. Wind energy also enhances air quality by helping mitigate the health effects of harmful pollutants.⁹ The realignment of the corridor will provide faster and more direct access to windfarms which require OS/OW loads to transport wind turbine components. Additionally, the US-81 corridor has been nominated as an Alternative Fuel Corridor.¹⁰ This will enhance opportunities for drivers to select cleaner vehicles with reliable access to alternate fueling stations. By enhancing this corridor's connectivity, this Project will aid in the opportunity to support the state's environmental goals for use of alternatively fueled vehicles.

Resiliency

The Project assists the state in disaster preparedness and designing for resiliency. This area of Oklahoma is prone to tornadoes and flooding. The US-81 corridor is an alternate route for I-44 and I-35 in the region and utilized for emergency routing when necessary. Traffic was routed to US-81 in 2015 during a major flood event that caused I-35 to close southeast of Chickasha. Traffic was also routed to US-81 as an emergency route due to a tornado that damaged an I-44 bridge. Investment in US-81 will improve the corridor to accommodate traffic impacts and congestion that occur when traffic is diverted to US-81. These enhancements will help create a reliable alternative in the case of extreme weather events, more likely to occur in the future as a result from climate change.

Recycled and Sustainable Materials

Structural steel, which will be utilized for this Project, is a premier green construction material. Its high recycled content and recycling rate exceed those of any other construction material. Over the past three decades, the steel industry has reduced greenhouse gas and overall emissions by 36 percent and increased the water recycling rate of steel production to 95 percent. While numerous legislative and regulatory efforts in recent years have targeted emissions, energy efficiency, and related environmental concerns, the structural steel industry has been proactive in pursuing measures that typically exceed regulatory requirements.¹¹

⁹ Redbed Plains Wind Farm, Oklahoma. Source: <https://www.edpr.com/north-america/redbed-plains-wind-farm>

¹⁰ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/maps/

¹¹ <https://www.aisc.org/nsba/design-and-estimation-resources/bridge-innovations/>

Criterion #3: Racial Equity and Barriers to Opportunity

The Project addresses racial equity through both planning and Project components. The Project's stakeholder outreach and planning process was focused on ensuring that surrounding tribal population input was sought. Ultimately, the southern access of the Project design was modified based on community input. The realignment would provide direct connections to the western portion of Chickasha that do not exist today. This connection help facilitate economic growth and provide improved access to goods, jobs, and education for underserved communities. The Project will align with the Oklahoma Department of Transportation (ODOT) Disadvantaged Business Enterprise (DBE) program.

Stakeholder Engagement

Stakeholder engagement has been an important component during the development and design of the Project. The University of Science and Arts of Oklahoma (USAO), located in Chickasha, provided key insight about their environmental project farm that would have been impacted by the original alignment. Through coordination with the University, the alignment was shifted to avoid the conflict with the farm. USAO provided a letter of support for this project as part of this application package.

Through development of the latest alignment, the University requested the Project to include an access point for Grand Avenue to provide an exit and direct connection to the University and surrounding businesses.

At the southern end of the Project, the original proposal was to eliminate access to the east-west 1405 Section Line Road. The businesses located at this removed access were to be purchased and eliminated, however, through stakeholder input the access was re-established to include two twin bridges to carry traffic over 1405 Section Line Road with the inclusion of a frontage road to provide access to Quail Road. The slight modification will help maintain business access to 1405 Road, and ultimately continue to support economic growth for this area.

Underserved Communities

The new facility will provide access to adjacent rural and industrial corridors through construction of six interchanges, as well as two newly constructed grade separated railroad crossings. These interchanges will provide direct access to the western portion of Chickasha that does not exist today. The connectivity from US-81 to these rural and industrial corridors will bring improved access to goods and facilitate economic growth near these interchanges, such as an increase in jobs and construction of new businesses.

Multi-Modal Benefits

The Project helps to mitigate barriers to mobility by diverting heavy truck traffic volumes from downtown to the new alignment. By shifting truck traffic to a less populated area, the quality of life for residents and visitors near the existing route is improved. High volumes of freight and truck traffic are not conducive to Downtown Chickasha and are much better suited for a divided access route. By removing freight and OS/OW loads, the downtown Chickasha pedestrian and bicycle environment will be significantly improved.

In addition to improved safety downtown, the Project provides safety benefits by grade separating railroad crossings. The benefit cost analysis demonstrates the improvement of safety by reducing crashes resulting in a total of \$8.9 million (discounted at 7 percent) benefit.

Hiring from Local Communities

The Project will also emphasize hiring from local communities and align with the Oklahoma Department of Transportation (ODOT) Disadvantaged Business Enterprise (DBE) program. While there is no requirement necessitating local community hiring, the primary businesses that will be affected positively will be earthwork contractors, aggregate suppliers, ready-mix concrete plants, and sod suppliers. It is anticipated that there will be hiring of local personnel and contractors for a wide range of labor categories. ODOT has historically defined projects within eight-mile segments (or smaller) to encourage participation from local, small, and DBE firms.

Criterion #4: Leveraging of Federal Funding

The partnership and commitment from ODOT and the OTA demonstrate the importance of this Project for Oklahoma. ODOT and its partners are committing \$139.9 million in future eligible non-Federal funds (in addition to a previous investment of \$22.1 million).

- ODOT commits to \$125.0 million in local (non-federal) future eligible cost (in addition to a previous investment of \$5.1 million).
- OTA commits to a total private funding commitment of \$31.9 million (\$14.9 million in future eligible Project costs and \$17.0 million from previously incurred eligible Project costs).
- **ODOT is requesting \$100,000,000 in INFRA Grant funds, 38 percent of the future eligible Project cost.**
- The Project boasts an approximate **54 percent local (non-Federal) funding share** of future eligible Project costs.

The significant contribution from the State of Oklahoma shows the importance of this Project, both to the region and to the state. Oklahoma is primarily a rural state with many financial demands, which have been heavily impacted due to the recent downturn in the oil and gas industry. However, because of the importance of this Project to the regional and state economy, freight movements, and the safety of those driving this highway, ODOT is prepared to make this significant funding obligation and investment in the corridor.

The OTA receives no tax money to operate its turnpikes. As such, the investment by OTA will not include any taxpayer dollars. In 1992, legislation made available additional motor fuel excise taxes, if necessary, for payment of OTA debt service requirements on OTA's bonds. Since that legislation was enacted in July 1992, OTA has received and immediately remised 100 percent of those funds to ODOT.^{12 13}

US-81 is a high transportation priority. ODOT and OTA are willing to invest in the US-81 Realignment Project absent of local municipal or county funding. The City of Chickasha and Grady County are small rural communities with limited financial resources and do not have the funds necessary to contribute to the Project.

OTA is a primary project partner with a \$14.9M commitment to the US-81 Realignment Project.

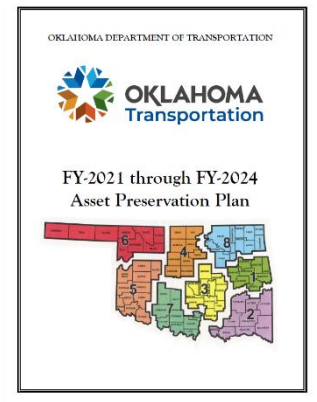


¹² See OTA website: <https://www.pikepass.com/pdf/OTA%20Adopted%20Budget%202020.pdf> page 20.

¹³ <http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=89525>

Addressing Life Cycle Costs

ODOT maintains a detailed Asset Preservation Plan for existing infrastructure and future transportation improvements within each county. These plans begin with ODOT’s Field District Engineer building on a condition assessment of the highway network based upon their knowledge of the transportation needs and priorities in each district. ODOT’s pavement maintenance schedule for existing US-81 includes pavement preservation projects every seven years and rehabilitation/reconstruction project once between 2019 and 2055 on the existing US-81 corridor. The estimated maintenance costs on this corridor, including annual general maintenance, would be \$51.1 million through 2056.



ODOT will maintain the existing corridor through Chickasha until the realignment Project is completed. At that time, the existing segment of the corridor will be decommissioned and transferred to Chickasha and Grady County through a formal highway removal process.

The new corridor alignment will be maintained in accordance with ODOT’s maintenance schedule outlined previously. ODOT has estimated the maintenance and operating costs for the realigned corridor using recent maintenance and operating cost analysis of other similar new corridors. Based on ODOT’s regular pavement maintenance, rehabilitation/reconstruction projects, and annual general maintenance, the estimated maintenance cost for the new alignment will be \$35.2 million through 2056, equating to a decrease in \$8.3 million in maintenance costs.

Criterion #5: Potential for Innovation

Innovative technology, Project delivery practices and financing are being deployed to:

- Expand rural 5G broadband access to rural residents and communities;
- Ensure an efficient and on-time completion of the Project; and
- Leverage public funds with private-sector transportation investment.

The Project offers innovation in **all three identified categories** which will improve quality of life for residents, improve performance and accountability measures, and ultimately increase potential for Project success.

Innovation Area #1: Technology

ODOT is familiar with the Executive Branch’s emphasis on expanding broadband to rural areas per the Presidential Executive Order 13821. ODOT plans to expand broadband statewide and this Project area is the ideal candidate for fiber, future roadside technologies, and expansion of broadband deployments.

Innovation Area #2: Project Delivery

The US-81 Realignment Project includes several innovative components and techniques to improve performance and implementation including ITS components and dynamic messaging signs to help manage traffic with travel time information and statewide alerts by implementing and maintaining applications to auto-capture and report safety. Portable dynamic messaging will be used during construction to alert drivers of potential delays.

The **US-81 Realignment Project will employ additional innovative strategies to improve Project delivery**. Strategies employed will include:

- **Accelerated Bridge Construction (ABC)** – ODOT will encourage the use of ABC techniques, particularly at the rail crossings and the northern and southern most interchanges on the realignment. ABC is a paradigm shift in the Project planning and procurement approach to minimize mobility impacts which commonly occur due to on-site construction activities. ODOT will encourage ABC innovative planning, design, materials, and construction methods to improve site constructability, Project delivery timeline, and work-zone safety. ODOT also anticipates reduced traffic impacts, on-site construction time and weather-related time delays due to ABC. On-site construction time and mobility impact time (period that traffic flow is reduced due to on-site construction activities) are two performance measures that can be used to gauge the effectiveness of ABC.
- **Incentives and Disincentives** – ODOT will offer incentives for early completion of each major Project milestone and implement disincentives for Project delay. This will further ensure that the US-81 Realignment Project is implemented on-time and within INFRA schedule requirements. In addition to schedule incentives, ODOT will also offer a cost incentive for enhanced pavement smoothness as a measure of quality construction.
- **Innovative QC/QA Testing Techniques** – ODOT will use innovative techniques such as use of concrete maturity meters and soil settlement plates to help expedite the construction process.

Innovation Area #3: Innovative Financing

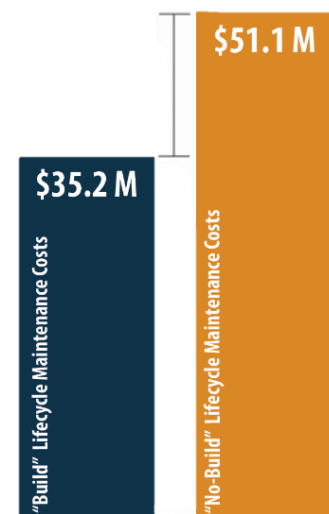
ODOT looks for every opportunity to further leverage public funds and taxpayer dollars. OTA, a private partner, will provide \$14.9 million in financial support for the Project, which includes the specific infrastructure improvements at the I-44 interchange. The partnership between ODOT and OTA will maximize the benefits of local and USDOT dollars. ODOT and OTA have a history of successfully implementing several projects across the state and do not foresee any issues collaborating on this Project.

Criterion #6: Performance and Accountability

Project Lifecycle Costs

ODOT has estimated full lifecycle costs of the Project, including the maintenance and operating costs for the realigned corridor. Lifecycle cost forecasts use recent maintenance and operating cost analysis of other similar new corridors, in addition to accounting for regular pavement maintenance, rehabilitation/reconstruction projects, annual general maintenance, and contingency in place within ODOT’s maintenance budget based on recent extreme weather conditions from climate change. ODOT’s current budget added \$40 million to prepare for additional maintenance based from more extreme weather (including flooding, tornados, and cold weather events).

Based on these assumptions, the estimated maintenance cost for the new alignment will be \$35.2 million through 2056, **equating to an annual decrease in \$8.3 million in maintenance costs.**



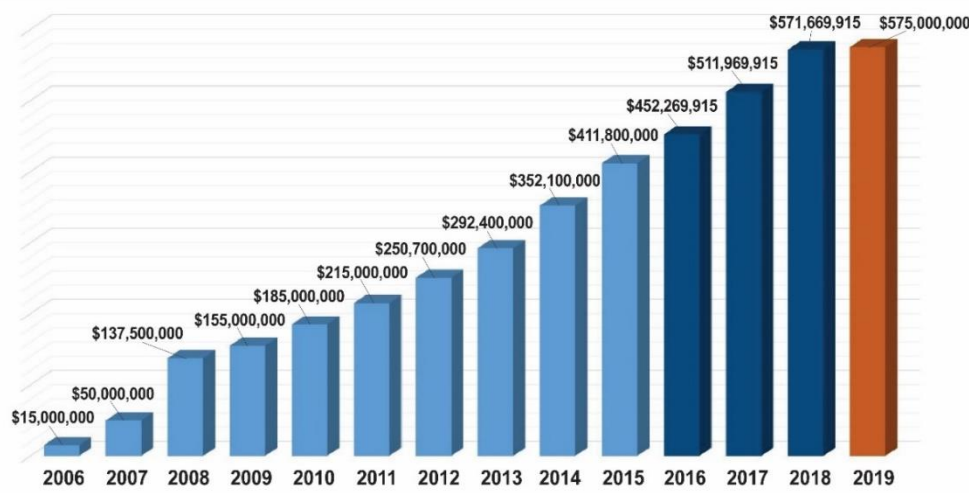
ODOT and its partners are confident in the ability to pay for operations and maintenance needs based on the state’s recent increases in **dedicated transportation funding**. Additionally, municipal partners are aware of the lifecycle costs on the existing alignment and Chickasha and Grady County are accounting for the maintenance costs in future planning. Street maintenance in the City of Chickasha and Grady County is funded through the general fund.

ODOT is funded by both state and federal dollars. In 2005, House Bill 1078 passed creating the Rebuilding Oklahoma Access and Driver Safety (ROADS) fund that permanently dedicated state income tax dollars to help supplement the minimal state dollars invested over the previous decades. Oklahoma, like many states, faced budget shortfalls from 2010-2017, resulting in nearly \$800 million in cumulative budget cuts to the transportation system during that period. The Oklahoma Legislature has recognized that cutting transportation funding was not an option and implemented the following countermeasures to partially offset this temporary budget impact:

- In 2016, ODOT was authorized to sell \$200 million in bonds to partially offset the budget shortfalls that impacted the transportation budget that year.
- In 2018, for the first time in over 30 years, state lawmakers united to pass a required supermajority (75 percent house and senate) tax increase to boost state revenue that included state motor fuel tax (3 cents on diesel and 6 cents on gasoline). While this revenue was not additive to the ROADS fund allocation, this transportation industry generated revenue was committed 100 percent to ODOT to help ensure that future budget shortfalls would not impact ODOT funding as occurred in 2016 and 2017.

Oklahoma increased dedicated transportation funding by \$163 million in annual state commitment from 2015 to 2018, representing a 40 percent increase to the state’s ROADS fund. However, as illustrated in Figure 3, the commitment since 2006 has built a new annual state commitment of \$575 million in transportation funding. That represents an estimated \$3.6 billion in non-federal revenue commitment during this period.

Figure 3: ODOT Tax Allocations



Source: ODOT Comptroller

ODOT Transportation Asset Management (TAM)

Following construct, US-81 will be included in ODOT’s TAM system, built on quality information inputs and disciplined analysis to establish a basis for optimizing expenditures to sustain and improve ODOT’s transportation system in an efficient manner.

Schedule Accountability Measures

The Project partners are focused on accountability in Project delivery and performance, and ODOT is committed to transparency and quality performance in all projects and operations.

The development of the US-81 Realignment Project is well advanced in all stages of work. ROW acquisition and utility relocation are complete and final design is anticipated to be complete in late 2021. With additional funding from the INFRA grant to leverage state and private investment, ODOT commits that the **Project will be shovel-ready by December 2021, will begin construction by the end of June 2022, and construction will be complete by December 2026**. ODOT is committing to schedule adherence and will deploy several strategies confirm on-time or ahead of schedule obligation of funding, beginning of construction, and Project completion.

If ODOT is awarded INFRA Grant funding, ODOT will provide schedule incentives for early completion and monitor quality throughout construction in order to ensure the Project achieves the optimal public benefits and meets or exceeds Project schedule and accountability measures.

- ODOT will employ **incentives for early completion** of each major milestone and **disincentives for delay**.
- ODOT will structure the Project contract to **encourage the use of Accelerated Bridge Construction (ABC) techniques** (particularly at the US-81 South and North interchanges and at rail crossings).
- ODOT also plans to employ **innovative material QC/QA testing techniques** such as use of concrete maturity meters and soil settlement plates to help expedite the construction process.

To support this commitment, ODOT will organize a **US-81 Project Performance Team** comprised of the persons from the design firm, the field district, and local city/county officials who will attend Project status meetings and be able to provide the construction team with accelerated answers to the contractor's requests for information. With this process and the previously mentioned strategies including construction incentives and ABC, ODOT feels confident in committing to the schedule accountability milestones for obligation of funds and construction.

One additional measure that will be used to ensure quality construction is a measure of pavement smoothness. ODOT will offer an incentive for enhanced pavement smoothness.

Project Readiness

ODOT and Project partners have already made significant investments to position the Project to proceed as quickly as possible once funding is available. The Project's **Environmental Assessment** has been prepared and submitted; and a **Finding of No Significant Impact (FONSI)** has been issued. ODOT has completed preliminary engineering plans and OTA has relocated a toll booth structure on I-44 in 2017 in preparation for Project construction. Engineering plans (90% drawings) and the Project's FONSI are included in the Reports and Technical Information section on the [ODOT US-81 INFRA Grant website](#).

Technical Feasibility

ODOT has extensive experience designing and constructing projects similar in complexity and scale to the one proposed in this application. The technical feasibility of this Project is evidenced by the 90% design plans that were complete as of June 2020. Plans are being designed in accordance with FHWA

and AASHTO standards. The cost estimates for this Project were developed based on estimated quantities and similar projects constructed in the State of Oklahoma.

Project Schedule

A detailed Project schedule that includes all major Project milestones has been prepared anticipating INFRA Grant funding. The Project schedule is shown on the following page and can also be found in the Application section on the [ODOT US-81 INFRA Grant website](#). A summary of the schedule includes:

- State and local planning approvals:
 - The Project is consistent with the 2020-2040 Oklahoma Long Range Transportation Plan (LRTP) completed in September 2020.
 - The State Transportation Improvement Program is a financially constrained document and will be amended as the Project progresses.
 - With an accepted INFRA award, ODOT will expedite the Project as funding is made available.
- The Project is included in the current Oklahoma Freight Transportation Plan (2018 – 2022).
- Environmental study, NEPA documentation, and other environmental reviews and approvals are complete with an Environmental Assessment signed on February 3, 2017. ODOT coordinated with the Federal Aviation Administration (FAA) and the US Army Corps of Engineers on permitting issues and the Project received all environmental clearances in early 2018.
- Right-of-way acquisition began at the end 2017 and was completed in mid-2019.
- Utility relocation began in 2018 and was completed in September 2019.
- Project design is 90% complete, with final design to be completed by late 2021.
- INFRA funds will be obligated by March 2022.
- Construction will begin by (or in advance of) June 2022 and complete by the end of 2026.

Construction on the Project will begin in 2022 and will be completed by the end of 2026 in advance of INFRA requirements. The primary risk, right-of-way acquisition, has been carried out in accordance with 49 CFR part 24 and other applicable federal regulations, and was concluded by August 2019.

The recently opened Kickapoo turnpike in Oklahoma is an example of an expedited schedule and quick construction turnaround. The 21-mile route began construction in January of 2018 and opened to traffic mid-October of 2020.¹⁴ This is important to note as US-81 is under half of the Kickapoo total route length, which highlights the efficiency that would be associated with the construction of this Project.

¹⁴ Kickapoo Turnpike. Source: <https://www.drivingforwardok.com/northeast-ok-county-loop>

Project Schedule and Milestones

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	% Complete
Survey	●												100% ✓
Preliminary Engineering	■	■											100% ✓
Environmental Clearance	■	■	■	■									100% ✓
ROW Acquisition			■	■	■								100% ✓
Utility Relocation				■	■	■							90%
90% Design		■	■	■	■								100% ✓
Final Design (100%)						■	■						50%
STIP/TIP Approval							○						75%
Obligate Funds							○						0%
Construction								■	■	■	■	■	0%
<i>Grading for Bypass</i>								■	■	■			0%
<i>Construct Bridges</i>										■	■		0%
<i>Construct Roadway</i>										■	■		0%
<i>Tie In Ramps</i>											■	■	0%
Construction Completion												○	0%
Project Open to Public												○	0%

Required Approvals

The Environmental Assessment, early coordination with other state and local plans, and commitments to amend the necessary planning documents to advance the realignment Project if INFRA funds are awarded puts this Project ahead of schedule to meet the INFRA Grant award obligation dates.

Environmental Permits and Reviews

ODOT reasonably expects all environmental approvals and permits necessary for the Project to proceed on the timeline specified in the Project schedule. The schedule will meet the statutory obligation deadline, including satisfaction of all Federal, state and local requirements. **The US-81 Realignment Project’s Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) was signed February 3, 2017.**

Reviews, Approvals and Permits by Other Agencies

The Environmental Assessment notes that coordination with Federal Aviation Administration (FAA) may be required via FAA Form 7460-1 prior to construction. The Chickasha Municipal Airport is roughly two miles north of the planned realignment. The proposed construction activities will be evaluated regarding the linear extent and volume of potential disturbance to any jurisdictional waters and wetlands to comply with the appropriate Clean Water Act Section 404 permit application made when design plans are finalized.

USDOT Modal Administration Discussions

FHWA was involved with the development of the US-81 Realignment Environmental Assessment and the document was approved by FHWA signature on February 3, 2017.

Public Engagement

During the development of the Environmental Assessment, ODOT and their team held three separate public meetings to obtain input and feedback regarding the realignment. Each public participation

event was well publicized and included a meeting with stakeholders representing local residents, businesses, and public organizations, followed by a meeting with the general public.

Chapter 5 of the **Environmental Assessment** describes the details of the public engagement process and comments can be found in the **Reports and Technical Information** section on the [ODOT US-81 INFRA Grant website](#). ODOT will continue to meet with regional partners and stakeholders throughout the design and construction process for this Project. In addition, ODOT will establish a Project advisory committee and coordinate with emergency services, public works staff, and area businesses, as well as Chambers of Commerce to allow businesses and residents to stay informed about Project progress.

State and Local Approvals

The current 2020 – 2040 Oklahoma Long Range Transportation Plan, approved by Commission in September 2020 is a policy document. Constructing the US-81 realignment to a full access-controlled facility addresses the following policy in the LRTP:

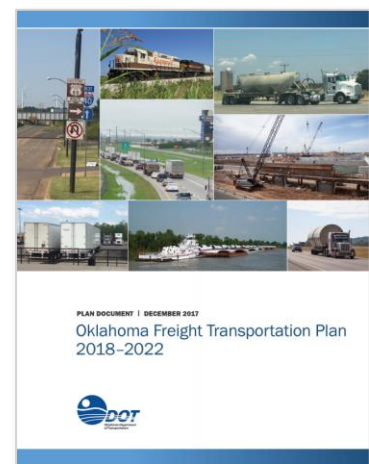
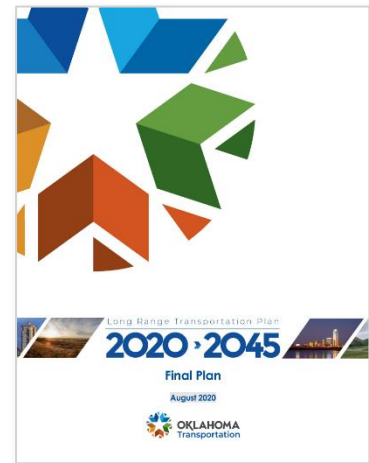
- Improve Commercial Motor Vehicle Mobility and Connectivity Policy #4: Make targeted investments on the National Highway System to accommodate traffic growth and truck routes and strengthen system safety and efficiency for truck operations.

ODOT has met with the City of Chickasha and Grady County and the Project is supported by these entities and is consistent with local plans and economic development efforts. Based on National Performance Management Research Data Set (NPMRDS), the Oklahoma Freight Transportation Plan: 2018 - 2022 identified US-81 through Chickasha as a top 5 percent freight bottleneck in Oklahoma.

Operational analysis of the proposed realignment shows collisions can be reduced and safety increased through implementation of this Project. The Project will allow for improved through freight and passenger vehicle traffic, and at the same time enhance the community environment and provide safe and reliable travel options for local residents and businesses.

Federal Transportation Requirements

Previous project elements (utilities and right-of-way acquisition) was included in prior Statewide Transportation Improvement Program (STIP) plans. Remaining project components included in the [current STIP](#) include fencing, bridge construction, interchange construction, approach construction, grading, drainage, and surfacing. The project included in the STIP is a two-lane realignment which falls short of the necessary four-lane facility. ODOT commits to amend the STIP and any other applicable local planning documents in the event the US-81 Realignment Project is awarded INFRA funding.



Assessment of Project Risks

ODOT staff have discussed the Project concept with the Oklahoma Division of FHWA and Project communication and coordination will continue. To date, no risks have been identified by FHWA staff. ODOT staff have carefully assessed the potential Project risks and mitigation strategies. Since ODOT’s previous submittals for INFRA, **all ROW has been secured and ODOT has eliminated that previously identified risk.** Other risks considered are as follows:

Project Risk	Mitigation Strategy	Risk Category
The timing of the obligation of funds could delay the start of the Project	ODOT and local partners have committed sufficient funds to initiate the Project prior to the obligation of funds. Historically, ODOT has met every funding obligation for pervious grant applications. It is important to note that no additional reviews or approvals are needed from State legislature once note of the award has been granted.	Minimal
The Project will require FAA approval	The FAA permit process will ensure that no construction equipment exceeds elevation limitations when located within prescribed distances of an airport, in this case Chickasha Municipal Airport, located just north of the northern terminus of the project. This is a perfunctory check to limit crane heights if applicable. The only location where this would be an issue is for the construction of the railroad overpasses at the north end of the project. Due to the distance of this crossing from the runway and the airport elevation being approximately 40’ higher than the existing railroad crossing, this will not be an issue.	None
The Project will require USACE 404 permit to begin construction	There are two blue-line mapped streams that are crossed by bridges on this project that will require 404 permit applications, Line Creek and Rock Hollow Creek. Since there are no channel changes, loss of sinuosity of the stream, or notable impacts to these streams due to construction of these bridge structures, the stream crossings will be routine.	Minimal
Weather related events could cause construction delays	The project schedule will include clear communications and documentation regarding rain days, careful management of Project schedule, and early and frequent communication with Project contractors.	Minimal
The Project has an aggressive schedule	The Project is shovel-ready with securing of ROW and the completion of final design plans later this year. ODOT is committing to schedule adherence and will deploy several strategies confirm on-time or ahead of schedule construction and Project completion including incentives for completion of major milestones and disincentives for delay; structure the contract to encourage the use of Accelerated Bridge Construction (ABC) techniques (particularly at the US-81 South and North interchanges and at rail crossings); and organize a dispute resolution team which will provide accelerated resolution to disputes based on a Project specific dispute resolution matrix. With this process strategies in place, ODOT feels confident in committing to the schedule accountability milestones for obligation of funds and construction.	Minimal

Large Project Requirements

Based on the future eligible Project costs of \$260,000,000 (total Project capital costs remaining), the US-81 Realignment Project exceeds the minimum total Project cost categories for the State of Oklahoma and therefore meets the large Project size requirement.

Requirement	Response
Does the Project generate national or regional economic, mobility, safety benefits?	Yes; The corridor supports major local economies that produce oil, gas, agriculture, and renewable energy (specifically wind energy). The Project provides connections to historically underserved communities with 6 planned separated grade crossings that will not only reduce travel time but also provide better connectivity to jobs, education and other services.
Is the Project cost effective?	Yes; INFRA funds provided by this Grant application would allow for construction of the four-lane Project to occur at one time, which is a more efficient and cost-effective process than first constructing a two-lane scenario. The BCA provided a value of 1.64 with a total net benefit (discounted at 7 percent) of \$369,288,247.
Does the Project contribute to one or more of the Goals listed under 23 USC 150? (<i>safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, reduced project delivery delays</i>)	Yes; The Project will provide improvements to safety and goods movement with more efficient connections to I-35 and I-40. Safety and congestion are significantly improved in downtown Chickasha because traffic will be diverted to the new alignment. This will improve the quality of life for residents and the downtown community of Chickasha.
Is the Project based on the results of preliminary engineering?	Yes; Activities completed as of submission of the application include: environmental assessments, topographic surveys, metes and bounds surveys, geotechnical investigations, utility engineering, traffic studies, financial plans, revenue estimates, hazardous materials assessments, and engineering estimates of the types and quantities of materials. 90% design was completed at the end of 2020.
With respect to non-federal financial commitments, does the Project have one or more stable and dependable funding or financing sources to construct, maintain, and operate the Project?	Yes; Funding will be provided from a combination of Station bonds (both ODOT and OTA), in addition to the Oklahoma ROADS fund.
Are contingency amounts available to cover unanticipated cost increases?	Yes; the project is carrying a contingency of \$20,460,000. With design work nearly complete, ODOT is confident that the contingency amount is sufficient to cover the minimal remaining project risk. ODOT is committed to the Project and should the project encounter unforeseen costs, ODOT will cover additional costs.
Is it the case that the Project cannot be easily and efficiently completed without other federal funding or financial assistance available to the Project?	Yes; ODOT cannot complete the four-lane design without financial assistance. INFRA funds will allow full construction of the four-lane build out to be complete by the end of 2026, an accelerated Project schedule (as compared to an alternative two-lane facility opening in 2028). A two-lane interim solution is inefficient and does not fully serve the needs in the community.
Is the Project reasonably expected to begin construction not later than 18 months after the date of the obligation of funds for the Project?	Yes; ODOT has met every funding obligation in pervious grant applications. 90% design is complete and the project. No additional reviews or approvals are needed from State legislature once note of the award has been granted.