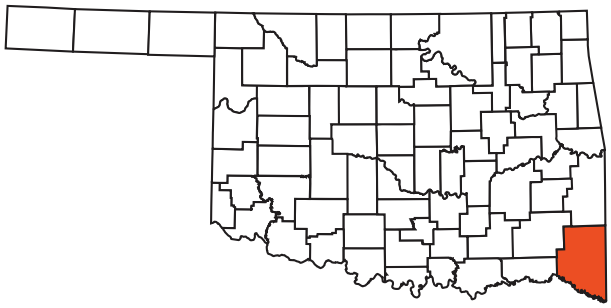
2011 TRANSPORTATION INVESTMENT
GENERATING ECONOMIC RECOVERY (TIGER) III
DISCRETIONARY GRANT APPLICATION

OKLAHOMA

Improved US 70 with Railroad Grade Separation

Valliant, McCurtain County, Oklahoma



October 31, 2011

TIGER

Name of Applicant: Oklahoma Department of Transportation
Address: 200 NE 21st Street, Oklahoma City, OK 73105

Primary Point of Contact
Name: Secretary Gary Ridley
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PROJECT TYPE:
Multimodal (freight rail, highway, pedestrian/bicycle)

CFDA # 20.933
FY2011 National Infrastructure Investments

LOCATION:
Valliant, McCurtain County, Oklahoma

Oklahoma Congressional District 2
(U.S. Rep. Dan Boren)

AREA: Rural

REQUESTED AMOUNT:
$8,000,000 (18% of total project)

TOTAL PROJECT COST:
$44,957,600

DUNS NUMBER:
824700074

CENTRAL CONTRACT REGISTRATION NUMBER:
339V2

PROJECT WEB ADDRESS:
http://www.okladot.state.ok.us/tiger/tiger_2011_valliant/index.htm

Table of Contents

List of Exhibits

EXECUTIVE SUMMARY

The "Improved US 70 with Highway Overpass" project in southeast Oklahoma is a multimodal project that widens and improves part of the National Highway System, creates a grade separation that will improve operational efficiency and safety for two Class III railroads and the highway, and adds bicycle and pedestrian facilities on this main thoroughfare through the City of Valliant.

The State of Oklahoma has been engaged in a vigorous commitment over the past 20 years to improve its transportation corridors. The two dominant modes in the State are highways and railroads. Following adoption of the 1995-2020 Statewide Intermodal Transportation Plan, the state initiated a purposeful effort to improve roads and bridges along major trade corridors in the state.

The proposed project will improve a transportation corridor in southeast Oklahoma where both rail and highway modes suffer because of safety problems and travel delays. The Texas Oklahoma and Eastern Railroad (TO&E) crosses US 70 at the western edge of the town of Valliant in McCurtain County.

The proposed project will improve five and one-half miles of US 70 in McCurtain County, the farthest southeastern county in Oklahoma. The project will replace the current two lane facility with a five lane facility consisting of four through lanes and a center turn lane. It will include a bridge elevating US 70 over the Texas Oklahoma & Eastern Railroad and its related switching operation in Valliant Oklahoma. The project will incorporate sidewalks and a bike path, and three enhanced pedestrian crossings. Anticipated benefits include: improved travel time, induced economic activity, safety for residents, community livability, safer travel, more efficient truck and train transport, and improved connectivity with other highways and with adjacent segments of US 70.

This project will provide a solution to a long term problem with a total cost of $44,957,600, and at a benefit/cost ratio of 1.94 to 1.00 (using a seven percent discount rate).

See project website http://www.okladot.state.ok.us/tiger/tiger_2011_valliant/index.htm

I. PROJECT DESCRIPTION

Transcontinental Highway Contributes to National Network

In 1926, when the American Association of State and Highway Officials (AASHO, the predecessor to today's AASHTO) approved the U.S. highway numbering plan, US 70 was one of 10 transcontinental major east-west routes. Running from coast to coast, with the eastern terminus near the Atlantic Ocean in North Carolina, and the western terminus near the Pacific Ocean in California, US 70 was sometimes referred to as the "Broadway of America ". With the growth of the Interstate system in the 1950s and 1960s, the western edge of the highway was decommissioned in favor of Interstate 10 or US 60. Thus today, US 70 originates east of Phoenix, in Globe Arizona, and continues approximately 2500 miles east to New Berne North Carolina, as illustrated in **Exhibit 1**.

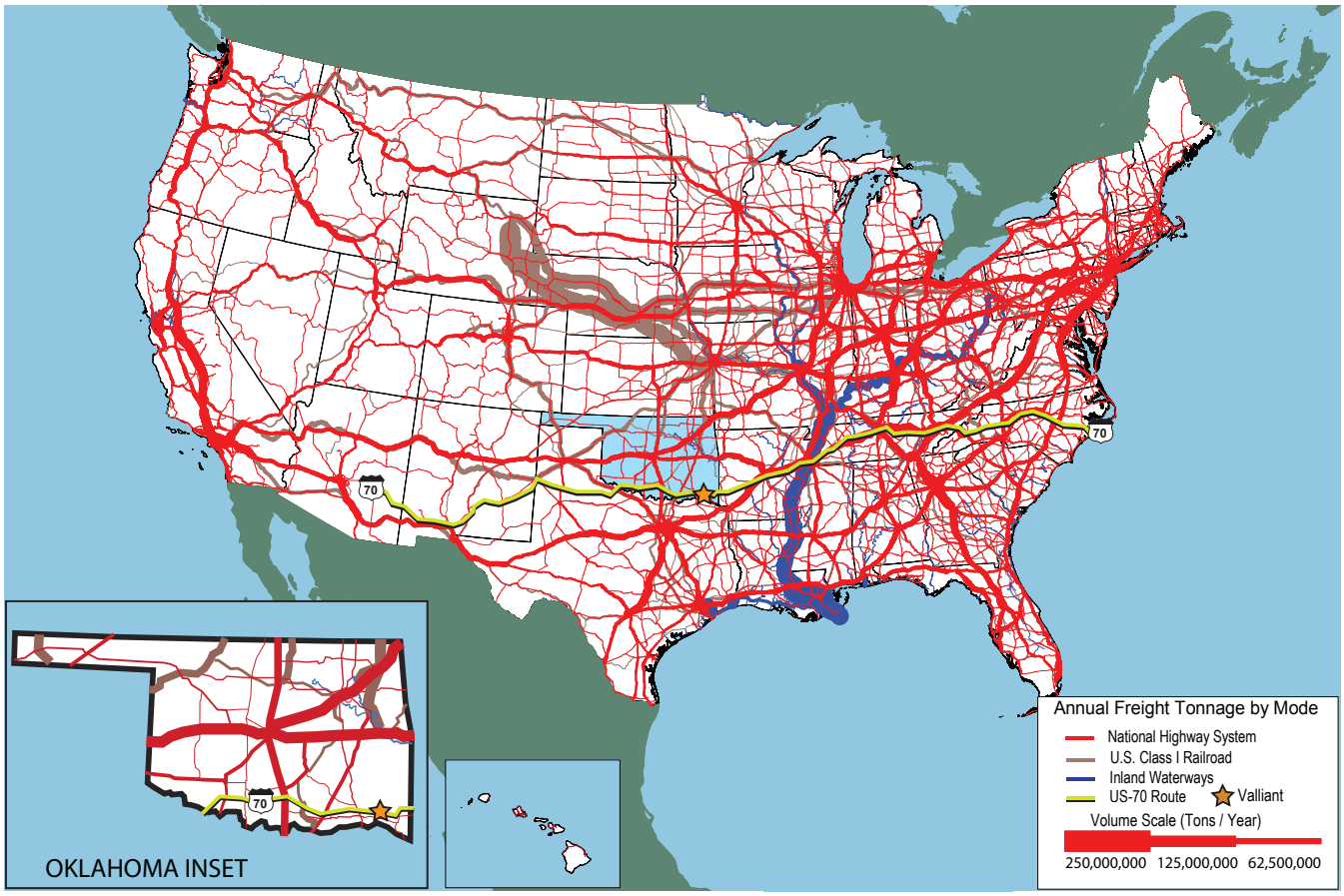
The US 70 route is roughly parallel to, and mostly south of I-40; and the improvement of the subject segment of US 70 will further enhance the attractiveness of this highway as a relief route to the frequently congested I-40 corridor.

A. TRANSPORTATION CHALLENGES

Important Corridor in Oklahoma, Part Of National Highway System

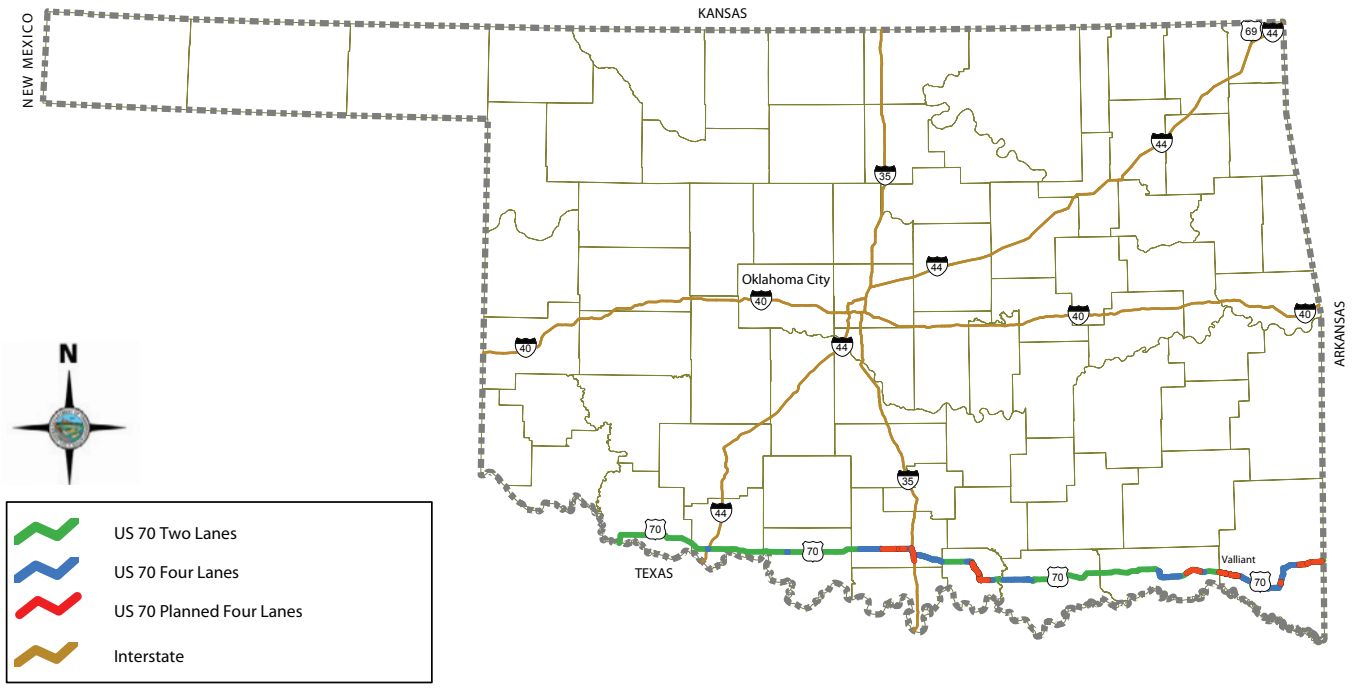
In 1995, the Oklahoma Department of Transportation (ODOT) developed its first Statewide Long Range Transportation Plan (*2020 Plan*). Among the issues for the state over the next 25 years, was maintaining and increasing an adequate number of functionally sound highway corridors to address mobility and accessibility needs for personal travel and goods movement. To address this concern, the Plan recommended a list of highways within the state for improvement by the year 2020.

Exhibit 1: U.S. 70 highlighted as Part of U.S. Freight Highway, Railroad, and Waterways Network: 2007



Source: US DOT, FHWA, Office of Operations, Freight Analysis Framework - http://ops.fhwa.dot.gov/program_areas/improving-freight.htm

Exhibit 2: US 70 in Southern Oklahoma



US 70 in the southeastern quarter of the state was identified as one of the state's transportation corridors needing improvement over the next quarter century. (Sources such as the *2020 Plan* are referenced throughout this document. Detailed information about the sources is available in the bibliography and http://www.okladot.state.ok.us/tiger 2011_valliant/index.htm).

Ten years later, the *2030 Plan* endorsed the need to improve US 70. Additionally, the later Plan contained a thorough analysis of freight issues, the growth in truck freight traffic and the strain on the state's highway system. This Plan described the importance of rail infrastructure, specifically to carry freight through the State. The Plan recommended bolstering short line railroads and expanding rail capacity and connectivity in Southern Oklahoma.

The most recent Statewide Long Range Transportation Plan, the *2035 Plan*, reiterates the emphasis on commerce and intermodal operations as evidenced by policies that recommend that ODOT "Improve operational performance on priority corridors through strategic targeted improvements" and "Evaluate the need for rail grade separation improvements as part of planning efforts on transportation corridors."

US 70 crosses the entire southern tier of Oklahoma as shown in **Exhibit 2**; and the portion from I-35 in the center of the state eastward to the Arkansas state line is also on the National Highway System. This 200 mile long principal arterial highway was the subject of the *US 70 Feasibility Study, I-35 to the Arkansas State Line (US 70 Corridor Study)*. Emphasizing that the highway provides for significant movement of people and goods, and also connects other principal transportation facilities, the Corridor Study concluded that the roadway should be a four or five lane facility for the entire corridor, with bypasses around some communities. The corridor was divided into 48 projects which were given a priority ranking: high, moderate, or low. High priority projects were located in three areas and these are complete. The Department is now addressing segments which were identified as a moderate priority in 1997, but fifteen years later have moved to the top of the list.

Current Condition of US 70

The *Needs Study and Sufficiency Rating Report*, prepared biennially by ODOT, evaluates roads on the State Highway System based on geometric design, physical condition, and capacity. This report classified the pavement condition of US 70 through the project area in the "inadequate to tolerable" range. One segment near the Valliant city center is scored as critical. The pavement quality rating is attributable primarily to overdue resurfacing and reconstruction needs on this segment of roadway. While geometric conditions are adequate, capacity limits of this highway will be reached in the next 20 years.

The US 70 project will address challenges to the congested national highway system, and will improve functioning of rail and highway modes through Southeast Oklahoma. But like politics, all transportation is "local". Thus it is also important to focus on the City of Valliant and McCurtain County to view the need for, and anticipated results of, the US 70 project.

Highways And Railroads As Part of Valliant and McCurtain County History

The history of Valliant in McCurtain County, Oklahoma is rich and interwoven with the history of Native Americans, railroads, and forestry and agriculture. McCurtain County, Oklahoma was formed in 1907 from Choctaw lands. The area we now know to be McCurtain County was once part of a larger district of the Choctaw Nation. The County was named for Green McCurtain, Principal Chief of the Choctaw Nation from 1896 to 1910.

In the early 1900's, as the Arkansas and Choctaw Railroad made its way across what is now Southeast Oklahoma, locations were chosen for towns and post offices. Valliant was platted in 1902 and the name Valliant was chosen in honor of one of the railroad officials, Frank W. Valliant. The Arkansas and Choctaw Railroad later was sold to the St. Louis & San Francisco Railway. The Kiamichi Railroad (KRR) in southeast Oklahoma operates today on a former St. Louis-San Francisco line. Eventually much of the St. Louis-San Francisco Railway was sold to the Burlington Northern and Santa Fe (BNSF). Another railroad emerged in the early 1900s, when the Dierks Lumber and Coal Company incorporated the Texas Oklahoma and Eastern (TO&E) Railroad to connect the company's timber holdings in southeast Oklahoma and southwest Arkansas to markets in the Midwest and East, via the St. Louis & San Francisco and Kansas City Southern lines.

Valliant and the surrounding area grew and became a center of progress. Early businesses in the area included a cotton gin, lumber company, three hotels, a newspaper, two banks, cafes,doctor's office, lawyer's office, and other businesses and professional offices.

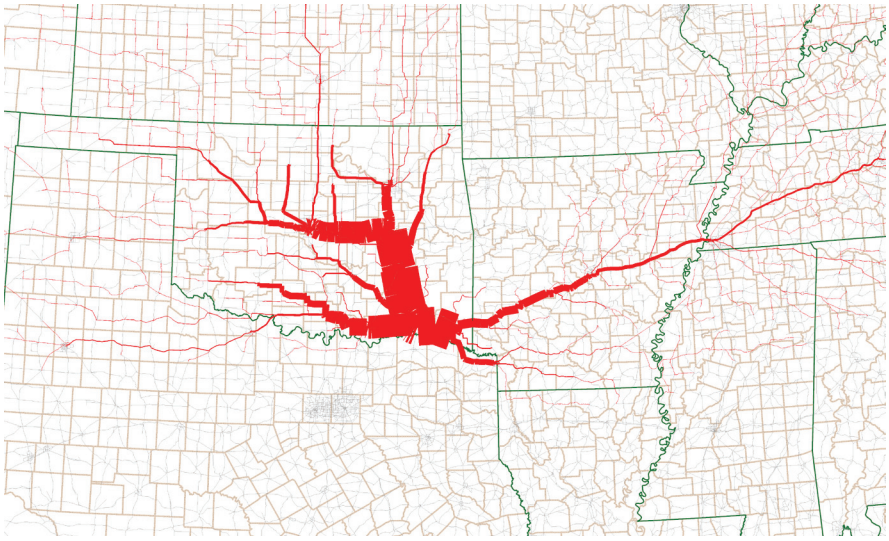
Historically, Valliant's primary economic base has been agricultural, due to the abundance of arable soils, including the fertile land along the Red River to the south. Cotton, grain, and horticultural crops initially predominated. As cotton production declined in the 1930s, there was a gradual shift to pasture and forage production for cattle-feeding enterprises. Logging, timber and wood production and processing have also been important to the McCurtain County economy.

A substantial amount of supplies and products for these industries is carried by semi-trucks. Today, trucks account for approximately 20% of the traffic on US 70 through Valliant, and this percentage is not expected to decrease. This translates to average daily truck traffic in the range of 1400, expected to increase to over 2000 trucks per day in the next 20 years. **Exhibit 3** displays the distribution of all truck trips travelling inbound, outbound and through Valliant in McCurtain County in 2009.

Three short line railroads in the area as illustrated in **Exhibit 4**, the Kiamichi Railroad (KRR), the Texas Oklahoma and Eastern Railroad (TO&E), and the Western Farmers Electric Coop Spur, also provide a valuable avenue for hauling heavy products. The TO&E Railroad transports heavy cardboard and other wood and paper products from the International Paper Company in Valliant.

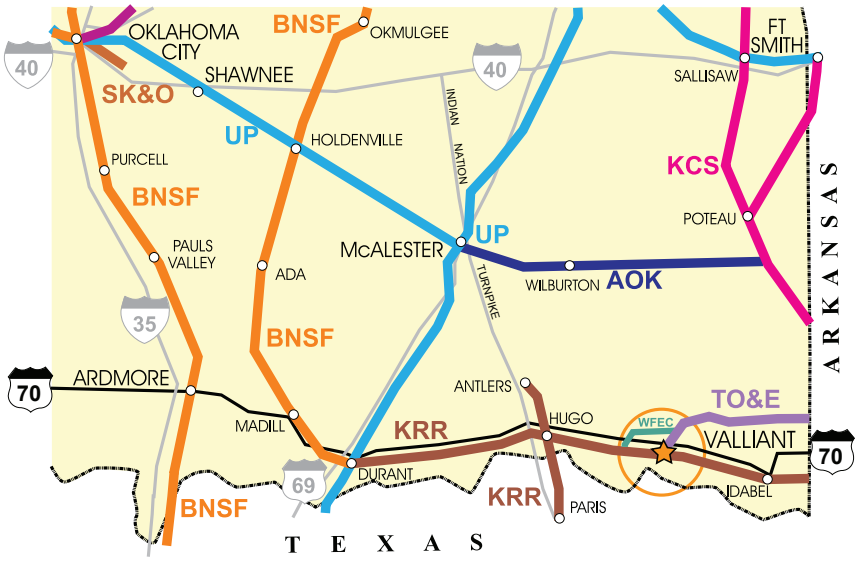
While a multi-modal approach may be most suited to the economic geography of southeast Oklahoma, it also amplifies the logistical and technical efforts required to make the system function smoothly.

Exhibit 3: Trucks traveling to, from, through US 70 in Valliant, McCurtain County, 2009



Source: 2007 Freight Analysis Framework, FHWA, ODOT Freight Flow Analysis, Parsons Brinckerhoff, 2011.

Exhibit 4: U.S. 70 and Railroads in Southeast Oklahoma



Source: ODOT State Rail Map, 2011

Mixing of the modes at crossings is essentially inevitable, and that is the case in Valliant. Trains on the Texas Oklahoma and Eastern rail line cross US 70 ten times per day and cause frequent backups and safety challenges as shown in **Exhibit 5** and **Exhibit 6**.

These crossings typically block US 70 for 15 minutes due to the slow train travel speeds required to make the 90 degree turn from TO&E to the tracks south of US 70. Additionally the Kiamichi and TO&E railroads use this site as a switching location where trains are occasionally parked across US 70 for 20 minutes at a time. Together these present significant impediments to smoothly flowing traffic on US 70.

In addition to rail-related issues, the highway passing through the City of Valliant (shown in **Exhibit 7**) also has problems functioning at an acceptable level of service, because of angle turning at driveways and intersections, the quantity of large trucks hampering visibility and turning movements, and lack of sidewalks and marked intersections for pedestrians.

B. PROJECT ADDRESSES TRANSPORTATION CHALLENGES

The proposed US 70 project will improve five and one-half miles of US 70 in McCurtain County, the farthest southeastern county in Oklahoma. The project will replace the current two lane facility with a five lane facility, four through lanes and a center turn lane. It will include a bridge elevating US 70 over the TO&E Railroad and its related switching operation in Valliant Oklahoma. The project will include sidewalks and a bike path, and three enhanced pedestrian crossings.

Anticipated benefits include: improved travel time, economic activity, safety for residents, community livability, safer travel, more efficient truck and train transport, and improved connectivity with other highways and with adjacent segments of US 70.

Exhibit 5: Westbound traffic on US 70 in Valliant

Exhibit 6: Traffic waits for a train on US 70 in Valliant

II. PROJECT PARTIES

A. GRANT RECIPIENT

The Oklahoma Department of Transportation (ODOT) will sponsor, manage, and provide oversight for this project.

B. PARTIES PROVIDING FINANCIAL SUPPORT

Financial support for the project will be provided by: Federal Highway Administration (FHWA) and ODOT.

III. GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS

Details on the project cost, totalling $45.0 million; the amount of TIGER III funding requested, $8.0 million; and the amount that has been secured, $37.0 million, is provided in **Exhibit 8**.

Exhibit 7: US 70 in Valliant and McCurtain County

Exhibit 8: Requested TIGER Grant Amount and Other Funding Sources

US 70 Valliant, Improved w Grade Separation (Cost Estimate in 000s)

		Source of Funds			
	Cost Estimate	State of Oklahoma	Oklahoma Fed Apportionment	Total Funds Secured	**TIGER 3 Request**
Use of Funds					
Environmental & Engineering Studies	$1,100.00		$1,100.00		
Construction	$43,857.60	$14,316.80	$21,540.80		**$8,000.00**
Percent of Total		32%	50%		**18%**
TOTAL	$44,957.60	$14,316.80	$22,640.80	$36,957.60	**$8,000.00**

Sources: ODOT Bridge, Project Management, Roadway Design Division

IV. SELECTION CRITERIA

The following section explains how the project aligns with each of the selection criteria related to long term outcomes, and describes the benefit cost analysis.

A. LONG-TERM OUTCOMES

i. State of Good Repair

The current condition of this segment of US 70 in southern Oklahoma is characterized by poor pavement conditions, and capacity limitations in places. Roadway geometry is good. The project will replace old and inadequate pavement on a two lane highway with new construction of a five lane facility. This new construction will be maintained in a state of good repair according to the Department's schedule for resurfacing every seven years and programming a major rehabilitation approximately every 20 years.

This project, which includes a bridge over the railroad crossing, is consistent with efforts to maintain the Oklahoma State Highway System and to minimize highway-railroad safety conflicts. Even though the improvement will be made to the highway system, benefits will accrue to the railroad as well. Currently the Texas Oklahoma and Eastern (TO&E) and the Kiamichi Railroad (KRR) use the TOE line that crosses US 70 at the west edge of the City of Valliant (FRA crossing 845147K) for a switching station. A grade separation will eliminate damaged rail equipment or gate arms that are hit by motor vehicles, and remove highway/railroad crossing maintenance costs at this location from the railroad and highway agency budgets.

ii. Economic Competitiveness

Larger Economic Context

The Valliant US 70 Project is an important component of a plan currently well underway to improve all of US 70 in southeast Oklahoma. US 70 plays a significant role in the local and regional multi-modal transportation network, delivering supplies to farms, businesses and construction sites, and enabling factories and farms to get their products to market in a cost-effective way. US 70 is also important in bringing tourists to popular recreational areas in this part of Oklahoma, as well as serving as a major local thoroughfare.

The US 70 route is roughly parallel to, and mostly south of I-40; and the improvement of this segment of US 70 will further enhance the attractiveness of this highway as a relief route to the frequently congested I-40 corridor. The likelihood of severe weather and other major disasters closing segments of the Interstate system make it imperative that alternate thoroughfares like US 70 are available as options. The connectivity of the system across seven southern states make it well suited as another choice for vehicles carrying freight or passengers.

Approximately half of this transcontinental route is four lanes and much of it is on the National Highway System, including the portion running through the project area. In New Mexico and North Carolina, portions of US 70 are on the Strategic Highway Network.

Role of Project in the Local Transportation Network

Highway and rail have long been partners in the economy of southeast Oklahoma. The local economy is heavily based on agriculture and forestry/logging/paper manufacturing, as well as quarrying sand, gravel and limestone. All of these sectors rely on freight movement to maintain their economic competitiveness. This project will make both modes of transportation more cost-effective, providing needed support to this low income part of the country.

Highway: Project benefits to the highway network result primarily from the increased reliability and reduced travel times along US 70, with additional benefits resulting from improved safety, easier access to businesses, and the addition of sidewalks and a bicycle path to encourage non-motorized transportation.

The highway benefits of the project arise from the widening of this segment of US 70 to five lanes, as well as from elimination of the rail grade crossing. With businesses and residences along both sides of US 70 through Valliant, vehicles making left turns to or from US 70 cause delay as well as accidents, particularly in the areas where US 70 is only one lane in each direction.

Four types of delay are imposed on highway traffic by at-grade rail crossings:

- Trains occupying crossings—Vehicles must stop and wait for a train to clear a crossing. Furthermore, there may be some delay to vehicles that arrive at a crossing before vehicles that were delayed by a train have cleared the crossing.
- Special vehicles—Certain vehicles, such as school buses and vehicles carrying hazardous materials may be required to stop at all rail crossings. In addition to the delay incurred to these special vehicles, their stopping may also impose delay on following vehicles.
- Crossing surface— Depending on the condition of the surface, vehicles may need to slow down to cross over the rails.

- Presence of crossing—This delay occurs regardless of whether a train is approaching or occupying the crossing. Motorists usually slow down in advance of crossings so that they can stop safely if a train is approaching. Therefore, the existence of a crossing may cause some delays to motorists who slow to look for a train.

Rail: An additional economic competitiveness consideration is the current maintenance cost to the TO&E railroad of maintaining the existing grade crossing with US 70. The railroad is crossed by thousands of cars and an estimated 1,050 heavy trucks every day, causing damage that costs an average of $22,700 per year to repair. Part of the expense comes from trucks breaking the crossing gate arms as they pass over the rail line. It is estimated that a new set of crossing arms is snapped off each month at this crossing. The project overpass would reduce maintenance costs on this short segment of railroad to nearly zero (an estimated ten dollars per year), helping to sustain rail service as a low-cost transportation option in the county.

Project Role in the Local Economy

The importance of US 70 to the local and regional economy is demonstrated by the large number and variety of businesses along the highway in the project area. For tourists, there is a hotel, several restaurants, a sporting goods store and a convenience store that sells hunting and fishing licenses. For local residents as well as the surrounding rural residents, there are grocery stores, feed and seed stores, a hardware store, and numerous local services (bank, cell phone, doctor, churches, mechanic, driver's license tag office, etc.) A large percentage of the businesses in the project area depend on pass-by traffic. These include the hotel, restaurants, gas stations and convenience stores, as well as the many retail stores whose sales depend at least partly on catching the eye of the driver.

One of the major freight movements in the project area are logs being transported from Arkansas and the Ouachita forest in Southeast Oklahoma to the International Paper (IP) plant on the west side of Valliant. Other major travel purposes are commuting – the IP mill employs three shifts of workers coming from Texas as well as nearby counties in Oklahoma, all of whom arrive at work via US 70. US 70 is also critical for non-work trips, as it is the location of a number of grocery stores and shops, and is an important route for accessing medical services and educational opportunities in nearby cities such as Idabel.

Lengthy delays on US 70 caused by railroad activity (**Exhibit 9**) are costly for trucks and the farms and businesses they serve, and reduce the productivity and quality of life for all travelers, particularly commuters, many of whom travel long distances to work in Valliant. Based on traffic count data and information on major employers in the area, it is reasonable to assume that over 4000 work trips are made in and through Valliant each day. Of the 500 individuals working at the Paper Plant in Valliant, 12% come from Texas and Arkansas, and 22% come from counties outside of McCurtain County.

Other significant employers in Valliant include the Valliant Public School System, various telephone and cellular phone companies, and electrical plumbing heating/air conditioning contractors. Additional major employer destinations in McCurtain County (to the east) include: Idabel Independent School District, McCurtain County Hospital, Sooner Turnaround (construction) Services Inc. and Wal-Mart in Idabel; and Broken Bow Public Schools and Tyson Foods in Broken Bow. According to the Census Journey-to-Work statistics, 89 percent of McCurtain County employees live and work in their home county. The most recent employment data shows 15,770 employees in McCurtain County. Other major employers including health care facilities, a sheet metal factory and educational institutions, are located in Hugo, in Choctaw County about 25 miles west of Valliant. Regardless of where they log in at work each day, employees' time is valuable, and they do not want to add commute time sitting at a railroad crossing.

Beyond the value of wasted time, the delays on US 70 also increase fuel usage, making trips more expensive.

Exhibit 9: Traffic on US 70 Delayed at the Railroad Crossing

The bridge over the rail crossing will significantly decrease train noise levels since train horn use will go to almost never. Currently the train horn sounds when passing through town whether it is 10 a.m. or 2 a.m. The only time train horns will be used in the future will be in case of emergency where some obstacle is on the track.

Tom Williams, Manager, TO&E

Currently an estimated 85,000 gallons of fuel are wasted each year on this stretch of US 70, a figure that will rise over the years, as traffic grows in this corridor. Assuming $3.25 per gallon, the fuel savings that will be achieved once the project is implemented is in the range of $275,000 annually.

Businesses in Valliant that depend on pass-by traffic are currently hurt in a number of ways by the existing grade-crossing. The most direct harm is done when traffic is backed up along US 70 waiting for a train to clear the roadway. Customers and potential customers, particularly along the two-lane sections of the road, have difficulty entering/exiting businesses when stopped cars block driveways. Additional harm to business is caused by the reduced number of drivers that see the businesses, including drivers who avoid US 70 by taking the "south bypass", as well as drivers who are less likely to notice roadside businesses as they focus on slowing traffic or look ahead for activity on the rail line. The number of shopping and other non-critical trips that are avoided by drivers who chose to remain home rather than face the prospect of a potential rail delay also reduces pass-by traffic and associated sales.

With the project in place, traffic on US 70 is expected to increase by 74,000 additional vehicles each year once the project is built (1.34 million annually vs. 1.27 million without the project). This additional annual traffic is expected to double to 150,000 trips per year by 2037. The additional traffic brought by the project is a result of fewer drivers taking the south bypass, as well as induced traffic brought about by the project's increased trip reliability and faster travel times. There are no commercial properties along the south bypass route, so no negative business consequences are expected from reduced traffic on this narrow rural road.

Business Impacts

The proposed project will improve travel time for patrons and employees of businesses in Valliant and McCurtain County.

There is understandable concern by some business and residential owners along US 70, where relocation is required, because land needed for the wider highway will negatively impact their future. Early review indicates that eight businesses will need to be relocated. A partial taking (acquisition by the government that involves less than the entire parcel of property owned by the owner) is possible for three commercial establishments. Eight residential relocations are expected.

The design for the improved highway includes a local road on the north side to ensure access for businesses that will remain in the area adjacent to the overpass.

It is clear that one of the biggest negative impacts of the project is the displacement of some area businesses and residences. Based on previous similar projects and relocation efforts, the outlook is positive for satisfactory relocation and assistance to affected individuals and businesses. It is hoped that the safety and mobility benefits, along with equal or improved situations for relocated homes or businesses, will add to the overall quality of life in the community.

Impacts on Recreational Travel

US 70 is an important gateway to the natural areas surrounding Valliant, which are excellent for hunting, fishing and watersports. Many visitors travel to McCurtain County from Texas, bringing needed income to this beautiful, but very low income area. In addition to day trips and weekend travel, there are a number of residents from the Dallas area that have purchased vacation homes in McCurtain County.

Traffic that is halted can have a serious impact on leisure travelers and the

"Little Dixie Transit has operated public transit services in southeast Oklahoma in Choctaw, McCurtain, and Pushmataha Counties for nearly 30 years. We use US 70 frequently to travel between Hugo, Valliant and Idabel to provide transportation services for senior citizens and individuals going to medical appointments. Highway traffic backs up often because of trains at the crossing, and it can be a lengthy process once traffic is halted. I know my staff and customers would greatly appreciate a more predictable and shorter ride time."

Jeannie McMillin, Director, Little Dixie Transit

businesses that they support, as tourists who are stuck behind a train for 10, 15, or occasionally 60 minutes, may take their recreational dollars elsewhere on their next trip. Purchases of vacation homes are also reduced when travel to an area is unreliable or unpleasant.

Overall the project will have a substantial positive impact on the local economy by reducing rail, truck and auto travel costs, and by bringing more drivers, and thus more customers, to the many businesses along US 70 in Valliant. In addition to the benefits to travel reliability and convenience resulting from the rail grade separation, the widening of US 70 to five lanes throughout the project area will make it easier for drivers to enter and exit businesses, and faster to travel through town. The associated sidewalk and bicycle improvements will also make it possible to safely and easily travel along the corridor by bicycle or on foot, making for a more vibrant business climate along the corridor.

iii. Livability

Railroads and a major US highway are part of the fabric of the Valliant area. Both provide advantages and disadvantages to communities. They generate employment opportunities for local citizens and provide transportation services to local industries and businesses. The presence of highways and railroads in communities can impose some disadvantages, such as vehicular delay and safety concerns at highway-rail grade crossings. In addition, the presence of railroads may impose noise and other concerns upon the community. The proposed project seeks to preserve the advantages and to minimize disadvantages.

"I'm a pedestrian and I like the idea of adding sidewalks and clearly marked pedestrian crossings. Right now, you can barely get across the road. Does it cost that much more in the long run to make a safe crossing area for those of us who want to walk? "

CITIZEN, June 2011 public meeting

Sound Levels

The TO&E railroad passes through the City of Valliant an average of 10 times per day. Seven passes are usually made during daytime hours, and three trains travel through the night time hours. The train engineers sound the horn each time they near the crossing with US 70. With the roadway elevated over the railroad, the need to sound the horn on a regular basis will be eliminated. The absence of the frequent horn sounds will be a welcome relief to area residents.

No wait time imposed at railroad crossing

In addition to the sound of the train, the more obvious community impact of the train is its physical presence crossing US 70, the main US highway through southeastern Oklahoma. The TO&E and KRR engage in switching operations on the rail line that cause lengthy delays on US 70 in addition to the daily crossing delays. The US 70 project will eliminate this wait time for drivers and pedestrians on US 70.

Better, safer options for bicyclists and walkers

The newly reconstructed US 70 will include paved pathways for bicyclists and pedestrians. The north side of US 70 will feature an eight foot bicycle path and the south side will include a five foot sidewalk. Sidewalks and curb and gutter will extend roughly from Clyde's Tue Road east one mile to Section Line Road. The project also includes enhanced pedestrian crossings at Clyde's Tue Road (NS 446), Dalton Avenue (Old Ok Hwy 298), and Section Line Road (NS 447). The option to walk or bike safely on these new paths will be helpful to students (**Exhibit 10**), local employees, and customers/clients of the community retail and office practices.

Exhibit 10: Students Walking North of US 70 in Valliant.

iv. Sustainability

This project speaks to the issues of conserving resources and reducing environmental impacts in a number of ways. The presence of safe and adequate bikeways and sidewalks will encourage additional non-motorized travel in the community, a clean and affordable travel option.

In addition, the project improves energy efficiency and reduces greenhouse gas emissions primarily because of reduced delay at the grade crossing. Emissions reductions for carbon dioxide and other pollutants are calculated to be approximately three million pounds annually once the project is complete. This issue is explained further in the following Benefit Cost Analysis section.

v. Safety

Additional capacity, turn lanes
The existing roadway is primarily a two lane facility that carries a high percentage of truck traffic. ODOT traffic studies indicate that the truck percentage is 20 percent, while heavy trucks (with three or more axles) comprise 15 percent of the total traffic. The semi-tractor trucks are often carrying large loads, and a clear field of vision for other smaller vehicles is sometimes obstructed. The project, designed with four lanes and a turn lane, will provide for improved visibility on the roadway and safer travel.

Crash reduction
Collision data from the past five years for the project area shows that: 70 percent of crashes were intersection or driveway related, 20 percent of crashes were rear end collisions, and 40 percent involved angle or angle turn actions. Over half, 56 percent, occurred within one mile of the railroad crossing. Approximately one-third of the crashes involved injury; two-thirds involved property damage only.

"Now, on-duty officers have to call the train manager in Arkansas if the train is blocking the track when they need to cross. Arrangements can be made relatively quickly so that the Local Deputy can talk directly to train crew. If the train needs to be 'broken', they will do that. We appreciate the level of cooperation and good will. However lives can be lost or saved in just a few seconds. The highway overpass will be a great benefit for public safety and emergency response."

Police Chief, City of Valliant

Angle turning collisions typically occur when a vehicle is entering the roadway (or turning across oncoming traffic into a driveway or intersection) and misjudges the gap of time that is needed to execute the turn into the next lane/driveway. Rear-end collisions are likely in areas where a queue of vehicles slows down for a lead turning vehicle, and as the number of waiting vehicles increases, so does the likelihood of rear end collisions.

A wider facility that includes turn lanes will reduce the high number of collisions at intersections or driveways. Additionally, the cessation of frequent stops at the railroad crossing will reduce the domino effect of unpredictable slowdowns and resultant rear end collisions. A 2005 Florida Study in a similar setting found that adding additional through lanes and turning lanes resulted in a crash reduction factor of 56.8 percent.

Public Safety-Improved access for emergency vehicles
Even though the TO&E and local officials have a good working relationship for resolving conflicts at the crossing in critical situations, delays still occur for police, ambulance, and fire services. A significant benefit of the grade separated highway will be improved emergency access.

Collisions less treacherous
The overpass portion of the US 70 project virtually eliminates potential train-vehicle or train-pedestrian collisions. These can have devastating consequences in terms of fatalities or serious injuries.

Preventing collisions involving hazardous materials transport is an especially important safety benefit of the grade separation. Regardless of the carrier, cleanup after a hazardous waste spill, leak, or explosion can usually move much more quickly if it involves only one mode.

vi. Benefit Cost Analysis (BCA)

A formal benefit-cost analysis (BCA) was conducted for this project using best practices for BCA in transportation planning, and reflects all TIGER III grant application guidelines. It is important to note that a formal BCA is not a comprehensive measure of a project's total economic impact, as many benefits cannot be readily quantified or occur under conditions of uncertainty.

However, to the maximum extent possible given available data, the formal BCA prepared in connection with this TIGER grant application reflects quantifiable economic benefits. It covers all five of the primary long-term impact areas identified in the TIGER III grant application guidelines.

- State of Good Repair: As US 70 traffic runs over the TO&E railroad tracks, damage is caused that requires an average of $22,700 annually to repair. This damage will be removed by the project.

Highway maintenance cost impacts are also calculated in the BCA.

- Economic Competitiveness: reducing travel times (for highway) and costs (for both rail and highway) will allow local industry and regional forestry and agricultural enterprises to reduce transportation costs, improve their logistics practices, and expand markets for both domestic and international shipments. This will support permanent jobs in this low-income area and improve the competitive position of domestic manufacturers and forestry/agricultural enterprises in southeastern Oklahoma, Arkansas and Texas.
- Livability: Reduction of travel times will improve livability for the many individuals in and around Valliant, Oklahoma, who rely on this road for their daily commute, as well as for trips for education, shopping, medical appointments, and other services. Reducing the lengthy delays and backups at the rail crossing boosts the local economy and quality of life, as well as improving emergency response times.
- Environmental Sustainability: Reducing idling at the rail crossing will reduce fuel consumption and vehicle emissions.
- Safety: The current configuration of the road leads to a substantial number of accidents each year. With no center turn lane, high traffic levels for a two-lane road, and an at-grade intersection with a railroad, collisions are quite prevalent. All of these issues will be removed with the project, which will substantially reduce the potential for accidents and injuries.

Given the caveats, the computed benefit-cost ratio for the Valliant US 70 project is 3.49 using a three percent discount rate, and 1.94 using a discount rate of seven percent. The BCA compares the capital construction costs and the future highway maintenance costs to the quantifiable benefits of the project for 40 years (2014-2054) following construction. These benefits are:

1. Avoided No Build highway maintenance costs
2. Rail maintenance cost savings
3. Travel time savings for vehicles
4. Fuel cost savings for vehicles
5. Emissions reduction benefits from reduced vehicle idling at grade crossings
6. Safety benefits (reduced auto accidents)

Discount Rates

Federal TIGER guidance recommends that applicants discount future benefits and costs to 2011 present values using a real discount rate of three percent when the funds currently dedicated to the project would be other public expenditures. This is the case for this project. The BCA ratio using a seven percent discount rate is also presented to show that the project's long term benefits outweigh the project's short term construction costs even using the opportunity cost of money in the private sector.

Cost Benefit Results

Exhibit 11 summarizes the cost and the quantifiable benefits of the project in terms of Present Value. Detailed analysis of costs and benefits, including data sources and methodology descriptions, are explained in the BCA Technical Memo available on the project website http://www.okladot.state.ok.us/tiger/tiger_2011_valliant/index.htm. As shown in the table, the present value of the project's capital cost and maintenance costs for the 2012-2054 period are between $42.5 million and $37.9 million, depending on the discount rate. Using a three percent discount rate, benefits exceed these costs by more than three times (3.49). Using a seven percent discount rate, the benefits exceed costs at a ratio of nearly two to one.

Highway Maintenance Costs

The annual maintenance costs which would be incurred without the project are substantial because the roadway is due for major rehabilitation, which is expected to cost $840,000, and is assumed to take place in 2012. Over the long run, the maintenance cost of the improved road will be slightly larger than for the existing road because it costs much more to maintain a five lane stretch of road than a two-to-four lane road of the same length.

Using a three percent discount rate, the additional maintenance costs of the project compared to the existing maintenance needs is valued at $93,300 over the next 40 years. Using a seven percent discount rate, the high value of the rehabilitation in 2012 has a much higher weight than the additional maintenance costs in the out-years, and the present value of the project's maintenance actually shows a net savings of $483,000 compared to the No Build maintenance costs.

Rail Maintenance Cost Savings

The cost to TO&E of operating and maintaining the railroad grade crossing in a safe and sound condition for both rail and road traffic is approximately $22,735 annually. As shown in **Exhibit 12**, these costs include signal operation, crossing repair, and maintenance of the crossing surface. The wear and tear on the surface of the crossing is heavy because of the large number of cars and heavy trucks traveling on US 70 over the TO&E railroad every day. In addition, the arms on the crossing gates are

Exhibit 11: Benefit Cost Analysis Summary (in thousands of 2011$)

Category	Present Value at 3%	Present Value at 7%
Costs		
Construction Cost	$40,884	$37,377
Maintenance Costs (Hwy)	$1,593	$557
TOTAL COSTS	**$42,477**	**$37,934**
Evaluated Benefits		
Maintenance Costs Avoided (Hwy)	$1,499	$1,040
Rail Maintenance Cost Savings	$472	$239
Vehicle Travel Time Savings	$127,745	$63,503
Vehicle Fuel Cost Savings	$7,771	$13,757
Emissions Savings	$3,567	$1,529
Safety Benefits	$7,345	$3,615
TOTAL EVALUATED BENEFITS	**$148,399**	**$73,683**
NET PRESENT VALUE	**$105,922**	**$35,749**
BENEFIT/COST RATIO	**3.49**	**1.94**

frequently damaged by the trucks passing by when the gates are being lowered.

In comparison, with a highway overpass in place, the cost of maintaining this small section of track is estimated at a miniscule ten dollars annually.

The present value of the savings that the project would bring to the railroad during the first 40 years of the project's operation is close to half a million dollars using a three percent discount rate, and $239,000 using a seven percent discount rate.

Travel Time Savings for Vehicles

The largest of the evaluated benefits is the travel time savings for autos and trucks. As noted above, travel time savings comes from two aspects of the project:

1. The widening of the road to five lanes through Valliant, which will allow cars to make left turns to and from the many businesses alongside the road without interfering with traffic flow
2. The railroad grade separation, which will eliminate delays to auto travel resulting from trains using the TO&E tracks. Most of the trains crossing US 70 in Valliant block the crossing for 10 to 20 minutes at a time, although a few times a year the trains will block the road for up to 60 minutes. In an average month, this adds up to over 44 hours during which trains are blocking traffic flow.

Traffic was modeled with and without the project, using current traffic levels as well as projected future traffic levels, to determine systemwide travel time savings. Traffic volumes are expected to increase about 40 percent by 2035. No change in train traffic is assumed. The project is expected to save 335,000 hours of vehicle travel time per year by 2035. Much of the time is work-related – 15% of the traffic on US 70 in the project area is large trucks (three or more axles), and 53% of auto and light truck travel is assumed to be commuting or other work-related trips. Using the values of time for truck drivers, business travelers, and personal travelers recommended in the guidance on the TIGER website, the value of time saved is $127.7 million at the three percent discount rate, and $63.5 million at the seven percent discount rate.

There would be some interference with traffic during construction, but because this is a widening project, it is expected that two lanes of traffic will be open throughout the project area during most if not all of the construction period.

Fuel Cost Savings for Vehicles

Another benefit of reduced delay is the reduced fuel usage resulting from cars and trucks not having to idle at the grade crossing. The fuel savings was calculated using an assumption that 70 percent of the travel time savings is due to eliminating idling at the grade crossing (with the other 30 percent resulting from the road widening as well as reduced time slowing down for the rail crossing, or getting back to speed after the train has passed).

Exhibit 12: No Build Rail Maintenance Costs (in 2011$)

Signal Labor	Crossing repair	Crossing Surface Maintenance	Annual Surface Maintenance	Total Average Annual Rail Maintenance
$8,600/year	$7,200/year	$5,167/year avg. *($31,000 every six years)*	$1,500	$22,467

Despite the relatively low fuel usage rate during idling (0.6 gallons per hour for trucks, and 0.4 gallons per hour for cars), calculations showed that this would result in a reduction of 3.8 million gallons of fuel during the 40-year analysis period. The project would result in some additional fuel savings from reduced VMT, due to fewer drivers using the bypass. This savings, however, is balanced out by the increase in fuel usage due to the induced travel. All three of these factors are accounted for in the BCA calculations (see detailed information on the project website).

The value of overall net fuel savings, using per-gallon diesel and gasoline cost projections from the Energy Information Administration, has a present value of $7.8 million using a three percent discount rate, and $3.8 million using a seven percent discount rate.

Emissions Reduction Benefits From Reduced Vehicle Idling at the Grade Crossing

The reduction in vehicle emissions was quantified by calculating the emissions produced during idling. Any reduction in emissions resulting from faster or smoother traffic flow is assumed to be cancelled out by the additional emissions from the induced traffic.

Exhibit 13 shows the resulting reduction in emissions in 2035, as well as the dollar value of this reduction using values recommended in the TIGER website guidance. The level of emissions produced, as well as the value of the emissions, varies from year to year; 2035 estimates are presented in the table as an example of the level of annual benefit.

The present value of the emissions reductions over the 2015-2054 analysis period is $3.6 million using a three percent discount rate, and $1.5 million using a seven percent discount rate.

Safety Benefits (Reduced Auto Accidents)

As noted above, the project will improve safety by eliminating the at-grade rail crossing and adding a center turn lane. Between 2006 and 2010, an average of nine accidents occurred per year on US 70 in the project area. Most were property-damage only, but there are three or four injury accidents each year. All accidents are expensive to society, both in terms of vehicle repair and replacement costs, medical expenses, lost time, and reduced productivity for injured individuals and those that may need to care for them.

To estimate the benefit of the grade separation, it was assumed that 80 percent of the accidents that currently occur near the rail line (specifically within 0.5 miles west and 0.75 miles east of the crossing) would be eliminated by the overpass construction. Even in locations like Valliant where rail-auto collisions are rare, the presence of a grade crossing can cause vehicle-vehicle crashes. Cars, trucks and buses stop or slow at the crossing, often in a manner not anticipated by surrounding drivers. This is one reason that 56 percent of the accidents in the project area occur in this 1.25-mile section of US 70, when it accounts for only about a quarter of the total project length.

For the remaining 4.25 miles of the project, the accident reduction rate was assumed to be 56.8 percent, based on a study done of a similar roadway in Florida where additional through lanes and turning lanes were added.

Using accident cost values recommended in the TIGER website guidance, the value of the project's accident reduction would be $296,000 in the first full year of operation (2016). It is assumed that the accident benefits will grow with the expected growth rate of traffic, adding up to a present value over the 2015-2054 analysis period of $7.3 million using the three percent discount rate, and $3.6 million using the seven percent discount rate.

Other Non-Quantifiable Costs and Benefits

There are a number of other project benefits, as well as costs, that could not be reasonably quantified for the benefit-cost analysis. Among these are:

- Noise reduction – Safety demands that for a busy road like US 70, "active" crossing protection be in place, including a crossing gate, bells and lights at the crossing to indicate the approach of a train, and the train is required to sound its horn. Train horns can sometimes be heard at the far other end of

Exhibit 13: Valuation of Emissions Reduction Benefits in 2035

Pollutant	VOC	NOx	CO	CO2	PM	TOTAL
Value per ton	$ 1,857	$ 4,370	$ 74	$ 118	$ 183,560	
Reduction resulting from project (pounds per day)	33.5	8.2	461.1	8,493.7	0.2	8,996.8
Reduction (tons per year)	5.5	1.3	75.1	1,406.0	0.035	1,488
2035 Value	**$ 10,142**	**$ 5,867**	**$ 5,542**	**$ 166,234**	**$ 6,398**	**$ 194,183**

Valliant, as train horns are designed to be loud at a distance of a quarter mile, but can often be heard a mile or more away. The sound of the bells and the train horn would be eliminated with the project, as would the engine noise from cars and trucks starting up at the crossing after a train has cleared the tracks.

- Benefits to employers - Businesses would gain from increased worker productivity due to reduced commute times and work trip travel times, as well as the ability to recruit workers from further away, and possibly reduced lateness.
- Increased sales - Local business are likely to experience additional sales resulting from increased pedestrian and auto traffic.
- Health benefits - Safe, marked pedestrian and bicycle facilities make it more likely that local residents will use these modes and realize the related exercise benefits.
- Impacts on relocated businesses - Eight businesses will need to be relocated to make room for the overpass. Changes of location, particularly when involuntary, always involve costs in reduced productivity and lost sales as customers adjust to new locations. However, due to the lack of suitable vacant commercial structures in the vicinity, the commercial relocations for this project will result in new, possibly custom-designed, structures for each of the relocated businesses. This improvement in the visual appeal of these businesses, as well as the likely reduction in maintenance and energy costs from more modern structures, could have a long term economic benefit for these businesses. Benefits may even spill over to neighboring businesses, as many are currently located near vacant lots or dilapidated buildings (**Exhibit 14**).
- Improved emergency access – It is likely that over the many decades that the US 70 overpass project will serve the area, that faster and more reliable travel times for police, fire and ambulance services needing to travel from one side of the rail line to the other will save lives and reduce property damage and injuries.

Because transportation is involved in so many aspects of our lives, the benefits of the project are potentially far-reaching, making trips for any purpose easier and safer, whether for work, recreation, shopping, higher education, or to visit an elderly relative or sick friend. While most of this value is measured in the travel time savings calculations, there are some aspects that do not make it into the benefit-cost ratio. The project's measurable reduction in travel costs has a similar potential, as funds not spent on fuel purchases could be used for a wide range of purposes, from making local manufacturing, forestry and agricultural businesses more competitive to increasing disposable income for residents of a county with a 27 percent poverty rate.

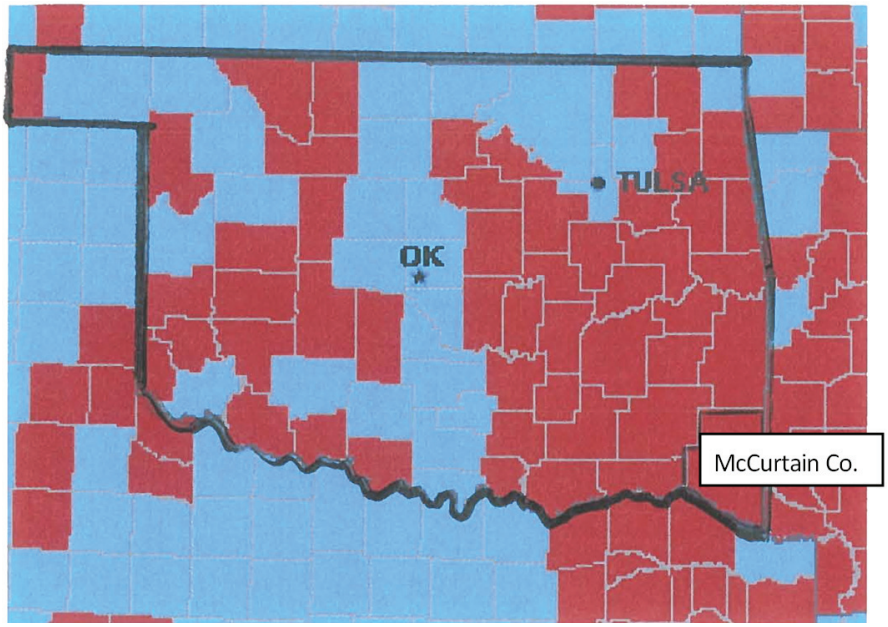
B. JOB CREATION AND NEAR TERM ECONOMIC ACTIVITY

i Influence on Economically Distressed Areas

According to FHWA guidelines, McCurtain County and the surrounding counties are in an economically distressed area (**Exhibit 15**). Per capital income in McCurtain County (at $18,267 in 2009) is less than 68 percent of the U.S. national average, and is 81 percent of the state of Oklahoma average. In addition, 27 percent of the county's population lives below the poverty rate (2009 data), nearly double the rate in the US at that time (14 percent). Unemployment in McCurtain County is currently 8.9 percent. Unemployment in Red River County, Texas, just six miles to the south of Valliant, is 12.4 percent (both figures from BLS for August 2011). This combination of low income and unemployed and under-employed workers in Valliant and the surrounding region indicate that the construction aspects of this project would provide great opportunities for a speedy and positive impact on some of the hardest-hit parts of our national economy.

Exhibit 14: Dilapidated Structure on US 70

Exhibit 15: McCurtain County in Southeast Oklahoma and Other Economically Distressed Counties in the State, 2011



Note: Counties in red indicate economically distressed areas.

Source: FHWA, Planning Environment Realty GIS Office, Economically Distressed Area, August 2011. http://hepgis.fhwa.dot.gov/hepgis_v2/GeneralInfo/Map.aspx

There are individuals with construction-related skills in the vicinity. In addition, the town of Idabel, 18 miles northwest of Valliant along US 70, has a trade school, Kiamichi Technology Centers, which provides training in welding, masonry, safety, electrical trades, machinery maintenance and other skills that would be needed to implement the project. It is expected that construction firms will use these regional resources, as well as the local workforce development agency, to staff the project.

Workforce Investment Efforts in Place

According to the *Southeast Oklahoma Workforce Investment Act Economic Profile*, the economy in southeastern Oklahoma shows highest employment in the government and agricultural, forestry, hunting and fishing sectors. Other strong sectors include construction and health care. While the agriculture, forestry, hunting & fishing, and manufacturing groups have long been important in this region, these important sectors have also shown the largest reduction in jobs between 2005 and 2009. It is clear that construction-related employment will increase as a result of the US 70 project. Further it is anticipated that the improved transportation facility will spur/entice growth in manufacturing and tourism & recreation businesses in the area.

The area has many organizations involved in workforce training and economic development.

The Southeast Area Workforce Investment Board carries out the purposes and functions of the Workforce Investment Act (WIA) in seven counties in extreme Southeast Oklahoma.

The WIA was created to design and implement a comprehensive workforce investment system. The system assists Southeastern Oklahoma residents to access the tools they need to manage their careers through information and high quality services. Particular emphasis is being placed on the design and implementation of services that will be of interest and assistance to area businesses and will provide another tool to help those businesses find skilled workers.

In November 2009, a consortium of local educational and career development entities completed a process to earn a "Work Ready" recognition from the Oklahoma Department of Commerce. The region was recognized as "Oklahoma's Premier Work Ready Region." This certification process was a collaborative effort by the Oklahoma Department of Commerce, the Kiamichi Technology Centers, the Choctaw Nation Career Development Program, Southeast Workforce Investment Board, and the Kiamichi Economic Development District of Oklahoma (KEDDO). These organizations are expected to help identify local workers needed to construct the project.

High Rural Poverty

The Town of Valliant and surrounding McCurtain County are inside of a cluster of high rural poverty counties that covers southeastern Oklahoma, southwestern Arkansas, northwestern Louisiana and east Texas. According to the Census Bureau's 2009 Small Area Income and Poverty Estimates (SAIPE), only one other county in the state had a greater percent of people in poverty.

In terms of median household income, McCurtain County ranks in the bottom six percent of median household income by county in Oklahoma, with a level of $29,200 (**Exhibit 16**). The highest county median household income in Oklahoma is nearly 57,000; the average is $41,700.

Exhibit 16: Education, Income, and Employment, McCurtain County, and State of Oklahoma, 2009

Geography	Percent GED/HS Diploma	Percent-Bachelor's Degree	Median Household Income	Per Capita Income	Percent Employed
McCurtain County	77.7%	12.5%	$29,207	$18,267	50.4%
State of Oklahoma	84.8%	22.4%	$41,716	$22,561	59.0%

Source: US Census Bureau, 2010 State and County Quick Facts.

ii Calculation of Construction-Induced Economic Impacts for the Valliant US 70 Project

The Valiant US-70 Improvement project is expected to create near-term economic benefits for the McCurtain County area and the state of Oklahoma, as well as for the nearby states of Texas and Arkansas. The economic benefits from the project would be driven by an increase in construction spending in the region. These project expenditures would generate a short term increase in demand for engineering and technical services, as well as construction-related labor and materials.

To quantify the near-term economic benefits of this project an analysis was conducted utilizing an input-output modeling framework based on multipliers from MIG Inc., the developers of IMPLAN.

The multipliers estimate two types of impacts:

- **Direct/Indirect Impacts**: Direct impacts represent new spending, hiring, and production by civil engineering construction companies to accommodate the demand for resources in order to complete the project. Indirect impacts result from the quantity of inter-industry purchases necessary to support the increase in production from the construction industry experiencing new demand for its goods and services. All industries that produce goods and services consumed by the construction industry will also increase production and, if necessary, hire new workers to meet the additional demand.
- **Induced Impacts:** Induced impacts stem from the re-spending of wages earned by workers benefitting from the direct and indirect activity. For example, if an increase in demand leads to new employment and earnings in a set of industries, workers in these industries will spend some proportion of their increased earnings at local retail shops, restaurants, and other places of commerce, which would further stimulate economic activity.

The results of the short term economic impacts are shown in **Exhibit 17**.

Assuming the grant is awarded, the Valliant project is expected to generate economic benefits for the region beginning in 2012. An estimated average of 231 jobs will be created annually by the project, including an average of 142 direct jobs per year. **Exhibit 18** shows the profile of average annual employment generated by the project's expenditures. Note that because award announcements will not be made until a few months into 2012, only the latter half of that year is counted.

In total, the project is projected to create 922 person years of employment, including 569 direct/indirect job person years. **Exhibit 19** shows the number of persons directly and indirectly employed by the project by quarter.

Exhibit 20 shows the breakdown of jobs created by industry and type of impact. As expected, the civil engineering construction industry is estimated to receive the largest increase in jobs from the project (311 person years), almost all of which are direct jobs created. The other industries that will see the largest number of jobs created include manufacturing (165 person years) professional services (68 person years), real estate and rentals (68 person years), retail (60 person years), and finance and insurance (51 person years).

Exhibit 17: Summary of Near-term Economic Impacts Resulting from the Project.

Direct + Indirect Impacts	
Employment (Annual Average	142
Earnings (2011 $)	$28,321,329
Output (2011 $)	$67,378,629
Induced Impacts	
Employment (Annual Average)	88
Earnings (2011 $)	$17,587,450
Output (2011 $)	41,841,902
Total Impacts	
Employment (Annual Average)	231
Earnings (2011 $)	$45,908,779
Output (2011 $)	$109,220,531

It is also important to consider the quality of the jobs that would be created by the project, which can be measured by the average level of compensation. The average job generated by this project would receive compensation around $49,750 per year, which is above the 2010 average US per capita income of $27,041 (2009 $) and well above the county's 2009 per capita income of $18,267 (2009 $). This indicates that the project will help stimulate the regional economy.

The amount of short-term economic activity generated by the project is shown in **Exhibit 21**. In total, the project would generate $109 million in real economic output (measured in 2011 dollars), with 7 million dollars of economic output generated in the second half of 2012, $42 million generated in 2013, and $53 million generated in 2014. The remaining $7 million of economic output would be generated in 2015.

Exhibit 18: Annual Employment per Year During Construction

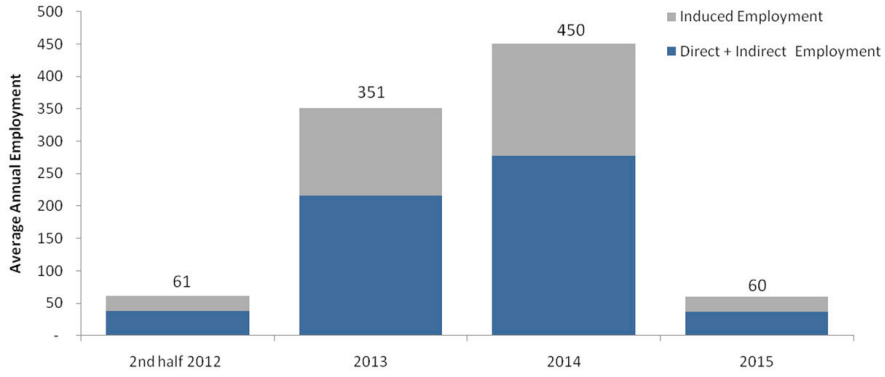
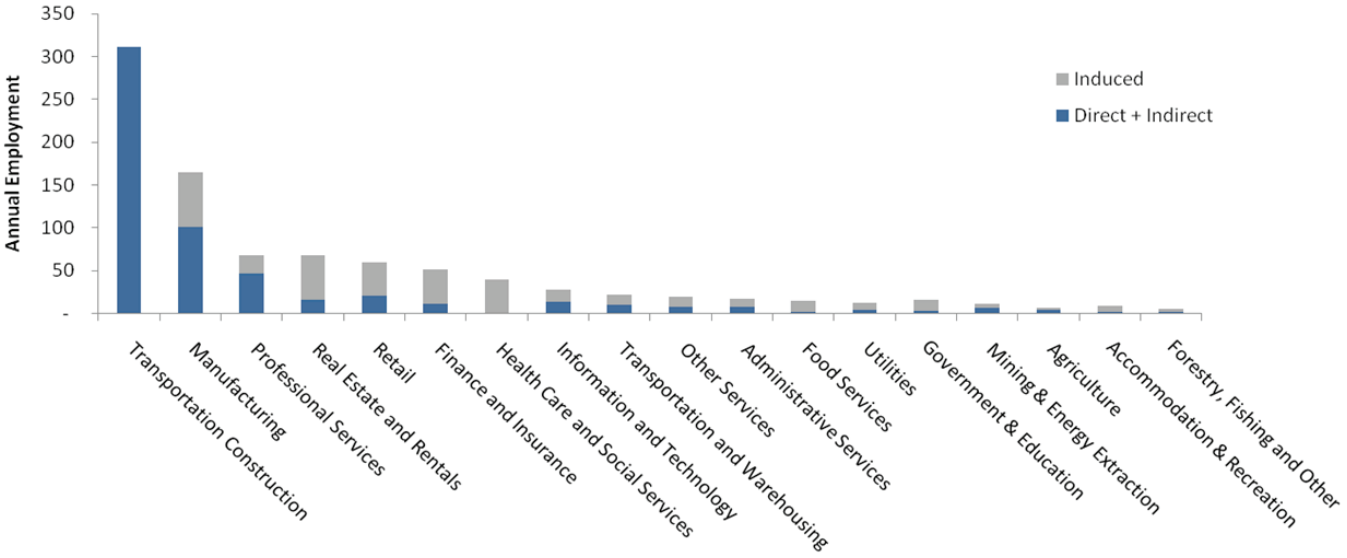


Exhibit 19: Direct + Indirect Jobs by Quarter

2012		2013				2014				2015
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
19	19	19	24	80	93	93	74	74	37	37

Exhibit 20: Breakdown of Job Creation by Industry and Type of Impact



C. INNOVATION

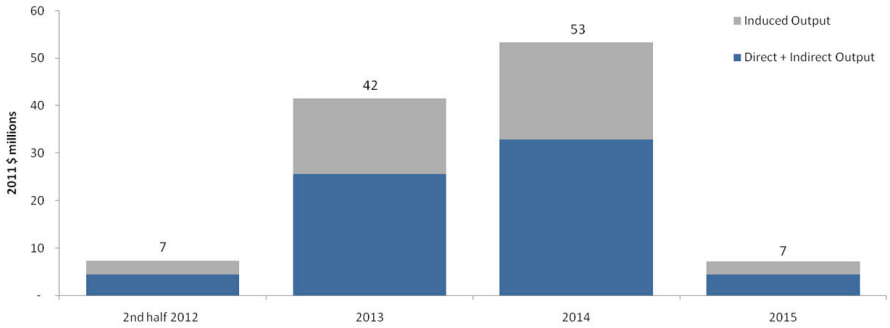
Not applicable

D. PARTNERSHIP

The decision to proceed with the widened highway with a rail overpass through the City of Valliant was made after many long discussions. Although it may seem like the obvious choice, in fact it was a conclusion reached after years of exploring other options. In a relatively poor community where options and resources for transportation are limited, the construction of a new highway through town, with a bikeway and sidewalk on either side, represents an innovation that is useful and aesthetically pleasing to the community. Particularly for residents and business people who have participated in the years-long process, the project represents the result of years of study and negotiating different points of view.

The project, which addresses safety and mobility needs of rail, commercial motor vehicle, and personal motor vehicle users, as well as those of bicyclists and pedestrians, is an

Exhibit 21: Breakdown of Economic Output by Year



approach which will improve safety, mobility and the economy in Valliant and McCurtain County in southeastern Oklahoma.

Community Dialogue

The public has been involved in dialogue about improvement to the US 70 corridor since the late 1990s. As referenced earlier, Statewide Plans completed in 1995, 2005, and 2010 included public meetings and discussions about the US 70 corridor. Local partners have been much more intimately involved over the past ten years as ODOT staff have worked with residents and businesses in and around McCurtain County.

US 70 Two Hundred Mile Corridor Study

As a part of the *US 70 Corridor Study*, several public meetings were conducted. In October 1996, public comment was requested regarding options for widening the highway or bypasses. At the time, a bypass to the north of the City of Valliant or improving the existing route through town were two concepts under consideration.

In the mid-1990s, the growth of the Weyerhaeuser Plant in Valliant boosted the area economy. However the tremendous growth in trains and trucks to the plant paralyzed traffic on US 70.This issue triggered Valliant to be a focal point of improvement to US 70 during the Corridor Study.

General support was offered for upgrading US 70, because area residents felt that the current two lane road would not support economic growth in the area. The US 70 Corridor Study was finalized in April 1997 with the four lane bypass, approximately 0.75 miles north of the existing US 70 as the preferred alternative. The document notes that "the bypass would serve motorists traveling along US 70 better than the existing alignment. Fewer environmental issues would have to be remediated. In addition the construction cost is considerably less than the amount to widen the existing route."

US 70 in McCurtain and Choctaw Counties, Environmental Review

The environmental assessment process followed the Feasibility Study. This process provides a more in-depth look at a proposed project and its alternatives. The *Environmental Assessment for Reconstruction of US 70 to a Four Lane Facility from 3 Miles East of SH 93 and Extending East 25 Miles in Choctaw and McCurtain Counties* (*US 70 EA in Choctaw and McCurtain Counties*) was completed in 2001, and included several meetings in the City of Valliant, as summarized below:

- Public Meeting, October 2000 - Discussion of north bypass along three very similar alignments, approximately 80 persons attended, no written opposition was received. Local community leaders requested that ODOT consider construction of an interchange at Dalton Street (Old SH 98) due to its importance as an access point for development in and north of Valliant.
- Valliant Chamber of Commerce Meeting, January 2001 – Discussion of proposed bypass, approximately 15 persons in attendance
- Public Hearing, April 2002 – Presentation of preferred alignment for north bypass; Approximately 122 persons in attendance. No oral or written comments were received.

The US 70 EA in Choctaw and McCurtain Counties was completed and a Finding of No Significant Impact (FONSI) was signed in July 2002.

Continued Review and Comment and Further Study, 2009 -2011

ODOT engineers initiated further work on this project, including final design and pre-construction activities. It was assumed that the project as planned met community needs and provided the best solution. However, early in 2009 area residents requested a special meeting about the proposed changes to US 70. Because of concerns expressed by local businesses and residents, ODOT officials decided to postpone a decision on the highway route until further review and analysis was conducted. Another series of meetings was held in Valliant.

- Town meeting, May 2009 – Discussion about proposed US 70 north bypass; approximately 200 persons in attendance; most opposed to highway bypass
- Public meeting, October 2011 – Discussion about proposed US 70 north bypass; approximately 190 persons in attendance; group opposes bypass; received 77 written comments

- Public meeting, December 2009 – Discussion about US 70 through town on existing alignment; ODOT agrees to re-evaluate options for through town alignment; approximately 120 in attendance
- Public meeting, June 2011 – Discussion about US 70; ODOT provides information on two options for through town: five lanes at grade on existing alignment with improved railroad crossing equipment or five lanes grade separated with bridge over railroad; approximately 110 in attendance; 73 written comments. Comments generally favored proceeding on existing alignment, but there was not agreement on how to address highway/railroad conflicts.

Following this period of in-depth review and analysis, the Department analysis indicated that the safest and best option for improving US 70 through this part of McCurtain County is the grade separated route through the City of Valliant (**Exhibit 22**).

Railroad, Highway, Community as Partners

To accomplish a project such as this which involves transportation infrastructure, a partnership is required among the federal government (if federal funds are involved), state and local government agencies, the railroad, and the community. Although the purpose of the project may be seen through the lens of "transportation improvements", as a result of the interaction between the community, the transportation agency, and the railroad, the partnership developed for this project provides an atmosphere of cooperative working relationships that continues into the future.

Support letters from the following are available on the project website:

- Kiamichi Railroad Company
- Texas Oklahoma and Eastern (TO&E) Railroad
- Triad Transport, Inc.(trucking company)
- Oklahoma Department of Transportation

Exhibit 22: Artist Rendering of Improved US 70 with Grade Separation

Source: Oklahoma Department of Transportation and Skyline Ink. October 2011

V. PROJECT READINESS AND NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) STATUS

A. PROJECT SCHEDULE

The US 70 project is ready to move forward quickly. The project is expected to be under contract in June 2012. The construction schedule, including critical path items, is available with the supplemental documents on the project website. The project completion is scheduled for February 2015.

B. ENVIRONMENTAL APPROVALS

The National Environmental Policy Act (NEPA) reassessment process is expected to be complete in mid-April 2012, with a reaffirmation of the Finding of No Significant Impact (FONSI) issued in July 2002. Final design will commence immediately upon completion of the environmental process.

C. LEGISLATIVE AND PLANNING STUDIES

No legislative actions are necessary to proceed with this project. The project is consistent with the Oklahoma 2035 Long Range Transportation Plan and is included in the 2012 - 2019 Construction Work Plan Program and the current Statewide Transportation Improvement Program.

D. TECHNICAL AND FINANCIAL FEASIBILITY

The Oklahoma Department of Transportation is well versed in managing and overseeing construction projects such as the planned

"Improved US 70 with Railroad Grade Separation (Highway Overpass)". No technical obstacles have been identified.

The project budget describes how the capital improvement will be financed. A sustainable revenue source is available for the long-term operation and maintenance of the highway. ODOT maintains an Eight Year Construction Work Plan and also devotes $125,000,000 annually to maintenance of the state highway system.

VI. FEDERAL WAGE RATE CERTIFICATION

As the applicant for TIGER funds, the ODOT will comply with federal wage rate requirements of Subchapter IV of Chapter 31, USC Title 40 as per the FY 2011 Continuing Appropriations Act. A statement to this effect is included below.

VII. MATERIAL CHANGES FROM PRE-APPLICATION STATEMENTS

The pre-application listed non-federal funds committed to the project as $35,857,000. After further clarification of available non-federal funds, the final application lists non-federal funds in the amount of $14,316,800. The stated TIGER grant request amount of $8 million has not changed

The pre-application project cost estimate was $43,857,000 and did not include all engineering and environmental costs. The final application shows the total project cost of $44,957,600.

The pre-application identified the project as "US 70 Elevated Roadway over TO&E Railroad". The final application project title is "Improved US 70 with Railroad Grade Separation (Highway Overpass) in Valliant, McCurtain County, Oklahoma".

As required in the Notice of Funding Availability for the Department of Transportation's National Infrastructure Investments (**TIGER III**) Under the Full-Year Continuing Appropriations, 2011, as printed in the Federal Register, Vol. 76, No. 156, Friday, August 12, 2011, The **Oklahoma Department of Transportation** states and assures that it will comply with the requirements of subchapter IV of chapter 31 of title 40, United States Code, the Federal wage rate requirements.

Oklahoma Secretary of Transportation

9-15-11

Date

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