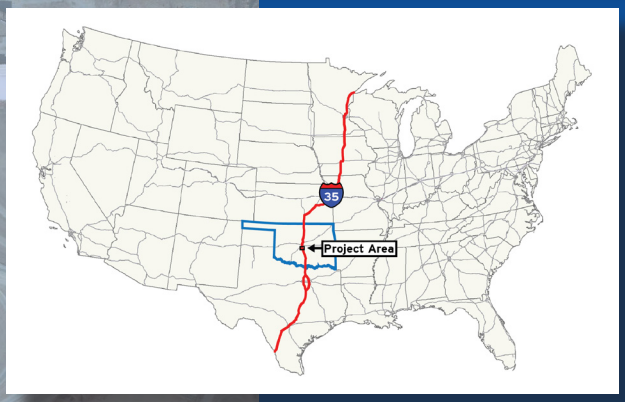


Oklahoma Department of Transportation

I-35 and State Highway 9 Improvements McClain County, Oklahoma

BUILD Grant Application

DUNS: 8247000740000

July 19, 2018

PROJECT INFORMATION	
Sponsoring Organization	Oklahoma Department of Transportation
DUNS Number	8247000740000
EIN	73-6017987
Name of Project	I-35 and State Highway 9 Interchange Improvements
Type of Project	Roadway
Location of Project	McClain County, Oklahoma
Congressional District	4th Congressional District Tom Cole, Current Representative
BUILD Application Amount Requested	$9,185,000
State Match	$ 5,953,254
Partner Match	$ 3,232,446
Total Project Cost	$18,370,700
Primary Point of Contact	Matthew Swift P.E. Strategic Assets and Performance Management Division Engineer Oklahoma Department of Transportation SAPM Division 200 N.E. 21st Street Oklahoma City, OK 73105 mswift@odot.org (405) 521-2704

Table of Contents

Project Description 1
Project Location 3
Grant Funds, Sources & Uses of Project Funding 4
Safety 5
State of Good Repair 7
Economic Competitiveness 9
Environmental Responsibility 12
Quality of Life 14
Innovation 15
Partnerships 16
Non-Federal Revenue for Transportation Infrastructure Investment 17
Project Readiness 19
- Technical Feasibility 19
- Project Schedule 19
- Required Approvals 20
- Assessment of Project Risks and Mitigation Strategies 21

Summary of BCA Results 22
Appendices 23

Project Description

The Oklahoma Department of Transportation (ODOT), in cooperation with the Chickasaw Nation and local municipalities, is seeking additional funding for improvements to the Interstate 35 (I-35) and State Highway 9 (SH-9) Interchange. The project is located at the southern edge of the Oklahoma City metropolitan area, west of the University of Oklahoma, and immediately south of the Cleveland/McClain County line (demarcated by the Canadian River). This project will leverage funds from two local governments, McClain County and the City of Newcastle, (which encompass land in or near the project), ODOT, as well as, investment from the Chickasaw Nation (a property owner in the area), totaling $9,185,700 in non-federal match (50 percent). The requested BUILD grant funding totals $9,185,000. The project total including the proposed grant funds and match is $18,370,700.

The I-35 and SH-9 Interchange Improvement Project (Project) eliminates significant congestion and ramp queuing on I-35, addresses safety concerns, and improves mobility to and from the surrounding development and activity nodes.

I-35 is a national freight corridor and designated as an interstate as part of the National Highway System (NHS). SH-9W is classified as an NHS Principal Arterial (consistent with SH-9E). Adjacent project improvements, in addition to I-35 ramps and terminals, include new connector streets that will provide a vital link to local existing and planned future development.

The proposed modifications to the interchange are anticipated to be the first phase of improvements to directly address safety and capacity improvements along this segment of southbound I-35 and SH-9 in the near term. Phase two improvements, to be completed in the future, include construction of direct connect ramps, grade separation of SH-9, and access improvements to businesses along SH-9. Phase one improvements requested in this grant application work towards the larger vision for the corridor.

The I-35/SH-9 Interchange Improvements included in the Project are as follows (and shown in **Figure 1** on the following page):

- Construct a second new southbound I-35 exit ramp that diverges under the existing SH-9 bridge and connects to a new county road. A roundabout is proposed at the terminus of the entrance ramp to reduce wrong way traffic.
- Extend the existing southbound I-35 mainline (7,500 linear feet) from the interchange to the north (I-35 at SH-9E) through the subject interchange.
- Reconfigure local access including construction of a new county road, realignment of NW 12th Avenue, and realignment of South Harvey Street.
- Modify traffic signals on SH-9 to address congestion and improve traffic flow.

FIGURE 1: I-35/SH-9 INTERCHANGE IMPROVEMENT PROJECT

A summary of existing needs and project benefits, aligning with merit criteria, are below.

PROVIDING SAFE & RELIABLE TRANSPORTATION

Existing need to improve safety (nearly 400 collisions with 45 injuries rom 2012 to 2017).

Project Benefits:

- ☑ Improved traffic flow by adding capacity in and around the I-35/SH 9W interchange which will reduce the number of rear end collisions caused by congestion and speed differential.
- ☑ Elimination of queuing by extending the existing southbound I-35 mainline from the interchange to the north.
- ☑ Reduced incidence of wrong way traffic by addition of roundabout at terminus of I-35 entrance ramp.
- ☑ Adequate shoulders which will provide support to the highway system and serve as a refuge area for disabled or emergency vehicles.
- ☑ An average annual crash savings of $4,000,000.

ENSURING INFRASTRUCTURE IN STATE OF GOOD REPAIR

Existing need for well-maintained infrastructure; aging and deteriorating infrastructure.

Project Benefits:

- ☑ Improved I-35 mainline infrastructure in a state of good repair to accomodate national freight corridor traffic.
- ☑ Roadway surface improvements which will protect the surface from intrusion of water and advanced erosion and deterioration.

SUPPORTING ECONOMIC VITATLITY

Growing communities need an expanded local street network and improved connectivity on SH 9 to I-35. McClain County was the second fastest growing county in Oklahoma from 2010 to 2017.

Project Benefits:

- ☑ Improved capacity on I-35 and better connecting streets and roads to reduce traffic burden on I-35.
- ☑ Improved access to adjacent businesses and activity centers to support expanded economic development.

PROTECTING THE ENVIRONMENT

Address problematic drainage and hydraulics located within the floodplain adjacent to the Canadian River.

Project Benefits:

- ☑ Drainage improvements in the proposed area which will allow for future development opportunities.
- ☑ Roadways which are free from water and debris.
- ☑ Reduced vehicle emissions and pollutants.

PROVIDING A HIGH QUALITY OF LIFE

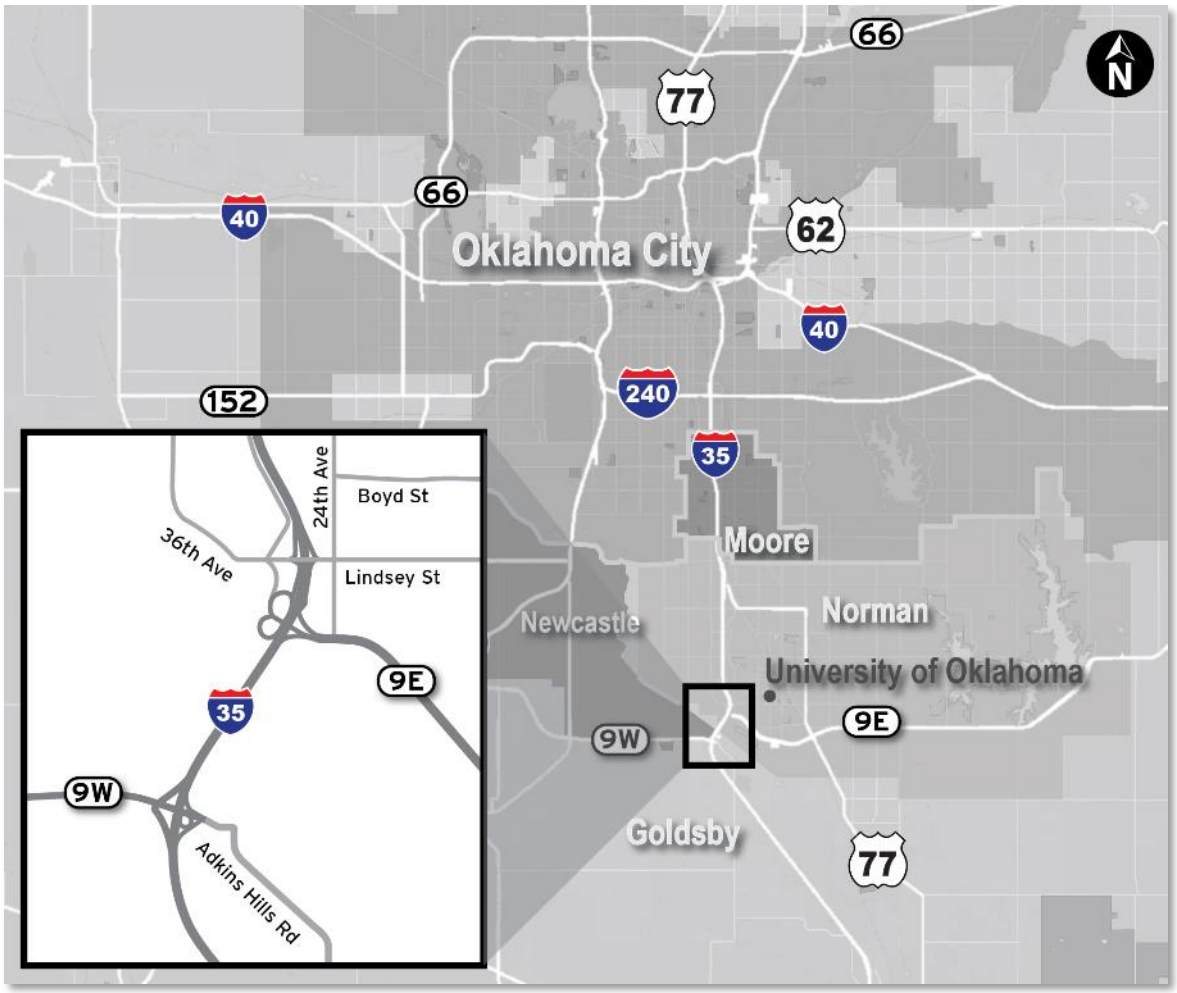
Existing need to minimize delays and unreliable travel time for nearby workers, residents, and area visitors.

Project Benefits:

- ☑ Reduced congestion and improved travel times on SH-9.
- ☑ Economic progress demonstrated through job growth and development opportunities.

Project Location

FIGURE 2: I-35/SH-9 PROJECT LOCATION



Source: I-35/SH-9 HNTB, Kimley-Horn Planning Team

The I-35/SH-9 Interchange Improvement Project is located in the unincorporated part of McClain County on the outskirts of Newcastle and Norman, Oklahoma (shown in **Figure 2**). These communities are within the Oklahoma City Metropolitan Region. The Project is located within the Oklahoma City Area Regional Transportation Study (OCARTS) area. The Association of Central Oklahoma Governments (ACOG) serves as the Metropolitan Planning Organization (MPO) for the OCARTS area, of which McClain County, Norman, Newcastle, and Goldsby are members. The interchange is generally located at geospatial coordinates 35.181258, -97.493900.

I-35 serves as the primary corridor through the region, connecting Oklahoma City to Dallas, Texas to the south and eventually leading to the U.S./Mexico border. To the north, I-35 connects to Kansas City, Missouri and continues north to Minnesota. Without a viable alternate interstate or access controlled route around Oklahoma City south of I-240, it is critical for traffic flow to be maintained on the I-35 corridor through the Project area, and into the cities of Norman and Moore to the north.

Grant Funds, Sources and Uses of Project Funding

TABLE 1: PROJECT BUDGET

Project Element	Estimated Cost
I-35 entrance and exit ramps with additional shoulder improvements at SH-9 and additional improvements to SH-9	$15,383,602 **84%**
NW 12th Avenue and Proposed County Road	$2,254,652 **12%**
South Harvey Street	$732,446 **4%**
Total	$18,370,700 **100%**

TABLE 2: SOURCES AND USES OF FUNDS

	Non-Federal Funds			Total Non-Federal Funds	BUILD Funds	Total Eligible Project Costs
	State Funds	Tribal Funds	Local Gov't Funds			
Engineering	-	-	-	-	$2.15M	$2.15M
ROW	$3.50M	-	-	$3.50M	-	$3.50M
Utilities	$.92M	-	-	$.92M	-	$.92M
Construction	$.82M	$1.60M	$1.63M	$4.05M	$4.88M	$8.94M
Contingency	$.72M	-	-	$.72M	$2.15M	$2.86M
Total	$5.96M **32%**	$1.60M **9%**	$1.63M **9%**	$9.185M **50%**	$9.185M **50%**	$18.37M **100%**

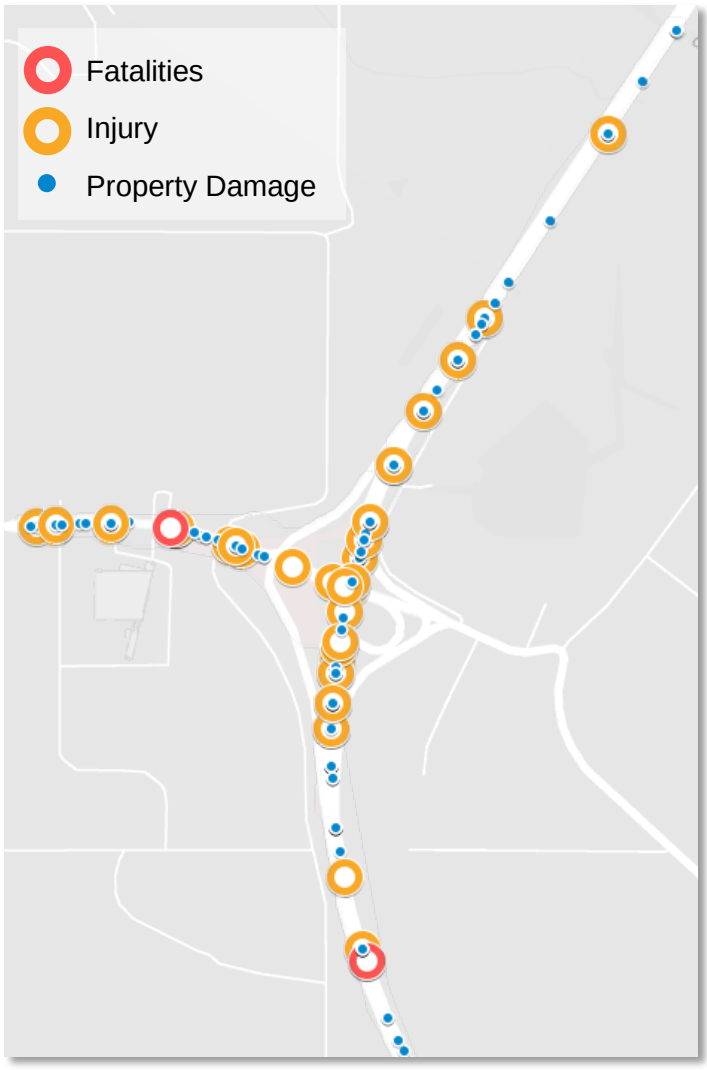
50%

NON-FEDERAL FUNDING

Safety

Safety is ODOT's top priority. This Project addresses a need for safety improvements to the I-35 and SH-9 corridors and the existing interchange location. This Project addresses queuing on southbound I-35 main lanes contributing to congestion in the area creating significant safety concerns. The Project adds a single lane off ramp at the southbound I-35 connection to SH-9 which will eliminate queuing. Other improvements will add capacity and reduce congestion in and around the interchange. Today, signal spacing is too close for functional traffic flow on SH-9 (approximately 400 feet). Signals will be re-spaced with improvements and new connections on SH-9, west of the interchange.

FIGURE 3: COLLISIONS IN PROJECT AREA



Source: ODOT, Fall 2012 – Fall 2017

Currently, congestion occurs on the I-35 ramps, particularly the southbound off-ramp, causing vehicles to back up onto the I-35 mainline. During the PM peak, southbound traffic from existing westbound SH-9 backs up and infringes on the primary southbound through lanes of I-35.

Congestion backup increases the risk for collisions and conflict between stalled or slow-moving vehicles and vehicles traveling at the posted speed in the adjacent through lanes on I-35. Rear-end collisions accounted 44 percent of crashes in this area (the dominant collision type). Crashes between 2012 and 2017 are shown in **Figure 3**.

I-35/SH-9 PROJECT
WILL RESULT IN
$4M
IN ANNUAL
CRASH SAVINGS

From 2012 to 2017, there were nearly 400 collisions in the project area. Of the 45 total collisions that resulted in injury, 58 people were injured. Additionally, in the last five years, there have been two fatalities in the project area.

The project area is well above the statewide average and critical collision rate for similar facility types. It is important that ODOT addresses the existing safety problems in the project area due to queuing.

TABLE 3: CRASH RATE TABLE

Collision Type	Project Area Rate	Statewide Average Rate	Critical Rates
Overall Collision	175.61	125.28	137.75
Fatal Collision	0.88	0.98	
Visible Injury Collision	19.91	16.48	
Visible Injury + Fatal Collision	20.79	17.46	22.25

Source: ODOT, Fall 2012 – Fall 2017

Reducing congestion backup onto I-35 will help alleviate safety concerns by reducing conflict points and common rear end collisions. Current queuing from the southbound I-35 exit ramp to the mainline creates a significant safety concern causing increased rear end collisions, sideswipe collisions, and other correctable collisions. It is estimated that 359 collisions will be avoided over the 20-year analysis period (2024 – 2044) with the proposed improvements. This is equivalent to more than $4.1 million in potential cost savings benefits per year.

This interchange has an elevated risk for collisions due to the nearby Riverwind Entertainment Complex, attracting visitors from around the region and neighboring states. Visitors who are unfamiliar with the area and its typical traffic patterns, unanticipated congestion, and backup in the corridor are at a higher risk for collision. A new southbound ramp for I-35 will provide direct access to a new county road serving current and future development. The Riverwind Entertainment Complex, a major visitor destination with 9,000 visitors a day and a major employer, is located adjacent to the proposed new county road. As previously mentioned, visitors to the area are unfamiliar with the interchange and unpredictable queuing at SH-9 on I-35.

State of Good Repair

ODOT oversees a significant amount of transportation infrastructure including more than 30,000 lane miles (12,265 centerline miles), and more than 6,800 bridges.[1] In total, 45 percent of Oklahoma's major local- and state-maintained urban roads and highways have pavements in poor condition; another 29 percent are rated in mediocre condition.[2] This Project will not only improve the condition of infrastructure on the state highway system, the Project will also improve the condition of adjacent arterial SH-9 and new and realigned collector roads. Today, the I-35 on- and off-ramps do not have sufficient shoulders and are deteriorating. Connecting roads are also deteriorating.

Infrastructure in poor state of repair

DRIVING ON DEFICIENT ROADS COSTS OKLAHOMA MOTORISTS **$5B** ANNUALLY

TRIP, 2017


Deteriorating and cracking pavement

No shoulder and poor pavement condition

Improving pavement condition and state of good repair of ODOT's infrastructure improves the traveling experience for motorists in Oklahoma and reduces vehicle maintenance costs for Oklahoma residents, visitors and fleet vehicles. It is estimated that the Project will produce more than $12.7 million of benefits in operating costs avoided over a 20-year period.

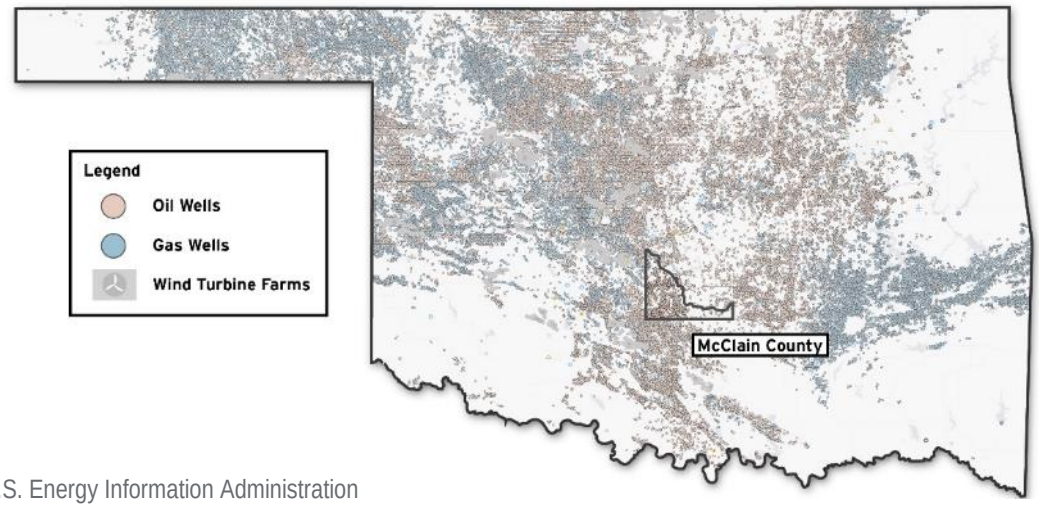
ODOT operates in accordance with the Fixing America's Surface Transportation (FAST) Act which in addition to providing funding, endorses the performance-based Federal highway program approach established by Moving Ahead for Progress in the 21st Century Act (MAP-21) legislation. ODOT uses Transportation Asset Management (TAM) to manage increasing demands on its highway system at a time when funding is decreasing.[3] ODOT's TAM process uses quality information and establishes a way to understand the costs and benefits associated with improvement options.

[1] Accessed at https://www.ok.gov/odot/Funding_Transportation_in_Oklahoma.html
[2] Accessed at http://www.tripnet.org/docs/OK_Transportation_by_the_Numbers_TRIP_Report_May_2017.pdf
[3] ODOT submitted the state TAM Plan to FHWA in April 2018 and expects certification of the TAM process in late July 2018

OVERSIZE AND OVERWEIGHT LOADS

Oklahoma is in the heart of the Mid-Continent oil region, a vast oil- and natural gas-producing area extending northward from Texas and between the Mississippi River and Rocky Mountain states.[4] Some of the largest natural gas and oil fields in the country are found in the state. The state has a high density of oil and gas wells as shown in **Figure 4**. In addition to fossil fuel production (including coal in the eastern part of the state), Oklahoma produces a significant amount of wind energy. The state also has substantial hydropower resources in addition to existing and future potential solar energy expansion.

FIGURE 4: STATE OF OKLAHOMA OIL AND GAS WELLS



Source: U.S. Energy Information Administration

This significant amount of energy production throughout the state puts strain on the transportation system. Heavy freight is required to transport necessary equipment and energy resources across the state network, particularly to, from, and through major freight corridors including I-35.

With trucks comprising 20 percent of the daily traffic on this portion of I-35, the burden on the roadway is immense. The additional weight and stress of larger vehicles causes more pressure on the roadbeds and concrete surfaces creating additional maintenance issues for ODOT and the local communities. Heavier vehicles create exponentially more damage to pavement and bridges. A four-axle, single-unit truck weighing 60,000 pounds causes six times as much pavement damage as a comparable truck weighing 40,000 pounds.[5] Considering the type of freight moving through Oklahoma, this impact is significant. Wind energy components are considered 'superloads' with vehicles or loads 16 feet wide and 21 feet high carrying 180,000 pounds or more. These superloads have a large impact on the pavement condition. ODOT faces a continuous challenge to maintain pavement condition with current funding levels while addressing pavement deterioration from increased weight and volumes of vehicles.

"Truckers regard highways as their factories and trucks as work tools. We need highways to be improved so that the channels of commerce can work effectively." – OK Trucking Association member[6]

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[4] Accessed at https://www.eia.gov/state/analysis.php?sid=OK
[5] Accessed at http://www.cbo.gov/ftpdocs/120xx/doc12043/01-19- HighwaySpending_Brief.pdf
[6] Accessed at https://ok.gov/odot/Programs_and_Projects/Transportation_Programs/ODOT_Freight_Transportation_Plan.htm

Economic Competitiveness

GROWTH

The I-35/SH-9 Interchange is a critical node in the area's transportation network, and in an area, that is rapidly growing and developing. From 2010 to 2017 McClain County was the second fastest growing county in the state of Oklahoma.[7] ACOG projects that by 2040, the population of McClain County will grow to nearly 50,000; an increase of more than 36 percent.[8]

McClain County offers a diverse mix of industry, including agribusiness, the equine industry, manufacturing and distribution, and retail trade and tourism. The University of Oklahoma (OU) Campus located just east of I-35 on SH-9 in neighboring Cleveland County, offers educational opportunities and is one of the top area employers with more than 12,000 employees. [9] Norman Regional Hospital is just six miles from the project area.

The City of Newcastle boasts an ideal location for retail and commercial development, including light manufacturing and distribution. The Chickasaw Nation has a strong business presence in the area with the Riverwind Entertainment Complex. Several large employers and activity centers are located around the interchange in addition to the Entertainment Complex including Cimarron Energy Inc., P&K Equipment, and other retail.

The Chickasaw Nation has also proposed a mixed-use development (**Figure 5**) adjacent to the I-35/SH-9W interchange which would further increase economic activity in the area and strain the transportation network. This development will not be feasible from a traffic and access standpoint without the proposed I-35/SH-9W interchange improvements.

FIGURE 5: PROPOSED DEVELOPMENT AREA

[7] ACS Census Data 2010 – 2017
[8] Accessed at http://www.acogok.org/wp-content/uploads/2018/02/2040-Population-Control-Totals.pdf
[9] Accessed at http://www.greateroklahomacity.com/index.php?submenu=_employers&src=employers&srctype=major_employers_map

STATE HIGHWAY 9

The interchange is located at the convergence of two important highways. SH-9 spans the width of Oklahoma, stretching from the Arkansas border on the east and the Texas border on the west. At almost 350 miles, SH-9 is Oklahoma's second-longest state highway. Future plans for SH-9E near the project area and in the vicinity of the City of Norman include expanding the highway to four lanes. Truck traffic on SH-9E is currently at 11 percent and is anticipated to increase by 2040 further causing safety and congestion issues on SH-9 if no improvements are made. Adding an additional lane on I-35 will allow for safer operations for people access the interchanges for SH-9W and SH-9E.

A NATIONAL FREIGHT CORRIDOR

I-35 is arguably one of the most important transportation corridors, not only in the State of Oklahoma, but also in the Midwest region. Several large Metropolitan Statistical Areas (MSAs) are located on the I-35 corridor including Minneapolis-St. Paul, Kansas City, Oklahoma City, Fort Worth-Dallas, Austin, and San Antonio. As a national freight corridor (**Figure 6**), I-35 has a high volume of long-haul freight traffic; approximately 20 percent truck traffic on I-35 through the project area.

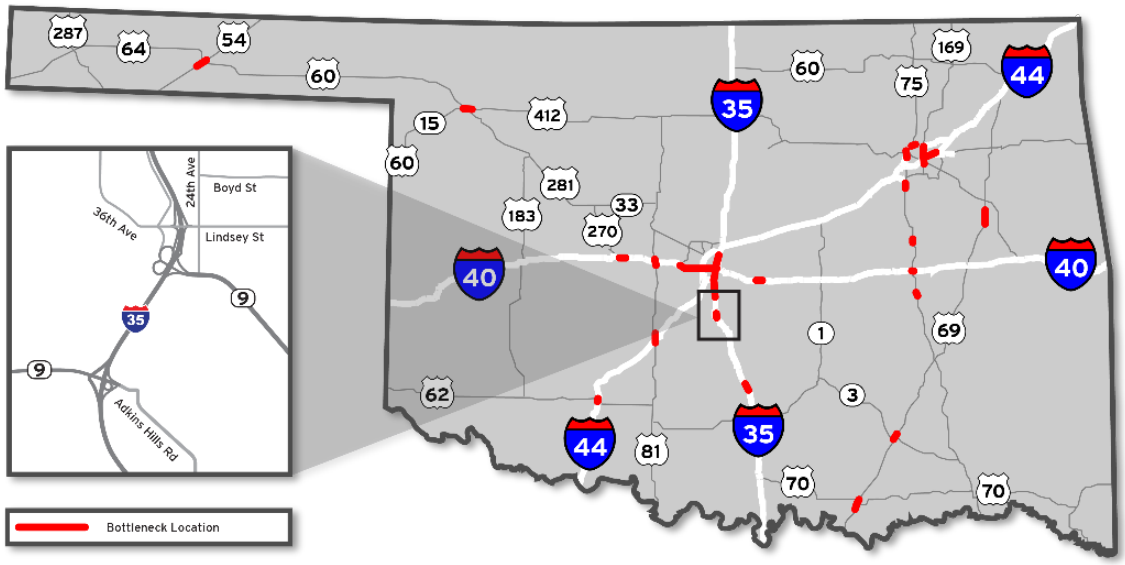
20% TRUCK TRAFFIC ON I-35 & 11% TRUCK TRAFFIC ON SH-9W IN THE PROJECT AREA

FIGURE 6: I-35 NATIONAL FREIGHT CORRIDOR

In 2015, more than 817 million tons of freight traveled through the state; 58 percent of freight was transported by truck.[10] Top commodities moved throughout the state include minerals, refined petroleum products, and agriculture. Oklahoma supplies agricultural products throughout the U.S. and internationally. In total, Oklahoma shipped $5.4 billion worth of goods around the globe in 2017.[11] Truck freight traffic in the State of Oklahoma is projected to grow by 46 percent between 2015 and 2045.[12]

I-35 is a primary freight corridor, but many segments of the corridor, including the project area, experience congestion (**Figure 7**). These segments include bottlenecks on the corridor and limit freight efficiency.

FIGURE 7: TOP FIVE PERCENT BOTTLENECK LOCATIONS



Source: ODOT, Oklahoma Freight Transportation Plan

I-35 CARRIED THE GREATEST TRUCK VOLUME IN OK, NEARLY 9,000 TRUCKS PER DAY IN 2015

[10] Accessed at http://www.okstatefreightplan.com/
[11] Accessed at http://www.worldstopexports.com/oklahomas-top-10-exports/
[12] ODOT Freight Plan HIS Markit Transearch, Freight Analysis Framework 4.3, WSP analysis

Environmental Protection

HYDROLOGIC AND HYDRAULIC IMPACTS

Environmental responsibility and stewardship is a guiding principle for ODOT planning efforts. The project area is adjacent to the Canadian River, which has been studied in detail as part of the Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for McClain County and Incorporated Areas. The Canadian River has a designated Special Flood Hazard Area (SFHA) Zone AE and Zone X floodplain throughout the project area and Base Flood Elevations (BFE's) have been determined.[13]

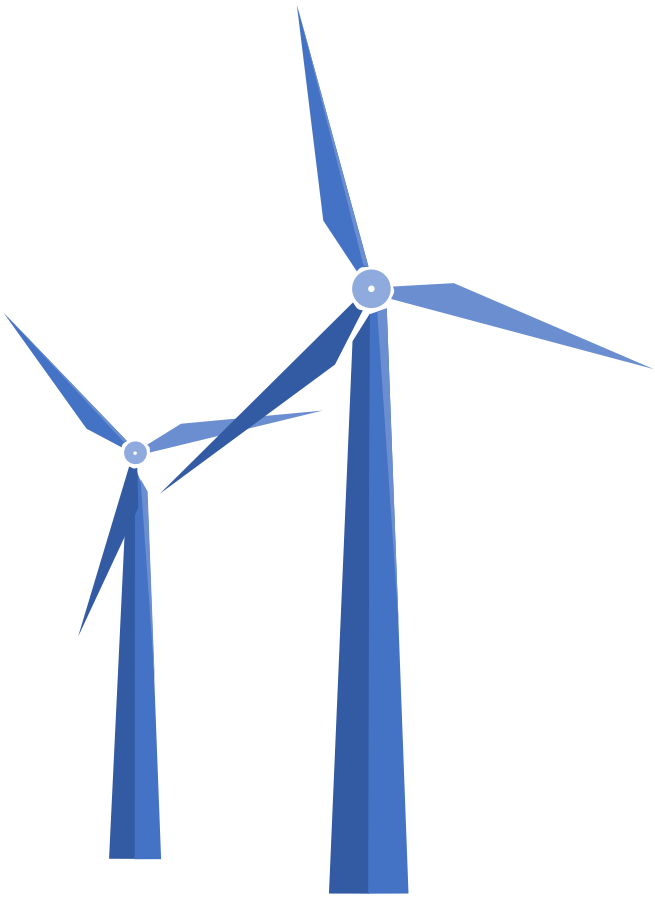
The proposed improvements will include minor fill to be placed within the 100-year floodplain, but will not impact the FEMA floodway. The realignment of local roads and the southbound I-35 entrance ramp will require modifications to an existing culvert and the addition of drainage structures at locations where an existing ditch will be crossed. The drainage structures will be designed to specifications provided in ODOT's Roadway Drainage Manual.

Additional study will be necessary in final design, but the improvements will meet design criteria and will not cause adverse impacts to other properties.

A REGION OF WIND

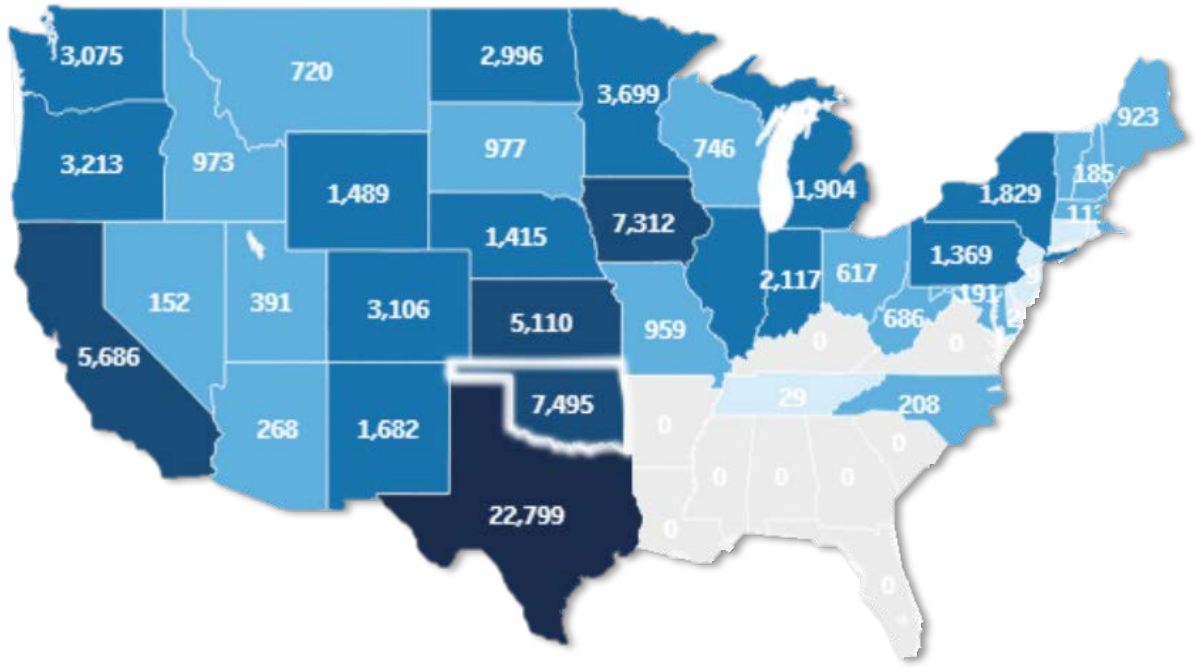
In addition to the direct impacts of the interchange improvements, the interchange will also support the development of renewable energy in the state. While Oklahoma is commonly known for its substantial natural gas production, the state also produces a significant amount of wind energy. The state has almost 7,500 Mega Watts (MW) of installed wind capacity and supports between 8,000 and 9,000 wind energy jobs. In total, there are seven wind manufacturing facilities. **Figure 8** on the following page shows Oklahoma's high performance in wind energy production as compared to other U.S. states.

Oklahoma is a leader in the energy sector and is also on the forefront of cleaner energy generation. But there is substantial impact by the heavy equipment and the volume of heavy loaded vehicles traveling through the area on roads not equipped to handle the size and scale of the shipments.



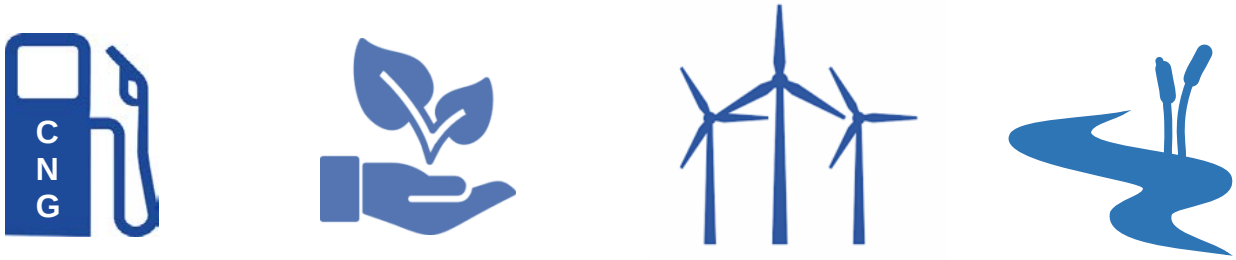
[13] Zone AE is an area that have a 1% probability of flooding every year. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP). ZONE X is an area outside of the Special Flood Hazard Area, and reflects the 500-year floodplain. Properties in Zone X are areas of minimal to moderate risk of flooding. Accessed at http://www.floodmaps.com/zones.htm and http://www.owrb.ok.gov/floodplain/definitions.php

FIGURE 8: 2017 WIND CAPACITY BY STATE



Source: American Wind Energy Association, 2017

There are currently 6 compressed natural gas (CNG) fueling stations along I-35 in Cleveland and McClain counties along I-35. By adding to the existing alternative fuel infrastructure and encouraging use of alternative fuel vehicles, ODOT and its partners will further reduce emissions and protect public health. As part of a national network of Alternative Fuel Corridors designated by FHWA, I-35 through the project area connects to a larger network of alternative fuel corridors that have large environmental benefits to both the State of Oklahoma and the nation as a whole.[14]



[14] Accessed at https://www.afdc.energy.gov/stations#/analyze?region=OK&fuel=CNG&show_map=true

Quality of Life

The improvements to the I-35/SH-9 interchange will significantly reduce congestion and increase the ease with which motorists move through the area. Additionally, the Project is the result of a planning process which coordinates transportation and land-use (mixed-use development) planning decisions.

Reconstruction of the I-35 ramps and terminals will reduce the back-up currently causing congestion and delay on I-35. This will increase mobility and reduce travel time for residents and visitors to the area. Reducing congestion and travel time is also good for the local and regional economy. Freight and transportation sectors will also reap benefits from reduced congestion. There is an approximate $1.3 million average annual cost savings associated with reduced travel times.

The interchange improvements will reduce accidents. Safety is fundamental to a high quality of life and ODOT makes safety a top priority for the transportation network. Improving safety will improve the lives of all motorists using the network in the project area.

WITHIN 5 MI:
10 K-6, 3 MIDDLE &
1 HIGH SCHOOL
+ UNIVERSITY
OF OKLAHOMA

$4M
ANNUAL CRASH SAVINGS

$640k
ANNUAL OPERATING COST BENEFITS

25%
TRAVEL TIME REDUCTION

Qualitative benefits of the Project include improved access and mobility, therefore spurring economic growth in the area. Improvements on I-35 and SH-9 will reduce spillover negative impacts on local streets, thus allowing easier and lower stress travel for school buses, and other educational transport vehicles in the vicinity. Other beneficiaries who will see improved mobility include local business owners, patrons, and residents.

The Project will improve access to the Chickasaw Nation-owned Riverwind Entertainment Complex and a tribal mixed-use development opportunity to the east. New opportunities will increase economic benefits for residents beyond the immediate area. The use of federal funds to invest in transportation infrastructure and spur economic growth in this area will directly benefit historically underserved populations, including the Chickasaw National Native American Indian tribe. The State of Oklahoma has a Native American population of 9.2 percent of the total population. In total, the state has a minority population (non-white) of almost 30 percent.[15]

Currently McClain County has an unemployment rate of 3.2 percent, which is lower than the statewide average of 4.0 percent. Additional opportunities in the area could help lower the unemployment rate even further. The project construction will also create short-term jobs in the project area.

[15] ACS 2016 Estimates

Innovation

INNOVATIVE TECHNOLOGIES

Transportation innovations are creating new opportunities to provide safer and more efficient mechanisms to improve travel for motorists by maximizing safety with more efficient and effective ways to move people and goods on our roadways. ODOT has identified several ways to use Intelligent Transportation System (ITS) technology to improve safety and efficiency.

Wireless Technology using Bluetooth: ODOT currently holds a contract with state universities to explore the use of Bluetooth sensors along I-35 and I-44, and in the Oklahoma City and Tulsa metropolitan areas. This will help determine the origin-destination for trucks. Another demonstration project will use technology applications to develop computer recognition of vehicle classification. Understanding truck volumes and travel patterns will allow more targeted funding for road improvements and maintenance.

ITS Traffic Signal Coordination: As part of the improvements to SH-9 and the surrounding street network, ITS technology will be employed to coordinate traffic signals for maximum efficiency, which will help reduce congestion and improve safety throughout the corridor.

INNOVATIVE FINANCING

The partnership between ODOT, the Chickasaw Nation and the local communities represents a larger collaboration striving to improve regional safety and transportation. By bringing financing from both state and local dollars to the Project, plus private funding from the Nation, the Project partnership allows for all dollars to be maximized and to fully leverage BUILD Grant funding to provide needed improvements along I-35 and SH-9.

Partnerships

ODOT is committed to improving safety on Oklahoma roads, and the commitment and investment by the state, local communities, and the Chickasaw Nation, in partnership with the federal government will allow ODOT to maximize the benefits of its transportation dollars.

The investment in the interchange ramps will improve capacity and meet demand, increase access to local routes, and create opportunities for area businesses to grow. Reducing congestion backup onto I-35 will alleviate safety concerns with slow moving or stopped traffic existing alongside higher speed through traffic on the interior lanes of I-35, reducing serious accident potential.

Private investment is critical to the success of the Project. The Chickasaw Nation, McClain County and the City of Newcastle have come together to identify funding for this important project. The Project will benefit the surrounding communities and allow for future growth and development opportunities while maintaining a safe and efficient transportation system.

McClain County has committed to investing a total of $900,000 to the Project. The City of Newcastle has committed to contributing $723,446 to the cost of the Project. And, the Chickasaw Nation investment of $1,600,000 will assist in funding the project, making the improvements feasible. These local commitments are in addition to ODOT's $5,953,254 commitment.

PROJECT FUNDING PARTNERS:

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CITY OF NEWCASTLE

MCCLAIN COUNTY

CHICKASAW NATION

Several organizations identify the I-35 and SH-9 project as an important project to the regional transportation network and support the interchange improvement project. Those supporting the project include, but are not limited to: ACOG, Association of South Central Oklahoma Governments (ASCOG), Southwest Oklahoma Regional Transportation Planning Organization (SORTPO), City of Norman, City of Goldsby and local property owners.

ADDITIONAL PARTIES IN SUPPORT OF THE PROJECT:

ASSOCIATION OF CENTRAL OKLAHOMA GOVERNMENTS

ASSOCIATION OF SOUTH CENTRAL OKLAHOMA GOVERNMENTS

CITY OF NORMAN

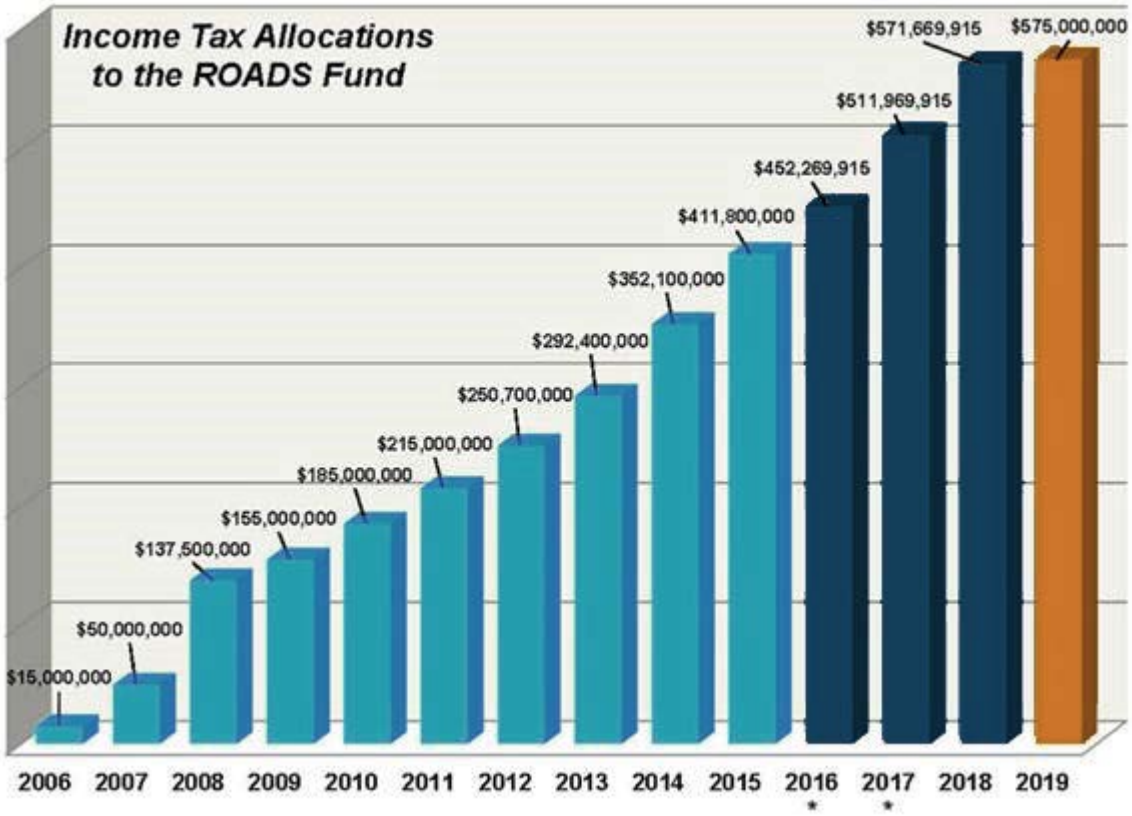
SOUTHWEST OKLAHOMA REGIONAL TRANSPORTATION PLNNING ORGANIZATION

CITY OF GOLDSBY

Non-Federal Revenue for Transportation Infrastructure Investment

ODOT is funded by both state and federal dollars. State funding consists of portions of state motor fuel taxes, state motor vehicle tax and fee collections and state income taxes. Until 2005, state motor fuel taxes made up the majority of the state funding match, but at that time it was clear to department of transportation leadership and lawmakers that ODOT was underfunded and needed additional long term, dedicated funding to ensure that critical construction, asset preservation, and maintenance projects could be planned and programmed appropriately. In 2005, the state passed legislation 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 (**Figure 9**). The previous state funding from motor fuel tax had been stagnant for 20 years and essentially contributed the minimum amount needed to ensure federal funds were received. Today, Oklahoma is a state that is providing almost 50 percent of the funding for transportation.

FIGURE 9: TAX ALLOCATIONS



*Fiscal Years 2016 and 2017 ROADS allocations were reduced due to the state budget shortfall.

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 super-majority (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 8, 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.

Project Readiness

TECHNICAL FEASIBILITY

ODOT and the Chickasaw Nation have completed the conceptual design plans and schematics to 30 percent design, meaning the Project is ready to move into the environmental clearance National Environmental Policy Act (NEPA) process and continue with preliminary and final design.

The preliminary engineering and NEPA study will be completed by fall of 2019.

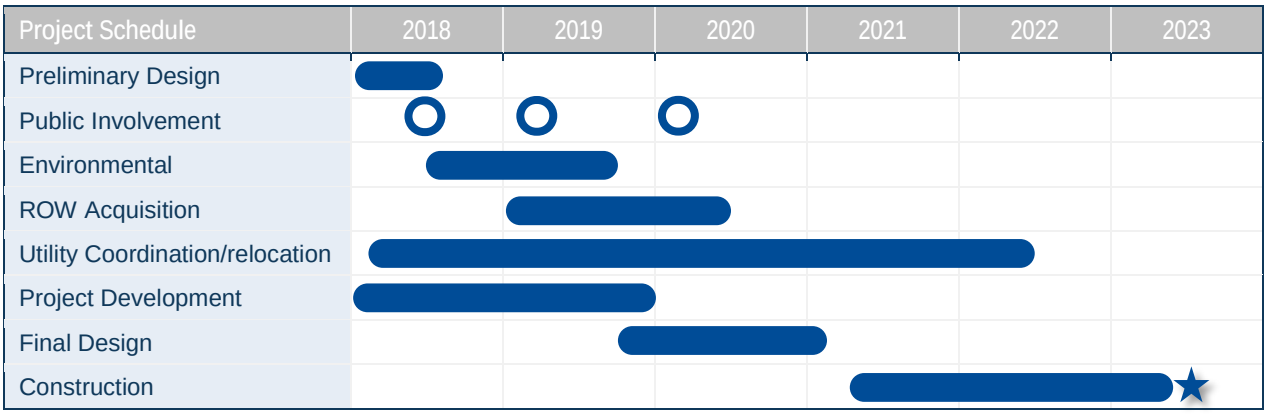
There are stated letters of support for the Project from regional planning agencies, affected local governments, and local property owners.

Project partners have contributed to the preliminary design, right of way acquisition, and street network plans and are prepared to make a major investment in transportation with these improvements as this project moves through final design and implementation.

ODOT has a long history of working closely with both the local Oklahoma FHWA office and the FHWA Headquarters office, as well as other Federal partners to successfully implement transportation infrastructure projects.

PROJECT SCHEDULE

The Project is ready for rapid implementation. ODOT and the Chickasaw Nation have 30 percent design plans completed and ready for the next phase of environmental clearance. Additional schedule details can be found in the Appendix.



REQUIRED APPROVALS

Environmental Approvals

With 30 percent design plans complete, ODOT and the study team are ready to begin the environmental documentation and the NEPA process. It is anticipated this Project improvement will require an Environmental Assessment based on adding additional ramps and requiring an Access Justification Report (AJR).

At this stage, no significant environmental, historic, or social impacts have been identified. The project development team has consulted with ODOT and FHWA and are on track to complete the NEPA process and an AJR by the end of 2019. The NEPA process will be conducted with assistance from the ODOT. ODOT is committed with the resources required to advance through environmental clearance.

Legislative Approvals

The Project has received significant support from both state and local officials. Any additional required state or local approvals are expected to be quickly and easily obtained.

State and Local Planning

The BUILD Project of reconstructing I-35 and SH-9 Interchange Improvements is part of ODOT's 8-year Construction Work Plan with construction programmed to begin in fiscal year 2022, but if funding is awarded, it will be expedited to 2021. Both McClain County and the City of Newcastle have designated local funding for a portion of the improvements and the Chickasaw Nation is also contributing to the project.

The Project is included in the recently adopted ACOG Metropolitan Transportation Plan, Encompass 2040. The Project is also consistent with the 2015-2040 Oklahoma Long Range Transportation Plan (LRTP), adopted in August 2015. The LRTP is a policy document. The Project for reconstructing the I-35/SH-9 Interchange addresses the following LRTP policy: Highway/Bridge Policy #5- Provide for a safe, efficient, and effective National Highway System to improve commercial motor vehicle mobility and connectivity. The BUILD project addresses the policy by improving safety and reducing collisions and improving commercial motor vehicle mobility and connectivity. The State Transportation Improvement Program and the ACOG Transportation Improvement Program are financially constrained documents, and will be amended when funding is made available.

ASSESSMENT OF PROJECT RISKS AND MITIGATION STRATEGIES

This Project has the typical risks associated with these types of roadway projects. ODOT has a proven process in place to mitigate risks through early planning, risk identification, and development of mitigation strategies. Potential risks and mitigation strategies for the Project include:

- ROW Acquisition Timeline: The process for ROW acquisition for the interchange and local roadway improvements will begin in 2019. There is always some risk with ROW acquisition, however, the ROW acquisition process will begin early and the schedule allows a conservative time period for acquisition. This is considered a medium risk considering the length of the ROW acquisition process and the potential for increasing real estate values.

- Environmental Clearance: The Project has not yet received environmental clearance; however, the project team has done their due diligence in the planning and feasibility stage to determine and potential risks and mitigation strategies, particularly related to hydrologic and hydraulic consideration. The environmental process is beginning now and will last until the third quarter of 2019. The Interchange Access Justification (IAJR) is anticipated to be complete in the second quarter of 2019. This Project will go through and comply with all necessary environmental and public involvement processes. Public hearings are anticipated in the first and third quarters in 2019.

This Project has completed 30 percent design and schematics are currently under review. Therefore, the technical feasibility can be assured and there is limited design risk. A conceptual project budget has been developed and includes the necessary detail to properly plan and estimate the total project cost.

Summary of BCA Results

The proposed Project provides for an additional southbound I-35 mainline for approximately 7,500 feet adjacent to the subject interchange (three southbound main lanes), an additional southbound I-35 exit ramp for added capacity, and roadway modifications to SH-9 to improve traffic operations/flow.

The long-term outcomes of the Project improve safety and traffic flow through the interchange and on I-35 mainline. The existing southbound I-35 off ramp at SH-9 routinely forms a queue up to a mile on I-35 main lanes causing significant safety concerns, which is reflected in the existing crash history.

The interchange improvements would provide the following:

- Improved safety on southbound I-35 main lanes by removing exit ramp backups from SH-9 onto the southbound I-35 mainline. This will be accomplished by improving SH-9 (traffic signal spacing) and adding a second southbound I-35 exit ramp further downstream to provide additional capacity.
- Improved travel times and decreased congestion for local and regional traffic on I-35 and SH-9.
- Increased access to private developments and developable land near the interchange.

The overall project benefits for the entire I-35 and SH-9 Interchange improvements over a 20-year period show the initial $18,370,700 investment would result in approximately $49,277,489 in net present value benefits. The resultant BCA ratio is 3.86.

TABLE 4: BCA SUMMARY

Project	I-35 at SH 6 Interchange Improvements
Length (Feet)	7,500 LF
Total Capital Costs	$18,370,700
Total Capital Costs (Net Present Value)	$12,776,113
Total Net Benefit	$126,108,224
Total Net Benefit (Net Present Value)	$49,277,489
Benefit Cost Ratio	3.86

Source: Project Planning Team

3.86
BENEFIT COST ANALYSIS RATIO

TABLE 5: BCA SUMMARY (NPV)

	Project Costs	Safety	Sate of Good Repair	Economic Competitiveness		Environmental Protection
	Capital Costs	Reduction in Crashes	Avoided Vehicle Repair Cost	Value of Travel Time Savings	Fuel Savings	Emissions Reduction
Total	$(12,776,113)	$37,815,552	$4,180,022	$6,307,434	$756,453	$218,028

Source: HNTB, Kimley-Horn Project Planning Team

Appendices

APPENDIX A: LETTERS OF SUPPORT

APPENDIX B: BCA ANALYSIS AND TECHNICAL MEMORANDUM

- BCA Technical Memorandum
- BCA Spreadsheet

APPENDIX C: HYDROLOGIC / HYDRAULIC STUDY REPORT

APPENDIX D: DESIGN SCHEMATIC

APPENDIX E: DETAILED PROJECT BUDGET

APPENDIX F: DETAILED PROJECT SCHEDULE

APPENDIX G: PROJECT AREA COLLISION ANALYSIS