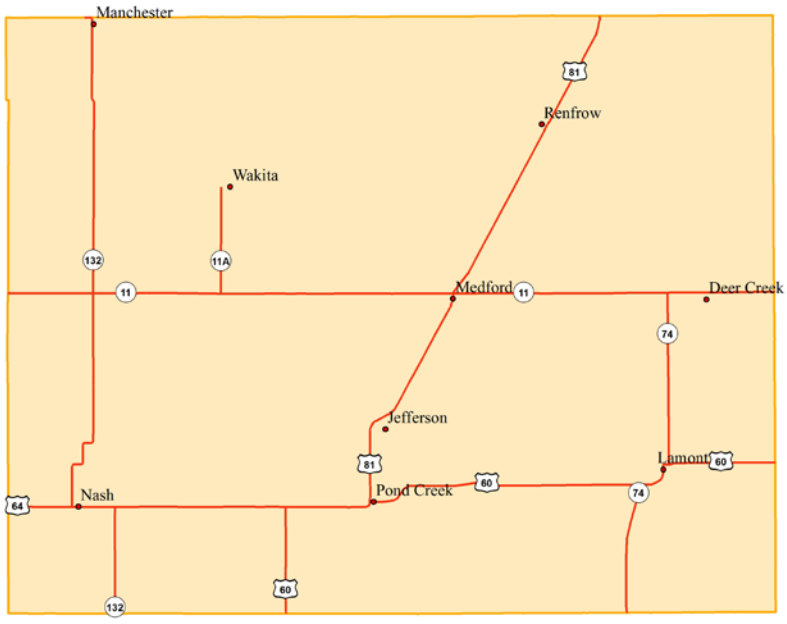
Northern Oklahoma Regional
Transportation Planning Organization

Grant County Oklahoma
2036 Long Range Transportation Plan

Northern Oklahoma Regional Transportation Planning Organization (NORTPO)



Northern Oklahoma Development Authority

NODA
NORTHERN OKLAHOMA DEVELOPMENT AUTHORITY

Prepared by:

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In cooperation with:
The County of Grant

The Cities of Medford and Pond Creek

The Towns of Deer Creek, Jefferson, Lamont, Manchester, Nash, Renfrow and Wakita

The Oklahoma Department of Transportation
The Federal Highways Administration
The Federal Transit Administration

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TABLE OF CONTENTS

Chapter *Page*

ADOPTION RESOLUTION

EXECUTIVE SUMMARY ES-1

1. INTRODUCTION, GOALS & KEY ISSUES..... 1
Introduction, Transportation Plan Purpose and Process..... 1
Regional Transportation Planning..... 2
Purpose of Plan..... 3
Relationship and Requirements with State and Federal Agencies..... 4
Planning Factors 4
Goals, Objectives and Policies 5
Goal 1: Mobility Choice, Connectivity and Accessibility..... 6
Goal 2: Awareness, Education and Cooperative Process..... 7
Goal 3: Community..... 7
Goal 4: Community..... 8
Goal 5: Economic Vitality..... 8
Goal 6: Environment..... 9
Goal 7: Finance and Funding..... 9
Goal 8: Maintenance and Preservation..... 9
Key Issues, Trends and Challenges 10

2. CURRENT CONDITIONS, NEEDS AND FUNDED IMPROVEMENTS 11
Traffic Analysis Zones..... 14
Physical Development Constraints, Development Conditions and Patterns..... 14
Environmental, Deficient Bridges, Historic and Archeological Sites, Federal or State Listed Species..... 15
Grant County Floodplains..... 15
Earthquakes..... 16
Historic Places 16
Threatened and Endangered Species 16
Air Quality 16
Wind Farms..... 16
County and Community Development 16
Road Classification..... 17
Public Safety Issues..... 18
Collisions..... 18
Areas of Concern 19
Transportation Inventory and Improvement Needs..... 19
Road System..... 19
Bridges..... 20
Freight..... 21
Rail..... 22
Passenger Rail..... 23
Bicycle and Pedestrian Network 23
Public Transportation..... 24
Aviation 24

Chapter *Page*

3. FUTURE CONDITIONS, NEEDS AND PLANNED IMPROVEMENTS 25
Future Conditions 25
2036 Transportation Improvements 25
Planned Improvements 26

4. FINANCIAL SUMMARY 27
Financial Assessment 27
Funding Sources 27
Federal 27
State 27
County 28
Local 29

5. PUBLIC PARTICIPATION SUMMARY 30
Environmental Justice 30
Coordination Efforts 30

6. TRANSPORTATION RECOMMENDATIONS 32
Roadway 32
Rail 32
Bicycle and Pedestrian 32
Safety 32
Public Transportation 32
Planning and Community 33
Committed Improvements 33
Conclusion 39

APPENDICES

Appendix A Resolutions A1
Appendix B Acronyms B1
Appendix C Definitions C1
Appendix D Performance Measures D1
Appendix E Functional Classification and Level of Service E1
Appendix F Plans and Corresponding Websites F1
Appendix G Letter to/from State Agencies G1
Appendix H Maps and Tables by Chapters H1
H-1 Chapter 1
H-2 Chapter 2
H-3 Chapter 3
H-4 Chapter 4
H-5 Chapter 5
H-6 Chapter 6

LIST OF MAPS IN PLAN

Map		*Page*
Map ES.1	NORTPO Area	ES-1
Map ES.2	Grant County	ES-2
Map 1.1	NORTPO and NODA Region	2

LIST OF TABLES IN PLAN

Table		*Page*
Table 1.1	Planning Factors	4
Table 1.2	Grant County Transportation Goal Categories	5
Table 6.1	Recommended List of Projects	33

LIST OF FIGURES IN PLAN

Figure		*Page*
Figure 2.1	Changes in Civilian Labor Force	13
Figure 2.2	Access Function	18
Figure 2.3	Average Daily Long Haul Traffic on NHS 2011	21
Figure 2.4	Existing and Proposed Ports of Entry	22
Figure 2.5	Oklahoma Portion of STRACNET	23

LIST OF MAPS IN APPENDIX H

Map 2.1 Grant County Traffic Analysis Zones (TAZ)
Map 2.2 Grant County Population by TAZ
Map 2.3 Medford Traffic Analysis Zones (TAZ)
Map 2.4 Pond Creek Traffic Analysis Zones (TAZ)
Map 2.5 Grant County Employment by TAZ
Map 2.6 Grant County Major Employers by TAZ
Map 2.7 Grant County Water Bodies
Map 2.8 Grant County Airports
Map 2.9 Grant County Highways and Rail Lines
Map 2.10 Grant County Historic Places
Map 2.11 Grant County Functional Classification
Map 2.12 Grant County Average Daily Traffic Counts
Map 2.13 Grant County Collisions by Severity
Map 2.14 Grant County Two Lane Highways Without Shoulders
Map 2.15 Oklahoma Steep Hills and Sharp Curves
Map 2.16 Grant County Bridges
Map 2.17 National Highway Freight Network, Oklahoma
Map 2.18 Grant County Freight Corridors and Connectors

Map 3.1 Grant County 2036 Population Projection by TAZ
Map 3.2 Grant County 2036 Employment Projection by TAZ
Map 3.3 ODOT Construction Work Program 2016-2024

Map 5.1 2014 Grant County Poverty Status by TAZ
Map 5.2 2014 Grant County Limited English Proficiency by Household by TAZ
Map 5.3 2014 Grant County Disabled Residents by TAZ

LIST OF TABLES IN APPENDIX H

Table 2.1 NORTPO Counties Population Data
Table 2.2 Grant County Growth 1980-2015 ACS Estimate
Table 2.3 Grant County Employment by Industry
Table 2.4 Grant County Vehicle Registrations
Table 2.5 Grant County Population by TAZ
Table 2.6 Grant County Employment by TAZ
Table 2.7 Grant County Major Employers
Table 2.8 Grant County Historic Places
Table 2.9 Grant County Collisions 2011- 2015
Table 2.10 Grant County Bridges
Table 2.11 Structurally Deficient and Functionally Obsolete Bridges
Table 2.12 Cherokee Strip Transit Ridership and Revenue for Grant County

Table 3.1 Grant County Population and Employment Projections
Table 3.2 Grant County 2036 Population Projection by TAZ
Table 3.3 Grant County 2036 Employment Projection by TAZ
Table 3.4 ODOT Eight Year Work Program
Table 3.5 ODOT CIRB Work Program

Table 4.1 Funding Categories Summary
Table 4.2 State Funding Categories

Table 5.1 2014 Grant County Poverty Status by TAZ
Table 5.2 2014 Grant County Limited English Proficiency by Household by TAZ
Table 5.3 2014 Grant County Disabled Residents by TAZ
Table 5.4 2014 Grant County Residents by Race

Northern Oklahoma Regional
Transportation Planning Organization

Resolution Re-Adopting the Grant County 2036 Long Range Transportation Plan

Whereas, The Northern Oklahoma Regional Transportation Planning Organization (NORTPO) is the Regional Transportation Planning Organization for the Northern Oklahoma Development Authority, for the expressed purposes to carrying out the transportation planning requirements of U.S. C. Title 23, Chapter 134 and U.S.C. 49, Subtitle III, Section 5303; and

Whereas, the Grant County 2036 Long Range Transportation Plan (LRTP) has been prepared by the NORTPO in consultation with all member local and state governments and local, state and federal transportation agencies in a continuing, cooperative, coordinated and comprehensive planning process; and

Whereas, the Plan has been presented to the general public for review and comment in accordance with the Public Participation Plan in addition to the series of public meetings and the Plan was posted on the NORTPO website for public review and comment; and

Whereas, the Plan is consistent with local, regional, and state transportation and other planning goals and objectives and has been prepared in accordance with all relative state and federal rules and regulations; and

Whereas, the Plan was originally approved and adopted on 27th day of October 2016.

NOW, THEREFORE BE IT RESOLVED, that the NORTPO Policy Board hereby approves and re-adopts the Grant County 2036 Long Range Transportation Plan. Further be it resolved that the NORTPO Policy Board recommends that the Plan be accepted by the Oklahoma Department of Transportation and the Federal Highway Administration and the Federal Transit Administration as the official long range transportation plan for the above cited area.

Approved and Adopted by NORTPO Policy Board and signed this 22nd day of April 2021.

NORTPO Policy Board Chairman

ATTEST:

Marci Hyde

NORTHERN OKLAHOMA DEVELOPMENT AUTHORITY - *Regional Solutions*

— a council of local governments providing opportunities to improve the quality of life in the counties of
ALFALFA • BLAINE • GARFIELD • GRANT • KAY • KINGFISHER • MAJOR • NOBLE

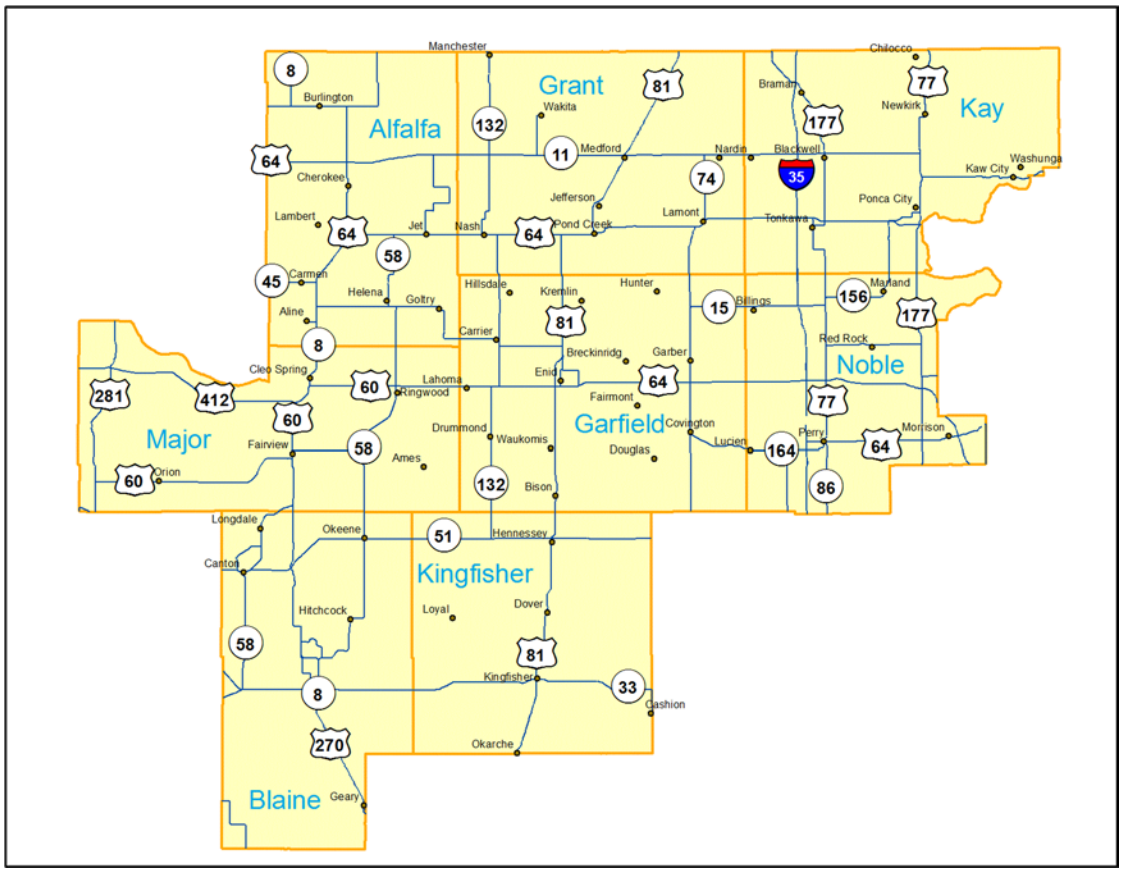
2901 NORTH VAN BUREN • ENID, OK 73703 • PHONE 580-237-4810 • FAX 580-237-8230 • www.nodanet.org

EXECUTIVE SUMMARY

The Northern Oklahoma Regional Transportation Planning Organization (NORTPO) developed the Grant County 2036 Long Range Transportation Plan (LRTP) in coordination and collaboration with stakeholders, communities, local, state and federal agencies.. The LRTP includes an inventory of the different modes of travel and identifies issues, opportunities, and trends that may influence transportation in the County over the next 20 years. The Plan also identifies existing and potential future transportation improvement needs.

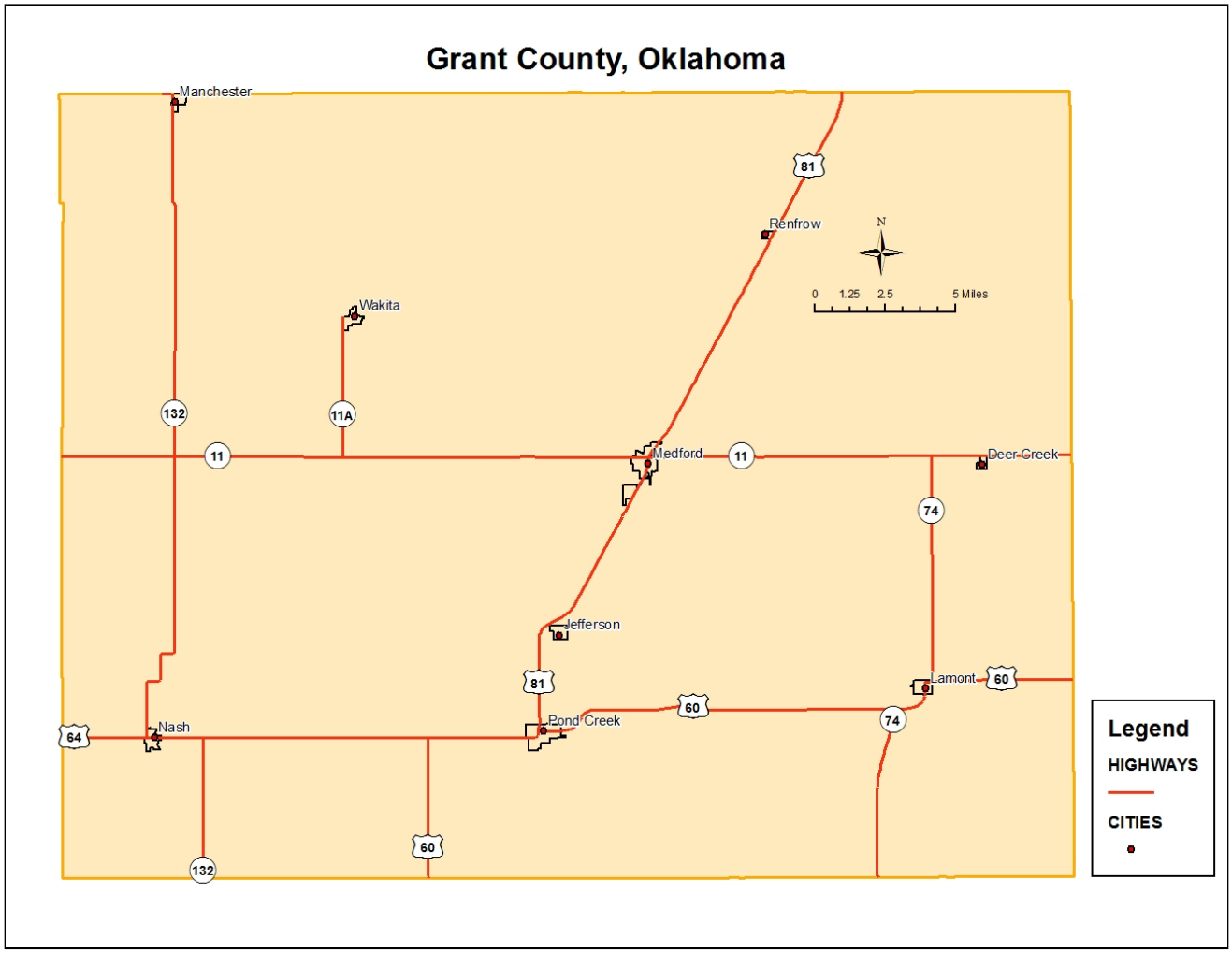
The Grant County LRTP is part of a pilot project to help determine feasibility and organizational structure of an eventual statewide regional transportation improvement plan. This plan will be a part of the region-wide effort of NORTPO in their continuation of a regional approach to identify and examine both short and long range goals for development. A regional approach to long range transportation planning is necessary because of the rural nature and diverse characteristics of the population in Oklahoma.

Map ES.1 NORTPO Area



The NORTPO Area (Map ES.1) is also the NODA region and is approximately 7,400 square miles and includes eight counties, seventy-one cities and towns, and nine conservation districts. The region is predominately rural, with the majority of the population being within the incorporated cities of Enid and Ponca City.

Map ES.2 Grant County



Grant County, located in north-central Oklahoma, lies in the most northern tier of counties bordered on the north by the state of Kansas. Surrounded by Kay County on the east, Garfield County on the south, and Alfalfa County on the west, Grant County has a total of 1,003.61 square miles of land and water.

Situated in the Red Bed Plains and in the Great Salt Plains, the area is noted as a wheat-growing region. The grassy plains are drained by the Salt Fork of the Arkansas River, which flows from west to east in the southern half of the county. North-south tributaries such as Pond, Deer, Osage, and Crooked creeks flow into the Salt Fork. The Chikaskia River originates in the county's northeastern corner, crossing west to east into Kay County. Grant County is included in an area of Oklahoma that is one of the state's least studied by archaeologists. There are nine known archaeological sites. Surveys have provided the conclusion that the area was occupied during the Archaic (6000 B.C. to A.D.1), Woodland (A.D. 1 to 1000), and Plains Village (A.D. 1000 to 1500) cultural periods.

Early explorers in the area of future Grant County included George C. Sibley and Nathan Boone. In summer 1811 Sibley made an excursion to the Great Salt Plains along the Salt Fork of the Arkansas River while visiting Osage villages in present northeastern Oklahoma. In 1843 Nathan Boone led an expedition from Fort Gibson to explore the Great Salt Plains. Both men recognized the commercial benefits of the salt deposits.

Grant County was initially part of the Cherokee Outlet, owned by the Cherokee Nation. Following the Civil War (1861–65) the Outlet became a rancher's paradise. Cattle companies, such as Williamson, Blair and Company of Kansas City, soon leased large sections of the Outlet from the Cherokee. In the late 1860s an individual named Sewell built a stockade (later known as Pond Creek Ranch) near present Jefferson as a haven for travelers and cattle drivers. Between 1867 and 1884 cattle drives originating in Texas passed through the area via the Chisholm Trail. Beginning in 1879 settlers called boomers clamored for the opening of the area to settlement. Between 1879 and 1884 Charles C. Carpenter and David L. Payne led several groups on excursions into the region to establish colonies. Although their efforts were thwarted, the publicity that was generated brought the situation to national attention, and the Cherokee Outlet was opened to non-Indian settlers on September 16, 1893.

Prior to the land opening the Department of the Interior had designated future Grant County as L County, with a county seat at Pond Creek. After the opening, communities such as Deer Creek, Jefferson, Lamont, Manchester, Medford, Nash, Pond Creek, Renfrow, and Wakita sprang into existence. In 2010 they continued as incorporated towns. During a general election held on November 6, 1894, voters named the county after Pres. Ulysses S. Grant. Centrally located within the county, Medford became the county seat through an election held on May 27, 1908. County officials met in temporary quarters until the Grant County Courthouse was constructed. Dedicated on July 4, 1910, it is listed in the National Register of Historic Places (NR 84003027).

The Grant County area has evolved from hunting grounds for American Indians and range for cattle owners to a prominent wheat-growing and livestock-raising region. At 1907 statehood the principal crops included wheat, corn, oats, alfalfa, and forage sorghum, with estimated value of $3.5 million. Farmers and ranchers had more than fourteen thousand each of hogs and cattle as well as almost thirteen thousand horses. A county commissioners' annual report for 1911 indicated that Grant County had 3,143 farms, of which 2,041 were owned by the occupants. In 1930 Grant County had 2,757 farms, with the average size farm being 242 acres. Almost 50 percent of the farms were operated by tenants. In 1963 farmers reported that 278,300 acres were planted in wheat, and livestock numbered 55,500 poultry, 50,000 head of cattle, 29,300 sheep, and 14,300 hogs. At the turn of the twenty-first century 584,588 acres were divided into 688 farms, with the average farm being approximately 850 acres.

In addition to agriculture Grant County's economy has been supplemented by some manufacturing and by the oil and gas industry. In the early 1920s oil and gas were discovered in the eastern part of the county near the Blackwell Field. On April 24, 1921, the Swaggart Number One, the first oil well in Grant County, was drilled near Deer Creek. At the turn of the twenty-first century the county reported seven manufacturers compared to twenty reported in 1930.

Notable early trails included the Black Dog and Chisholm trails. Beginning in 1889 and 1890 the Chicago, Kansas and Nebraska Railway (later the Chicago, Rock Island and Pacific Railway) constructed a railroad from northern Kansas through Grant County with Renfrow, Medford, Jefferson, and Pond Creek along that line. In 1897 the Gulf Railroad (later the Atchison, Topeka and Santa Fe Railway, AT&SF) connected Manchester, Wakita, Medford, and Deer Creek with outside markets. At the turn of the twentieth century the Blackwell, Enid and Southwestern Railroad (later the St. Louis and San Francisco Railway) passed through Lamont, and the Denver, Enid and Gulf Railroad (later the AT&SF) reached Nash (Nashville). The county is served by State Highway 11, running east and west, and U.S. Highway 81 (Chisholm Trail Highway), running north and south. Other highways include State Highways 74 and 132 and U.S. Highways 60 and 64. In the 1940s the Mid-Continent bus lines had terminals at Medford and Pond Creek.

At 1907 statehood Grant County had a population of 17,638. After peaking in 1910 at 18,760, the

numbers declined each decade. Censuses for 1920, 1930, and 1940 reported 16,072, 14,150, and 13,128, respectively. Between 1950 and 1970 the numbers dropped from 10,461 to 7,117. In 1980, the county had 6,518 residents, and in 1990, 5,689. In 2000 Grant County had a population of 5,144. In 2010 it had 4,527 with a distribution of 95.8 93.0 percent white, 1.9 percent American Indian, 0.8 percent African American, and 0.2 percent Asian. Hispanic ethnicity was identified at 3.5 percent. In addition to the courthouse Grant County had four properties listed in the National Register of Historic Places: the Bank of Nashville (NR 02000655), the Dayton School in Lamont (NR 88001369), Deer Creek General Merchandise Store (NR 84003024), and the Medford Bathhouse and Swimming Pool (NR 88001368). Prominent Grant County natives include aviators Apollo and Zeus Soucek. Gov. Frank Franz moved from Kansas to Medford in 1893, and U.S. Rep. Page Henry Belcher was born in Jefferson in 1899. *(Source: http://www.okhistory.org)*

Long range transportation planning requires the planning process to be a cooperative, continuing, coordinated, and comprehensive process that monitors regional growth and any subsequent socio-economic changes resulting from growth. The monitoring efforts of the NORTPO transportation planning process are conducted in cooperation with the member local governments in order to maintain an accurate and current representation of transportation needs and improvements. .

Federal surface transportation legislation Moving Ahead for Progress in the 21st Century (MAP-21), passed in 2012 included a definition of the basic structure and responsibilities of Regional Transportation Planning Organizations (RTPOs) for the first time in federal statute (Title 23 CFR). This statutory language described RTPOs as being voluntary institutions representing local governments. This work continues through the Fixing America's Surface Transportation (FAST) Act signed into law in December 2015.

Regional transportation planning is a collaborative process designed to foster participation by all interested parties, such as business community, community groups, elected officials, and the general public through a proactive public participation process. Emphasis by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) is placed on extending public participation to include people who have been traditionally underserved by the transportation system and services in the region. The transportation planning process involves both long-term transportation system objectives and short-term implementation of projects and will provide a blueprint for the development of a safer, more efficient and less congested transportation network between population centers. Long-term objectives are identified and documented in the regional transportation planning process. The identified planned transportation improvements will be implemented within the next 20 years. Steps have been taken to determine what short-term projects can be completed within the next 5 years.

The primary goals of the NORTPO Transportation Plan include enhancement of a regional transportation system connectivity, promotion of regional mobility/congestion relief, and enhancement of regional transportation safety. The objective of the LRTP is to coordinate with regional stakeholders and the public to compile a statewide list of capacity/mobility projects, develop scoring criteria, and prioritize a list of regional roadway projects. Non-highway modes will also be a part of the Plan.

Maps and tables referred to in this plan are included in Appendix H (by chapter) and listed in the Table of Contents.

CHAPTER 1
INTRODUCTION, GOALS AND KEY ISSUES

Introduction, Transportation Plan Purpose and Process

In 1970 Oklahoma's governor established 11 sub-state planning districts. Subsequently, the local governments served by the planning districts created the 11 Councils of Government (COG) using the sub-state planning district boundaries. These 11 districts make up the Oklahoma Association of Regional Councils (OARC). Throughout the past 44 years, the regional councils have evolved from conduits for regional planning and grant administration to catalysts of change in all aspects of life throughout the state. During April of 2012 the Oklahoma Department of Transportation (ODOT) contracted with OARC to implement a transportation planning process in three selected COGs. Subsequently these COGs have developed Regional Transportation Planning Organizations (RTPOs): Northern Oklahoma Regional Transportation Planning Organization (NORTPO), South Western Oklahoma Regional Transportation Planning Organization (SORTPO), and Central Oklahoma Regional Transportation Planning Organization (CORTPO). In October 2015 ODOT selected Association of South Central Oklahoma Governments (ASCOG) and Grand Gateway Economic Development Association (GGEDA) to participate in the transportation planning process. These five RTPOs are working together as part of a state-wide pilot regional transportation planning process.

The Northern Oklahoma Development Authority (NODA) on June 16, 2010 created the Northern Oklahoma Regional Transportation Planning Organization (NORTPO), as illustrated below in map 1.1. Additional tables and maps referred to in this chapter are included in Appendix H-1.

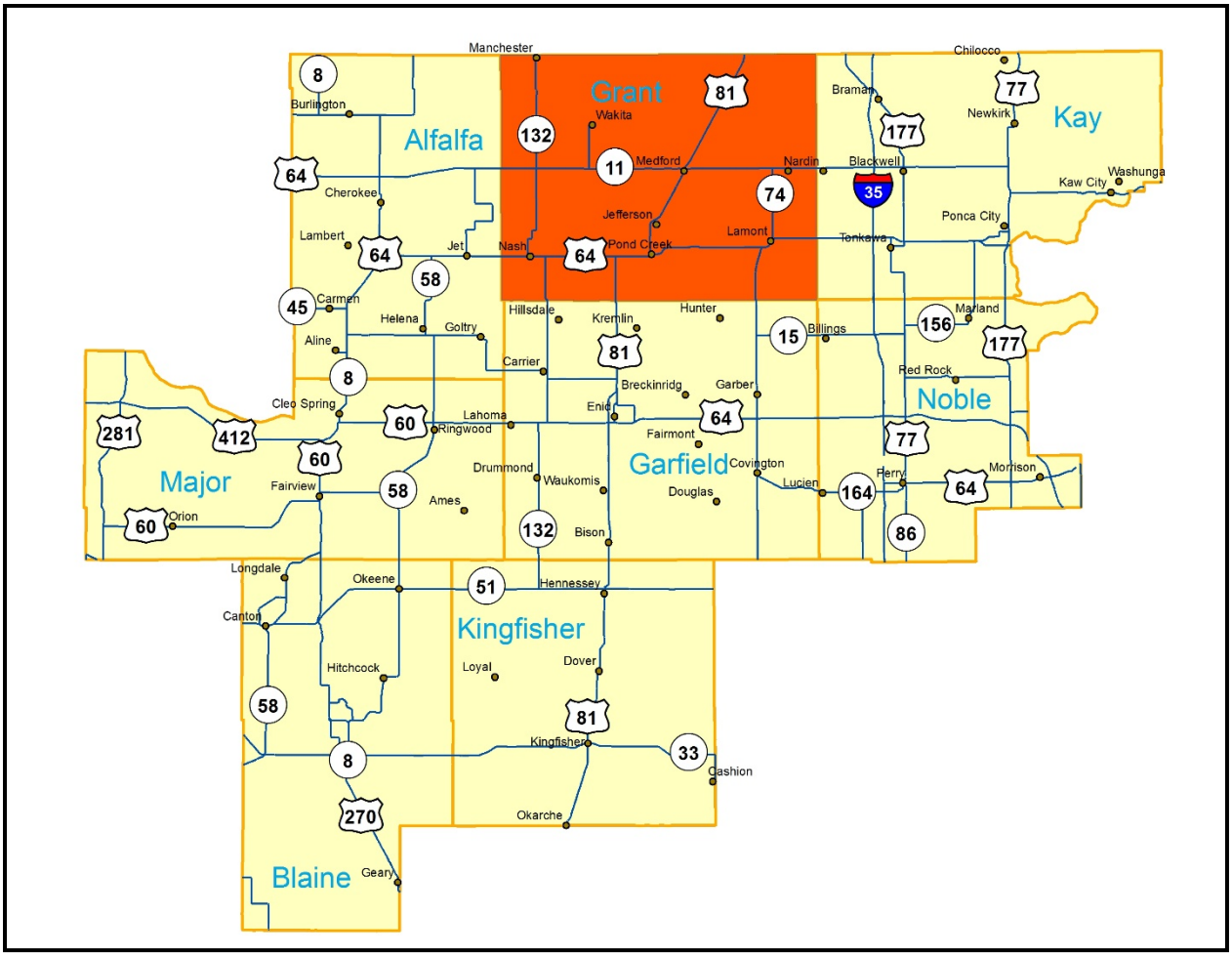
NORTPO, a member of the pilot project, is tasked with developing a Long Range Transportation Plan (LRTP) for Grant County. This plan will be a part of the region-wide effort of NORTPO in their continuation of a regional approach to identify and examine both short and long range goals for development. A regional approach to long range transportation planning is necessary because of the rural nature and diverse characteristics of the population in Oklahoma. With less populated communities and counties, maintenance funding of transportation projects and programs will be an issue. It became evident in the early stages of development that the region would need to be assessed and long-range plans created for each county with the culmination of a regional planning document encompassing eight counties within five years.

The purpose of the transportation system is to move people and goods in the safest and most efficient manner possible. The LRTP envisions the transportation system as a critical element of the quality of life for the citizens. Transportation systems for both highway and transit must safely, efficiently, and effectively allow citizens to travel to work and to conduct their personal lives. Transportation systems must further provide for the efficient movement of goods to markets to support the county's economic vitality. Additionally, transportation decisions should carefully consider and reflect environmental and community concerns.

Transportation planning is a process that develops information to help make decisions on the future development and management of transportation systems. It involves the determination of the need for new or expanded roads, transit systems, freight facilities, and bicycle/pedestrian facilities, along with their location, capacity and future needs. The process of developing the Plan provides an opportunity for participating in both planning and priority sets. The process allows

the community to focus their attention on transportation in the context of Grant County as well as the NORTPO region.

Map 1.1 NORTPO and NODA Region



Source: NORTPO

Regional Transportation Planning

Regional transportation planning is a collaborative process designed to foster participation by all interested parties such as business communities, community groups, elected officials, and the general public through a proactive public participation process. Emphasis by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) is placed on extending public participation to include people who have been traditionally underserved by the transportation system and services in the region. All aspects of the transportation planning process are overseen by the NORTPO Policy Board with input provided by the Technical Committee. This committee reviews transportation planning work efforts and provides a recommendation to the NORTPO Policy Board for their consideration and action. The day-to-day activities of NORTPO are supported by one full-time NODA staff member. Additional NODA staff members contribute to the transportation planning process to ensure the overall planning program is executed in a timely and efficient manner and in accordance with Federal regulations. Staff is housed at the NODA office located in Enid, Oklahoma. Staff, equipment, supplies, rent, consulting studies, and other expenses used to support staffing operations are reimbursable to NORTPO by the FHWA

State Planning & Research (SPR) program funds at 80% of the total amount of the work effort and the local match of 20% is provided by NODA.

The LRTP establishes the goals, objectives and transportation strategies for addressing the region's transportation needs. This planning process follows the four "C's" identified by federal transportation regulations:

- Consideration means that one or more parties takes into account the opinions, actions and relevant information from other parties in making decisions or determining a course of action
- Consultation means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), consider the views of the other parties and periodically inform them about action(s) taken.
- Cooperation means that the parties involved in carrying out the transportation planning programming processes work together to achieve a common goal or objectives.
- Coordination means the cooperative development of plans, programs and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate.

The LRTP was developed within the regulatory framework of the Fixing America's Surface Transportation Act (FAST Act).

Purpose of the Plan

The *Grant County 2036 Long Range Transportation Plan* (LRTP) is a document that can be utilized by Deer Creek, Jefferson, Lamont, Manchester, Medford, Nash, Pond Creek, Renfrow, Wakita, Grant County, Cherokee Strip Transit, and residents as a guide to maintain and improve the County's transportation system through 2036. The LRTP is an important tool and assists communities in focusing their limited funds on projects that give them the best value and benefit of public funds. This is accomplished by developing a realistic project list based upon available resources, analysis of data, and input from the communities. The prioritized list of transportation projects will provide elected officials and citizens a clear focus for future transportation projects and programs.

The transportation planning process involves both long-term transportation system objectives and short-term implementation of projects that will provide a blueprint for the development of a healthier, safer, and more efficient transportation system. The year 2036 was chosen as the planning horizon year for the LRTP for the following reasons:

- The year 2036 is far enough into the future to allow for the anticipated growth of the area to be implemented, and
- Allows the local governments and participating agencies to adequate time to plan for long range solutions to anticipated needs.

Although this may appear to be a rather pragmatic approach in response to critical planning issues, it is a direction that will enable local governments and participating agencies to adequately plan and prepare to achieve the long term goals, while maintaining the necessary short term vision and implementation techniques to respond to crucial short term issues. The identified planned transportation improvement projects will be prioritized with the goal of being implemented within the next 20 years.

As a means of achieving the successful implementation of the LRTP, the plan has been developed in five year increments. The five-year increment format will offer realistic goals in Chapter 6

relative to the LRTP's short range implementation activities while still addressing the ultimate long range goals. Additionally, the five-year incremental approach presents a "good fit" with the local governments' ability to program and commit local financial resources for transportation improvements. The incremental approach also provides a reasonable opportunity in scheduling state and/or federally funded transportation improvements within Grant County.

Deer Creek, Jefferson, Lamont, Manchester, Medford, Nash, Pond Creek, Renfrow, Wakita, Cherokee Strip Transit, Grant County Commissioners, regional stakeholders and the public were contacted to compile a countywide list of projects and prioritize a list of Grant County transportation projects. Projects were also taken from County Improvements for Roads and Bridges (CIRB) and ODOT.

Relationship and Requirements with State and Federal Agencies

The LRTP was developed in cooperation and collaboration with the federal, state, county, local member governments, ODOT, FHWA and FTA. The LRTP is the culmination of a continuing, cooperative, coordinated and comprehensive planning effort among the federal, state, and local governments. Directed by NORTPO it provides for consideration and implementation of projects, strategies, and services that address the ten planning factors (listed below) identified in the FAST Act signed into law in December 2015.

Table 1.2 Planning Factors

1. Support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially enabling global competitiveness, productivity and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic patterns.
6. Enhance the integration and connectivity of the transportation system across and between modes, people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
10. Enhance travel and tourism.

*Source: 23 USC Section 135(d) (1) and 23 USC Section 134(h) (1) - *refers to "the metropolitan area"*

In addition, The FAST Act continues Map-21 requirement to state departments of transportation and Metropolitan Planning Organizations (MPO) to use a performance-based approach to support seven national goals for the transportation system. This requirement has not been

mandated to non-metropolitan areas. Though specific performance measures are not identified in this plan, NORTPO recognizes the significance of such measures and will begin the collection of data needed to establish standards in future plans. Please see Appendix D for Performance Measures.

Goals, Objectives and Policies

The Plan format follows a hierarchy that includes goals, objectives, and policies to assist NORTPO in planning and prioritization of transportation system projects and studies. The following definitions describe the scope and intent of the goals, objectives, and policies in this plan. Goals are far-reaching statements of intent and were developed cooperatively with the community by identifying shared values and understanding of existing trends and issues. Implementation of goals is the responsibility of local, county and state governments and the RTPOs. Objectives were developed in coordination with partner agencies. The policies developed do not fall solely under the responsibility of NORTPO. Local and community agencies should consider their roles in affecting outcomes. It will be necessary to prioritize the policies and build the data collection for those policies deemed most important, into annual programs, such as the Planning Work Program (PWP).

Objectives are more focused statements that should be specific and measurable. Objectives are typically more tangible statements of approach related to attaining the set goals. Policies identified in this Plan are formal statements of practice or procedures that are recommended to be adopted by the NORTPO Policy Board. Policies are how to implement goals and objectives and are the responsibility of the appropriate agency(s). The summary of goal categories for Grant County is:

Table 1.2 Grant County Transportation Goal Categories

Goal	Description
1. Mobility Choice, Connectivity and Accessibility	Facilitate the easy movement of people and goods, improve interconnectivity of regions and activity centers, and provide access to different modes of transportation.
2. Awareness, Education, and Cooperative Process	Create effective transportation partnerships and cooperative processes that encourage citizen participation that enhance awareness of the needs and benefits of the transportation system.
3. Community	Ensure continued quality of life during project development and implementation by considering natural, historic, and community environments, including special populations, and promote a County and regional transportation system that contributes to communities' livability and sustainability
4. Economic Vitality	The transportation system will support and improve the economic vitality of the county and region by providing access to economic opportunities.

5. Environment	Reduce impacts to the County's natural environment, historic areas and under-represented communities resulting from transportation programs and projects.
6. Finance and Funding	A cooperative process between RTPO partners, state officials and private interests in the pursuit and funding of transportation improvements.
7. Maintenance and Preservation	Preserve the existing transportation system and promote efficient system management in order to promote access and mobility for both people and freight.
8. Safety and Security	The transportation system will safely and securely support the people, goods and emergency preparedness.

Goal 1. Mobility Choice, Connectivity and Accessibility
Facilitate the easy movement of people and goods, improve interconnectivity of regions and activity centers, and provide access to different modes of transportation.

Objectives

1. Promote accessibility and mobility by increasing and improving multi-modal transportation choices.
2. Promote connectivity across and between modes for people and freight.
3. Maximize access to the transportation system and improve the mobility of the transportation under-represented population.
4. Ensure new facilities are built to American Association of State Highway and Transportation Officials (AASHTO) design standards.
5. Improve and expand infrastructure for pedestrians, bicyclists and people with disabilities in compliance with the Americans with Disabilities Act (ADA) standards.
6. Provide accessible and convenient non-motorized routes to destinations throughout the county such as schools, commercial areas, recreational facilities, education, major employment areas and activity centers.
7. Incorporate bicycle and pedestrian friendly designs into considerations for transportation improvement projects.
8. Minimize conflicts between pedestrians, bicyclists and vehicles while accommodating each type of travel.

Policies

1. Regional transportation partners will continue to work together to plan and implement transportation systems that are multi-modal and provide connections between modes.
2. Increase inter- and intra-county transit services between multi-modal facilities within the County.
3. Promote transit system that provides service to major employment and activity centers, such as hospitals, educational facilities, parks and retail areas.
4. Develop a Transit Development Plan that will identify effective tools to measure transit service, assess and collect data, enhance coordination between providers and provide guidance on future needs and system expansion.

5. Maintain and expand the demand-responsive transit services in the County and enhance better coordination between various providers.
6. Add curb ramps to crosswalks where needed and move unsafe curb ramps to safer areas within that location.
7. Map the locations of major employment centers, including existing and proposed developments, and identify types of transportation available.
8. Increase access to bicycle and pedestrian facilities within ½ mile of transit route and/or facilities connecting to regional activity center(s).
9. Document locations and conditions of current freight routes.
10. Hold joint meetings between the rail, freight community, and public transportation agencies.
11. Track the increase in households or jobs by TAZ to identify potential employment and residential growth areas.
12. Encourage public acquisition of abandoned right-of-ways to permit multi-modal use of these properties. Identify designated routes for use by non-motorized users. Conduct a bicycle and pedestrian needs assessment to be able to develop a bicycle and pedestrian network. Ensure that when feasible any transportation improvements consider multi-modal issues during planning and design phases, including bicycle and pedestrian improvements, multi-modal connections, etc., and provides for travel across or around physical barriers, and/or improves continuity between jurisdictions.
13. Include bicycle racks at education facilities, health facilities, major employment areas and activity centers.
14. Develop a system to collect and monitor changes in population, employment, and major employers by Traffic Analysis Zone (TAZ).

Goal 2: Awareness, Education, and Cooperative Process

Create effective transportation partnerships and cooperative processes that encourage citizen participation to enhance awareness of the needs and benefits of the transportation system.

Objective

Promote local, regional and state cooperation on collection of data, identification of transportation needs, and early public participation.

Policies

1. Participate on state, regional and local committees regarding County transportation issues.
2. Undertake studies (when needed) to address emerging transportation needs through cooperation, participation and initiation with relevant regional agencies and affected parties.
3. Educate key stakeholders, businesses, local leaders and the public on the purpose and function of SORTPO.
4. Annually review the Public Participation Plan.
5. Develop a clearinghouse for regional data sets, such as geographic information systems to help inform sound planning decisions.
6. Facilitate and support the coordination of regional training opportunities.
   Develop method to track the implementation of projects and regularly update the public on the status of projects, programs and finances.

Goal 3: Community

Ensure continued quality of life during project development and implementation by considering natural, historic, and community environments, including special populations, and promote a County and regional transportation system that contributes to communities' livability and

sustainability.

Objective

1. Improve or expand the multi-modal transportation system to meet the needs of the community and under-represented population.
2. Increase access to ensure all residents have the capability of moving affordably between where they live, work, play and get services, using transportation options that promote a healthy lifestyle.

Policies

1. Support transportation projects serving already-developed locations of residential or commercial/industrial activity.
2. Design the transportation network to protect cultural, historical and scenic resources, community cohesiveness, and quality of life.
3. Increase the number of quiet zones, especially around residential areas.
4. Consider local economic development activities in the transportation planning process.
5. Coordinate with local and tribal governments on the placement of regionally significant developments.
6. Maintain local and state support for the general aviation airports that serve the region.
7. RTPO partners will plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities.

Goal 4: Economic Vitality

The transportation system will support and improve the economic vitality of the County and region by providing access to economic opportunities, such as industrial access, recreational travel, tourism, as well as enhancing inter-modal connectivity.

Objectives

1. Improve multi-modal access to county and regional employment concentrations.
2. Support transportation projects that promote economic development and job creation.
3. Invest in a multi-modal transportation system to attract and retain businesses and residents.
4. Support the County and region's economic competitiveness through the efficient movement of freight.

Policies

1. Prioritize transportation projects that serve major employment areas, activity centers, and freight corridors.
2. The RTPO will coordinate with other agencies planning and pursuing transportation investments that strengthen connections to support economic vitality.
3. Emphasize improvements to the major truck freight corridors.
4. Encourage the railroad industry to upgrade and/or expand the freight and passenger rail infrastructure.
5. Continue to coordinate transportation planning with adjoining counties, regions and councils of government for transportation needs and improvements beyond those in our region.
6. Working with area employers and stakeholders develop a database and map identifying transportation needs.

Goal 5: Environment

Reduce impacts to the County's natural environment, historic areas, and under-represented communities resulting from transportation programs and projects.

Objective

Plan and design new expanded transportation projects while preserving historical, cultural and natural environments, and under-represented communities.

Policies

1. Promote proper environmental stewardship and mitigation practices to restore and maintain environmental resources that may be impacted by transportation projects.
2. Promote the use of alternative fuels and technologies in motor vehicles, fleet and transit vehicles.
3. Assist in identification of potential environmental mitigation issues by acquiring, creating, and updating geographic information system (GIS) data layers.
4. Develop an air quality awareness and education program to educate residents on the importance of utilizing alternative transportation to decrease effects of air pollution.
5. RTPO partners will avoid, minimize, and mitigate disproportionately high and adverse impacts of transportation projects to the County's under-represented communities.

Goal 6: Finance and Funding

Develop a cooperative process between RTPO partners, state officials, and private interests in the pursuit and funding of transportation improvements.

Objective

Seek and acquire a variety of transportation funding sources to meet the many needs of a diverse system.

Policies

1. Maximize local leverage of state and federal transportation funding opportunities.
2. Increase private sector participation in funding transportation infrastructure and services.
3. Encourage multi-year capital improvement planning by local, county and state officials that includes public participation, private sector involvement, coordination among jurisdictions and modes, and fiscal constraint.
4. Assist jurisdictions in identifying and applying for funds that enhance or support the region's transportation system.

Goal 7: Maintenance and Preservation

Preserve the existing transportation network and promote efficient system management in order to promote access and mobility for both people and freight.

Objective

Preserve, maintain and improve the existing street, highway system, bikes, trails, sidewalks and infrastructure.

Policies

1. Identify sources of transportation data and develop a procedure to collect the data and present to the public.
2. Emphasize system rehabilitation and preservation.
3. Establish a regular traffic count and reporting system for the region.

Goal 8: Safety and Security

The transportation system will safely and securely sustain people, goods and emergency support services.

Objective

Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective

emergency management operations.

Policies

1. Collect and routinely analyze safety and security data by mode and severity to identify changes and trends.
2. Incorporate emergency service agencies in the transportation planning and implementation processes in order to ensure delivery of transportation security to the traveling public.
3. Coordinate with local governments and other agencies to identify safety concerns and conditions. Coordinate county and regional actions with the Statewide Highway Safety Plan.
4. Improve the transportation infrastructure to better support emergency response and evacuations.
5. Assist in the designation of various corridors and development of procedures to provide for safe movement of hazardous materials.
6. Minimize the impacts of truck traffic on roadways not designated as local truck routes or regional goods movement corridors.
7. Support the Oklahoma Department of Transportation in its plans to add and improve roadway shoulders to designated two lane highways.

Key Issues, Trends and Challenges

Rural communities have problematic transportation areas even if they do not experience congestion. Understanding the true nature of the problem at these locations and developing a plan to address them is an important part of rural planning. Unanticipated changes may happen that can have impacts on a city, town, county or region. There are several issues, challenges and trends facing the county that have a direct or indirect impact on the transportation system. Key issues, trends and challenges were obtained by NORTPO through the stakeholder's meeting, technical committee meetings and NORTPO Policy Board meetings and public surveys. The following information is intended to identify issues, trends and challenges in Grant County.

Key issues

Key issues as identified through public comment and by existing plans and reports include:

- Maintenance and preservation of the existing transportation system;
- Road flooding/Drainage
- Safety/Lack of proper signage, and road shoulders on narrow roads

Challenges

The challenges facing the transportation system in Grant County include:

- Lack of significant financial resources necessary to maintain the existing system and make improvements as necessary;
- An aging population and their need for alternate transportation services, and
- Lack of designated freight route;
- Lack of routes to major highways.

Trends

Trends identified include:

- Increase in aging population
- Freight traffic will increase
- Traffic Congestion

CHAPTER 2

CURRENT CONDITIONS AND FUNDED IMPROVEMENTS

This chapter provides a "snapshot" of current conditions that relate to transportation in Grant County. Understanding the status of the transportation system provides a basis for developing the transportation plan. Much of this data and information was obtained from county, state and federal agencies or institutions. Tables and maps referred to in this chapter are included in Appendix H-2.

Transportation planning in Oklahoma has typically been limited to urban areas. Rural or regional transportation planning has begun to evolve into an opportunity to consider both the short and long term transportation needs for areas outside of urban areas. This plan will consider growth and development patterns in the county and will not address development regulations. However, critically important complements to these growth areas are the locations that may generate significant demands on the transportation system. Such "activity generators" include business and industrial sites, governmental, schools, universities, tourism and recreation centers. Counties in the NORTPO region are working to seek new economic growth and diversification while striving to preserve the natural, historic and culture resources.

As the population fluctuates, either through economic changes, in or out migration or shifting within the region, the needs of the communities including education, health care, social services, employment, and transportation remain relatively stable. Land use and development changes that particularly affect transportation in rural areas include, but are not limited to, loss or gain of a major employer, movement of younger sectors of the population to more urban areas, tribal land development and investment.

Located in north central Oklahoma, the NORTPO region is predominately rural with the majority of the population located within the incorporated cities of Enid (49,379) and Ponca City (25,401). Table 2.1 provides population data for NORTPO Counties. Grant County encompasses 1,004 square miles and includes nine cities and towns.

The economy of Grant County is based upon agriculture, with the Farmers Grain Company, a producer-owned cooperative, providing service for most of the County. Much of the region is comprised of large tracts of farming and agriculture lands and most of the populous of the county are within the cities and towns Deer Creek, Jefferson, Lamont, Manchester, Medford, Nash, Pond Creek, Renfrow, and Wakita. According to American Community Survey (ACS) 2015 census estimates, Grant County has a total population of 4,527. Medford is the largest community in Grant County with a population of 996. The remaining towns all have a population of less than 900 each: Pond Creek with 856, Lamont with 417, Wakita with 334, Nash with 204, Manchester with 103, and Jefferson and Renfrow with 12 each. The remaining population resides outside of any towns or cities.

Deer Creek is a small town with an economy base of petroleum production, farming and ranching providing a living for the bulk of the 130 residents in the 2010 Census. The elementary school in Deer Creek Lamont School District is located in Deer Creek with an enrollment of 159 students in grades pre-k through 8th grade. Employers include Deer Creek Lamont Public School and Clyde Co-Op Association.

Jefferson is a very small town located six miles southwest of Medford with a population of 12 in the 2010 Census. The Medford School District provides education for any school-age children living in Jefferson. Historic Jefferson Park, the site of Sewell's Stockade and water station for the Chisholm Trail cattle drive is located in Jefferson.

Lamont is a small town located in southeast Grant County with a population of 417 according to the 2010 Census. A site near Lamont is home to one of five World Atmospheric Radiation Measurement Program sites, a part of the US Department of Energy's Global Climate Change Research Project. Employers in Lamont include Deer Creek-Lamont School District and Clyde Co-Op Association.

Manchester is located in far northwest Grant County, ½ mile from the Oklahoma/Kansas state line, and in 2010 Census had a population of 103. Manchester students are in the Medford School District. Employers include State Line Grain Co., and Manchester Manufacturing.

Medford is the county seat for Grant County and is located within 1/4 mile of the geographical center of Grant County. In the 2010 Census Medford had a population of 996. Medford Public School enrollment for pre-k through high school is 333 students. Conoco and ONEOK are two major employers in Grant County, located just south of Medford. Other major employers in Medford are Grant County, U.S. Department of Agriculture (FSA and NRCS), Clyde Co-Op Association, Medford Public School District, Servant Living Center - Medford LLC, Little B's Construction Inc., and Gonzales Welding & Construction Inc.

Nash is located in southwest Grant County and is part of the Great Plains Trail of Oklahoma. 2010 Census population was 204 and students attend school in the Timberlake School District. The Salt Fork Adventure Program is a boys' home operated by Southwestern Oklahoma State University that has been established at the former Nash school. Employers include Farmers Grain Company, and First National Bank of Nash.

Pond Creek is located in south central Grant County and is home to Pond Creek-Hunter School District where 323 students attend classes. 2010 Census population was 856. Employers include Pond Creek-Hunter School District, City of Pond Creek, Farmers Grain Co., Grant County, Deterding Aerial Service, and Woodward Railcar Repair.

Renfrow is located nine miles northeast of Medford in northern Grant County. Renfrow supports the Medford School District and at the 2010 Census had a population of 12. The employer in Renfrow is Clyde Co-Op Association.

Wakita is located in north central Grant County and had a 2010 Census population of 344. Wakita students attend Medford Public Schools. "*Twister*" Museum, dedicated to the major motion picture produced in 1996, is in Wakita where much of the movie was filmed. Employers include Community Health Center, Wakita Farmer's Grain Co., and WB Johnston Grain Co.

Each county in the region although a separate entity as far as governmental services, the counties are linked together through commerce, employment and regional transportation. Population growth and shifts for the NORTPO region are dependent on many factors for each particular County. Grant County's deviations in population and employment pattern is attributed to the volatile nature of the oil and gas industry and subsequent impact to declines in prices in the oil and gas industry. Although current data indicates this decline, historical data found in Table 2.2 in the appendices illustrates Grant County's growth from 1980 to 2015.

With the heavy dependence on the oil and gas industry as the economic driving force for the County it is necessary to collect data from additional sources to support the concept that although there is a current downward trend in population and employment there is historical data to support that the employment does rebound. Figure 2.1 illustrates the changes in the civilian labor force (not adjusted). Table 2.3 illustrates employment by industry.

The County population is distributed 49.7% male and 50.3% female with a median age of 45.8. Grant County's population 65 years and older (2010-2014 ACS) represents 21.3% of the total population. Transportation is crucial to keeping older adults independent, healthy and connected to friends, family and health providers. However, older residents' transportation needs differ based on their health, income, marital status, age, race and whether they live in a city, town or rural county area. The needs of this segment of the population will influence the demand for public transportation services, which is limited in the region.

According to data obtained from the Oklahoma Employment Security Commission the local area unemployment statistic (LAUS) data indicates the number of people employed between 2011 and 2015 ranged from 2,008 to 2,085 a net increase of 77; while total labor force during this same time period ranged from 2,144 to 2,205.

Figure 2.1 Changes in the civilian labor force from 1990-2015.

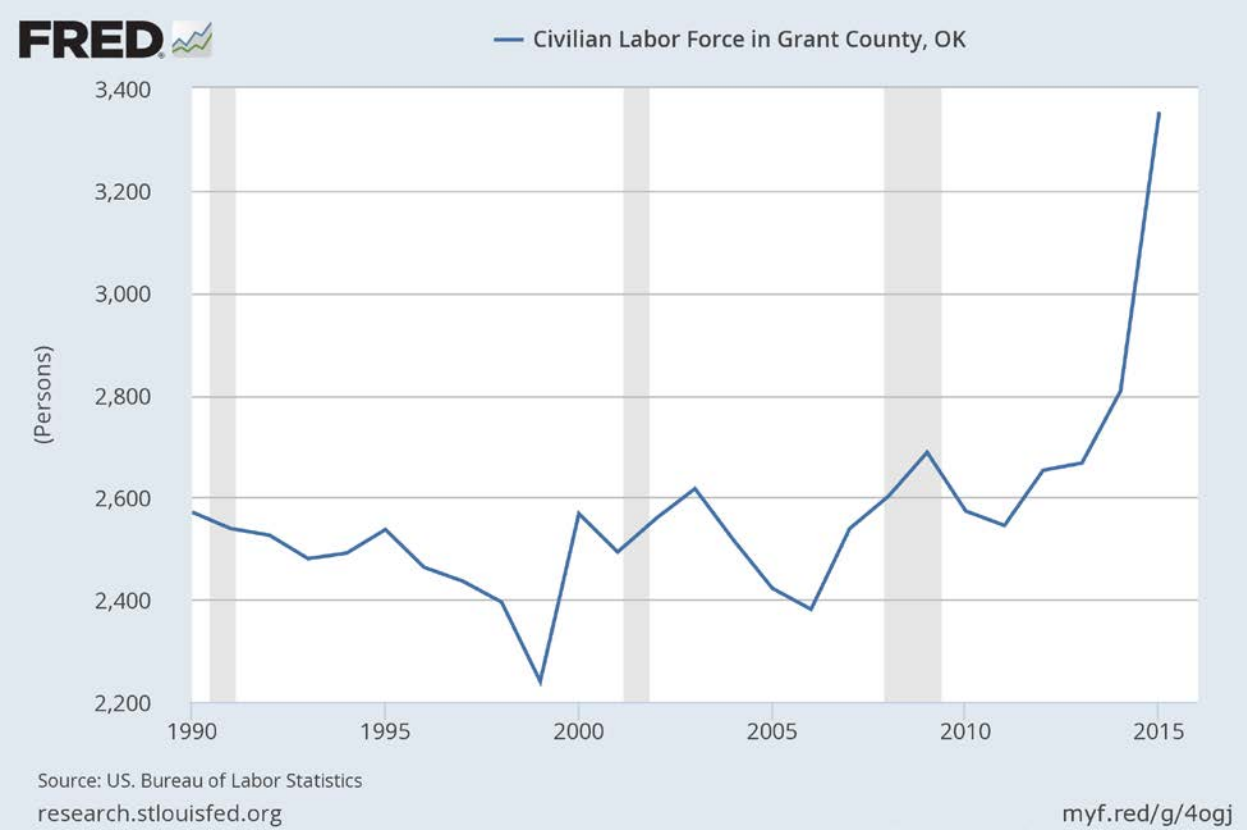


Table 2.4 summarizes vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Automobile and farm truck registration continues to show an increase annually. The data in the graph confirms that the primary vehicle is the automobile, which saw an increase of approximately 388 automobiles between 2011 and 2015. Data obtained from the 2010-2014 ACS reveals that 40.9% of the population had access to two or more vehicles available; while 0.8% of

the population did not have access to a vehicle. Commute patterns to work for Workers 16 years and older according to the 2010-2014 ACS identify that 76.2% of workers drove alone, 15.8% carpooled, and 3.2% worked at home. Mean travel time was estimated at 19.8 minutes.

Traffic Analysis Zones

The Traffic Analysis Zone (TAZ) Program is a specialized software program used for delineating TAZs in support of the Census Transportation Planning Products (CTPP). This software program is designed to allow agencies the ability to define areas to and associate demographic data that supports transportation system analysis as well as creation of geographic summary layers suitable to their planning. TAZ delineation for the areas other than Metropolitan Planning Organizations (MPO) are the responsibility of ODOT. Historically in non-MPO areas the TAZ boundary defaulted to the census tract boundary. This makes the process of maintaining and updating socioeconomic data much easier. However, utilizing this default for the plan did not provide NORTPO with transportation data that met the needs of the planning process. NORTPO staff reviewed the existing TAZ boundaries and after analysis of data, community boundaries and TAZ guidelines new boundaries were drafted. The revised TAZ boundaries were based on the population thresholds of 200 to 400 and employment thresholds of 300. In the future NORTPO will work cooperatively with ODOT in designation or revision to TAZ boundaries.

Geographically, Grant County is subdivided into 15 TAZs. Because of the rural nature of Grant County, there are a minimal amount of TAZs. Medford and Pond Creek are the only cities in Grant County that are located over multiple TAZs, because their areas are with the highest population and work force. Historically, in non-metropolitan planning organization areas, the TAZ boundary defaulted to the census tract boundary. NORTPO will work in coordination with ODOT to maintain and update TAZs in the future. Map 2.1 illustrates the TAZs for Grant County. Map 2.2 and Table 2.5 show the population by TAZ. Medford TAZs are in Map 2.3, Pond Creek in Map 2.4. Table 2.6 and Map 2.5 lists the employment by TAZ. Major employer data is found in Table 2.7 and Map 2.6. Population changes have not changed significantly over the past twenty years.

Physical Development Constraints, Development Conditions and Patterns

There are several factors that constrain development in Grant County. These include but are not limited to, land ownership of large tracks of land, existing development, and environmental features that affect the growth of Grant County. These constraints, both physical and manmade, have shaped and impacted the development of the County. Current growth is concentrated in cities and towns as well non-incorporated areas of the County. Medford is the only city in the County that has an adopted comprehensive plan. There are no regulations guiding development and growth in areas outside of Medford. The most significant commercial growth areas continue to occur in Medford.

According to information received from the public, lack of transportation is mentioned as one of the constraining factors. Maps 2.7, 2.8, and 2.9 depict the location of the water bodies, airports, and highways and railroads. The primary east/west corridors are State Highways (SH) 11, 60 and 64 and US Highways (US) 74, 81 and 132. Union Pacific Railroad provides Class 1 rail in the county. The airports in Grant County include publicly owned Medford Municipal and Pond Creek Municipal, and a private airport, Homestead Farms. Transit services are limited to call-on-demand van services provided by Cherokee Strip Transit located in Medford.

Grant County is home to environmental features and natural and cultural resources which can influence the transportation system. Environmental information collected and mapped provides for an understanding and awareness of important features and resources early in the planning process. This way the protection of these resources, either through avoidance or minimization of

impact, can be more fully considered as an integral part of plan and project development. There are many different types of environmentally sensitive areas and potential impacts to the natural and human environment that may be affected by various actions associated with the 2036 LRTP. These include (but are not necessarily limited to):

- Threatened and Endangered Species
- Wetlands
- Floodplains
- Surface and Ground Waters
- Stormwater Management and Erosion and Sediment Control
- Hazardous Materials
- Air Quality
- Historical/Cultural Resources
- Right-of-Way/Property Impacts, Including Impacts to Parks, Farmland and Neighborhoods
- Traffic and Train Noise

Identification of important environmental features provide agencies and officials, involved with addressing the transportation issues, baseline information necessary to afford protection or to minimize impact to environmental resources, as required by the National Environmental Policy Act (NEPA) and other state and federal laws, rules, and regulations. As individual projects or transportation improvements are advanced from this plan, detailed environmental impact assessments will be required for any projects using federal funds, and in many cases, also any using state funds.

Environmental (Streams/creeks, floodplains and wetlands), Deficient Bridges, Historic and Archeological Sites, Federal or State Listed Species

The environmental features and constraints in this section were identified and mapped using secondary source information that included mapping, publications, and correspondence from the following: United States Environmental Protection Agency (USEPA), Oklahoma Geological Survey, Oklahoma Department of Fish and Wildlife Resources, Oklahoma Department for Environmental Quality (ODEQ), United States Department of Agriculture (USDA), United States Department of the Interior Fish and Wildlife Service (USFWS), United States Geological Survey (USGS), Oklahoma University Geographic Information System (GIS), and other state and local agencies. (A complete list of references is included in Appendix F.)

Bodies of water flowing through the county are Salt Fork River of the Arkansas, Chikaskia River, Sand Creek, Pond Creek, Wagon Creek, Polecat Creek, Deer Creek, and Doe Creek. Streams are natural corridors that provide habitat for fish, insects, and wildlife, and recreational benefits to people such as hunting, fishing, boating, and bird watching, as well as aesthetic benefits. Streams also provide drinking water for wild animals, livestock, and people.

Grant County Floodplains

Floodplains have only been determined for the incorporated areas of Grant County. Special flood hazard areas are a designated width along a stream or river which has a 1% chance of flooding annually. Flood hazard areas are protected to prevent any increase in the risks or severity of possible future floods and to maintain their natural and ecological benefits. Additional information can be accessed through www.msc.fema.gov.

Earthquakes

Although earthquakes have become a reoccurring issue in Grant County, according to a study from ODOT, none of the earthquakes are a high enough magnitude to cause any noticeable damage to roads and bridges.

Historic Places
The National Register of Historic Places (NRHP) is a list of properties determined significant in American history, architecture, archaeology, engineering, or culture, by virtue of design or architectural criteria, association with historical persons and events, and/or value for historic or prehistoric information.

Under state and federal law, NRHP listed and NRHP-eligible properties are afforded equal protection from impact. NRHP properties are designated to help state and local governments, federal agencies, and others identify important historic and archaeological resources, to ensure their protection, either through preservation, or minimization and mitigation of impact. Such Grant County properties are plotted on Map 2.10 and listed in Table 2.8. http://www.nationalregisterofhistoricplaces.com/ok/Grant/state.html

Threatened and Endangered Species
State and federal agencies classify plants and animals as threatened or endangered when their numbers are low or declining due to direct destruction (from development or pollution, for example) or loss or degradation of suitable habitat. The presence of a threatened or endangered species in an area is an indicator of a better or good quality environment. Federally listed endangered and threatened species in Grant County may include: Interior Least Tern (Sterna antillarum), classified as endangered, Piping Plover (Charadrius melodus) classified as threatened, and Whooping Crane (Grus Americana) classified as endangered. http://www.wildlifedepartment.com/wildlifemgmt/endangeredspecies.htm

Air Quality
The Clean Air Act requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act identifies air quality standards to protect public health, including protecting the health of "sensitive" populations such as asthmatics, children and the elderly. Air quality data is not collected for Grant County at this point in time.

Wind Farms
An increasing source of electricity around the nation has been through the harnessing of wind power. Due to the geographic location of Oklahoma in the Great Plains and the Rocky Mountains to the west, and the pattern of meteorological systems' general movement of west to east, winds tend to come over the mountains onto the plains at an increasing rate, thus making Oklahoma a prime location for power-generating wind turbines to be located to harness this energy.

Wind farms, locations with multiple wind turbines in fairly close proximity to each other, are created by energy companies to collect the energy created and move it via power lines to other locations. There is one wind farm located in the area of Renfrow.

County and Community Development
Planning in Oklahoma has been nonexistent or very limited outside of urbanized cities and towns. This Plan will consider growth and development patterns in the County. A critically important component to transportation planning is growth areas that that may generate significant demands on the transportation system.. The predominant land use in Grant County is agricultural with limited commercial and residential within the cities and towns.

With historical trends in population declining county and community governments must consider the long term impact of declining revenues dedicated to transportation systems and infrastructure. Efforts to maintain and attract business and industry will remain the focus of the communities for the future. Investment in infrastructure to support industry and business will careful analysis and consideration prior to expenditure of funds. In Grant County changes that impact the transportation system include, but are not limited to, loss or gain of a major employer and movement of younger sectors of the population to more urban areas. Areas that may generate demands on the transportation system include agriculture operations, retail sites, industrial and energy related facilities. The concentration of employers can be found in Medford, Pond Creek, and Deer Creek as illustrated in Map 2.6.

Streets and roads considered to be most important in the development of a long range transportation plan include the US and State Highways and those county roads considered to be critical to overall mobility in Grant County. The majority of the roads in the county are two-lane undivided roads. The critical roads are functionally classified and illustrated in Map 2.11.

Road Classification

Functional classification is a well-established system utilized by the Federal Highway Administration (FHWA) for grouping streets and highways into classes based on roadway characteristics and intended services. Basic to this process is the recognition that individual roads and streets cannot serve travel independently; rather, most travel involves movement through a network of roads. Thus, it is necessary to determine how to channelize travel within the network in a logical and efficient manner. Functional classification defines the extent to which roadways provide for through travel versus the extent to which they provide access to land parcels. An interstate highway provides service exclusively for through travel, while a local street is used exclusively for land access. Each roadway has a classification number based on its location, access, and capacity characteristics. Functional class and jurisdiction are important not only in relation too operational and maintenance responsibility, but also in how roadway improvement projects can be funded.

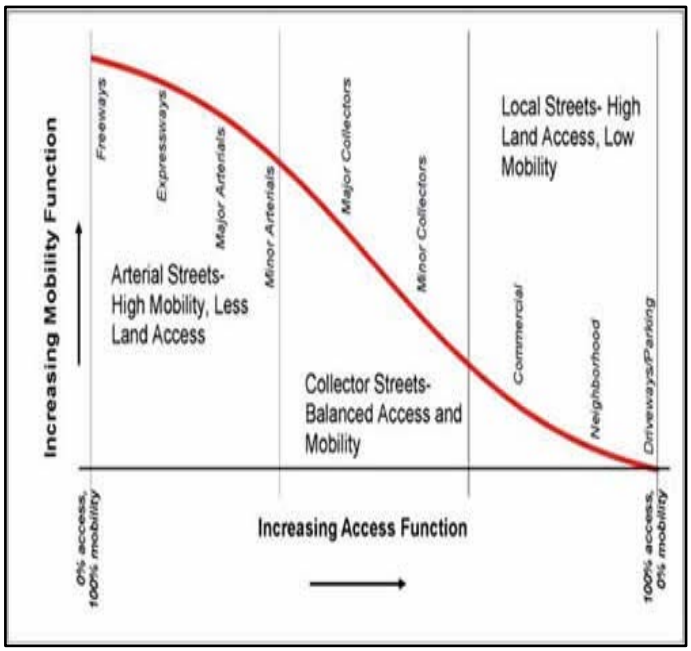
Funding eligibility limitations include:

- FHWA National Highway Performance Program (NHPP) can be used only on the National Highway System, which comprises the Interstates, all other Principal Arterials, and all designated NHS Connectors.
- FHWA Surface Transportation Program (STP) can be used on any facility except Local Roads and Rural Minor Collectors.
- FHWA Highway Safety Improvement Program can be used to address safety problems on any public road.

An efficient transportation system includes a proper functional hierarchy among its highways, arterials, collectors, local streets and roads in order to maintain the proper balance between movement of traffic and access to abutting land. The majority of the roads in Grant County are designated as rural. The following Figure 2.2 illustrates the functional classification hierarchy.

Traffic count data was collected from ODOT (Map 2.12). Traffic counts are collected by ODOT and data included in this plan reveal that the largest volume of traffic is carried on US 81 between Medford and Pond Creek and US 64 West of Pond Creek into Alfalfa County. Grant County has no high volume truck corridors.

Public Safety Issues **Figure 2.2**



The vulnerability of a region's transportation system and its use in emergency evacuations are issues receiving new attention with the threat of intentional damage or destruction caused by vandalism, criminal activity, terrorist events and natural disasters. Therefore, security goes beyond safety and includes the planning to prevent, manage or respond to threats toward a region and its transportation system and users. There are many programs to help manage security concerns and emergency issues. NORTPO and its member jurisdiction transportation and emergency service staff are regular participants in security planning and preparation activities including development of the Grant County Multi-jurisdiction Hazard Mitigation Plan. Ongoing participation in these planning activities helps prepare for and to better manage transportation security situations.

FAST Act required all states to prepare and annually evaluate their Strategic Highway Safety Plan (SHSP). A SHSP is a statewide, coordinated safety plan which includes goals, objectives and emphasis areas for reducing highway fatalities and serious injuries on all public roads. More information on the Oklahoma SHSP can be found on the ODOT website (http://www.okladot.state.ok.us/oshsp/index.htm).

The safety of the traveling public, regardless of vehicle type or highway system classification, is of paramount concern for ODOT and NORTPO. Safety strategies are developed based on an analysis of key contributing factors such as crash data, highway inventories, traffic volumes, and highway configurations such as geometric challenges. When undesirable patterns become evident, specific countermeasures are identified based on a more in depth and detailed analysis of crash locations and causes.

Collisions

To help identify safety issues, traffic safety data must be analyzed. Trend analysis based upon multiple-years' worth of data will give a more accurate reflection of the safety condition of the county. Collision records were collected from ODOT for the years 2011-2015.

There were 480 total crashes and 15 fatality crashes in Grant County over the 2011-2015 timeframe with an average of 96 crashes. Map 2.13 shows the locations of collisions between 2011 and 2015. Table 2.9 crash data for 2011-2015 shows total crashes and fatalities. A severity index is a measure of the severity of collisions at a particular location, derived by assigning a numeric value according to the severity of each collision and totaling those numeric values. The highest concentration of collisions occurred along State Highway 11. The majority of type of collisions occurred were overturned or vehicle rollovers. The majority of the crashes had no improper action involved. The second highest was due to unsafe speeds.

Areas of Concern

Areas of concern were identified through surveys, holding public meetings and soliciting comments from stakeholders. Through the collective knowledge and experience of the members of the Technical Committee and Policy Board, and information obtained via public comment, data areas of concern were identified. According to the public surveys the major areas of concern are

- The lack of 4-lane highways,
- The lack of shoulders on narrow highways,
- Level of Service (Quality of roads), and
- Flooding on roadways.

Transportation Inventory and Improvement Needs

Road System

The state owned highway system in Oklahoma is comprised of the State numbered route highways, the US numbered route highways and the Interstate Highway System. The state system of highways encompasses 12,264 centerline miles as measured in one direction along the dividing stripe of two lane facilities and in one direction along the general median of multilane facilities. Transportation on our highways is also facilitated by over 6,800 bridge structures that span major rivers and lakes, named and unnamed perennial streams and creeks, other roads and highways and railroads. On the average, passenger vehicles, buses and trucks traveled more than 68.8 million vehicle miles each day (daily vehicle miles traveled or DVMT) in 2014 on the state owned highway system (not including toll roads).

Oklahoma's rural nature and historically agricultural and energy based economy has witnessed the conversion of many farm-to-market roads and bridges into highways. While these roads were ideal for transporting livestock and crops to market 70 years ago, they are less than adequate when supporting today's heavier trucks, increased traffic demands and higher operating speeds. Almost 4,600 miles of Oklahoma highways are two-lane facilities without paved shoulders Map 2.14 illustrates the location of two lane highways with no shoulders. Map 2.15 illustrates the Steep Hill/Sharp Curves areas of concern (statewide). The County transportation system has approximately 3,155 miles of roadways that make up the road network.

Preserving the transportation system has emerged as a national, state and local transportation priority. Aging infrastructure continues to deteriorate, reducing the quality of the system and increasing maintenance costs. All roads deteriorate over time due to environmental conditions and the volume and type of traffic using the roadway. Without proper maintenance, roadways wear out prematurely. ODOT's annual evaluation of pavement conditions and safety features such as passing opportunities, adequate sight distances, existence of paved shoulders, recovery areas for errant vehicles, and the severity of hills and curves in 2015 reveals about 28% or approximately 3,466 of the State's 12,264 miles of highway rate as critical or inadequate which includes 2,858 miles of two-lane highway. The Interstate System in Oklahoma is the highest class of highway and is designed to be the critical transportation link. While the 673 miles of interstate account for only 5.5% on the centerline miles of our state system, it carries 33.6% of daily miles travelled.

Grant County is served by many state and US highways, as well as municipally owned streets, and county roads.

Major access roads are:

- US 81 is the major north-south transportation corridor.
- SH 132 and SH 74 are also north-south corridors through Grant County.

- US 60, US 64 and SH 11 are east-west corridors and provide access to the western counties from the major north-south corridors, including access to Interstate 35 just east of Grant County.

The NORTPO network of roads consists of more than 10,000 lane miles. The municipalities are responsible for road maintenance within the corporate limits excluding the Interstate system, US and State Highways which are maintained by ODOT. The County maintains the roads outside the municipalities' corporate limits.

Bridges

Federal law requires that all bridges be inspected biennially; those that have specific structural problems may require more frequent inspections. Inspections include evaluation and rating of numerous elements of the substructure, superstructure, and deck, with special attention paid to fracture-critical members. Underwater inspections occur no less than every 5 years to check for scour around bridge piers. Bridges are composed of three basic parts: deck, superstructure and substructure. If any of these components receives a condition index value of 4 or less in the National Bridge Index, it is considered structurally deficient.

- **Functionally Obsolete:** A bridge term used when any of the geometric properties of a bridge are deficient such as being too narrow or load posted; any restriction of strength or weight.
- **Structurally Deficient:** A bridge term used when the physical condition of any of the bridge elements are lacking. These properties have a major bearing in qualifying a bridge for federal bridge replacement or rehabilitation funds.

Bridges are rated on a numerical scale of "1" to "7" that translates into a range of Poor, Fair, Good, and Excellent. Bridges are also described as "Structurally Deficient" and "Functionally Obsolete." The former may have any of a number of structural problems noted in the inspection; while some may be closed or load-posted, many remain safe for traffic. The latter are bridges that do not meet current design standards. They may have narrow lanes, or inadequate clearances, but they may also be structurally sound.

The NORTPO planning area has more than 3,000 bridges, culverts, and structures constructed since 1902 that are critical for regional mobility. These structures enable vehicles, bicycles, pedestrian and wildlife to cross an obstacle. More specifically, culverts are structures designed to increase water flow, while bridges are structures that span more than 20 feet between supports. Like roads, bridges and culverts deteriorate over time due to weather and normal wear-and-tear with the passage of vehicles. To ensure safety and minimize disruption to the transportation network these structures undergo regular inspections by qualified engineers. Inspections help locate and identify potential problems early and trigger protection mechanisms when a problem is found. The bridges and culverts in the county vary greatly in their age, averaging 48 years.

There are over 400 bridges in Grant County. Map 2.16 shows the bridges and Table 2.10 lists the bridges by location. According to data received from ODOT, there are numerous deficient bridges, not only in Oklahoma but Grant County as well. In the last few years repair and/or replacement of deficient bridges has been a priority of ODOT.

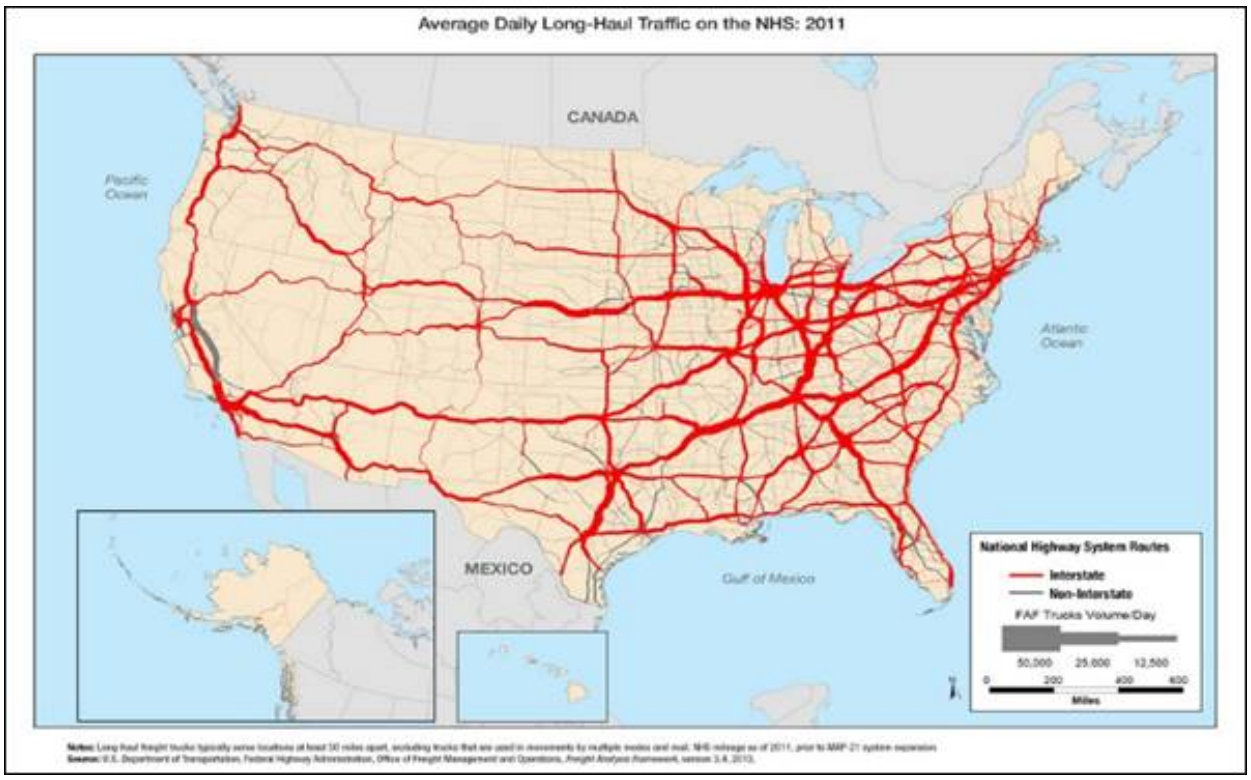
Table 2.11 lists bridges identified as structurally deficient and functionally obsolete for Grant County.

Freight

The FAST Act repealed both the Primary Freight Network and National Freight Network and directed the FHWA administrator to establish a National Highway Freight Network (NHFN). The FAST Act included the Interstate System - including Interstate facilities not located on the Primary Highway Freight System (PHFS) in the NHFN. All Interstate System roadways may not yet be reflected on the national and state NHFN maps (Map 2.17). While Grant County does not include roads identified in the PFN the NORTPO Policy Board recognizes that highways US 11 and US 81 are significant statewide and regional highway freight corridor. Grant County freight corridors and connectors determined by the NORTPO Technical Committee are located on Map 2.18.

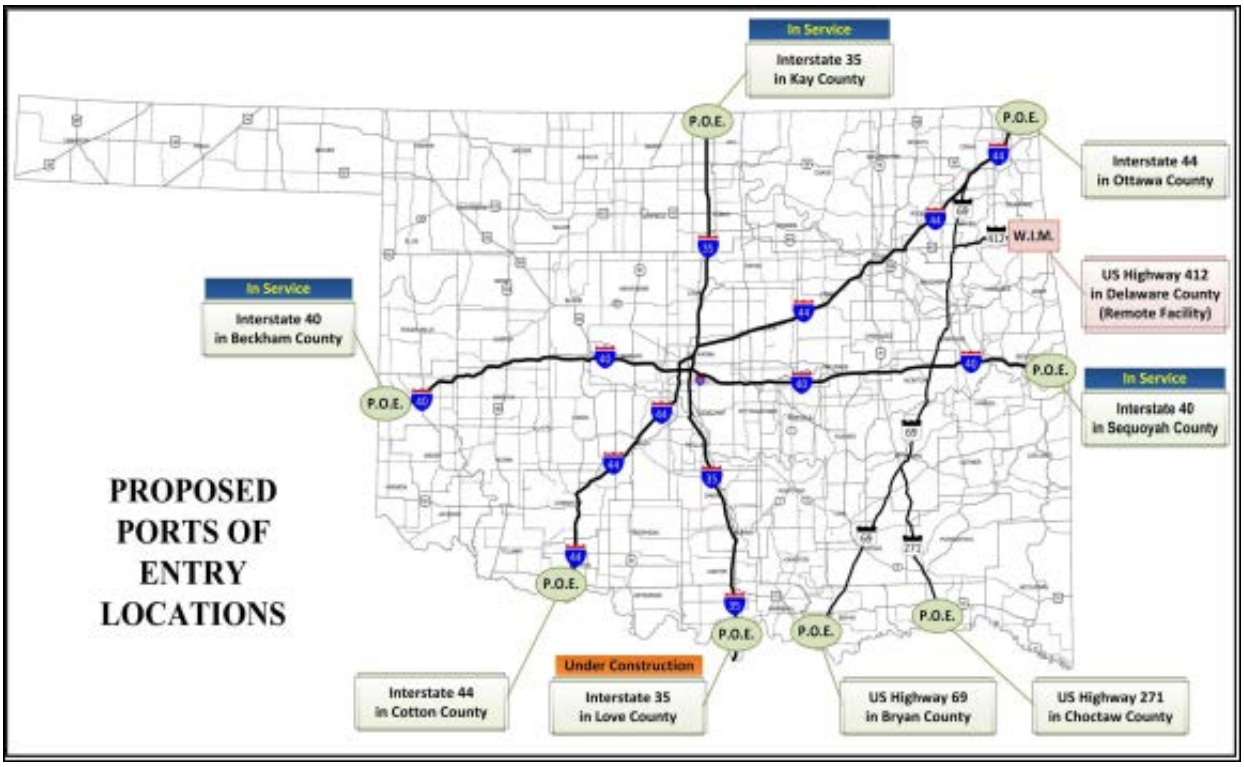
The majority of freight movement in the region is by truck. I-35 east of Grant County is considered a major truck route and truck volume is projected to grow by the year 2040. Figure 2.3 illustrates the long haul truck volume in 2011.

Figure 2.3 - Average Daily Long Haul Traffic on NHS 2011



Growth of freight by truck will continue to grow. With the State's opening of state-of-the art weigh station (port of entry truck weigh and inspection station) on I-35 near Braman in April 2012 additional information on truck traffic will be available. To assist with the inspection and enforcement of truck permits the Ports of Entry (POE) facilities were construction. The POE (Figure 2.4) are state-of-the-art facilities established as the mechanism to create a more controlled freight transportation environment on the highway system. This system monitors freight ingress at the state line and allows better enforcement of vehicle and freight laws.

Figure 2.4 Existing and Proposed Ports of Entry



Rail

Freight traffic continues to be the main source of railroad activity in the State. An estimated 287.5 million tons of freight flows through the state on rail lines each year with many rail lines carrying 50 to 100 trains a day. Rail freight traffic will experience significant growth over the next few decades with the number of trains on some corridors expected to double over the next 20 years. The state-owned tracks are leased by privately operated railroads.

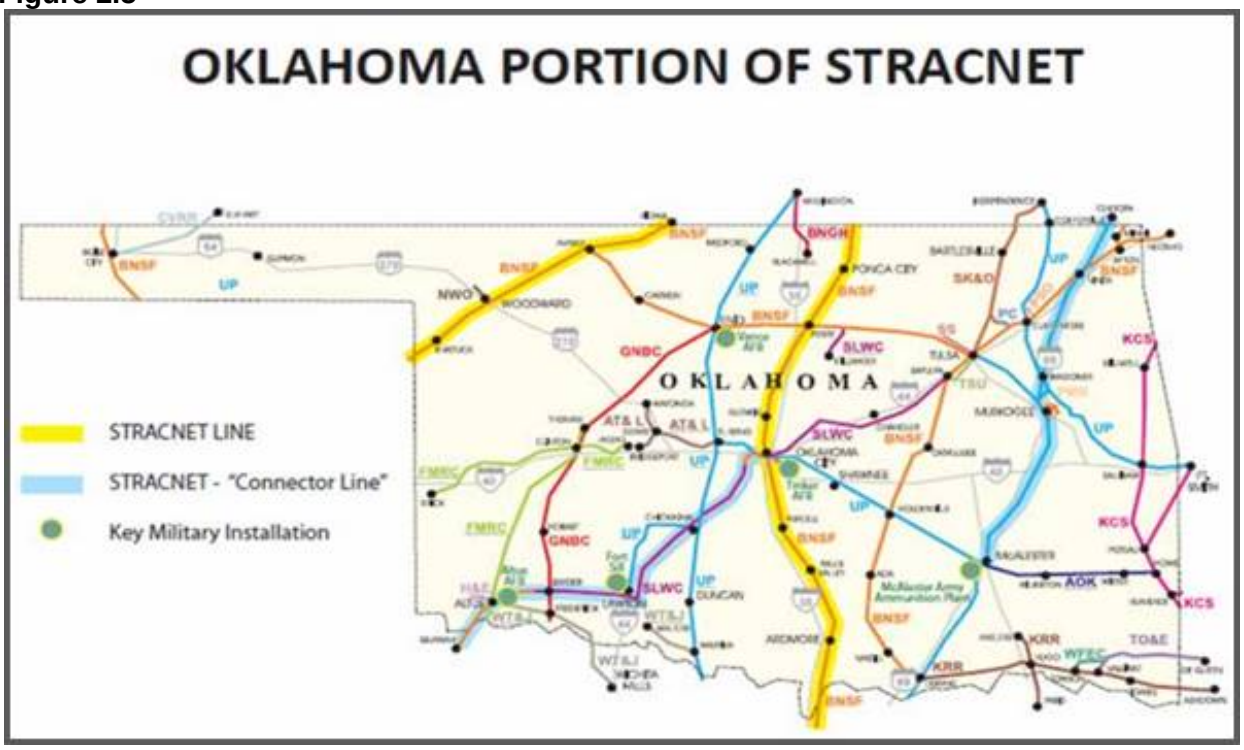
There are three Class I railroads and 19 Class III railroads in Oklahoma, Union Pacific the only Class I railroad in Grant County. The State of Oklahoma owns approximately 306 miles of track and the tracks are leased by privately operated railroads. In August 2014, ODOT and the Stillwater Central Railroad completed a $75 million sale of the Sooner Sub rail line between Midwest City and Sapulpa. With the sale of this 97.5 mile, ODOT announced a $100 million initiative to improve safety at the State's railroad crossings. Most of the money for this program comes from the $75 million sale of the Sooner Sub. Improvements are to be made to more than 300 rail crossings statewide and will add flashing lights and crossing arms to many of these crossings. Federal funding, as well as funds provided by railroad companies will also be used in completing the three to four-year program.

Agricultural, automotive and coal products are the main freight transported through the County. Freight movement by rail in the NORTPO region is primarily used by the agricultural industries in the NORTPO region. There are approximately 1,375 miles of open rail track in the region. The rail infrastructure is the responsibility of the railroads. Grant County does not have any railroad spurs, the closest of which are in the following communities: Dolese Brothers spurs at Enid and Dover, Blackwell Industrial Park at Blackwell, US Gypsum at Southard, and W.B. Johnston Grain terminal in Enid.

According to information obtained from "Freight Flow Report 2012" prepared by Parsons Brinkerhoff, to enhance the state freight truck model county-level traffic and truck counts are needed.

Oklahoma is a part of the Strategic Rail Corridor Network (STRACNET), a function of the Railroads for National Defense. STRACNET consists of 38,800 miles of rail lines important to national defense serving military installations that require rail service. Both Fort Sill and the McAlester Army Ammunition Depot are actively connected to STRACNET, while Vance Air Force Base, Altus Air Force Base, and Tinker Air Force Base all have the capability to reconnect to STRACNET should the need arise. Union Pacific Railroad line is STRACNET "connector line" through Grant County and can service some of these military installations.

Figure 2.5



Passenger Rail
Currently there is no passenger rail service available in Grant County.

Bicycle and Pedestrian Network
Bicycle and pedestrian facilities have been primarily a local issue, usually within communities. Most communities have at least a partial system of sidewalks to aid pedestrians, particularly near schools. Pedestrian travel requires a network of sidewalks without gaps and with accommodations for people with disabilities as defined by the Americans with Disabilities Act (ADA). There are instances, particularly in rural areas, where a wide shoulder is an acceptable substitute for a sidewalk. Safe pedestrian travel also requires protected crossings of busy streets with marked crosswalks and pedestrian signals and appropriate pedestrian phases at signalized intersections. Grant County's rural nature has limited the available investment in a bicycle and pedestrian network.

Public Transportation

Public transportation systems and services in rural areas are limited. Low population densities in the NORTPO region and the distances between activity centers complicate the delivery of public transportation in rural areas. There are limited activity generators (mostly job destinations) that produce concentrations of transit need. That is, at least one (1) end of a trip is concentrated enough that public transit may be attractive. The difficulty then becomes establishing feasible routes and scheduling service such that the trip is acceptable to the workers. Federal, state and especially local funding is limited. This limits the type and level of service that can be provided. ODOT's Transit Programs Division is responsible for the administration of the Federal Transit Administration (FTA) grants for rural transit operations.

Public transportation services for the area is limited to on demand van services provided by Cherokee Strip Transit located in Medford. This service is provided based on a pre-arrangement or an agreement between a passenger (or group of passengers or an agency representing passengers) and a transportation provider for those needing "curb to curb" transportation. The pre-arrangement may be scheduled well in advance or, if available, on short notice and may be for a single trip or for repetitive trips over an extended period (called "subscription service"). Low population densities in NORTPO and the distances between activity centers complicate the delivery of public transportation in rural areas. Table 2.12 shows the ridership and revenue data for Cherokee Strip Transit from October 2013 - September 2014 and October 2014 - September 2015 for Grant County.

Aviation

NORTPO area consists of thirteen general aviation airports which are considered all civil aviation operations other than scheduled air services and non-scheduled air transport operation for remuneration or hire. General aviation flights range from gliders and powered parachutes to corporate jet flights. General aviation covers a large range of activities, both commercial and non-commercial, including flying clubs, flight training, agricultural aviation, light aircraft manufacturing and maintenance. Medford Municipal is a general aviation airport located 1 mile southwest of Medford covering 127 acres at 1,093 feet above mean sea level. Its one runway is designated 17/35, 3,007 by 60 feet (917x18 meters), located at 36º47'26N 97º44'56W. The year ending March 30, 2016, the airport averaged 83 general aviation aircraft operations per month. At that time there were 9 aircraft based at this airport, all single-engine, 60% local general aviation and 40% transient general aviation.

Pond Creek Municipal is located at the southwest edge of Pond Creek at 1,061 feet above mean sea level. It has two runaways: 15/33 is 1,220 by 30 feet (372x9 meters) asphalt located at 36º39'93.65N 97º48'62.50W; and 17/35 is turf surfaced of 2,320x430 feet (707x131 meters) located at 36º39'92.40N 97º48'52.00W. In the year ended Oct. 14, 2015, the airport had 5 single engine aircraft based on the field and averaged 20 aircraft operations per week, 95% local general aviation and 5% transient general aviation. *Source: http://www.airnav.com /airport/2K1 and http://www.airnav.com/airport/O53*

CHAPTER 3

FUTURE CONDITIONS AND PLANNED IMPROVEMENTS

The objective of the Future Conditions and Planned Improvements chapter is to portray a "snapshot" of typical daily traffic conditions in the County for the year 2036. It is assumed that only those projects included in the current ODOT eight year construction plan, CIRB, and projects funded by local governments will be constructed by the year 2036. Tables and maps referred to in this chapter are included in Appendix H-3.

Future Conditions

The population and employment projections for Grant County were produced at the TAZ level for 2036. The 2036 population projection of 4,641 and employment projection of 2,230 were distributed through the Census Block Groups. Table 3.1 shows the population and employment beginning in 1980 through projections to 2040. The projected population and employment data are illustrated in Maps 3.1 and 3.2. Tables 3.2 and 3.3 contains supporting data for the maps. Compared to the year 2010, population and employment is projected to remain fairly consistent with the 2015 ACS estimated population of 4,523 and Oklahoma Employment Security Commission's LAUS employment data of 2,085 through 2035.

Population and employment projections are based upon available data. When utilizing this data, it is imperative to understand that the Grant County economy is continuing to rebound from previous industries relocating in and out of the County. With this knowledge of the continued fluctuation in growth NORTPO will continue to monitor projections and impact on the LRTP.

Studies to identify specific causes and solutions for these areas will need to be considered on a case-by-case basis. As population changes occur, the impact on the traffic volume and roadway capacity will need to be re-examined.

The need for safety and intersection improvements in Grant County is widespread and not practical to address all the improvements at once. Instead careful review is needed prior to prioritization of the projects. Often times through new road construction or improvement safety problems can be addressed. However, many of the local roads experiencing safety concerns do not need widening or are not conducive to widening.

2036 Transportation Improvements

Not all service needs for the transportation system are for constructed improvements. In many instances additional data will need to be collected and studies developed to provide a complete list of needs. In the interim projected construction improvement needs will rely on information, data, programs implemented by state, tribal governments, rail line companies, county, and city governments.

There are a number of options for addressing safety concerns on rural roads. These include but are not limited to: widening and paving shoulders, designing shoulders to accommodate pedestrians and bicyclists, realigning intersections and curves and intersection improvements.

The funded projects identified in Table 3.4 were obtained from the ODOT Eight Year Construction Program 2016-2023, CIRB Plan 2016-2019, County Commissioners, Local Governments and

Transit operators. Map 3.3 illustrates the location of projects included in the ODOT Eight Year Construction Program.

Planned Improvements

Planned improvements are projects that are desired but funding has not been secured. ODOT initiated projects are those listed in years 2021-2025. Local or county projects are also included in Table 6.1.

CHAPTER 4
FINANCIAL SUMMARY

Financial Assessment
The assessment is intended to summarize federal, state and local transportation sources. Maps and tables referred to in this chapter are included in Appendix H-4.

Funding Sources

Federal
In general, transportation revenues continue to follow an unsustainable trajectory as multiple factors force the funding available for transportation to continue a downward trend. For example, both the Oklahoma and federal gas tax rates are fixed on a per-gallon basis, and therefore gas tax revenues are not responsive to inflation. As the cost of transportation infrastructure projects increases, the amount of revenue generated from the gas tax remains static. It is not possible to maintain past levels of transportation investments as per capita collections continue to decline. Additionally, as cars become more fuel efficient, drivers pay less in gas taxes. At the same time, the wear and tear on roadways caused by these vehicles remains the same. The federal funding levels related to highways are typically established through authorizing legislation commonly referred to as the Federal Highway Bill. This legislation normally authorizes projected funding levels for a period of six years. Consistent, long-term funding anticipations are critical in order to understand the expected annual federal funding availability and prepare projects accordingly. Each year, the legislation is funded through the Administration's budgeting and the congressional appropriations processes. The primary source for the dedicated federal transportation funding appropriation is the gasoline and diesel tax deposits directed to the Federal Highway Trust Fund (HTF).

The department of transportation in each state is designated as the cognizant or recipient agency to interact with the representative federal agency, the Federal Highway Administration. Therefore, federal funding for roads and bridges is administered by ODOT regardless of facility ownership. All traditional, congressionally identified or discretionarily funded city street and county road projects that utilize federal highway funding are administered by and through ODOT.

Taxes on gasoline and other motor fuels are collected and distributed from the HTF and are distributed to the states by the FHWA and the FTA to each state through a system of formula grants and discretionary allocations. Motor fuels taxes, consisting of the 18.4 cents per gallon tax on gasoline and 24 cents per gallon tax on diesel fuels, are the trust fund's main dedicated revenue source. Taxes on the sale of heavy vehicles, truck tires and the use of certain kinds of vehicles bring in smaller amounts of revenue for the trust fund.

Surface Transportation Program (STP) are federal funds utilized on road projects. These STP funds may provide up to eighty percent (80%) of the construction costs of these projects. Counties fund the remaining twenty percent (20%) match for construction costs, plus the costs for engineering, right of way and utility relocation through local sources or state fund. taxes. Table 4.1 identifies the transportation funding categories.

State
Funding for highway improvements in Oklahoma comes primarily from two sources – Federal HTF and revolving funds including federal and state motor fuel taxes directed to the Highway

Trust Fund and the State Transportation Fund along with the Rebuilding Oklahoma Access and Driver Safety (ROADS) fund as initiated by House Bill 1078 in 2005. House Bill 2248 and House Bill 2249 provide funding to reduce the number of structurally deficient bridges and deteriorating road conditions on the state highway system.

In 1923, Oklahoma enacted its first state level excise tax on motor fuels. The last increase was in 1987 and the tax is currently 17 cents per gallon for gasoline and diesel at 14 cents per gallon. There is also a transportation-dedicated 5 cents per gallon tax on natural gas used for motor vehicle fuel. Oklahoma's primary sources of funding for road and bridge construction and maintenance are derived from fuel taxes and motor vehicle tax. The motor fuel taxes that are deposited to the State Transportation Fund (STF) are gasoline excise tax, diesel fuel excise tax, special fuel use tax, and special fuel decals. The fuel tax is assessed on consumers when they purchase fuel, and the gasoline tax is the largest generator of revenue to the STF. The motor fuel tax revenues are also apportioned to municipalities and county governments for road and bridge repair and maintenance and to Native American Tribes.

In addition to the above taxes the ROADS Fund is guaranteed an annual apportionment equal to the amount apportioned for the previous year plus an additional $59.7 million until it reaches a cap of $575 million. In FY 2015 the Fund received $416.8 million. In addition, the County Improvement for Roads and Bridges (CIRB) fund, created in 2006 and administered by ODOT, was increased to 20% of motor vehicle registration fees and capped at $120 million beginning in SFY 2016. Table 4.2 summarizes the state funding categories supporting transportation.

Public transportation funding for rural transit agencies is as follows:

- ODOT receives FTA's Section 5311 funding.
- Sub recipients submit application for Section 5311 funds annually.
- ODOT reviews application which includes service areas. Service areas usually include multiple counties and/or city limits.
- Funds are allocated to eligible sub recipients based on the average of their last two previous years of performance measures (i.e. revenue miles, passenger trips, etc.) within their pre-approved Section 5311 service areas.
- Sub recipients are reimbursed for eligible administrative, operational, and capital expense, at specific rates, for services performed within their total pre-approved Section 5311 service areas

Funding of local transportation projects and programs is heavily influenced by State of Oklahoma's annual budget and federal funding. Transportation funding sources based on motor vehicle fuel taxes tend to fluctuate with changes in fuel prices and fuel consumption. While most taxes are not tied to fuel prices, when gas prices go up, consumption tends to go down and thus tax revenues decline. Oklahoma's state budget continues to experience historic downfall revenues and these downfalls have a negative impact on the transportation system. With this plan development it is anticipated that there will continue to be a downfall in available revenue for transportation programs and projects. Therefore, the coordination with local, regional and statewide agencies in the development of transportation programs and projects is significant in order to accomplish the projects.

County

The main funding program for county roads and bridges is the County Highway Fund, which consists of revenues from the state taxes on gasoline and diesel fuels as well as motor vehicle registration fees and a portion of the of the state gross production tax on oil and gas in the case

of counties that have oil and gas production. A county's apportionment is based on several formulas that use proportional shares of each factor as it relates to the total statewide county totals. Counties that have oil and natural gas production receive a portion of the 7 percent state tax on natural gas and oil. Counties have authority to impose a countywide sales tax for roads and bridges with revenues earmarked for roads and bridges

Challenges faced by local and state governments include: dependence on revenues from the state gas tax, the state's fixed rate gas tax, major disaster declarations, and impact on the infrastructure.

In the summer of 2006 a law created the County Improvements for Roads and Bridges (CIRB) program. The funds apportioned to the program are in equal amounts to the eight Transportation Commission Districts. The sole purpose of the funds is for the construction or reconstruction of county roads or bridges on the county highway system that are the highest priority. Funds may accumulate annual funding for a period of up to five years for a specific project. Information obtained from a report published by the National Association of Counties, funds collected by OTC for transportation projects are distributed directly to the counties. Revenues for specifically for the CIRB category are collected from state gasoline and diesel tax, special fuel tax and state gross production tax on oil. Table 3.5 summarizes the CIRB for Grant County. The County uses a small percentage of tax revenues for maintenance and minor improvements, relying on outside funding sources for major improvements.

Local

The main source of funding for community transportation projects is found in the general operating budgets. Generally these funds are derived by city sales tax and fees.

Funding for rural transportation projects may also be available through federal sources such as Community Development Block Grant (CDBG) through Oklahoma Department of Commerce, Economic Development Administration (EDA), and US Department of Agriculture Rural Development (USDA RD) programs. Oklahoma has limited funding available for projects through Rural Economic Action Plan (REAP) administered by Councils of Government (COG).

CHAPTER 5
PUBLIC PARTICIPATION SUMMARY

This chapter presents and describes the public participation tools the RTPOs utilize as part of the planning process. Public participation is a federal requirement identified in the FAST Act. NORTPO has an adopted Public Participation Plans that was followed.

Environmental Justice (EJ)
The Federal Highway Administration (FHWA) has long embraced non-discrimination policy to make sure federally-funded activities (planning through implementation) are not disproportionately adversely impacting certain populations. These populations include low income persons and populations as defined by the U.S. Department of Health and Human Services (HHS) Poverty Guidelines, and minority persons and populations (Black or African American, Hispanic or Latino, Asian American, American Indian and Alaskan Natives). As such, public involvement and outreach for the LRTP must adhere to Presidential Executive Order 12898, Environmental Justice.

According to the US Census Bureau's 2014 population estimates, Grant County's racial and ethnic composition is 92.6% White, followed by 1.9% American Indian and Alaska Native, then 4.4% Hispanic or Latino, and 1.2% African American. In comparison, Oklahoma's is 74.8% White, followed by 9.1% American Indian and Alaska Native, then 10.1% Hispanic or Latino, and 7.8% African American. The LRTP process identified EJ populations through a comparison of the racial and ethnic composition of the county.

Low income populations were also identified for Grant County. Low income populations are defined by the FHWA for transportation planning purposes as families of four with a household income that is below the poverty guidelines set by HHS. The 2015 HHS poverty guideline for a family of four is $24,250.

Appendix H-5 contains a series of maps and tables that identifies the areas considered under-represented.

Coordination Efforts
The process to identify goals and objectives for the County started with a review and comparison of goals and objectives from other related planning documents and policies to ensure general consistency. This review included:

- FAST Act Federal Planning Factors
- ODOT 2015-2040 Long Range Transportation Plan
- Medford Comprehensive Plan
- 2012 Freight Flow study
- 2012 Transit Gap Overview and Analysis
- Oklahoma Mobility Plan
- STIP:http://ok.gov/odot/Programs_and_Projects/8_Year_Construction_Work_Plan/index.html
- CIRB: http://www.okladot.state.ok.us/cirb/index.htm
- Rail Plan: http://www.okladot.state.ok.us/rail/rail-plan/pdfs/2012_RailPlan.pdf

Public involvement is an integral part of the transportation process. NORTPO is proactive in its efforts to effectively communicate with the public and on Jan. 21, 2016 adopted a revised Public

Participation Plan (PPP) (on NORTPO website) to ensure that the transportation planning process and procedures complies with federal requirement for public involvement and participation. These procedures provide opportunities for the public to take an active role in the decision making process.

NORTPO hosted two public meetings in Grant County and 15 at NODA's office in Enid, and/or provided notice of availability for public outreach to involve interested parties in the early stages of the plan development. Surveys were distributed at the stakeholders meeting, Medford City Hall, and were available on NORTPO's website (www.nortpo.org), and is shown in Appendix H-5

CHAPTER 6

TRANSPORTATION RECOMMENDATIONS

This chapter identifies the recommendations and summary of improvements that were developed as a result of the previous review of demographics, growth, activity generators, transportation system, survey information, existing plans and other such issues. The information provided in the LRTP is to provide guidance on recommended projects, studies and plans. It is assumed that only those Grant County projects included in the current ODOT eight-year construction program and CIRB will be constructed by the year 2036.

The projects included in the LRTP are primarily funded by ODOT. When implementing this plan, NORTPO will continue to review potential funding sources as they become available or as projects become eligible for other sources. NORTPO will expand on this effort by identifying additional projects that are needed in the county and helping local governments with the identification of funding sources for those projects.

Not all of the recommendations are for constructed improvements. In some cases, studies must be conducted to determine if the improvement is warranted (installation of new traffic signals, for example). In other cases, studies should be undertaken in order to develop a comprehensive set of solutions. Table 6.1 shows the recommended transportation projects.

Implementation policies and solutions include:

Roadway

- Plan and implement transportation systems that are multi-modal and provide connections between modes.
- Support transportation projects serving already developed locations.
- Protect cultural, historical, scenic resources.
- Establish a scheduled traffic count and reporting system for the region.
- Develop a regional freight plan.
- Improve infrastructure to support emergency response and evacuations.
- Utilize ODOT's bridge rating system as a tool to identify marginally sufficient structures.
- Collect and review data from Weight in Motion (WIM, aka Truck Weigh Station/Port of Entry) and identify trends.
- Participate in updates of the State Multi-modal Freight Plan.

Rail

- Collect and review incident data at rail crossings. Identify crossings for potential upgrade.

Bicycle and Pedestrian

- Develop an education safety awareness program.
- Participate in ODOT's planning efforts to develop a statewide bicycle and pedestrian plan.

Safety

- Coordinate with local governments to identify safety concerns.
- Collect and review accident data and identify trends.

Public Transportation

- Increase inter- and intra- county transit services.

- Promote transit systems providing service to major activity centers and enhance coordination among providers.
- Measure transit service and identify needs.

Planning and Community

- Coordinate with local, regional and state partners to identify type, frequency and responsibility of data collection and maintenance.
- Facilitate meetings with local and regional transportation providers and users.
- Engage the public in various methods to increase their understanding of the planning process.
- Protect the general aviation airports from encroachment of incompatible development.
- Prioritize transportation projects that serve major activity centers and freight corridors.
- Develop and maintain electronic database and mapping of environmental resources or areas of concern.
- Participate in regional and statewide planning efforts.

The projects included in the LRTP may have potential funding from a single source or multiple sources. Each project has its own unique components relative to only that project and while there are many funding programs within various state and federal agencies, each project must be evaluated on its own merits to determine which programs will apply. It should be noted that that some projects have multiple funding sources, these represent the primary sources and additional sources not listed may also be available. Additional sources could include funding from sources such as but not limited to EDA, USDA, CDBG, REAP, Industrial Access, Lake Access, and Transportation Alternative Programs. When implementing this plan, NORTPO will continue to review potential funding sources as they become available or as projects become eligible for other sources. NORTPO will expand on this effort by identifying additional projects that are needed in the County and helping local governments with the identification of funding sources for those projects.

Committed Improvements

The ODOT eight-year plan groups projects according to anticipated state and federal fund categories. With regard to federally funded projects, the current plan is fiscally balanced in that the total project costs do not exceed the anticipated federal funds. ODOT policy prohibits start of future projects until all funding is in place and policy dictates projects cannot be programmed in the Statewide Transportation Improvement Program (STIP) unless there is a programmatic and financial game plan for completing the project within six years. Table 6.1 includes a list of projects for through the year 2036. Some projects may include development of studies, plans, and collection of data.

Table 6.1: Recommended List of Projects

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
Develop data collection standards. Develop procedures to identify and collect traffic count data at specific locations.	Goal 1 Policies 4, 11, 14; Goal 2 Policies 2, 5; Goal 5 Policy 3; Goal 7	2016-2020	SPR, Local			

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
	Policies 1, 3; Goal 8 Policy 1					
Education and Awareness	Goal 2 Policies 3, 4, 7; Goal 5 Policies 1, 2, 4	2016-2020	SPR, Local			
Economic Vitality	Goal 4 Policies 1, 6	2016-2020	SPR, Local, CDBG, USDA			
Environment	Goal 5 Policies 1, 2, 3, 4, 5	2016-2020	SPR, Local, USDA			
Speed study at intersection locations with high accident severity index and corridors with major attractors.	Goal 8 Policy 1	2016-2020	Local, State, Federal			
24163(05) Bridges & Approaches: SH-11 over Pond Cr, 14.9 MI east of the Alfalfa Co line within 24163(04)		FFY 2016	STIP	$1,189,797	$ -	$1,189,797
24163(06) Bridges & Approaches: SH-11 over Osage Cr, 8.1 MI east of SH-11A within 24163(04)		FFY 2016	STIP	$1,025,526	$ -	$1,025,526
24163(07) Bridges & Approaches: SH-11 over Cottonwood Cr, 2.6 MI west of US-81 within 24163(04)		FFY 2016	STIP	$1,072,134	$ -	$1,072,134
24163(04) Shoulder Improvement: SH-11 from 13.0 MI east of the Alfalfa Co line, east to US-81 in Medford		FFY 2017	STIP	$11,750,802	$ -	$11,750,802
29838(05) Right of Way: US 60: shoulders and resurfacing from N. Apache St in Pond Creek, east 7.0 MI (ROW FOR 29838(07))		FFY 2017	STIP	$780,000	$ -	$780,000
29838(06) Utilities: US 60: shoulders and resurface from N. Apache St in Pond Creek, east 7.0 MI (UT for 29838(04))		FFY 2017	STIP	$780,000	$ -	$780,000

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
31809(06) Right of Way: SH-11; shoulders and resurface from SH-74 Jct, extend east to I-35 (ROW FOR 31809(04)(05))		FFY 2020	FY 2016-2023 8-Year Construction Work Program	$1,500,000	$ -	$1,500,000
31809(07) Utilities: SH-11; shoulders and resurface from SH-74 Jct, extend east to I-35 (UT FOR 31809(04)(05))		FFY 2020	FY 2016-2023 8-Year Construction Work Program	$1,500,000	$ -	$1,500,000
Grant 31371(04) Resurface from .1 MI south of the Garfield county line extend north 5.19 MI to JCT of US 64		FFY 2016	Asset Preservation	$14,595,999	$ -	$14,595,999
27614(04) Resurface from JCT SH 11 extend south 4.0 miles		FFY 2017	Asset Preservation	$1,500,000	$ -	$1,500,000
30631(04) Resurface from the Alfalfa county line extend east 6.5 MI medium overlay		FFY 2017	Asset Preservation	$2,000,000	$ -	$2,000,000
30632(04) Resurface US 81/US 60 resurface from the Garfield County line extend north 5 MI to US 64		FFY 2018	Asset Preservation	$900,000	$ -	$900,000
30632(04) Resurface US 81 resurface from the City of Jefferson extend north 5 MI		FFY 2019	Asset Preservation	$1,200,000	$ -	$1,200,000
31372(04) Resurface US 81 resurface from JCT with US 60 in Pond Creek extend north 4.2 MI to Jefferson		FFY 2019	Asset Preservation	$1,050,000	$ -	$1,050,000
31922(04) Bridge & Approaches: SH 132 Box replacement over unnamed creek .35 MI north of US 64 Jct		FFY 2019	Asset Preservation	$650,000	$ -	$650,000
24946(05) Grading, Drainage, Bridge & Surface on NS 301 BEG @ EW 20 ext. 1 MI south, 2 MI east and 1 MI South & 1 MI east to NS 304/EW 22 Phase II		FFY 2016	CIRB	$4,000,000	$ -	$4,000,000

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
28360(04) Bridge & Approaches on NS 280 over Sand Creek 1MI east and 2.9 MI south of JCT SH 11/SH 132		FFY 2016	CIRB	$900,000	$ -	$900,000
28412(04) Bridge & Approaches CO RD (EW - 016) over Polecat Creek, 2 MI south & 5.2 MI east of Jct SH 11/US81		FFY 2016	CIRB	$600,000	$ -	$600,000
28416(05): Contact PE Co Rd (EW26) over Wild House Creek 2.2 MI south & 1.1 MI east of Pond Creek. PE for 28416(04) CIRB Funds		FFY 2016	CIRB	$75,000	$ -	$75,000
(28419(09) Right of Way: CO Rd (EW08) beg approx. 4 MI west of SH 132 & extend east approx. 4 MI Phase II r/W for 28419(05)		FFY 2016	CIRB	$10,000	$ -	$10,000
284191(10) Utilities: CO Rd (EW08) beg approx. 4 MI west of SH 132 & extend east approx. 4 MI Phase II UT for 28419(05)		FFY 2016	CIRB	$10,000	$ -	$10,000
31844(05): resurface NS 291 from SH 11 extend North 3 MI ODOT PE for 31844(04)		FFY 2016	CIRB	$60,000	$ -	$60,000
27282(04) Bridge & Approaches: CO Bridge EW 16 over Sand Creek 2 MI south & 1.4 MI east of SH 11/SH 132 Jct		FFY 2017	CIRB	$900,000	$ -	$900,000
28419(05) Widen & Resurface: Co Rd (EW 08) beg approx. 4 MI west of SH 132 and extend east approx. 4 MI. Phase II		FFY 2017	CIRB	$3,004,170	$ -	$3,004,170
29862(04) Bridges & Approaches on EW 1 over Osage Creek 2. MI west 1 south and .4 MI west of JCT SH 11/US 81		FFY 2017	CIRB	$700,000	$ -	$700,000
31221(05): Contact PE Bridges & approaches on NS 2770 over Sand Creek MI west & 4.8 MI south of		FFY 2017	CIRB	$60,000	$ -	$60,000

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
Manchester PE for 31221(04)						
28674(05): Contract PE County Rd EW 20 from NS 288 to 296 include CN 177 PE for 28670(04)		FFY 2018	CIRB	$200,000	$ -	$200,000
29861(04) Bridges & Approaches on NS 299 over Pond Creek .7 MI south 6.8 MI west and .9 MI north of Lamont		FFY 2018	CIRB	$700,000	$ -	$700,000
31836(05): Contract PE bridges & approaches on NS 283 over Sand Creek 4.7 MI east and 1 MI North of Nash. PE for 31836(04)		FFY 2018	CIRB	$75,000	$ -	$75,000
28416(04) Bridge & Approaches on EW 26 over Wild Horse Creek 2.2 MI south and 1.1 MI east of Pond Creek		FFY 2019	CIRB	$1,000,000	$ -	$1,000,000
31844(04) Resurface NS 291 from SH 11 extend north 3 MI		FFY 2019	CIRB	$2,200,000	$ -	$2,200,000
Statewide Maintenance		2016-2020				$ -
Statewide Bridge		2016-2020				$ -
Statewide Safety		2016-2020				$ -
Statewide Transit		2016-2020				$ -
Statewide Rail		2016-2020				$ -
Transit Planning & Survey	Goal 1 Policies 2, 3, 4, 5, 8; Goal 4 Policy 1	2021-2025	SPR, Local, CDBG, USDA			$ -
Education and Awareness	Goal 2 Policies 3, 4, 7; Goal 5 Policy 4	2021-2025	SPR, Local			$ -
Bicycle and Pedestrian Planning	Goal 1 Policies 1, 2, 6, 8, 12, 13	2021-2025	SPR, Local,			$ -
Collect traffic count data at specific locations within the County	Goal 7 Policy 3	2021-2025	SPR, Local			$ -

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
Speed study at intersection locations with high accident severity index and corridors with major attractors.	Goal 8 Policy 1	2021-2025	SPR, Local, SAFETY			$ -
Railroad crossings (upgrade and improve)	Goal 4 Policy 4	2021-2025	Local, State			$ -
Statewide Maintenance		2021-2025				$ -
Statewide Bridge		2021-2025				$ -
Statewide Safety		2021-2025				$ -
Statewide Transit		2021-2025				$ -
Statewide Rail		2021-2025				$ -
Bicycle & Pedestrian Projects	Goal 1 Policies 1, 2, 6, 8, 12, 13	2026-2030	TAP, Local			$ -
Education & Awareness	Goal 2 Policies 3, 4, 7; Goal 5 Policy 4	2026-2030	SPR, Local			$ -
Railroad crossings (upgrade and improve)	Goal 4 Policy 4	2026-2030	State, Local			$ -
Freight Planning	Goal 1 Policies 9, 10; Goal 3 Policy 1, Goal 4 Policies 3, 4, 5; Goal 5 Policy 2	2026-2030	SPR, Local			$ -
Collect traffic count data at specific locations within the County	Goal 7 Policy 3	2026-2030	SPR, Local			$ -
Speed study at intersection locations with high accident severity index and corridors with major attractors.	Goal 8 Policy 1	2026-2030	SPR, Local, State			$ -
Statewide Maintenance		2026-2030				$ -
Statewide Bridge		2026-2030				$ -
Statewide Safety		2026-2030				$ -
Statewide Transit		2026-2030				$ -

Project Description	Goal, Policy	Project Year	Funding Program/ Source	Funding State/Federal	Funding Other	Total
Statewide Rail		2026-2030				$ -
Bicycle & Pedestrian Projects		2031-2035	TAP, Local			$ -
Education & Awareness	Goal 2 Policies 3, 4, 7; Goal 5 Policy 4	2031-2035	SPR, Local			$ -
Railroad crossings (upgrade and improve)	Goal 4 Policy 4	2031-2035	State, Local			$ -
Collect traffic count data at specific locations within the County	Goal 7 Policy 3	2031-2035	SPR, Local			$ -
Speed study at intersection locations with high accident severity index and corridors with major attractors.	Goal 8 Policy 1	2031-2035	SPR, Local, State			$ -
Statewide Maintenance		2031-2035				$ -
Statewide Bridge		2031-2035				$ -
Statewide Safety		2031-2035				$ -
Statewide Transit		2031-2035				$ -
Statewide Rail		2031-2035				$ -

Source: NORTPO

Conclusion

This plan will be used to develop and implement programs to enhance the County and region's multi-modal transportation system, providing the public and businesses safe, convenient, affordable and environmentally responsible transportation choices. NORTPO will work with elected officials, various state and federal agencies, and public and private stakeholders as it is the intent of this plan to also encourage communities to invest in improving their streets, ensuring the transportation network is a high-performing system for economic competitiveness for the next 20 years.

APPENDICES

Appendix A **Resolutions**

Appendix B **Acronyms**

Appendix C **Definitions**

Appendix D **Performance Measures**

Appendix E **Functional Classification and Level of Service**

Appendix F **Plans and Websites**

Appendix G **Letter to/from State Agencies**

Appendix H **Maps and Tables by Chapters**

- **Appendix H-1** **Chapter 1**
- **Appendix H-2** **Chapter 2**
- **Appendix H-3** **Chapter 3**
- **Appendix H-4** **Chapter 4**
- **Appendix H-5** **Chapter 5**
- **Appendix H-6** **Chapter 6**

Appendix A
Resolutions

1. Resolution adopting plan
2. Resolutions from Cities/Counties

Appendix B

Acronyms

AASHTO	The American Association of State Highway Transportation Officials
ADA	Americans with Disabilities Act
CTPP	Census Transportation Planning Products
CIRB	County Improvements for Roads and Bridges
CORTPO	Central Oklahoma Regional Transportation Planning Organization
EJ	Environmental Justice
EDA	Economic Development Administration
EPA	United States Environmental Protection Agency
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information System
LEP	Limited English Proficiency
LOS	Level of Service
LRTP	Long Range Transportation Plan
NEPA	National Environmental Policy Act
NHS	National Highway System
NODA	Northern Oklahoma Development Authority
NORTPO	Northern Oklahoma Regional Transportation Planning Organization
OARC	Oklahoma Association of Regional Councils
ODEQ	Oklahoma Department of Environmental Quality
ODOT	Oklahoma Department of Transportation
PWP	Planning Work Program
RTPO	Regional Transportation Planning Organization
SORTPO	Southwest Oklahoma Regional Transportation Planning Organization
STRACNET	Strategic Rail Corridor Network
TAZ	Traffic Analysis Zone

Appendix C
Definitions

Accident Severity Index - A measure of the severity of collisions at a particular location, derived by assigning a numeric value according to the severity of each collision and totaling those numeric values.

Americans with Disabilities Act of 1990 (ADA) - Federal law which requires accessible public transportation services for persons with disabilities, including complementary or supplemental paratransit services in areas where fixed route transit service is operated. Expands definition of eligibility for accessible services to persons with mental disabilities, temporary disabilities, and the conditions related to substance abuse. The Act is an augmentation to, but does not supersede Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of disability against otherwise qualified individuals in programs receiving federal assistance.

Capacity - The maximum number of vehicles that can pass over a given section of a lane or roadway in one direction during a given time period under prevailing roadway and traffic conditions.

Census Tracts - Small areas with generally stable boundaries, defined within counties and statistically equivalent entities, usually in metropolitan areas and other highly populated counties. They are designed to be relatively homogeneous with respect to population characteristics, economic status, and living conditions.

Class I railroad - Having annual carrier operating revenues of $250 million or more after adjusting for inflation using the Railroad Freight Price Index.

Class III or short-line railroad – Having an annual operating revenue of less than $20 million and typically serve a small number of towns and industries or haul cars for one or more of the Class I railroads.

Congestion - The level at which transportation system performance is no longer acceptable to the traveling public due to traffic interference.

Demand Response Service (DRS) – Provides travel assistance from one location to another within a specific area for medical appointments, shopping, and other basic needs destinations. The vehicles do not operate over a fixed route or on a fixed schedule but in response to calls from passengers or their agents. Fares will vary based on length of trip and users are required to call in advance to make reservations. The vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destinations.

Environmental Justice (EJ) - The fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In transportation, this requires review of whether the benefits and burdens of transportation investments appear to be distributed evenly across the regional demographic profile and, if necessary, mitigation of such effects.

Functional Classification (FC) - Identification and categorization scheme describing streets according to the type of service they provide into one of four categories: principal arterials, minor arterials, collectors and local. G Grade - The slope (ratio of change in elevation to change in distance) of a roadway typically given in percent. For example, a 2% grade represents 2-feet of elevation change over a 100foot distance.

Level of Service (LOS) - Refers to a standard measurement used by planners which reflects the relative ease of traffic flow on a scale of A to F with free-flow being rated LOS A and congested conditions rated as LOS F.

Long Range Transportation Plan (LRTP) - Every state and MPO must develop a long range transportation plan for transportation improvements, including a bicycle and pedestrian element. The LRTP looks 20 years ahead and is revised every five years.

Multimodal - The consideration of more than one mode to serve transportation needs in a given area. Refers to the diversity of options for the same trip; also, an approach to transportation planning or programming which acknowledges the existence of or need for transportation options.

National Highway System (NHS) - A nation-wide system of approximately 155,000 miles of major roads. The entire Interstate System is a component of the National Highway System, and includes a large percentage of urban and rural principal arterials, the defense-strategic highway

Surface Transportation Program (STP) - A category of federal transportation funds administered by the Federal Highway Administration and allocated to states and metropolitan areas based on a prescribed formula. This category of funds can provide 80% of the cost to complete transportation improvement projects. These funds are flexible, and can be used for planning design, land acquisition, and construction of highway improvement projects, the capital costs of transit system development, and up to two years of operating assistance for transit system development.

Traffic Analysis Zones (TAZ) - A traffic analysis zone is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, and will vary significantly between the rural and urban areas. Zones are constructed by census block information. Typically these blocks are used in transportation models by providing socio-economic data. This information helps to further the understanding of trips that are produced and attracted within the zone.

Appendix D
Performance Measures

Transportation performance measures data/information about the condition, use and impact of the system. The performance measures (or indicators) to track progress toward established goals.

US DOT has established performance measures and state DOTS will develop performance targets in consultation with MPOs and others. The law allows the state DOT to develop performance targets for rural and urban areas. The targets must be established in coordination with MPOs and public transit operators in areas not represented by MPOs. Seven (7) areas in which performance measures will be developed:

1. Safety – to achieve reduction in facilities and serious injuries on all public roads.
2. Infrastructure Condition – to maintain highway infrastructure assets in state of good repair.
3. Congestion Reduction – to achieve reduction in congestion on the National Highway System.
4. System Reliability – performance on the Interstate/Non Interstate system.
5. Freight Movement – freight movement on the Interstate and
6. Economic Vitality – Environment Sustainability to enhance the performance of the transportation system while protecting and enhancing the environment
7. Reduced Project Delivery Delays – to reduce project costs, promote jobs and the economy and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies work practices.

As a fundamental element of a performance management framework, states, MPOs and providers of public transportation will need to establish targets in key national performance areas to document expectations for future performance. The statewide and metropolitan transportation planning processes shall provide for the use of a performance-based approach to transportation decision-making to support the national goals.

Appendix E
Functional Classification and Level of Service

Functional Classification
Functional classification is the grouping of roads, streets and highways into integrated systems ranked by their importance to the general welfare, motorist and land-use structure. It is used to define the role that any particular road should play in providing mobility for through movements and access adjoining land. This grouping acknowledges that roads have different levels of importance and provides a basis for comparing roads fairly.

Historically, one of the most important uses of functional classification of streets has been to identify streets and roads that are eligible for federal funds. The original Federal-aid Primary, Federal-aid Secondary, Federal-aid Urban, and National Interstate systems all relied on functional classification to select eligible routes. In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) eliminated the Primary, Secondary, and Urban Federal-aid systems and created the National Highway System (NHS). ISTEA continued the requirement that a street, road, or highway had to be classified higher than a “Local” in urban areas and higher than a “Local” and “Minor Collector” in rural areas before federal funds could be spent on it. The selection of routes eligible for NHS funding was also based on functional criteria. While eligibility for federal funding continues to be an important use for functional classification, it has also become an effective management tool in other areas of transportation planning.

Streets are grouped into functional classes according to the character of service they are intended to provide. Oklahoma's Functional Classification system undergoes a comprehensive review after each decennial U.S. Census. The list below helps depict the hierarchy of the roadway system. As the figure indicates, local streets provide the most access to the adjacent properties, but function poorly in terms of mobility. Freeways exhibit high mobility because of speeds and volumes, serve poorly as access to adjacent roads and properties. Streets that carry higher volumes of traffic should have a limited number of “curb cuts” (driveway openings, few intersections) so traffic movement will not be impeded. While eligibility for federal funding continues to be an important use for functional classification, it has also become an effective management tool in other areas of transportation planning.

The functional classification of streets is shown in Map 2.11 and includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector. Rural roads consist of those facilities that are outside of small urban and urbanized areas. The functional classification of streets is shown Map xxx and includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector.

Rural Principal Arterial - A rural principal arterial road includes the following service characteristics:

- Traffic movements with trip length and density suitable for substantial statewide travel
- Traffic movements between urban areas with populations over 25,000
- Traffic movements at high speeds
- Divided four-lane roads
- Desired LOS C

Rural Minor Arterial A rural minor arterial road includes the following service characteristics:

- Traffic movements with trip length and density suitable for integrated interstate or inter-

county service
- Traffic movements between urban areas or other traffic generators with populations less than 25,000
- Traffic movements at high speeds
- Undivided four-lane roads
- Striped for one or two lanes in each direction with auxiliary lanes at intersections as required by traffic volumes
- Desired LOS C

Rural Major Collector - A rural major collector road includes the following service characteristics:
- Traffic movements with trip length and density suitable for inter-county service
- Traffic movements between traffic generators, between traffic generators and larger cities, and between traffic generators and routes of a higher classification
- Traffic movements subject to a low level of side friction
- Development may front directly on the road
- Controlled intersection spacing of 2 miles or greater
- Striped for one lane in each direction with a continuous left turn lane
- Desired LOS C

Rural Minor Collector - A rural minor collector road includes the following service characteristics:
- Traffic movements between local roads and collector roads
- Traffic movements between smaller communities and developed areas
- Traffic movements between locally important traffic generators within their remote regions
- Two-lane undivided roads with intersections at grade, and designed to take a minimum interference of traffic from driveways appropriate to a rural setting
- Striped for one lane in each direction
- Desired LOS B

Rural Local Road - A rural local road includes the following service characteristics:
- Two-lane undivided roads with intersections at grade
- Traffic movements between collectors and adjacent lands
- Traffic movements involving relatively short distances
- Desired LOS A

Other classifications of roadways include:

1. The National Highway System represents 4% to 5% of the total public road mileage in the US. This System was designed to contain the follow subcategories:
   a. Interstate -The current Interstate System retained its separate identity within the NHS along with specific provisions to add mileage to the existing Interstate subsystem.
   b. Other Principal Arterials - These routes include highways in rural and urban areas which provide access between an arterial route and a major port, airport, public transportation facility or other intermodal transportation facility.
   c. Intermodal Connecting Links - These are highways that connect NHS routes to major ports, airport, international border crossings, public transportation and transit facilities, interstate bus terminals and rail and intermodal transportation facilities.

2. The Strategic Highway Network (STRAHNET). This system includes the Dwight D. Eisenhower system of Interstate and Defense Highways, identified as strategically important to the defense of the United States.

3. The National and Scenic Byways recognizes highways that are outstanding examples of our

nation's beauty, culture, and recreational experience in exemplifying the diverse regional characteristics of our nation.

Level of Service

Level of service (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Street Capacity is the measure of a street's ability to accommodate the traffic volume along the street. Level-of-service range from LOS A, which indicates good operating conditions with little or no delay, to LOS F, which indicates extreme congestion and long vehicle delays.

The following is a list of the various LOS with abbreviated definitions from the Highway Capacity Manual.

- LOS A describes a condition with low traffic volumes with little or no delays. There is little or no restriction in maneuverability due to the presence of other vehicles. Drivers can maintain their desired speeds and can proceed through signals without having to wait unnecessarily. Operating capacity can be measured as less than 30% of capacity.

- LOS B describes a condition with stable traffic flow with a high degree of choice to select speed and operating conditions, but with some influence from other drivers. Operating capacity can be measured as less than 50% of capacity.

- LOS C describes the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. LOS C is normally utilized as a measure of "average conditions" for design of facilities in suburban and urban locations. Operating capacity can be measured as less than 69% of capacity.

- LOS D describes high density flow in which speed and freedom to maneuver is severely restricted even though flow remains stable. LOS D is considered acceptable during short periods of time and is often used in large urban areas. Operating capacity can be measured as less than 70% to 90% of capacity.

- LOS E describes operating conditions at or near capacity. Operations at this level are usually unstable, because small increases in flow or minor disturbances within the traffic stream will cause breakdowns. Operating capacity can be measured as between 90% to 99% of capacity.

- LOS F is used to define forced or breakdown flow. This condition exists whenever the amount of traffic approaching a point exceeds the amount that can be served. LOS F is characterized by demand volumes greater than the roadway capacity. Under these conditions, motorists seek other routes in order to bypass congestion, thus impacting adjacent streets. Operating capacity can be measured above 100% of capacity.

Future increases in traffic volume can be traced to population growth and land use development patterns. Capacity and LOS can also be diminished by increasing the number of access points and median cuts on the road network.

Appendix F

Plans and Corresponding Websites

Medford Comprehensive Plan
Grant County Hazard Mitigation Plan
ODOT: http://ok.gov/odot/Programs_and_Projects/Transportation_Programs/LRTP_2015-2040.html
FAST Act Federal Planning Factors
2012 Transit Gap Overview and Analysis
Oklahoma Mobility Plan
Oklahoma Dept. of Transportation http://ok.gov/odot/
- STIP:http://ok.gov/odot/Programs_and_Projects/8_Year_Construction_Work_Plan/index.html
- CIRB: http://www.okladot.state.ok.us/cirb/index.htm
- Rail Plan: http://www.okladot.state.ok.us/rail/rail-plan/pdfs/2012_RailPlan.pdf

Federal Highway Administration http://www.fhwa.dot.gov/

csa.ou.edu
data5.ctpp.transportation.org
www.oksafe-t.org
www.census.gov
www.kansasenergy.org
www.nationalregisterofhistoricplaces.com
www.fhwa.dot.gov
www.grantwindfarm.com

Appendix G
Letter to/from State Agencies

Appendix H
Maps and Tables by Chapters

Appendix H-1 Chapter 1

Appendix H-2 Chapter 2

Table 2.1 NORTPO Counties Population Data
Table 2.2 Grant County Growth 1980-2015 ACS Estimate
Table 2.3 Grant County Employment by Industry
Table 2.4 Grant County Vehicle Registrations
Map 2.1 Grant County Traffic Analysis Zones (TAZ)
Map 2.2 Grant County Population by TAZ
Table 2.5 Grant County Population by TAZ
Map 2.3 Medford Traffic Analysis Zones (TAZ)
Map 2.4 Pond Creek Traffic Analysis Zones (TAZ)
Map 2.5 Grant County Employment by TAZ
Table 2.6 Grant County Employment by TAZ
Map 2.6 Grant County Major Employers by TAZ
Table 2.7 Grant County Major Employers
Map 2.7 Grant County Water Bodies
Map 2.8 Grant County Airports
Map 2.9 Grant County Highways and Rail Lines
Map 2.10 Grant County Historic Places
Table 2.8 Grant County Historic Places
Map 2.11 Grant County Functional Classification
Map 2.12 Grant County Average Daily Traffic Counts
Map 2.13 Grant County Collisions by Severity
Table 2.9 Grant County Collisions 2011- 2015
Map 2.14 Grant County Two Lane Highways without Shoulders
Map 2.15 Oklahoma Steep Hills and Sharp Curves
Map 2.16 Grant County Bridges
Table 2.10 Grant County Bridges

Table 2.11 Structurally Deficient and Functionally Obsolete Bridges
Map 2.17 National Highway Freight Network, Oklahoma
Map 2.18 Grant County Freight Corridors and Connectors
Table 2.12 Cherokee Strip Transit Ridership and Revenue for Grant County

Appendix H-3 Chapter 3

Table 3.1 Grant County Population and Employment Projections
Map 3.1 Grant County 2036 Population Projection by TAZ
Table 3.2 Grant County 2036 Population Projection by TAZ
Map 3.2 Grant County 2036 Employment Projection by TAZ
Table 3.3 Grant County 2036 Employment Projection by TAZ
Table 3.4 ODOT Eight Year Work Program
Table 3.5 ODOT CIRB Work Program
Map 3.3 ODOT Construction Work Program 2016-2024

Appendix H-4 Chapter 4

Table 4.1 Funding Categories Summary
Table 4.2 State Funding Categories

Appendix H-5 Chapter 5

Map 5.1 2014 Grant County Poverty Status by TAZ
Table 5.1 2014 Grant County Poverty Status by TAZ
Map 5.2 2014 Grant County Limited English Proficiency by Household by TAZ
Table 5.2 2014 Grant County Limited English Proficiency by Household by TAZ
Map 5.3 2014 Grant County Disabled Residents by TAZ
Table 5.3 2014 Grant County Disabled Residents by TAZ
Table 5.4 2014 Grant County Residents by Race
Grant County Surveys

Appendix H-6 Chapter 6

Appendix H-2
Chapter 2

Table 2.1 NORTPO Counties Population Data

Populations	4/1/2010 Estimate	2012 Estimate	2013 Estimate	2014 Estimate	2015 Estimate	% Change 4/1/10 to 7/1/15
Alfalfa County	5,642	5,666	5,847	5,793	5,868	3.9%
Blaine County	11,943	9,785	9,720	9,896	9,833	-21.5%
Garfield County	60,580	61,189	62,267	62,977	63,569	4.7%
Grant County	4,527	4,516	4,528	4,496	4,523	-0.1%
Kay County	46,562	45,779	45,633	45,510	45,366	-2.6%
Kingfisher County	15,029	14,994	15,276	15,509	15,584	3.6%
Major County	7,527	7,667	7,683	7,758	7,771	3.1%
Noble County	11,561	11,546	11,446	11,519	11,554	-0.1%
NORTPO Region	163,371	161,142	162,400	163,458	164,059	0.4%
Oklahoma	3,751,357	3,815,780	3,850,568	3,879,610	3,911,338	4.1%

Source: US Census Bureau

Table 2.2 Grant County Growth 1980-2015 ACS Estimate

ACS	1980	1990	2000	2010	2015 Est.
Oklahoma	2,328,284	2,559,229	3,025,290	3,145,585	3,911,338
Grant County	6,518	5,689	5,144	4,527	4,523
Deer Creek	174	124	147	130	132
Jefferson	92	36	37	12	12
Lamont	571	454	465	417	411
Manchester	146	106	104	103	103
Medford	1,419	1,172	1,172	996	987
Nash	301	281	224	204	204
Pond Creek	949	982	896	856	866

Renfrow	27	19	16	12	12
Wakita	526	453	420	344	344
Remainder of County	2,313	2,062	1,663	1,453	1,452

Source: American Community Survey

Table 2.3 Grant County Employment by Industry

Subject	Grant County, Oklahoma					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian employed population 16 years and over	2,107	+/-88	59.5%	+/-2.2	40.5%	+/-2.2
Agriculture, forestry, fishing and hunting, and mining:	543	+/-73	83.8%	+/-4.9	16.2%	+/-4.9
Agriculture, forestry, fishing and hunting	354	+/-69	82.8%	+/-6.7	17.2%	+/-6.7
Mining, quarrying, and oil and gas extraction	189	+/-44	85.7%	+/-7.4	14.3%	+/-7.4
Construction	208	+/-62	95.2%	+/-6.1	4.8%	+/-6.1
Manufacturing	110	+/-34	77.3%	+/-11.4	22.7%	+/-11.4
Wholesale trade	60	+/-35	51.7%	+/-20.3	48.3%	+/-20.3
Retail trade	158	+/-39	38.6%	+/-12.9	61.4%	+/-12.9
Transportation and warehousing, and utilities:	144	+/-42	88.2%	+/-8.8	11.8%	+/-8.8
Transportation and warehousing	117	+/-37	85.5%	+/-10.9	14.5%	+/-10.9
Utilities	27	+/-14	100.0%	+/-44.8	0.0%	+/-44.8
Information	23	+/-22	100.0%	+/-48.5	0.0%	+/-48.5
Finance and insurance, and real estate and rental and leasing:	102	+/-36	23.5%	+/-13.4	76.5%	+/-13.4
Finance and insurance	89	+/-30	12.4%	+/-9.7	87.6%	+/-9.7
Real estate and rental and leasing	13	+/-15	100.0%	+/-64.5	0.0%	+/-64.5
Professional, scientific, and management, and administrative and waste management services:	67	+/-28	74.6%	+/-18.6	25.4%	+/-18.6
Professional, scientific, and technical services	41	+/-18	73.2%	+/-20.4	26.8%	+/-20.4
Management of companies and enterprises	0	+/-9	-	**	-	**

Subject	Grant County, Oklahoma					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Administrative and support and waste management services	26	+/-19	76.9%	+/-26.7	23.1%	+/-26.7
Educational services, and health care and social assistance:	371	+/-59	17.5%	+/-5.7	82.5%	+/-5.7
Educational services	187	+/-41	20.3%	+/-8.6	79.7%	+/-8.6
Health care and social assistance	184	+/-40	14.7%	+/-9.6	85.3%	+/-9.6
Arts, entertainment, and recreation, and accommodation and food services:	83	+/-32	7.2%	+/-7.6	92.8%	+/-7.6
Arts, entertainment, and recreation	7	+/-9	28.6%	+/-57.5	71.4%	+/-57.5
Accommodation and food services	76	+/-31	5.3%	+/-7.3	94.7%	+/-7.3
Other services, except public administration	108	+/-39	46.3%	+/-15.6	53.7%	+/-15.6
Public administration	130	+/-38	60.0%	+/-13.7	40.0%	+/-13.7
Percent Imputed						
Industry	9.3%	(X)	(X)	(X)	(X)	(X)

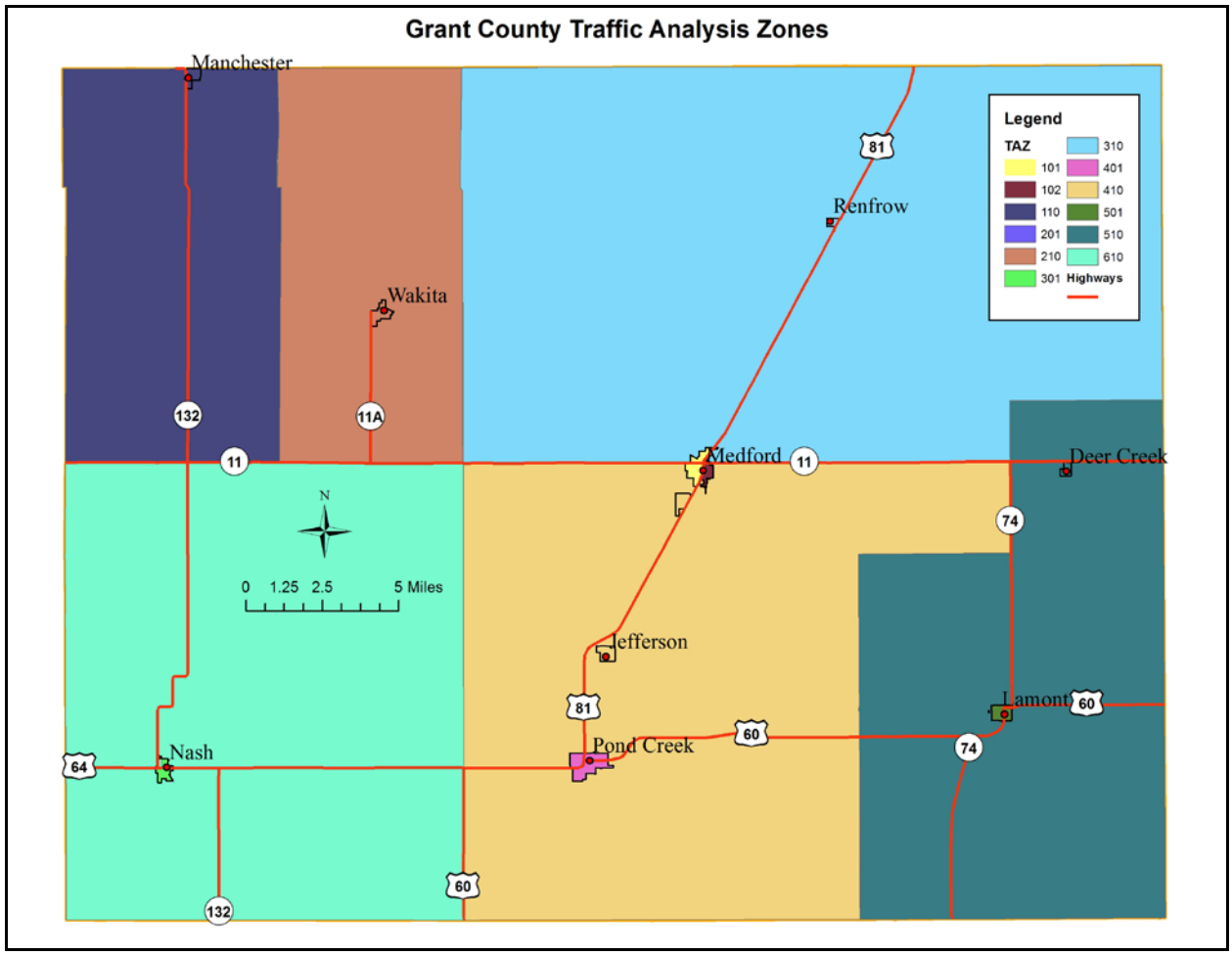
Source: US Census Bureau

Table 2.4 Grant County Vehicle Registrations

Vehicle Type	2011	2012	2013	2014	2015
Automobile	3,025	3,027	3,050	3,047	3,413
Farm Truck	1,681	1,691	1,772	1,716	1,738
Commercial Truck	391	470	515	588	633
Commercial Truck Tractor	21	35	36	50	67
Commercial Trailer	80	121	107	113	128
Motorcycles	204	196	214	237	258

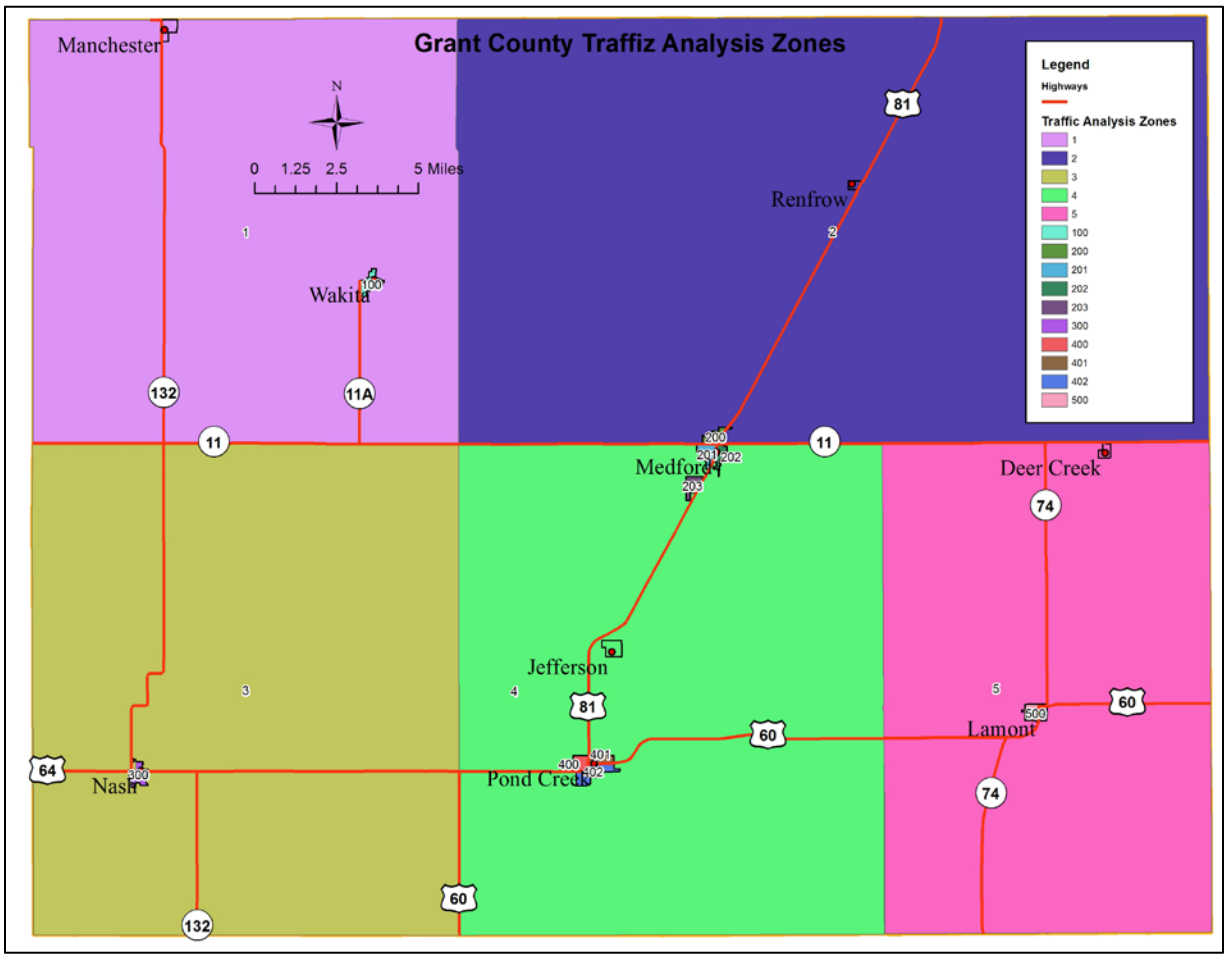
Source: Oklahoma Tax Commission Annual Vehicle Registration Reports

Map 2.1 Grant County Traffic Analysis Zones (TAZ)



Source: NORTPO

Map 2.2 Grant County Population by TAZ



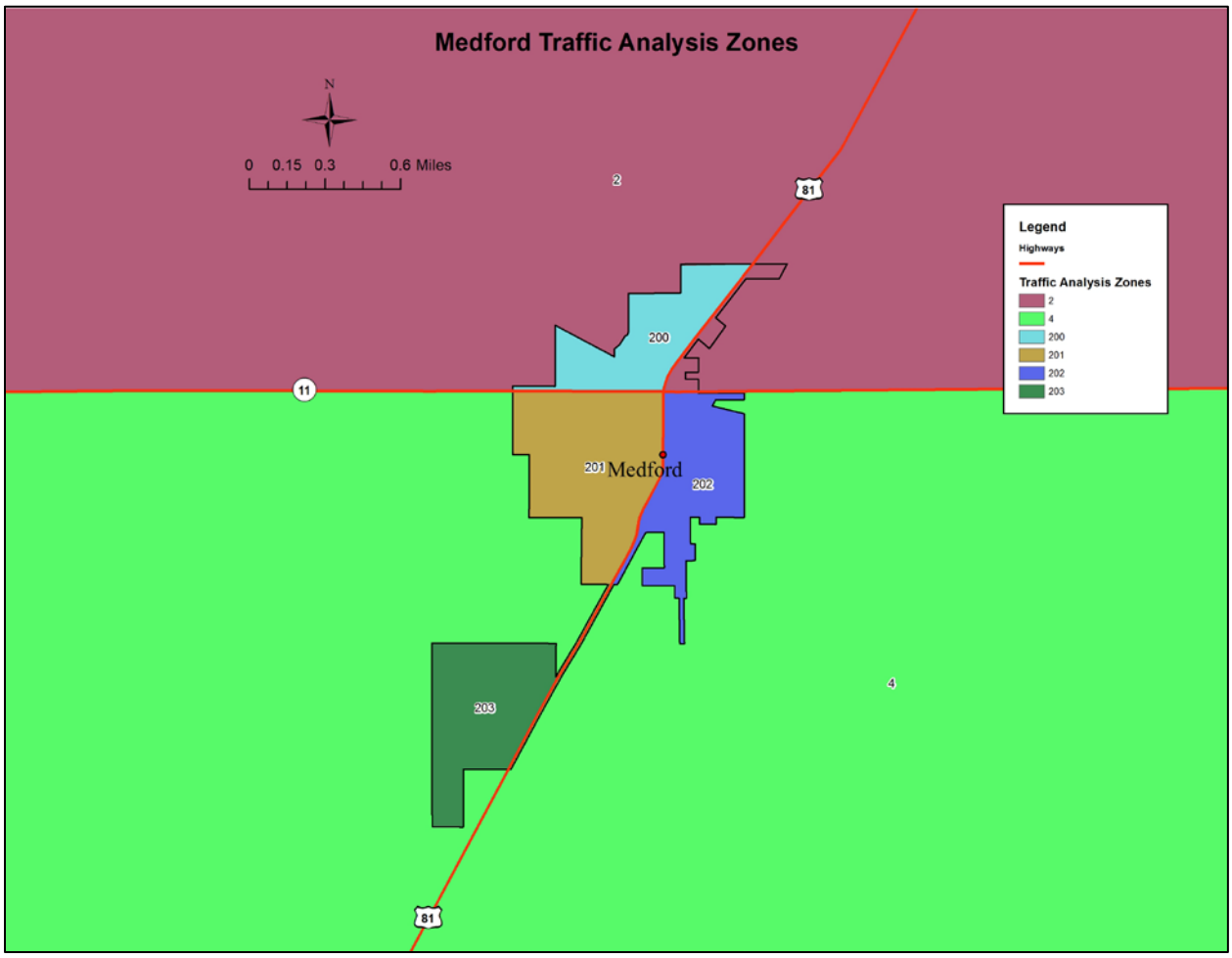
Source: NORTPO

Table 2.5 Grant County Population by TAZ

Grant County Population by TAZ	
TAZ	Population
1	293
2	299
3	354
4	391
5	375
100	344
200	300
201	400
202	286
203	ONEOK
300	204
400	400
401	91
402	375
500	500

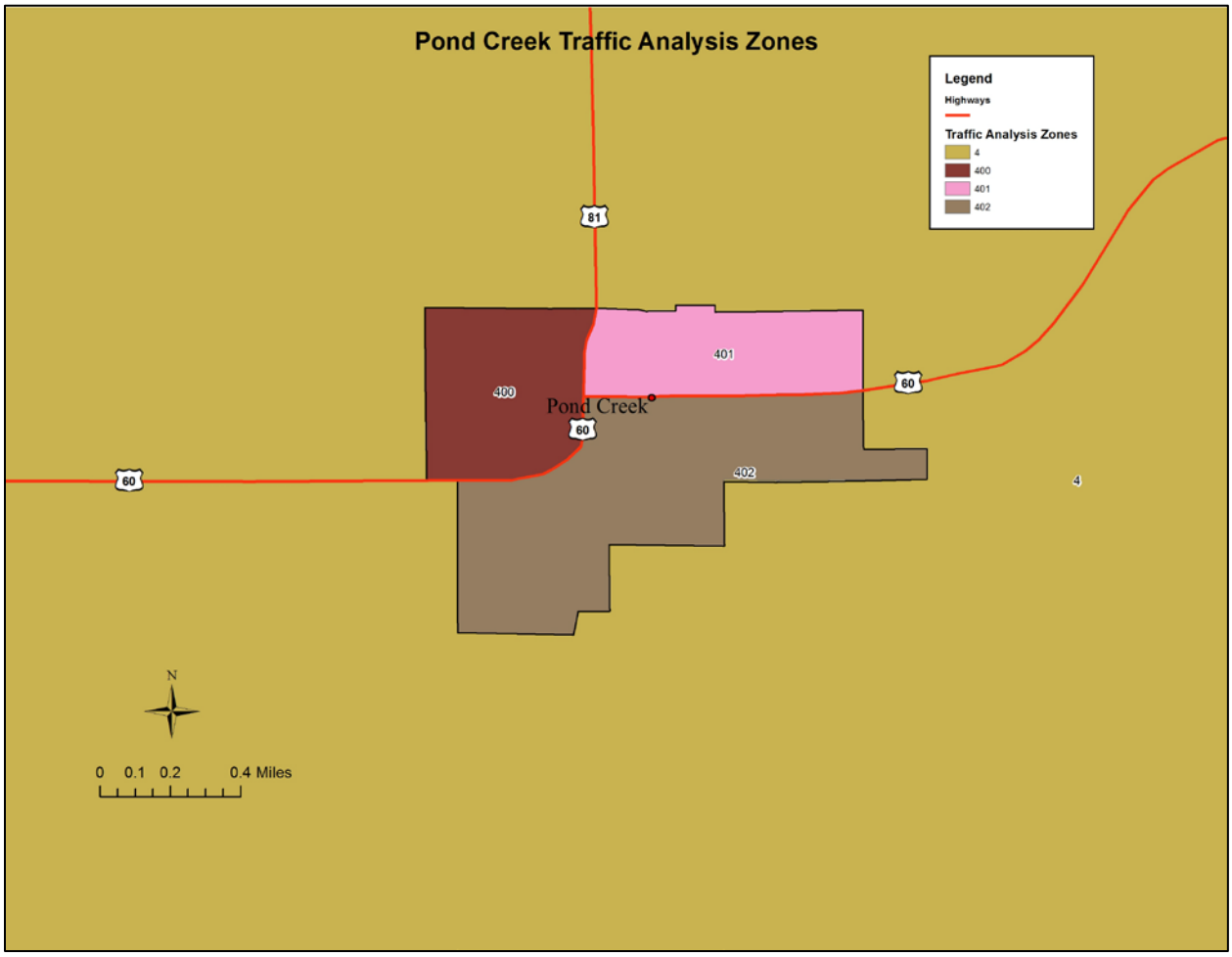
Source: NORTPO

Map 2.3 Medford Traffic Analysis Zones (TAZ)



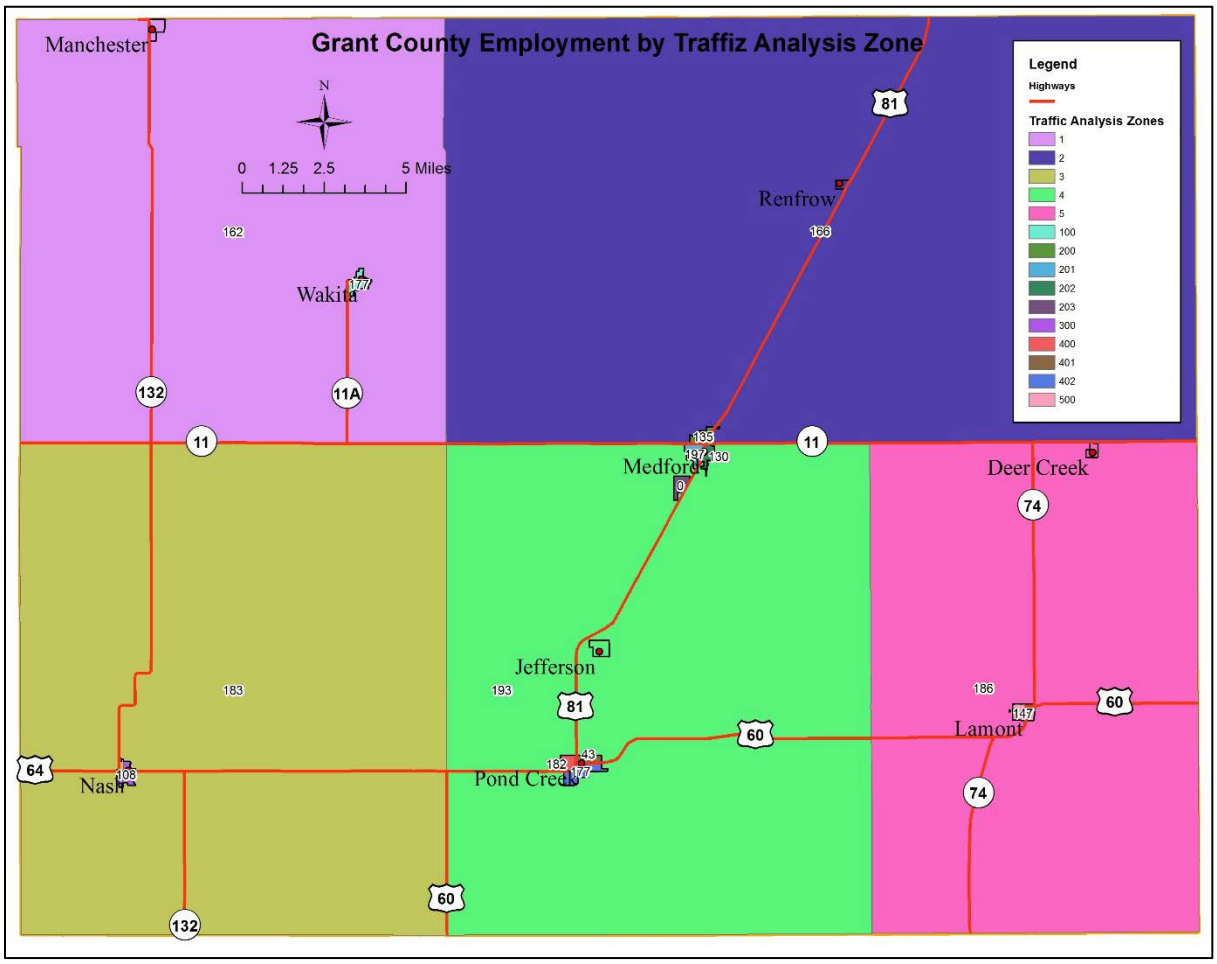
Source: NORTPO

Map 2.4 Pond Creek Traffic Analysis Zones (TAZ)



Source: NORTPO

Map 2.5 Grant County Employment by TAZ



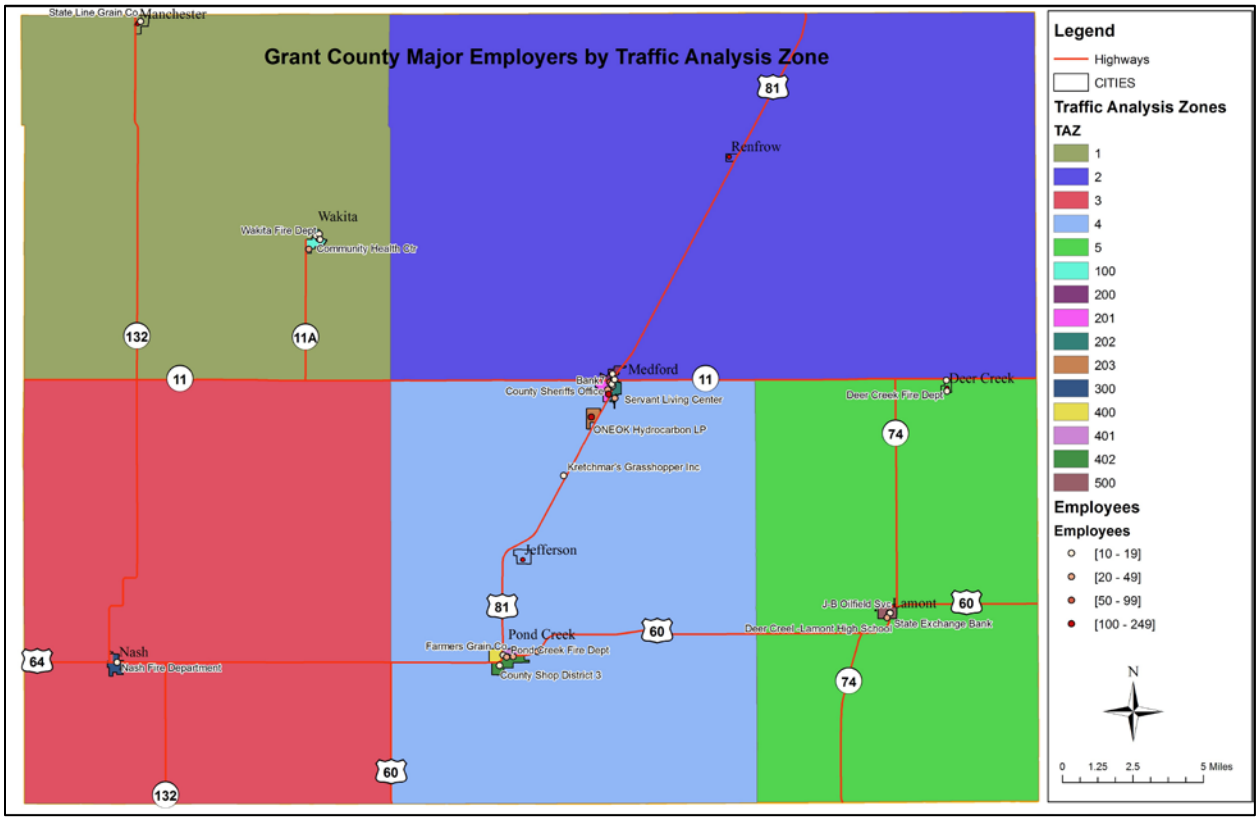
Source: NORTPO

Table 2.6 Grant County Employment by TAZ

Grant County Employment by TAZ	
TAZ	Employment
1	162
2	166
3	183
4	193
5	186
100	177
200	135
201	197
202	130
203	0
300	108
400	182
401	43
402	177
500	147

Source: NORTPO

Map 2.6 Grant County Major Employers by TAZ



Source: NORTPO

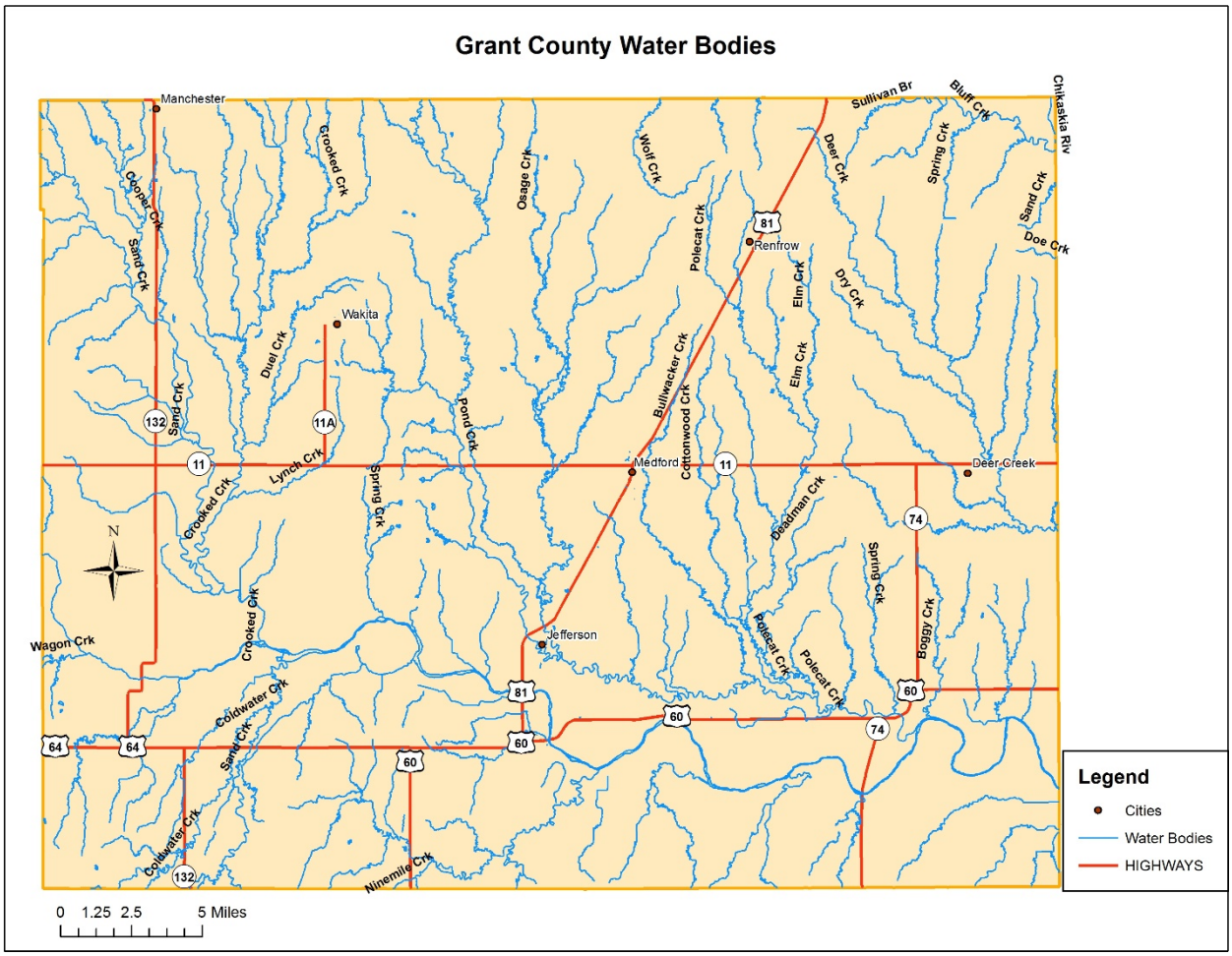
Table 2.7 Grant County Major Employers

Employer	Address	# of Employees
Little B's Construction Inc	26535 US Highway 81, Medford, OK 73759	[20 - 49]
J-B Oilfield Services	103 S. Main St, Lamont, OK 74643	[10 - 19]
Pond Creek Pallet Inc	E0237 Rd and Highway 60, Pond Creek, OK 73766	[20 - 49]
Kretchmar's Grasshopper Inc	24531 US Highway 81, Medford, OK 73759	[10 - 19]
State Line Grain Co	1132 5th St, Manchester, OK 73758	[10 - 19]
Farmers Grain Co	302 W Broadway, Pond Creek, OK 73766	[10 - 19]
Jiffy Trip	210 E Highway 11, Medford, OK 73759	[10 - 19]
ONEOK Hydrocarbon LP	25923 US Highway 81, Medford, OK 73759	[100 - 249]
W B Johnston Grain Co Inc	202 W Creek St, Wakita, OK 73771	[10 - 19]
Bank7	120 N 1st St, Medford, OK 73759	[10 - 19]
State Exchange Bank	101 S Main St, Lamont, OK 74643	[10 - 19]

Employer	Address	# of Employees
Deer Creek-Lamont Elementary	1643 Main St, Deer Creek, OK 74636	[10 - 19]
Deer Creel-Lamont High School	1192 Harrison Ave, Lamont, OK 74643	[20 - 49]
Medford Public Schools	301 N Main St, Medford, OK 73759	[50 - 99]
Pond Creek-Hunter Public Schools	200 E Broadway St, Pond Creek, OK 73766	[20 - 49]
Miller EMS	514 N 1st St, Medford, OK 73759	[10 - 19]
Servant Living Center	616 S Front St, Medford, OK 73759	[20 - 49]
Medford Family Clinic	158 E Sunset Dr, Medford, OK 73759	[10 - 19]
Community Health Center	1153 Cherokee St, Wakita, OK 73771	[20 - 49]
Gonzales Welding & Constr.	405 S Main Street, Medford, OK 73759	[100 - 249]
County Sheriff Office	219 N 1st St, Medford, OK 73759	[10 - 19]
County Shop District 3	416 W Dogwood Dr, Pond Creek, OK 73766	[10 - 19]
County Shop District 2	524 N. Front St, Medford, OK 73759	[10 - 19]
County Shop District 1	2005 Elm St, Wakita, OK 73771	[10 - 19]
Deer Creek Fire Dept.	106 N Main St, Deer Creek, OK 74636	[10 - 19]
Nash Fire Department	109 N Main, Nash, OK 73761	[10 - 19]
Wakita Fire Dept	114 W Main, Wakita, OK 73771	[10 - 19]
Pond Creek Fire Dept	109 S 2nd St, Pond Creek, OK 73766	[20 - 49]

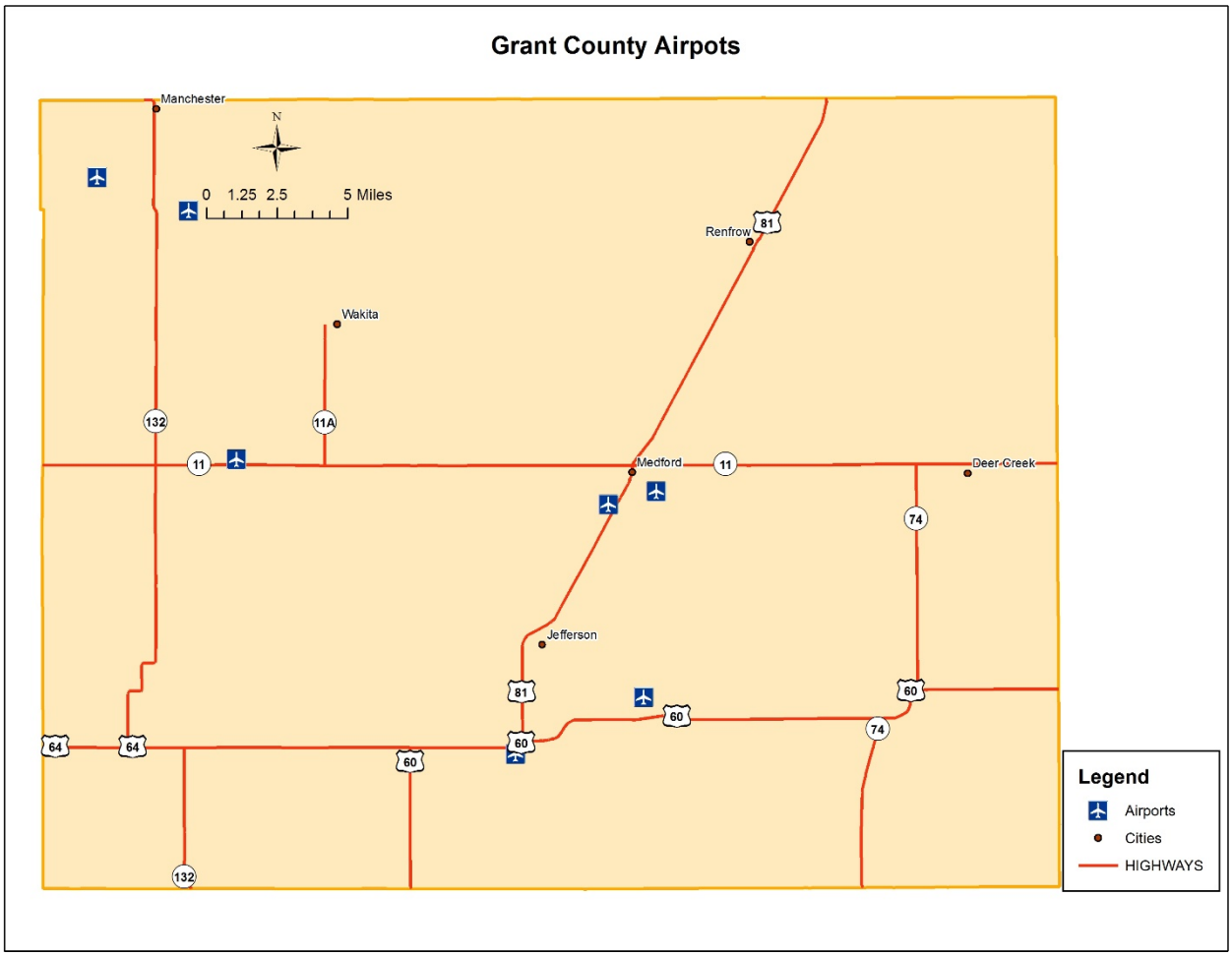
Source: US Census Bureau

Map 2.7 Grant County Water Bodies



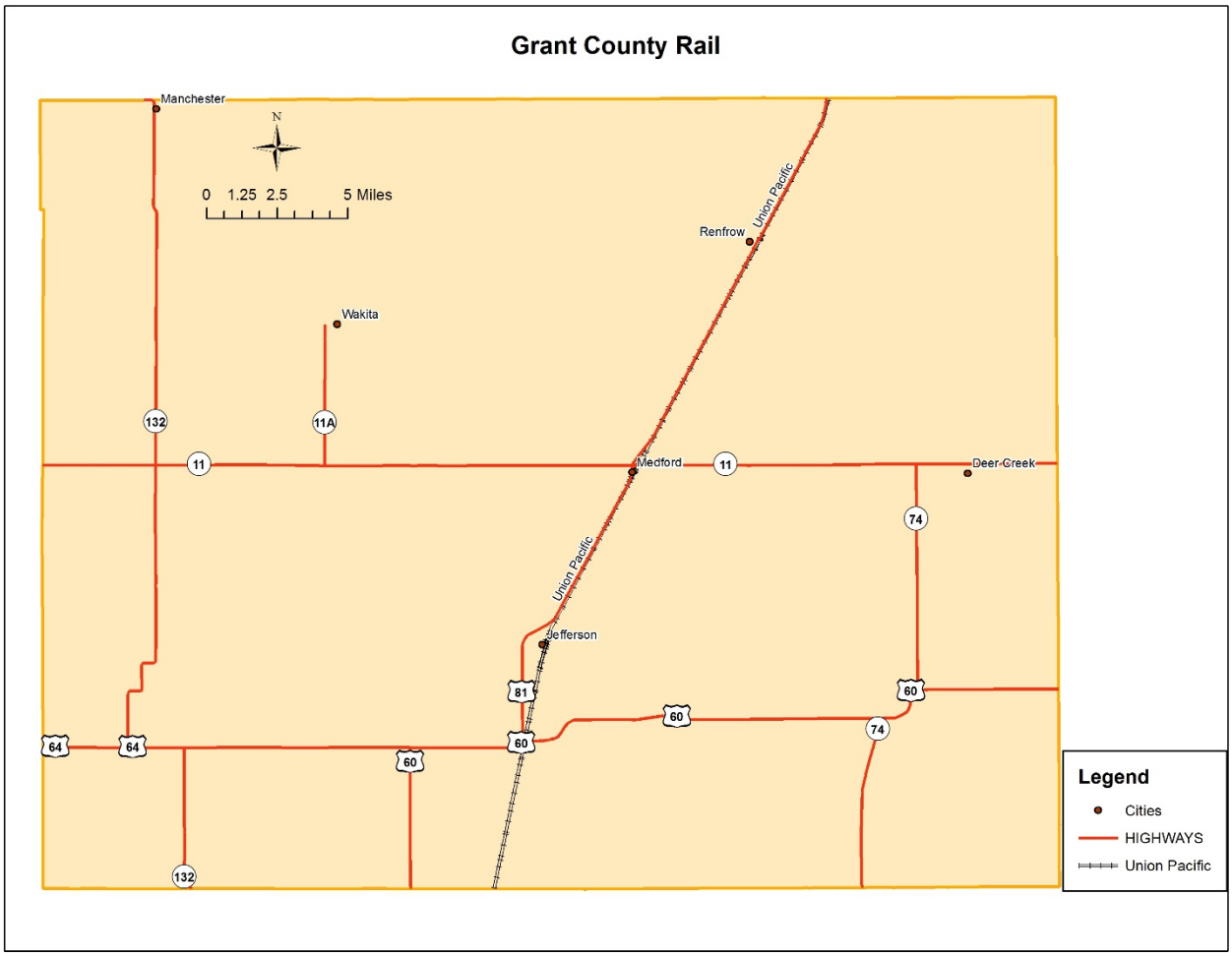
Source: csa.ou.edu

Map 2.8 Grant County Airports



Source:csa.ou.edu

Map 2.9 Grant County Highways and Rail Lines



Source:csa.ou.edu

Map 2.10 Grant County Historic Places

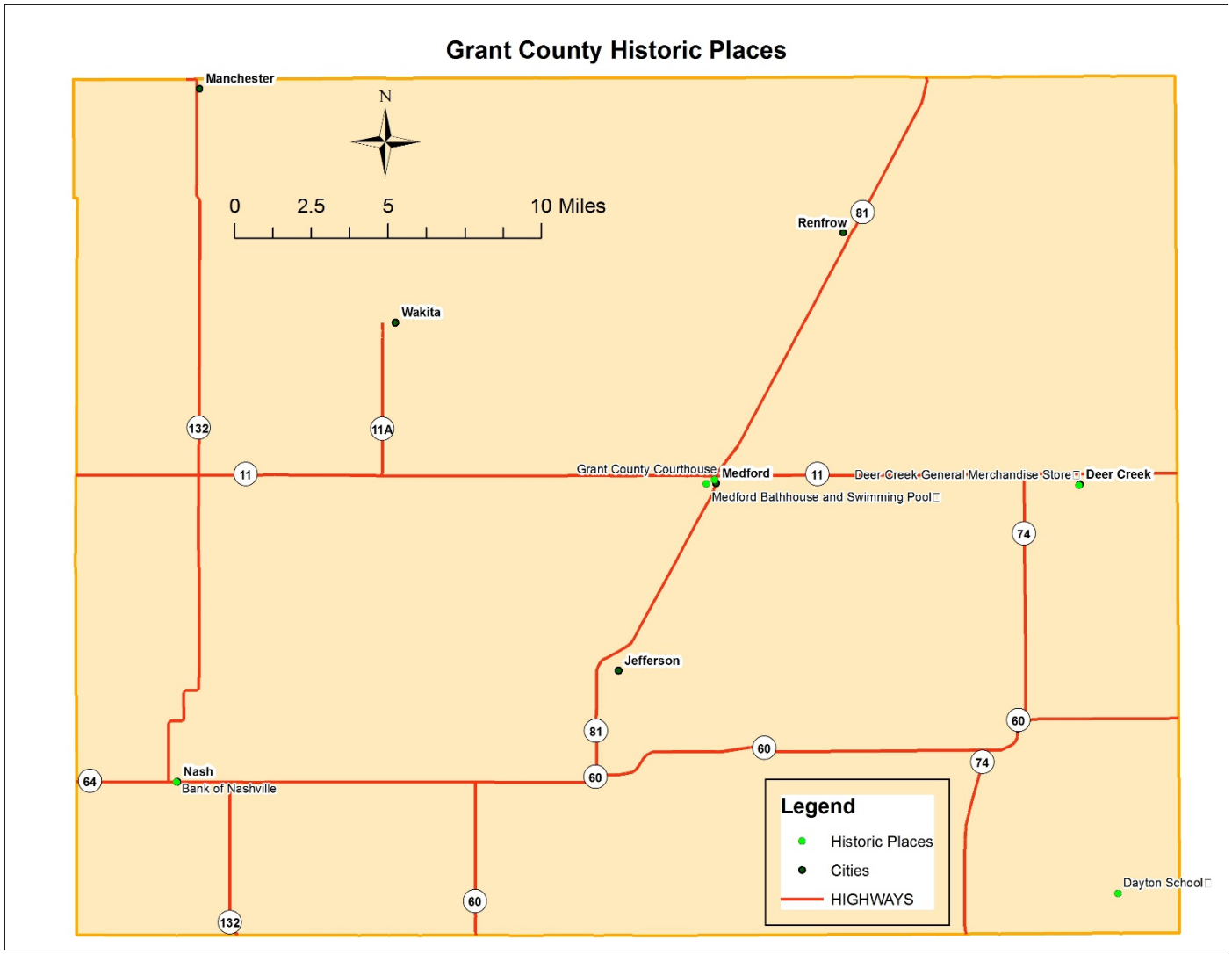


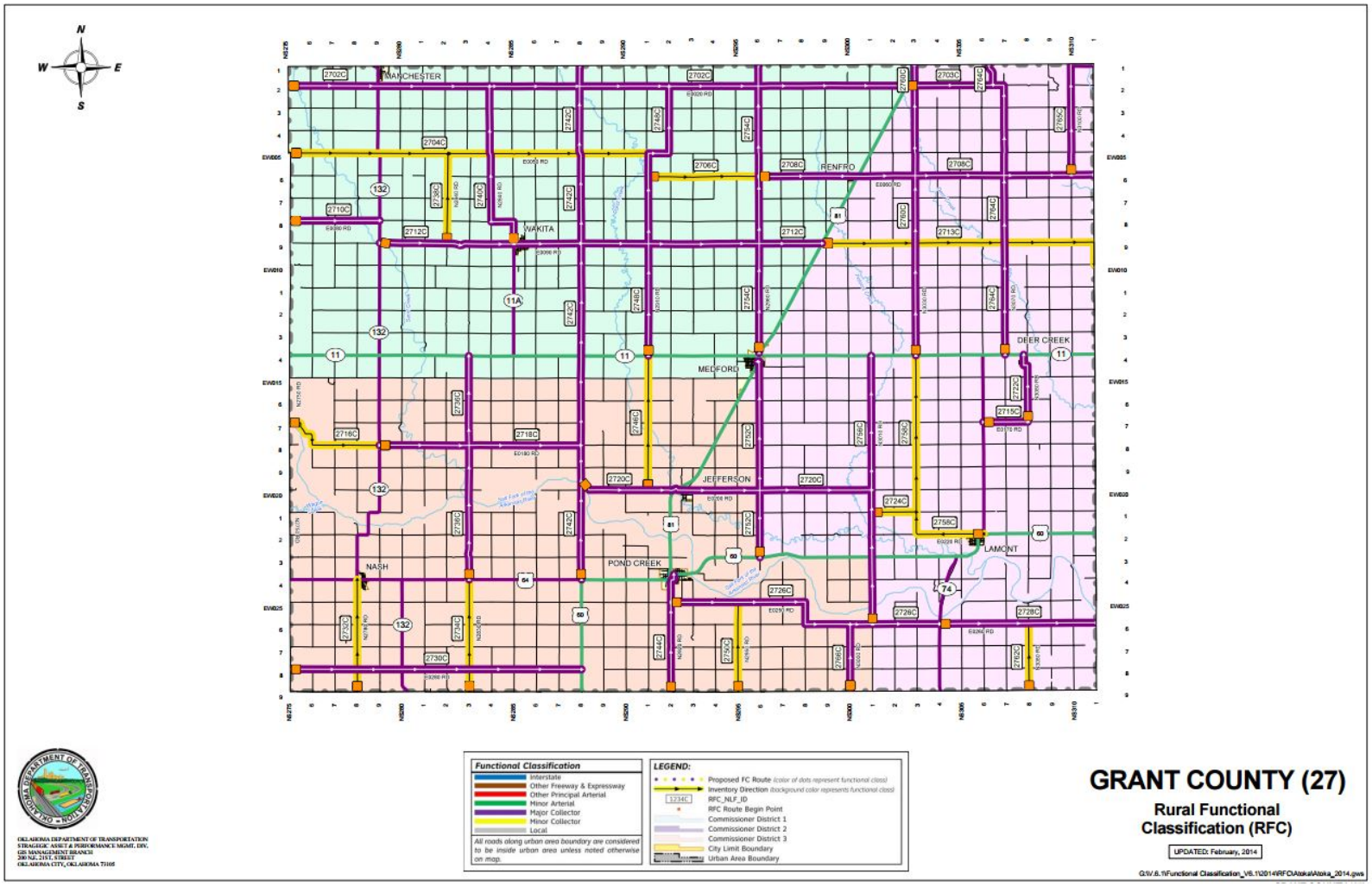
Table 2.8 Grant County Historic Places

Name	Address	City	Owner	Category	Ownership
Bank of Nashville	Junction U.S. 64 & Main St	Nash	Town of Nash	Building	Public
Dayton School	SE of Lamont	Lamont	Kenneth Schuelein	Building	Private
Deer Creek General Merchandise Store	South Main Street	Deer Creek	James Lehman	Building	Private

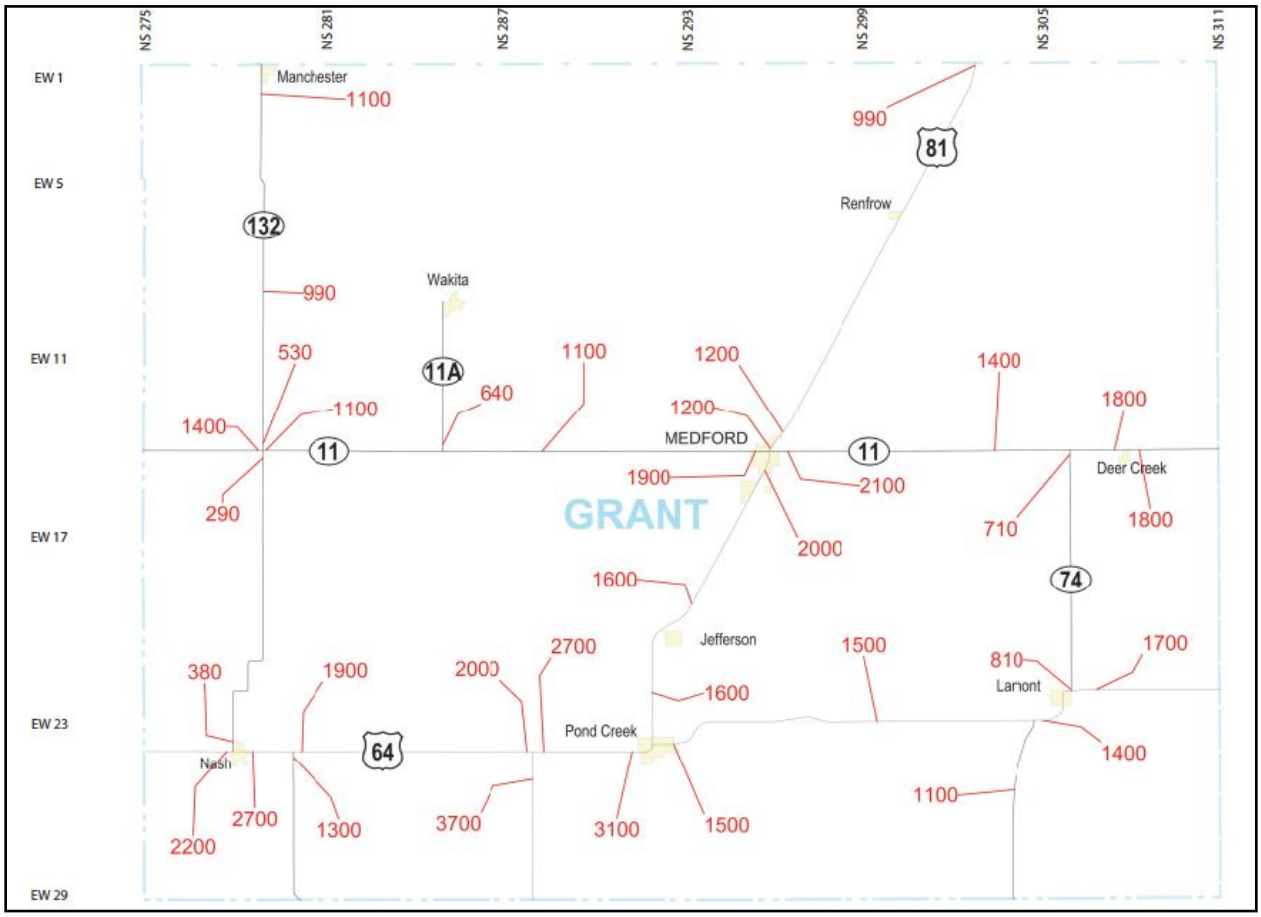
Name	Address	City	Owner	Category	Ownership
Grant County Courthouse	W Guthrie St, Between N Main & Highway 81	Medford	Grant County	Building	Public
Medford Bathhouse & Swimming Pool	Guthrie & 5th Street	Medford	City of Medford	Structure	Public
Pond Creek Masonic Lodge	126 E. Broadway	Pond Creek	Masonic Lodge #125	Building	Private

Source: Oklahoma Historical Society/State Historic Preservation Office

Map 2.11 Grant County Functional Classification



Map 2.12 Grant County Average Daily Traffic Counts



Map 2.13 Grant County Collisions by Severity

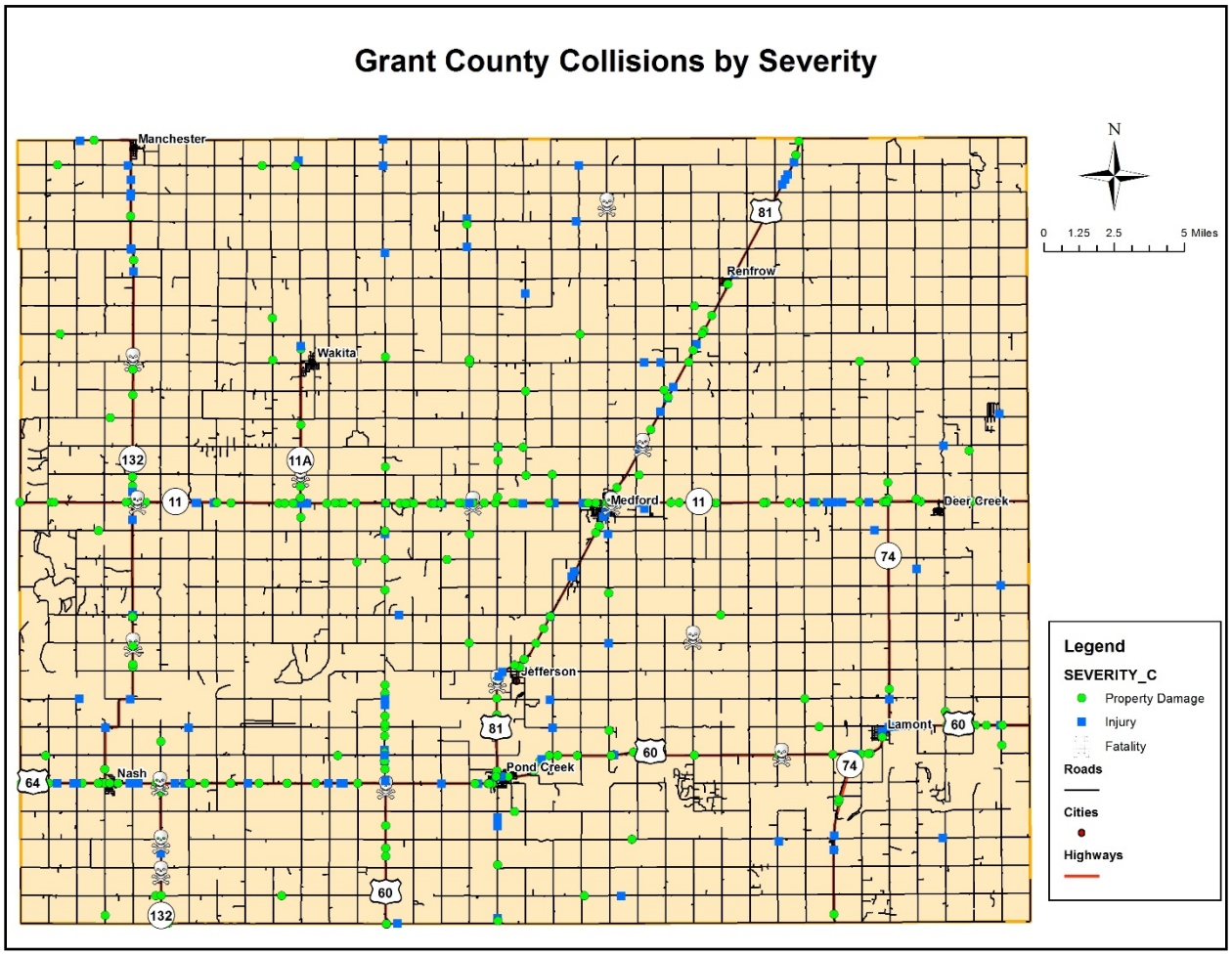
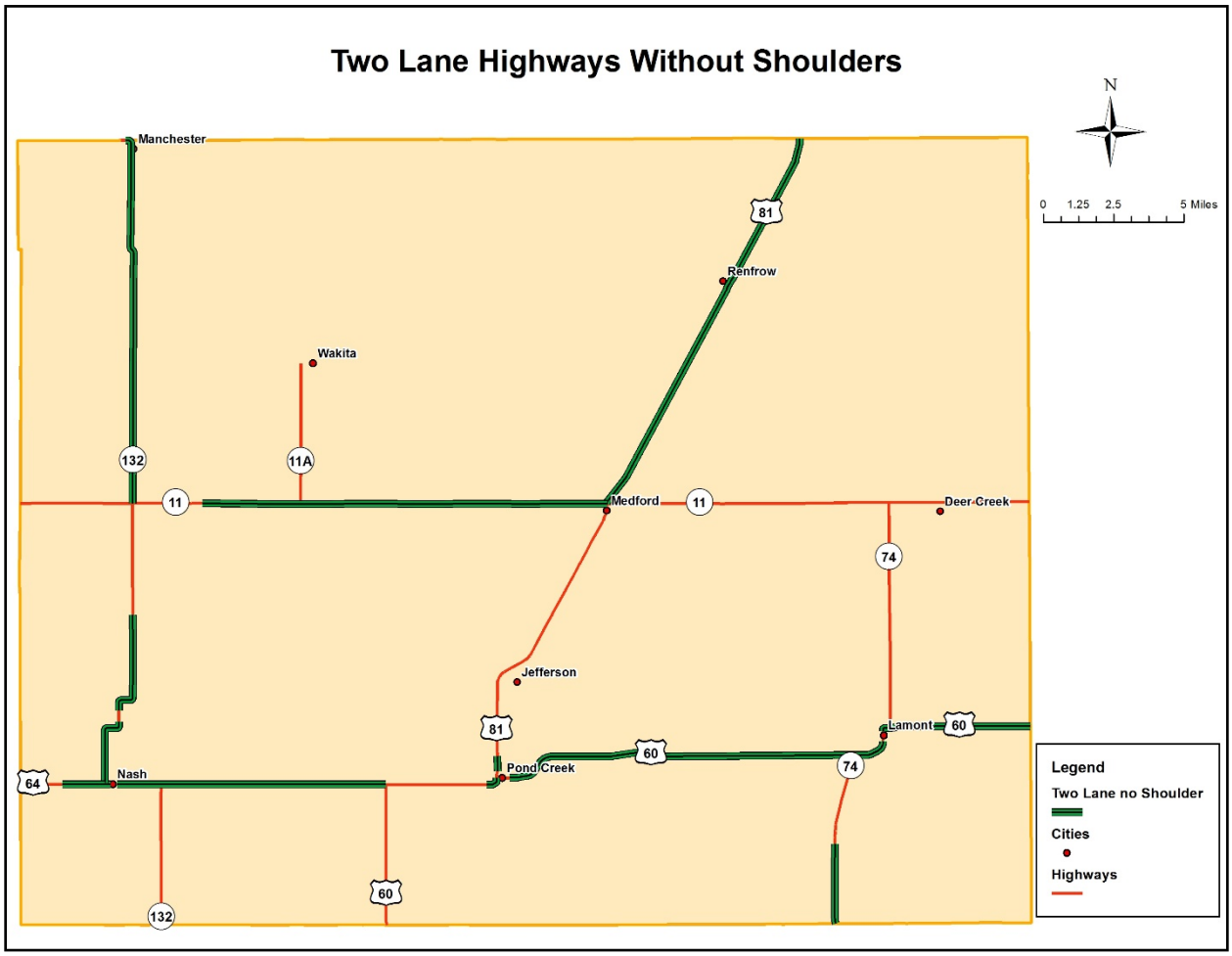


Table 2.9 Grant County Collisions 2011- 2015

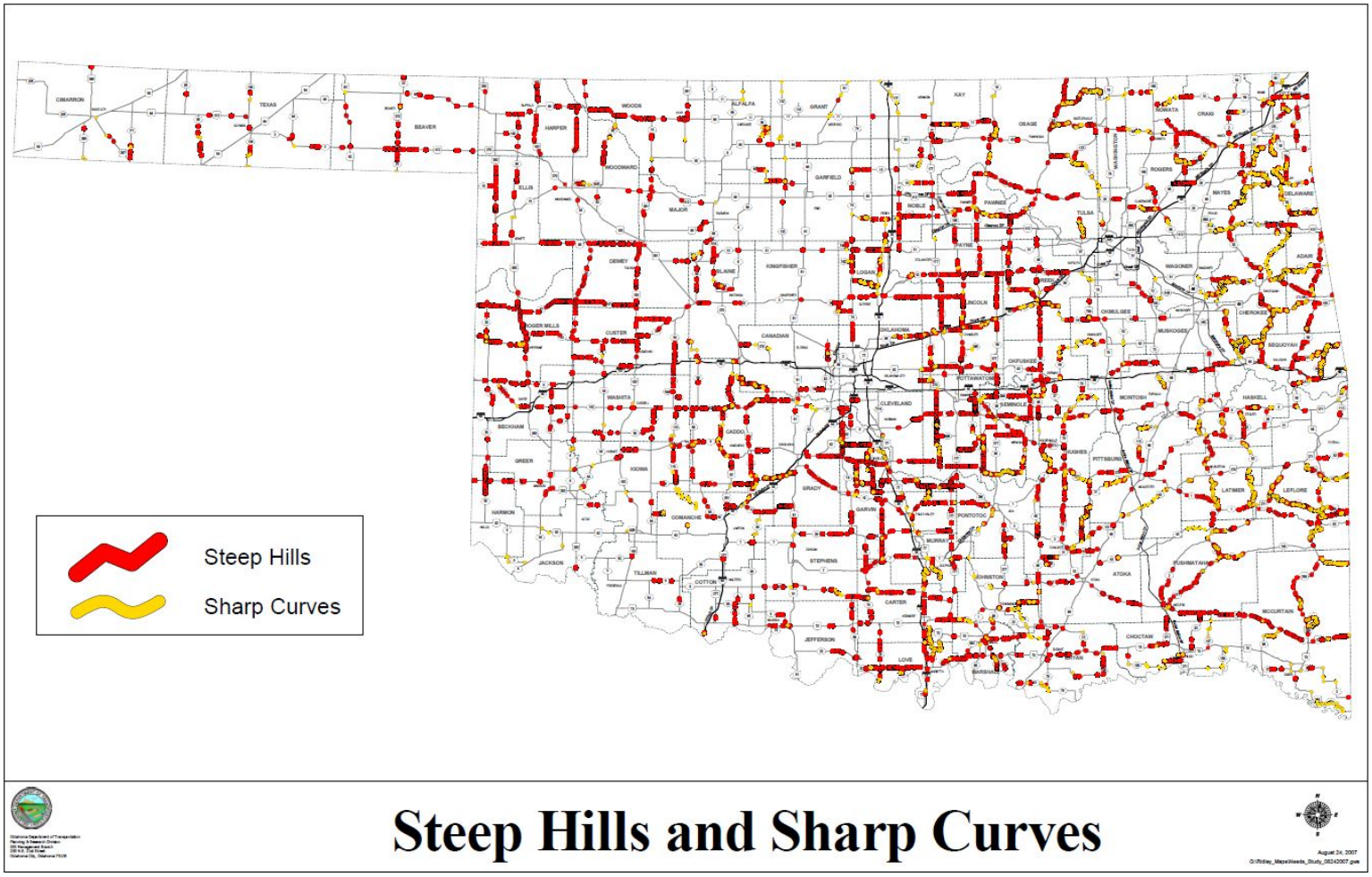
	Highway Collisions				City Street Collisions				County Road Collisions				Total Collisions			
	Fat.	Inj*	PD	Tot	Fat.	Inj*	PD	Tot	Fat.	Inj*	PD	Tot	Fat.	Inj*	PD	Tot
- Rural -	12	99	182	293					2	45	73	120	14	144	255	413
Lamont		1	1	2										1	1	12
Medford	1	4	11	16		1	4	5					1	5	15	21
Nash			3	3											3	3
Pond Creek		4	16	20		3	13	16						7	29	36
Renfrow		1		1										1		1
Wakita						1	3	4						1	3	4
Total:	13	109	213	335		5	20	25	2	45	73	120	15	159	306	480

Source: Oklahoma Department of Transportation/Traffic Engineering Div. Collision Analysis and Safety Branch

Map 2.14 Grant County Two Lane Highways without Shoulders



Map 2.15 Oklahoma Steep Hills and Sharp Curves



Map 2.16 Grant County Bridges

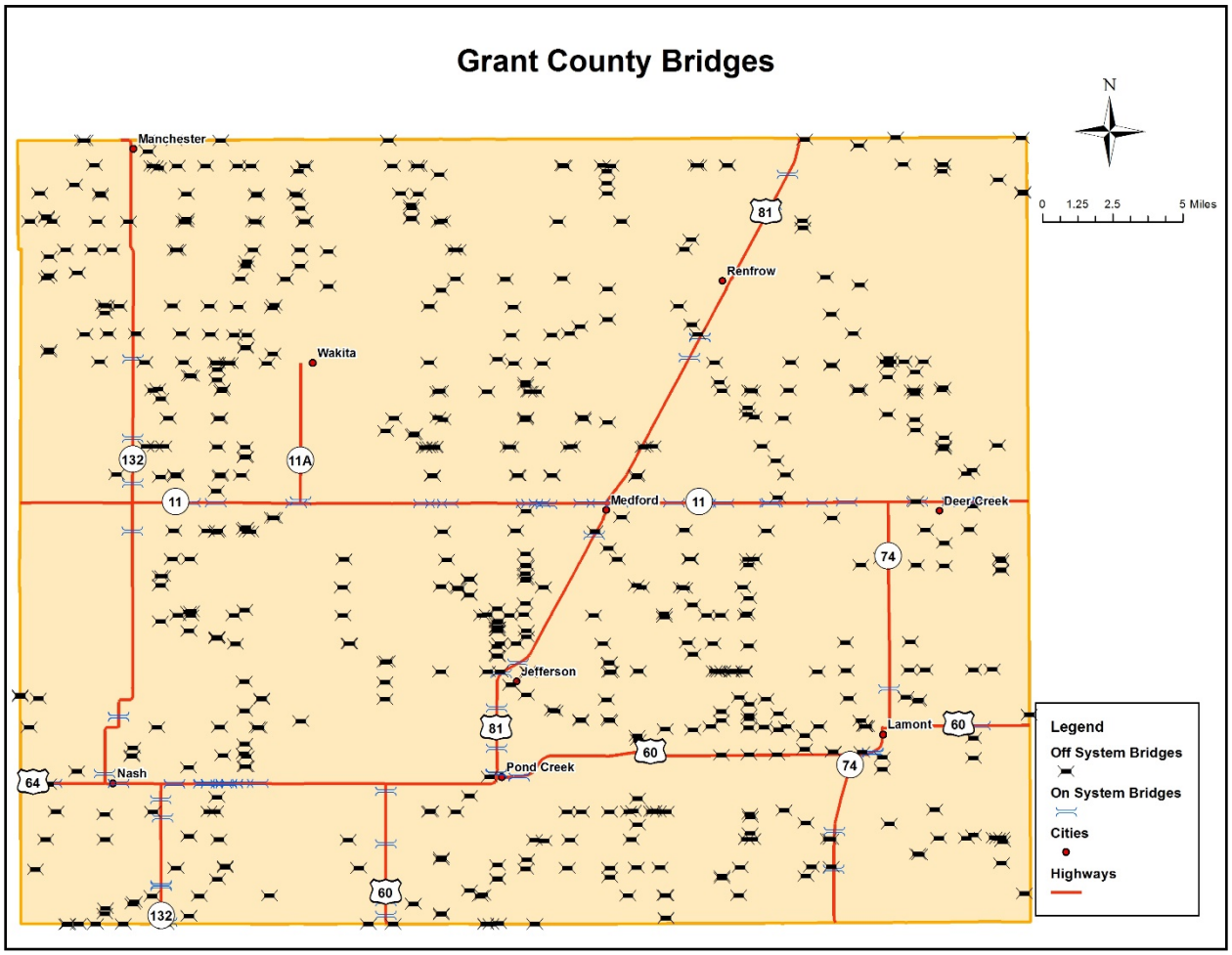


Table 2.10 Grant County Bridges

Owner	Feature Intersected	Location	Year Built	Design	Material
State	Killpecker Creek	.1 Mi N Jct US 60	1924	Culvert	Concrete
State	Creek	3.5 Mi E Alfalfa c/l	1925	Slab	Concrete
State	Polecat Creek	6 Mi N Jct SH 11	1926	Girder	Steel
State	Creek	6.7 Mi N Jct SH 11	1926	Girder	Steel
State	Creek	2.4 Mi E Jct US 81	1926	Culvert	Concrete
State	Creek	5.8 Mi E Jct US 81	1926	Culvert	Concrete
State	Polecat Creek	5.9 Mi E Jct US 81	1926	Girder	Steel
State	Creek	2.9 Mi S Kansas St.	1927	Culvert	Concrete
State	Creek	2.7 S Kansas St. Line	1927	Culvert	Concrete
State	Creek	1.3 S Kansas St. Line	1927	Culvert	Concrete
State	Creek	1.2 Mi S Jct SH 11	1928	Culvert	Concrete
County	Little Antelope Creek	1E of Jct SH11/SH74	1928	Slab	Concrete
County	Creek	.5E 6N 3.4E of Wakita	1930	Girder	Steel
County	Polecat Creek	1.N 6.3E of SH11/US81	1930	Girder	Wood or Timber
County	Creek	4N .1E of US 60/US81	1930	Truss-thru	Steel
County	Creek	2.2S 2.6E of Pond Creek	1930	Culvert	Concrete
County	Creek	2.2S 2.6E of Pond Creek	1930	Culvert	Concrete
County	Creek	1.7E 5S of Nash	1930	Girder	Steel
County	Creek	.3W 1.1S of Nash	1930	Slab	Concrete
County	Creek	4.7E 6.2N of Nash	1930	Girder	Steel
County	Creek	4.7E 2.6N of Nash	1930	Culvert	Concrete
County	Osage Creek	.2N of Jefferson	1930	Truss-thru	Steel
County	Creek	1.2S 5E .5S of Pond Creek	1930	Slab	Concrete
County	Cottonwood Creek	.3N 3.2E 3.5S of Medford	1930	Girder	Steel
County	Polecat Creek	.2N .7E 4.7S of Renfrow	1930	Girder	Wood or Timber
State	Creek	5.5 Mi E Alfalfa c/l	1931	Slab	Concrete
State	Creek	6.5 Mi E Alfalfa c/l	1931	Slab	Concrete
State	Coldwater Creek	6.8 Mi E Alfalfa c/l	1931	Girder	Concrete
State	Creek	7.1 Mi E Alfalfa c/l	1931	Culvert	Concrete
State	Sand Creek	7.3 Mi E Alfalfa c/l	1931	Girder	Concrete
State	Creek	7.5 Mi E Alfalfa Co.	1931	Slab	Concrete
State	Creek	4.6 Mi W Jct US 81	1931	Culvert	Concrete
State	Creek	.4 Mi E Jct US 81	1932	Culvert	Concrete
State	Creek	2.6 Mi W Jct SH 74	1932	Culvert	Concrete
State	Boggy Creek	4.2 Mi W Kay c/l	1933	Girder	Steel
State	Creek	1.8 Mi W Kay c/l	1933	Culvert	Concrete
State	Creek	3.5 Mi E Jct US 81	1933	Culvert	Concrete
State	Creek	4.2 Mi E Jct US 81	1933	Culvert	Concrete

Owner	Feature Intersected	Location	Year Built	Design	Material
State	Creek	1.5 Mi W Jct SH 74	1933	Culvert	Concrete
State	Little Antelope Creek	1.1 Mi E Jct SH 74	1933	Culvert	Concrete
State	Creek	2.7 Mi W Grant-Kay c/l	1933	Culvert	Concrete
State	Pond Creek	1.5 Mi E of Jct SH 74	1934	Truss-thru	Steel
County	Creek	1.3W 4.1N .3E of Renfrow	1934	Slab	Concrete
County	Creek	.6E of Manchester	1935	Girder	Steel
County	Creek	1.7S 4.5E of Manchester	1935	Girder	Wood or Timber
County	Creek	3W 4.S of Manchester	1935	Girder	Wood or Timber
State	Salt Fork Arkansas Riv.	1 Mi E Jct US 81	1936	Truss-thru	Steel
State	Creek	0.7 Mi W Jct US 81	1936	Culvert	Concrete
State	Creek	.3 Mi W Jct US 81	1936	Culvert	Concrete
County	Creek	.7S 2.6E of Manchester	1936	Culvert	Concrete
County	Creek	4S 3.6E of SH11/SH132	1936	Girder	Steel Continuous
County	Creek	.2N 4.9E of Salt Fork	1936	Girder	Steel
County	Creek	.2E 3.2 N of Medford	1936	Culvert	Concrete
County	Creek	.8S of Lamont	1936	Culvert	Concrete
County	Creek	.8S 1.6E of Manchester	1938	Girder	Steel
County	Creek	.7S 3.8E of Manchester	1938	Girder	Steel
County	Creek	.7S 4.3E of Manchester	1938	Girder	Steel
County	Bullwacker Creek	5.8S 3.8E of Medford	1939	Girder	Steel
County	Polecat Creek	.2E .2N 7.2E of Jefferson	1939	Girder	Steel
County	Polecat Creek	.2E .2N 7.5E of Jefferson	1939	Girder	Steel
County	Creek	6S 1.3E of SH11/SH74	1939	Girder	Steel
State	Creek	4.3 Mi E Jct SH 11A	1940	Culvert	Concrete
State	Pond Creek	14.9 Mi E Alfalfa Co.	1940	Truss-thru	Steel
State	Creek	5.1 Mi E Jct SH 11A	1940	Culvert	Concrete
State	Osage Creek	8.1 Mi E Jct SH 11A	1940	Girder	Steel
State	Cottonwood Creek	2.6 Mi W Jct US 81	1940	Girder	Steel
State	Creek	1.9 Mi N Garfield Co.	1940	Culvert	Concrete
County	Wolf Creek	.3W 3.2N 3.9W of Renfrow	1940	Girder	Wood or Timber
County	Creek	3.7S 1.6E of Manchester	1940	Floor Bm	Steel
County	Creek	3.7S 4.2E of Manchester	1940	Girder	Steel
County	Pond Creek	4.5E 3N .5E of Wakita	1940	Girder	Steel
County	Cooper Creek	7N .6W of SH11 & SH132	1940	Girder	Steel
County	Creek	4.4W 2N .6W of Wakita	1940	Girder	Steel
County	Pond Creek	0.5E 2N 3.7E of Wakita	1940	Girder	Wood or Timber
County	Osage Creek	6.5E 2N .5E of Wakita	1940	Girder	Wood or Timber
County	Creek	4N .7E of Sand Creek	1940	Girder	Wood or Timber
County	Creek	1N 3.8W of Wakita	1940	Girder	Wood or Timber
County	Creek	6N 1.4W of SH11/US81	1940	Girder	Wood or Timber

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	7.5W of Wakita	1940	Girder	Wood or Timber
County	Sand Creek	5N .4E of SH11/SH132	1940	Truss-thru	Steel
County	Creek	5N 1.8E of SH1/SH132	1940	Girder	Steel
County	Duel Creek	1.6 W of Wakita	1940	Culvert	Concrete
County	Polecat Creek	.3W 2.8S .2W of Renfrow	1940	Girder	Steel
County	Creek	3N 3.3E of SH11/SH11A	1940	Girder	Wood or Timber
County	Creek	3N 3.9W of US 81/SH11	1940	Girder	Wood or Timber
County	Creek	1.4N .9E of Deer Creek	1940	Girder	Wood or Timber
County	Sand Creek	4S 1.6E of SH11/SH132	1940	Truss-thru	Steel
County	Spring Creek	4S 1.6E of SH11/ SH11A	1940	Girder	Steel
County	Wild Horse Creek	2.2S 1.1E of Pond Creek	1940	Truss-thru	Steel
County	Creek	2.2S 1.4E of Pond Creek	1940	Girder	Steel Continuous
County	Creek	.2N 2.8W of Salt Fork	1940	Girder	Steel
County	Creek	3.4S 2.5E of Pond Creek	1940	Slab	Concrete
County	Creek	1.7S 2E .9S of Manchester	1940	Girder	Wood or Timber
County	Crooked Creek	.4W 6.8N of Wakita	1940	Girder	Wood or Timber
County	Creek	3.4S 4E of Pond Creek	1940	Girder	Concrete
County	Creek	3.9W 1.S of Salt Fork	1940	Girder	Wood or Timber
County	Creek	.3N 5.2E 3.5S of Medford	1940	Girder	Steel
County	Pond Creek	1.3 S of Lamont	1940	Truss-thru	Steel
County	Spring Creek	.1E 12.2N of Deer Creek	1940	Girder	Wood or Timber
County	Creek	.3N 3.1E of Manchester	1941	Culvert	Concrete
County	Creek	.3W 5S .9W of Nash	1941	Box Bm. Multi	Steel
County	Coldwater Creek	.3W 5S .3W of Nash	1941	Girder	Concrete
County	Creek	5E 3.4N of Medford	1941	Slab	Concrete
County	Creek	.3N .6E of Manchester	1945	Slab	Concrete
County	Creek	.7S3W4S.1W of Manchester	1945	Girder	Wood or Timber
County	Creek	2.5W 3N .2W of Wakita	1945	Girder	Steel
County	Creek	7 N 3.7E of SH132/SH11	1945	Girder	Steel
County	Creek	6N 1.9W of US81/SH 11	1945	Girder	Wood or Timber
County	Elm Creek	3N 6.3E of SH11/US81	1945	Girder	Wood or Timber
County	Dead Man Creek	4.1E 5S of US81/SH11	1945	Girder	Wood or Timber
County	Creek	.2E .8S 2.9E of Jefferson	1945	Girder	Steel
County	Creek	7S .9E of SH11/SH74	1945	Girder	Wood or Timber
County	Creek	1.2S 1.5W of Pond Creek	1945	Slab	Concrete
County	Coldwater Creek	1.7E 3S .5E of Nash	1945	Girder	Wood or Timber
County	Creek	5.7E 3.2S of Pond Creek	1945	Girder	Wood or Timber
County	Creek	1.8S 3.1W of Salt Fork	1945	Girder	Wood or Timber
County	Creek	.3E1.3S4.5E.4N Pond Creek	1945	Girder	Steel
County	Creek	4.7E of Renfrow	1945	Girder	Wood or Timber

Owner	Feature Intersected	Location	Year Built	Design	Material
State	Sand Creek	6.1 E Alfalfa c/l	1946	Girder	Steel
State	Crooked Creek	7 Mi E Alfalfa c/l	1946	Truss-thru	Steel
State	Creek	0.1 Mi W Jct SH 11A	1946	Culvert	Concrete
County	Creek	.2N 6W of Renfrow	1946	Culvert	Concrete
County	Creek	3E 2.8N of SH11A/SH11	1947	Girder	Steel
State	Creek	1.4 Mi N Jct US 60	1948	Culvert	Concrete
County	Elm Creek	4N 6.5E of US81/SH11	1948	Girder	Steel
County	Creek	4N 1.9E of SH11/SH74	1948	Girder	Wood or Timber
County	Creek	.2E 1.4S of Medford	1948	Culvert	Concrete
County	Horse Creek	3S .9W of US64/US81	1949	Girder	Wood or Timber
State	Creek	2.2 Mi W Jct US 81	1950	Culvert	Concrete
County	Chikaskia River	.2N9.7E5N.8E of Renfrow	1950	Slab	Concrete
County	Creek	.2N5.7E4N.6E of Renfrow	1950	Girder	Steel
County	Crooked Creek	1.7S 5.9E of Manchester	1950	Girder	Wood or Timber
County	Creek	2.6S .2W of Manchester	1950	Girder	Wood or Timber
County	Osage Creek	8.0 Mi W of Renfrow	1950	Girder	Steel
County	Polecat Creek	6N 3.2E of SH11/US81	1950	Girder	Wood or Timber
County	Spring Creek	.3W 2.8S 6.5E of Renfrow	1950	Girder	Steel
County	Creek	5N 1.3E of SH11/SH74	1950	Girder	Wood or Timber
County	Creek	.5W of Sand Creek	1950	Girder	Wood or Timber
County	Creek	1S 1.7 W of Sand Creek	1950	Girder	Wood or Timber
County	Duel Creek	1N 3.9E of SH11/SH132	1950	Girder	Steel
County	Lynch Creek	1S 3.1E of SH11/SH132	1950	Girder	Steel
County	Lynch Creek	1S 1.8W of SH 11/SH11A	1950	Girder	Steel
County	Lynch Creek	1S 4.3E of SH11/SH132	1950	Girder	Wood or Timber
County	Cottonwood Creek	.7S 2.8E of Medford	1950	Girder	Wood or Timber
County	Little Antelope Creek	1S 1.4E of SH11/SH74	1950	Girder	Steel
County	Bullwacker Creek	2S .3E of SH11/US81	1950	Girder	Wood or Timber
County	Big Antelope Creek	2S .1E of SH11/SH74	1950	Girder	Steel
County	Bullwacker Creek	3S 1.2E of SH11/US81	1950	Girder	Wood or Timber
County	Creek	.8W 4S .4E of SH11/US81	1950	Girder	Wood or Timber
County	Cottonwood Creek	3.8S 3.3E of Medford	1950	Girder	Wood or Timber
County	Pond Creek	.2N1.8W1N.1Eof Jefferson	1950	Girder	Wood or Timber
County	Creek	1.1N 3E of Jefferson	1950	Girder	Wood or Timber
County	Bullwacker Creek	4.8S 2.8E of Medford	1950	Girder	Wood or Timber
County	Creek	.2N 4.7W of Jefferson	1950	Girder	Wood or Timber
County	Spring Creek	6S 1.5W of SH11/SH74	1950	Girder	Steel
County	Boggy Creek	6S .7E of SH11/SH74	1950	Girder	Wood or Timber
County	Creek	6.S 3.8E of SH11/SH74	1950	Girder	Wood or Timber
County	Polecat Creek	7S 5.4W of SH11/SH74	1950	Girder	Wood or Timber

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	3.9E 2.N of Nash	1950	Girder	Wood or Timber
County	Coldwater Creek	3.7E 1N .2E of Nash	1950	Girder	Wood or Timber
County	Creek	1.7E 1S .2W of Nash	1950	Girder	Wood or Timber
County	Creek	.3N2.1E1N1.6 of Salt Fork	1950	Girder	Wood or Timber
County	Creek	1.4W 2S 1.1W of Nash	1950	Girder	Wood or Timber
County	Creek	.3W 2S .1E of Nash	1950	Girder	Wood or Timber
County	Sand Creek	3.7E 2.S of Nash	1950	Girder	Wood or Timber
County	Creek	1.3W 3S 1.5W of Nash	1950	Girder	Wood or Timber
County	Creek	3.2S 4E of Pond Creek	1950	Girder	Wood or Timber
County	Creek	.8S 3.3W of Salt Fork	1950	Girder	Wood or Timber
County	Creek	.1E .7S .8W of Salt Fork	1950	Girder	Wood or Timber
County	Creek	4S,.8W of 74 & 60	1950	Girder	Wood or Timber
County	Creek	4.7E 4S .9E of Nash	1950	Girder	Wood or Timber
County	Creek	4.2S 4.7E of Pond Creek	1950	Girder	Wood or Timber
County	Creek	1.8S 6W of Salt Fork	1950	Girder	Wood or Timber
County	Creek	.1E 1.8S 6.8E of Salt Fork	1950	Girder	Steel
County	Sand Creek	6N 1W .8N of SH11/SH132	1950	Girder	Wood or Timber
County	Creek	.7E 1.2N of Nash	1950	Girder	Steel
County	Creek	.2S of Hawley	1950	Girder	Wood or Timber
County	Creek	2.7E .6N of Nash	1950	Girder	Steel
County	Coldwater Creek	2.7E 1.9S of Nash	1950	Girder	Wood or Timber
County	Creek	3E .3N of SH132/SH11	1950	Girder	Wood or Timber
County	Lynch Creek	3W 1.1S of SH11A/SH11	1950	Truss-thru	Steel
County	Creek	.3S1.2W.4S of Pond Creek	1950	Girder	Wood or Timber
County	Creek	.2N .8E 2.2N of Jefferson	1950	Girder	Wood or Timber
County	Pond Creek	.2N .8W .9N of Jefferson	1950	Girder	Steel
County	Creek	.3N2.8W1.9S of US81/SH11	1950	Girder	Wood or Timber
County	Osage Creek	.3N2.8W2.5S of US81/SH11	1950	Girder	Wood or Timber
County	Creek	.8E 3.3S of Pond Creek	1950	Girder	Wood or Timber
County	Creek	.1E 12N of Medford	1950	Culvert	Concrete
County	Creek	.1E 11.7N of Medford	1950	Culvert	Concrete
County	Creek	1.2S 4E of Pond Creek	1950	Girder	Steel
County	Bullwacker Creek	.2E 1.7S 1E .9S of Medford	1950	Girder	Wood or Timber
County	Creek	5.9W 2S of Salt Fork	1950	Girder	Wood or Timber
County	Polecat Creek	1.3W 1.5S of Renfrow	1950	Girder	Steel
County	Bullwacker Creek	.3N 3.2E 5.5S of Medford	1950	Girder	Steel
County	Polecat Creek	.3W 3.7S of Renfrow	1950	Girder	Steel
County	Creek	1W .6 N of Salt Fork	1950	Girder	Wood or Timber
County	Creek	.2N .9W 1.3S of Salt Fork	1950	Girder	Wood or Timber
County	Spring Creek	.3N .8E .1N of Lamont	1950	Girder	Wood or Timber

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Deer Creek	4.4N of Jct SH74/SH11	1950	Girder	Wood or Timber
County	Deer Creek	.2N 2.1E .5N of Salt Fork	1950	Culvert	Concrete
County	Big Antelope Creek	.3N 1.2E 5.8N of Lamont	1950	Girder	Steel
County	Creek	.3N 5.2E .4N of Lamont	1950	Girder	Wood or Timber
County	Dry Creek	3.1N of SH74/SH 11	1951	Girder	Wood or Timber
County	Creek	.3N 3.2 E .5S of Lamont	1951	Girder	Steel
County	Creek	.3N 4.3W of Lamont	1952	Girder	Wood or Timber
County	Creek	.3N 3.9W 1.3S of Salt Fork	1952	Girder	Wood or Timber
County	Creek	.2N 5.1E .1N of Salt Fork	1952	Girder	Wood or Timber
State	Creek	.1 Mi N Jct SH 11	1955	Culvert	Concrete
County	Deer Creek	2.3N .1E of Deer Creek	1955	Girder	Steel
County	Bullwacker Creek	.5S .5E of SH11/US81	1955	Girder	Steel
County	Osage Creek	2.8W 1S .4W of SH11/US81	1955	Truss-thru	Steel
County	Sand Creek	2S 1.4E of SH11/SH132	1955	Girder	Wood or Timber
County	Creek	5S 1.5W of SH11/SH74	1955	Girder	Wood or Timber
County	Creek	6.S 3.1E of SH11/SH74	1955	Girder	Steel
County	Creek	3.3W 2N .3E of Nash	1955	Girder	Wood or Timber
County	Creek	1S 1.8W of Nash	1955	Girder	Wood or Timber
County	Coldwater Creek	1.7E 1S 1.8E of Nash	1955	Girder	Wood or Timber
County	Sand Creek	2.7E 1S .9E of Nash	1955	Girder	Wood or Timber
County	Creek	3S 4.9E of Pond Creek	1955	Girder	Wood or Timber
County	Wild Horse Creek	4.2S 1.3W of Pond Creek	1955	Girder	Wood or Timber
County	Sand Creek	3.7E .4S of Nash	1955	Girder	Wood or Timber
County	Wild Horse Creek	1E 1.1N of Co. Line/US81	1955	Girder	Wood or Timber
County	Creek	.2N 2.9W of Salt Fork	1955	Girder	Wood or Timber
County	Creek	2W .6S of SH11/SH74	1955	Girder	Wood or Timber
County	Creek	.1E 4.5N of Deer Creek	1955	Girder	Wood or Timber
County	Little Antelope Creek	.2E 1.1 S of Deer Creek	1955	Girder	Steel
County	Creek	.3N 2.2W of Lamont	1957	Girder	Wood or Timber
State	Creek	0.7 Mi N Jct SH 11	1959	Culvert	Concrete
State	Creek	2.3 Mi N Jct SH 11	1959	Culvert	Concrete
County	Creek	.2W of Sand Creek	1959	Culvert	Concrete
County	Creek	.2E 7N of Medford	1959	Girder	Wood or Timber
County	Deer Creek	.2N1.7E2N.9E of Renfrow	1960	Girder	Wood or Timber
County	Big Antelope Creek	2S .2W of SH11/SH74	1960	Girder	Steel
County	Creek	.2N 4.3E of Jefferson	1960	Girder	Steel
County	Sand Creek	1.7N of Sand Creek	1960	Truss-thru	Steel
County	Creek	1E .9N of SH132/SH11	1960	Girder	Steel
County	Creek	2E 2.3N of Co. Line/US81	1960	Girder	Wood or Timber
County	Creek	5.3S of Pond Creek	1960	Culvert	Concrete

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Dry Creek	1.W 3.9N of SH74/SH11	1960	Girder	Steel
State	Creek	.1 Mi N Garfield c/l	1961	Culvert	Concrete
State	Coldwater Creek	1.4 Mi N Garfield Co.	1961	Culvert	Concrete
State	Creek	1.5 Mi N Garfield Co.	1961	Culvert	Concrete
State	Creek	0.5 Mi S of Jct US 64	1961	Culvert	Concrete
State	Creek	1 Mi N Jct US 60	1962	Culvert	Concrete
State	Salt Fork Arkansas Riv.	1.6 Mi N Jct US 60	1962	Girder	Steel Continuous
State	Creek	2.5 Mi N Jct US 60	1962	Culvert	Concrete
State	Antelope Creek	6.1 Mi N Jct US 60	1962	Culvert	Concrete
County	Creek	.2N 2.8W of Jefferson	1962	Culvert	Concrete
County	Creek	.2W3.7N .3W of Pond Creek	1962	Culvert	Concrete
State	Creek	1 Mi S Jct SH 11	1966	Culvert	Concrete
State	Nine Mile Creek	0.3 Mi N Garfield c/l	1967	Culvert	Concrete
State	Creek	.8 Mi N Garfield c/l	1967	Culvert	Concrete
State	Creek	1.1 Mi N Garfield Co.	1967	Girder	Steel
State	Pond Creek	3.8 Mi N Jct US 60	1967	Girder	Steel Continuous
State	Osage Creek	4.5 Mi N Jct US 60	1967	Girder	Steel Continuous
State	Creek	2.9 Mi N Garfield Co.	1969	Culvert	Concrete
County	Creek	6N 1.7W of SH11/SH132	1970	Culvert	Concrete
County	Creek	2.2S 5.4W of Pond Creek	1970	Girder	Steel
County	Sand Creek	3.7S 2.4E of Manchester	1975	Girder	Steel
City	Creek	2Blk SW of US60/US81	1975	Girder	Steel
County	Pond Creek	.7S 9.4E of Manchester	1981	Culvert	Concrete
County	Salt Fork Arkansas Riv.	4.7E 3.6N of Nash	1981	Girder	Pre-stressed Conc.
State	Salt Fork Arkansas Riv.	3.2 Mi N Garfield c/l	1982	Girder	Pre-stressed Conc.
County	Cooper Creek	3.7S .7W of Manchester	1982	Girder	Steel
County	Creek	.3W 2N 1.6E of Nash	1982	Girder	Steel
County	Coldwater Creek	1.7E 4S .3W of Nash	1982	Tee Beam	Pre-stressed Conc.
County	Creek	1.3W .4N of Nash	1982	Girder	Steel
County	Deer Creek	1E 3.9N of SH74/SH11	1982	Girder	Concrete
County	Cooper Creek	2.7S 1.2W of Manchester	1983	Girder	Concrete
County	Wild Horse Creek	3.3S of Pond Creek	1983	Girder	Concrete
County	Deer Creek	.1E 2.7N of Deer Creek	1983	Girder	Concrete
County	Deer Creek	.2N 3.5E of Renfrow	1985	Tee Beam	Pre-stressed Conc.
County	Sand Creek	2N 1.2E of SH11/SH132	1985	Girder	Concrete
County	Coldwater Creek	4.7E 1.4N of Nash	1985	Girder	Concrete
County	Cooper Creek	.7S 1.2W of Manchester	1986	Girder	Concrete
County	Sand Creek	6N .8W of SH132/SH11	1987	Tee Beam	Pre-stressed Conc.
County	Pond Creek	5N 6.4E of SH11/US 81	1987	Girder	Concrete
County	Osage Creek	5N 3.4W of US81/SH11	1987	Culvert	Concrete

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	5N 2.4W of US81/SH11	1987	Culvert	Concrete
County	Crooked Creek	2N 3.1E of SH11/SH132	1987	Tee Beam	Pre-stressed Conc.
County	Crooked Creek	2S 2.1E of SH11/SH132	1987	Girder	Steel
County	Wild Horse Creek	1.2S 2.5E of Pond Creek	1987	Girder	Pre-stressed Conc.
County	Creek	1.2S 3.E of Pond Creek	1987	Girder	Steel
County	Creek	1.2S 5.6E of Pond Creek	1987	Girder	Steel
County	Creek	1.2S 5.6E of Pond Creek	1987	Girder	Steel
County	Creek	.9W 6.5N of Medford	1987	Girder	Steel
County	Pond Creek	.2E.2N3E2.4S of Jefferson	1987	Girder	Steel
County	Pond Creek	.2E.2N5E2.2S of Jefferson	1987	Girder	Steel
County	Osage Creek	6N 3.5W of US81/SH 11	1988	Girder	Steel
County	Elm Creek	3.W 2.8S 2.6E of Renfrow	1988	Culvert	Steel
County	Duel Creek	2N 4.1E of SH11/H132	1988	Girder	Steel
County	Deer Creek	1S 2.8E of SH11/SH74	1988	Girder	Steel
County	Creek	5.2S 3.7W of Pond Creek	1988	Girder	Steel
County	Creek	.2E 8.1N of Medford	1988	Girder	Steel
County	Bluff Creek	.2N 9.7E 3.4N of Renfrow	1988	Girder	Pre-stressed Conc.
State	Creek	.2 Mi N Jct US 64	1989	Culvert	Steel
County	Crooked Creek	6N 4.1E of SH132/SH11	1989	Girder	Concrete
County	Crooked Creek	4S 2.1E of SH11/SH132	1989	Girder	Pre-stressed Conc.
County	Sand Creek	1.7E 4S 1.4E of Nash	1989	Tee Beam	Pre-stressed Conc.
County	Dead Man Creek	.3N2.8W1N2W1.8Nof Lamont	1989	Tee Beam	Pre-stressed Conc.
County	Pond Creek	.7S 4.8W 1N of Lamont	1989	Girder	Pre-stressed Conc.
County	Creek	2.7E 2N of Renfrow	1989	Girder	Wood or Timber
County	Deer Creek	.2N 3.7E 1.1S of Renfrow	1989	Girder	Concrete
County	Creek	2S 4.9E of SH11/US81	1990	Culvert	Concrete
County	Salt Fork Arkansas Riv.	4.2N of US81/US64	1990	Girder	Pre-stressed Conc.
County	Osage Creek	.3N2.8W3.6S of US81/SH11	1990	Girder	Steel
County	Polecat Creek	.3N 5.2E 2.3S of Medford	1990	Girder	Pre-stressed Conc.
County	Cottonwood Creek	.3N2.8W1N2W.1S of Lamont	1990	Culvert	Concrete
County	Polecat Creek	.3N2.8W1N2W.5S of Lamont	1990	Girder	Concrete
County	Creek	.3N2.8W1N2W.6S of Lamont	1990	Culvert	Concrete
County	Crooked Creek	1S 2.7E of SH11/SH132	1991	Girder	Steel
County	Sand Creek	1N of Hawley	1991	Girder	Wood or Timber
County	Sand Creek	4.1W 2.8N of Pond Creek	1991	Tee Beam	Pre-stressed Conc.
County	Creek	2.7S 3.6W of Manchester	1992	Girder	Steel
County	Creek	.2N6.7E2N.1E of Renfrow	1992	Culvert	Steel
County	West Br of Crooked Cr.	1N 2.8E of Wakita	1992	Girder	Concrete
County	Cottonwood Creek	2S 2.9E of SH11/SH81	1992	Girder	Concrete
County	Spring Creek	1W5S .7E of SH11/SH11A	1992	Box Bm. Sngl	Steel

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Cottonwood Creek	1.1N 7E of Jefferson	1992	Girder	Wood or Timber
County	Cottonwood Creek	.2E .2N 6.9E of Jefferson	1992	Girder	Steel
County	Creek	3.8 Mi E of Salt Fork	1992	Tee Beam	Pre-stressed Conc.
County	Pond Creek	.7S 2.7W .1N of Lamont	1992	Girder	Pre-stressed Conc.
County	Creek	6S 5.2W of SH11/SH74	1993	Culvert	Steel
County	Creek	.2N 5.9E of Salt Fork	1993	Tee Beam	Pre-stressed Conc.
County	Lynch Creek	5E 9.1N of Nash	1993	Girder	Concrete
County	Creek	5E .6 N of Nash	1993	Girder	Concrete
County	Creek	6.7E 2.2N of Nash	1993	Girder	Pre-stressed Conc.
County	Creek	6.9W 10.7N of Medford	1993	Girder	Steel
County	Pond Creek	.2N 2.2E 1.7Sof Jefferson	1993	Box Bm. Multi	Steel
County	Creek	.2N 3.2E .3N of Jefferson	1993	Box Bm. Multi	Steel
County	Salt Fork Arkansas Riv.	.7S 2.8 W 1N of Salt Fork	1993	Girder	Pre-stressed Conc.
County	Creek	.3N 3.1E .6S of Salt Fork	1993	Culvert	Steel
County	Crooked Creek	10N 6.2E of SH11 & SH132	1994	Box Bm. Multi	Steel
County	Creek	3.4W 2N .3W of Wakita	1994	Box Bm. Multi	Steel
County	Creek	2W 1N of US81/SH11	1994	Girder	Steel
County	Creek	.2E .2N 7.3E of Jefferson	1994	Culvert	Steel
County	Coldwater Creek	.3W 2N 5.5E of Nash	1994	Box Bm. Sngl	Steel
County	Crooked Creek	2.4W .6N of Wakita	1994	Girder	Concrete
County	Sand Creek	4.7E 1N of Nash	1994	Box Bm. Sngl	Steel
County	Creek	.3S4W3.7N of Pond Creek	1994	Culvert	Steel
County	Pond Creek	.3N 4.8W 3.3S of Medford	1994	Box Bm. Sngl	Steel
County	Pond Creek	.2N .8W 1.4N of Jefferson	1994	Box Bm. Multi	Steel
County	Osage Creek	4N 2.9W US81/ SH11	1995	Box Bm. Multi	Steel
County	Crooked Creek	.4W 4S 2.9W of Wakita	1995	Girder	Pre-stressed Conc.
County	Polecat Creek	3.8S 4.9E of Medford	1995	Girder	Steel
County	Osage Creek	4.N & 1.1E of US81/US60	1995	Girder	Pre-stressed Conc.
County	Creek	4.5W .5S of Wakita	1995	Box Bm. Multi	Steel
County	Crooked Creek	3W 4.7S of Jct 11/11A	1995	Girder	Steel
County	Crooked Creek	2W4S1W.8S of Jct 11/11A	1995	Girder	Steel
County	Creek	2.4W 3.6N of Wakita	1995	Box Bm. Multi	Steel
County	Creek	3.7S of Pond Creek	1995	Culvert	Steel
County	Creek	3N 10.8 E of Renfrow	1996	Box Bm. Multi	Steel
County	Sand Creek	2N .2W of Sand Creek	1996	Box Bm. Multi	Steel
County	Pond Creek	1S 4.4E of Wakita	1996	Box Bm. Multi	Steel
County	Osage Creek	.7N 1.9E of Clyde	1996	Box Bm. Multi	Steel
County	Pond Creek	.2S 1.4W of Clyde	1996	Box Bm. Multi	Steel
County	Creek	2N 1.3E Jct SH11/US81	1996	Girder	Steel
County	Pond Creek	4S 4.3E of Wakita	1996	Box Bm. Multi	Steel

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Pond Creek	4.8W 1S .9Wof SH11/SH81	1996	Box Bm. Multi	Steel
County	Pond Creek	4.8W 3S .4W of SH11/US81	1996	Box Bm. Multi	Steel
County	Sand Creek	1.7E 3S 2.3E of Nash	1996	Box Bm. Multi	Steel
County	Creek	2W 1.3S of Manchester	1996	Box Bm. Multi	Steel
County	Duel Creek	2W 1.6N of SH 11/SH11A	1996	Girder	Steel
County	Creek	.6W 3.8N of Wakita	1996	Box Bm. Multi	Steel
County	Pond Creek	.2W 5.5N of Pond Creek	1996	Girder	Steel
County	Osage Creek	.3N2.8W2.2S of US81/SH11	1996	Girder	Steel
County	Creek	.3N 1.1E .9N of Medford	1996	Culvert	Steel
County	Creek	1W 4N 1.3E of Renfrow	1997	Girder	Steel
County	Lynch Creek	1W .5S of SH11A/SH11	1997	Box Bm. Multi	Steel
County	Pond Creek	.2N.8W1.6N of Jefferson	1997	Box Bm. Multi	Steel
County	Sullivan Creek	5N 4.7E of Renfrow	1997	Box Bm. Multi	Steel
County	Creek	.4N.8W 4.6N of Deer Creek	1997	Box Bm. Multi	Steel
County	Dry Creek	.3N .9W 2.6Nof Deer Creek	1997	Box Bm. Multi	Steel
County	Cooper Creek	1.7S 1.1W of Manchester	1998	Girder	Steel
County	Pond Creek	4.6E 4N .6E of Wakita	1998	Box Bm. Multi	Steel
County	Creek	3.5W of Wakita	1998	Girder	Pre-stressed Conc.
County	Pond Creek	3.8W 4S .4W of SH11/US81	1998	Box Bm. Multi	Steel
County	Coldwater Creek	4.7E 3N .6E of Nash	1998	Box Bm. Multi	Steel
County	Creek	1.7S 3.2W of Manchester	1998	Box Bm. Multi	Steel
County	Creek	3W 8.1N of SH132/SH11	1998	Girder	Steel
County	Coldwater Creek	.3W 4.7S of Nash	1998	Tee Beam	Pre-stressed Conc.
County	Coldwater Creek	.7W 4.2S of Nash	1998	Box Bm. Multi	Steel
County	Creek	3W 4.3N of SH11A/SH11	1998	Tee Beam	Pre-stressed Conc.
County	Osage Creek	2.9W 4.2N of US81/SH11	1998	Box Bm. Multi	Steel
County	Creek	.3N 1.2E .9N of Lamont	1998	Box Bm. Multi	Steel
State	Deer Creek	2.7 Mi E Jct SH 74	1999	Girder	Pre-stressed Conc.
County	Sand Creek	7N 1.1W of SH132/SH11	1999	Girder	Steel
County	Crooked Creek	3W of Wakita	1999	Tee Beam	Pre-stressed Conc.
County	Creek	5.8S .1E of Medford	1999	Tee Beam	Pre-stressed Conc.
State	Sand Creek	5.1 Mi N Jct SH 11	2000	Girder	Pre-stressed Conc.
County	Creek	.3S 2.2W 1S .4W Pond Creek	2000	Girder	Wood or Timber
County	Sand Creek	6N 2W 2.2N of SH132/SH11	2000	Box Bm. Multi	Steel
County	Pond Creek	.2N .8W .5N of Jefferson	2000	Girder	Steel
County	Pond Creek	.2N 1.2E 1.4S Jefferson	2000	Girder	Steel
County	Deer Creek	2E 2.5S of Deer Creek	2000	Tee Beam	Pre-stressed Conc.
State	Creek	1.6 Mi W of Kay c\l	2001	Girder	Pre-stressed Conc.
County	Creek	.2S 1.2W of Clyde	2001	Girder	Steel
County	Creek	2.2N 1.3W of Medford	2001	Girder	Steel

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	2S 2.3E of SH11/US81	2001	Culvert	Steel
County	Creek	.7S 1E .1S Manchester	2001	Girder	Steel
County	Creek	.7S 10E 1.9S Manchester	2001	Girder	Steel
County	Creek	2N 4E .5N of SH11/SH11A	2001	Girder	Steel
County	Pond Creek	.2N 3.2E 1.8Sof Jefferson	2001	Girder	Pre-stressed Conc.
County	Creek	4.6W .1N of US60/SH74	2001	Culvert	Concrete
County	Creek	3.6W .1N of US60/SH74	2001	Culvert	Concrete
County	Creek	2.6W .1N of US60/SH74	2001	Culvert	Concrete
County	Creek	1.7S 9.6E of Manchester	2002	Box Bm. Multi	Steel
County	Creek	2.7S 1.8E of Manchester	2002	Girder	Steel
County	Osage Creek	1N 3.3W of SH11/US81	2002	Box Bm. Multi	Steel
County	Nine Mile Creek	5.2S 4.7W of Pond Creek	2002	Girder	Steel
State	Killpecker Creek	.5S Jct US 81	2003	Culvert	Concrete
County	Creek	1.7S 1.8E of Manchester	2003	Box Bm. Sngl	Steel
County	Creek	2.7S 4.4E of Manchester	2003	Girder	Steel
County	Spring Creek	.3N .8W of Lamont	2003	Girder	Steel
County	Creek	1.2S 4.8E of Pond Creek	2003	Girder	Pre-stressed Conc.
County	Creek	1E 1.3N of Renfrow	2003	Girder	Steel
County	Creek	6E .9S of Salt Fork	2003	Girder	Steel
County	Deer Creek	5N .1W of SH11/SH74 Jct	2004	Girder	Pre-stressed Conc.
County	Osage Creek	2.2N 3.6W of Medford	2004	Box Bm. Multi	Steel
County	Sand Creek	4.2S .6W of Pond Creek	2004	Box Bm. Multi	Steel
County	Creek	6E .1S of Salt Fork	2004	Girder	Steel
County	Creek	.6E 3.9N of Wakita	2005	Girder	Steel
County	Creek	1S of KS S/L&.8E of SH132	2006	Girder	Pre-stressed Conc.
County	Wolf Creek	12N 1.5W of US81/SH11	2006	Tee Beam	Pre-stressed Conc.
County	Creek	4.3W4.1N2.1W Renfrow	2006	Girder	Steel
County	Creek	1S.7W of 11&83 Junction	2006	Girder	Steel
County	Creek	.3N .6W of Lamont	2006	Girder	Wood or Timber
County	Creek	_	2006	Girder	Pre-stressed Conc.
County	Creek	3W5.4N of S.H.132/S.H.11	2006	Girder	Steel
County	Creek	11E .4S of Manchester	2006	Girder	Steel
County	Wild Horse Creek	2E.4N of Co. Line /U.S.81	2006	Girder	Steel
County	Osage Creek	1.3N 3W 2.1N of Medford	2006	Girder	Steel
County	Dry Creek	2W4.9N of S.H.74/S.H.11	2006	Girder	Steel
County	Creek	.7S, 10.3E of Manchester	2007	Girder	Steel
County	Creek	0	2007	Girder	Steel
County	Crooked Creek	3N, 3.1E of Manchester	2007	Girder	Steel
County	Creek	.2N of Salt Fork	2007	Girder	Pre-stressed Conc.
County	Crooked Creek	1.4W 1.9N of Wakita	2007	Girder	Steel Continuous

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	.27N, 1.7W 3.4N Jefferson	2007	Girder	Steel
State	Creek	1.1Mi.E. Alfalfa c/l	2008	Girder	Pre-stressed Conc.
County	Crooked Creek	0.7S6.2E of Manchester	2008	Girder	Pre-stressed Conc.
County	Creek	3.4N, 2.8W of Jefferson	2008	Girder	Steel
County	Creek	4.0E2.19S of S.H.74/SH-11	2008	Girder	Pre-stressed Conc.
State	Salt Fork Arkansas Riv.	2.8N Jct U.S. 64/S.H. 132	2009	Girder	Pre-stressed Conc.
County	Creek	0.5N 2E of Manchester	2009	Girder	Steel
County	Sand Creek	1.8S 3.2W of Manchester	2009	Girder	Steel
County	Crooked Creek	3.7S 6E Manchester	2009	Girder	Steel
County	Crooked Creek	.5W 3N .5W Wakita	2009	Girder	Steel
County	Creek	.2N, 3W of Salt Fork	2009	Girder	Steel
County	Creek	0.1Mi.S. U.S.64 on N0276	2009	Culvert	Concrete
County	Pond Creek	4.6E 5N .1E of Wakita	2010	Girder	Steel
County	Crooked Creek	4N 3.2E of SH11/SH132	2010	Girder	Steel
County	Polecat Creek	6E 4N 1E of SH11/SH74	2010	Girder	Steel
County	Pond Creek	3S 3.6E of Wakita	2010	Tee Beam	Pre-stressed Conc.
County	Creek	3.2N .8W of Medford	2010	Girder	Steel
County	Creek	.2S 1.7W of Clyde	2010	Girder	Steel
County	Sand Creek	1.0N,1.5E of S.H.11/SH132	2010	Tee Beam	Concrete
County	Sand Creek	1S 1.5E of SH11/SH132	2010	Girder	Steel
County	Polecat Creek	5.2E 1S .7E of SH81/SH11	2010	Girder	Steel
County	Polecat Creek	3S 4.9E of SH11/US81	2010	Girder	Steel
County	Creek	.3W 1N .9E of Nash	2010	Girder	Steel
County	Sand Creek	1 E, 2.6S of SH-11/SH-132	2010	Tee Beam	Concrete
County	Crooked Creek	4S 2E .1N of SH11/SH132	2010	Girder	Steel
County	Wild Horse Creek	1E .8N of Co. Line/US81	2010	Girder	Steel
County	Osage Creek	2.75N 1E .2N of Clyde	2010	Girder	Steel
County	Pond Creek	S.W. EDGE of Jefferson	2010	Girder	Steel
County	Creek	5.9W 2.7S of Salt Fork	2010	Girder	Steel
County	Creek	3.7S 1.2W of Manchester	2011	Girder	Steel
County	Creek	3.7S 1.7E of Manchester	2011	Girder	Steel
County	Spring Creek	3S, 9.5W of SH11/US81	2011	Girder	Steel
County	Creek	4S 3.9E of Medford	2011	Girder	Steel
County	Creek	1.9W, 5S of Nash	2011	Girder	Steel
County	Creek	5.2S .4W of Pond Creek	2011	Girder	Steel
County	Creek	2.7E 4.6S of Nash	2011	Girder	Steel
County	Osage Creek	.3N2.8W2.7S of US81/SH11	2011	Girder	Steel
County	Dry Creek	.1E 2.3N of Deer Creek	2011	Girder	Steel
County	Creek	1.1E 1.5N of Deer Creek	2011	Girder	Steel
County	Creek	3E .3S of SH11/74 Jct	2011	Box Bm. Multi	Steel

Owner	Feature Intersected	Location	Year Built	Design	Material
County	Creek	4N 4.9W of SH11/SH74	2012	Culvert	Steel
County	Dry Creek	4N 1.1W of SH11/SH74	2012	Culvert	Steel
County	Creek	.2E 2.3N 1.9E Deer Creek	2012	Culvert	Steel
County	Bullwacker Creek	1N 1.1E of SH11/US81	2012	Culvert	Steel
County	Cottonwood Creek	2.8S 2.7E of Medford	2012	Culvert	Steel
County	Boggy Creek	5S .8E of S.H. 11/S.H. 74	2012	Culvert	Steel
County	Wagon Creek	3.3W 3.1N of Nash	2012	#N/A	Steel
County	Antelope Creek	.2E 1.9S of Deer Creek	2012	Girder	Steel

Source: Oklahoma Department of Transportation

Table 2.11 Structurally Deficient and Functionally Obsolete Bridges

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0160	Big Antelope Creek	2S .1E of SH11/SH74	Steel Stringer/Multi-beam or girder	1950	SD
E0160	Big Antelope Creek	2S .2W of SH11/SH74	Steel Stringer/Multi-beam or girder	1960	SD
N3070	Big Antelope Creek	.3N 1.2E 5.8N of Lamont	Steel Stringer/Multi-beam or girder	1950	FO
E0200	Boggy Creek	6S .7E of SH11/SH74	Wood Stringer/Multi-beam or girder	1950	SD
E0160	Bullwacker Creek	2S .3E of SH11/US81	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
N2990	Bullwacker Creek	.3N 3.2E 5.5S of Medford	Steel Stringer/Multi-beam or girder	1950	SD
E0170	Bullwacker Creek	3S 1.2E of SH11/US81	Wood Stringer/Multi-beam or girder (3 spans)	1950	SD
N2970	Bullwacker Creek	.2E 1.7S 1E .9Sof Medford	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0145	Bullwacker Creek	.5S .5E of SH11/US81	Steel Stringer/Multi-beam or girder	1955	SD
E0190	Bullwacker Creek	4.8S 2.8E of Medford	Wood Stringer/Multi-beam or girder	1950	SD
E0010	Chikaskia River	.2N9.7E5N.8E of Renfrow	Concrete Slab (8 spans)	1950	SD
N2830	Coldwater Creek	4.7E 1.4N of Nash	Concrete Stringer/Multi-beam or girder (3 spans)	1985	--
E0210	Coldwater Creek	4.7E 3N .6E of Nash	Steel Other	1998	SD
E0220	Coldwater Creek	.3W 2N 5.5E of Nash	Steel Other	1994	SD
E0230	Coldwater Creek	3.7E 1N .2E of Nash	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0250	Coldwater Creek	1.7E 1S 1.8E of Nash	Wood Stringer/Multi-beam or girder (2 spans)	1955	SD
E0290	Coldwater Creek	.3W 5S .3W of Nash	Concrete Stringer/Multi-beam or girder (2 spans)	1941	SD
E0150	Cottonwood Creek	.7S 2.8E of Medford	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0180	Cottonwood Creek	3.8S 3.3E of Medford	Wood Stringer/Multi-beam or girder	1950	SD
S.H. 11	Cottonwood Creek	2.6 MI W Jct US 81	Steel Stringer/Multi-beam or girder (3 spans)	1940	SD
E0190	Cottonwood Creek	1.1N 7E of Jefferson	Wood Stringer/Multi-beam or girder	1992	SD
E0260	Creek	.2N 4.9E of Salt Fork	Steel Stringer/Multi-beam or girder	1936	SD
E0180	Creek	4S 3.6E of SH11/SH132	Steel Stringer/Multi-beam or girder (2 spans)	1936	SD
E0020	Creek	.7S 3.8E of Manchester	Steel Stringer/Multi-beam or girder	1938	SD
E0020	Creek	.7S 4.3E of Manchester	Steel Stringer/Multi-beam or girder	1938	SD
E0200	Creek	6S 1.3E of SH11/SH74	Steel Stringer/Multi-beam or girder	1939	SD
N3010	Creek	.3N 5.2E 3.5S of Medford	Steel Stringer/Multi-beam or girder	1940	SD
2766C	Creek	3.9W 1.S of Salt Fork	Wood Stringer/Multi-beam or girder	1940	SD
E0090	Creek	7.5W of Wakita	Wood Stringer/Multi-beam or girder	1940	SD
E0070	Creek	4.4W 2N .6W of Wakita	Steel Stringer/Multi-beam or girder	1940	SD
E0110	Creek	3N 3.3E of SH11/SH11A	Wood Stringer/Multi-beam or girder	1940	SD
E050	Creek	3.7S 1.6E of Manchester	Steel Girder and floorbeam system	1940	SD
E0080	Creek	1N 3.8W of Wakita	Wood Stringer/Multi-beam or girder (2 spans)	1940	SD
E0260	Creek	.2N 2.8W of Salt Fork	Steel Stringer/Multi-beam or girder (2 spans)	1940	SD
S.H. 74	Creek	1.9 MI N Garfield Co	Concrete Culvert (3 spans)	1940	SD
E0080	Creek	4N .7E of Sand Creek	Wood Stringer/Multi-beam or girder (3 spans)	1940	SD
E0080	Creek	6N 1.4W of SH11/US81	Wood Stringer/Multi-beam or girder (2 spans)	1940	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
N2810	Creek	1.7S 2E .9S of Manchester	Wood Stringer/Multi-beam or girder	1940	SD
E0130	Creek	1.4N .9E of Deer Creek	Wood Stringer/Multi-beam or girder	1940	SD
E0110	Creek	3N 3.9W of US 81/SH11	Wood Stringer/Multi-beam or girder	1940	SD
E0290	Creek	.3W 5S .9W of Nash	Steel Box beam or girders - Multiple (2 spans)	1941	SD
N3050	Creek	4.7E of Renfrow	Wood Stringer/Multi-beam or girder	1945	SD
E0010	Creek	.3N .6E of Manchester	Concrete Slab	1945	FO
E0070	Creek	7 N 3.7E of SH132/SH11	Steel Stringer/Multi-beam or girder	1945	SD
E0210	Creek	.2E .8S 2.9E of Jefferson	Steel Stringer/Multi-beam or girder	1945	SD
E0270	Creek	5.7E 3.2S of Pond Creek	Wood Stringer/Multi-beam or girder	1945	SD
E0210	Creek	7S .9E of SH11/SH74	Wood Stringer/Multi-beam or girder	1945	SD
E0060	Creek	.7S3W4S.1W of Manchester	Wood Stringer/Multi-beam or girder (2 spans)	1945	SD
E0080	Creek	6N 1.9W of US81/SH 11	Wood Stringer/Multi-beam or girder (2 spans)	1945	SD
E0280	Creek	1.8S 3.1W of Salt Fork	Wood Stringer/Multi-beam or girder (2 spans)	1945	SD
E0100	Creek	4N 1.9E of SH11/SH74	Wood Stringer/Multi-beam or girder	1948	SD
N2820	Creek	3E .3N of SH132/SH11	Wood Stringer/Multi-beam or girder	1950	FO
N2920	Creek	.2N .8E 2.2N of Jefferson	Wood Stringer/Multi-beam or girder	1950	SD
N2910	Creek	.3S1.2W.4S of Pond Creek	Wood Stringer/Multi-beam or girder	1950	SD
N3030	Creek	1W .6 N of Salt Fork	Wood Stringer/Multi-beam or girder	1950	SD
N2930	Creek	.8E 3.3S of Pond Creek	Wood Stringer/Multi-beam or girder	1950	SD
N2980	Creek	5.9W 2S of Salt Fork	Wood Stringer/Multi-beam or girder	1950	SD
E0270	Creek	1.3W 3S 1.5W of Nash	Wood Stringer/Multi-beam or girder	1950	SD
E0130	Creek	1S 1.7 W of Sand Creek	Wood Stringer/Multi-beam or girder	1950	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0280	Creek	4.7E 4S .9E of Nash	Wood Stringer/Multi-beam or girder	1950	SD
E0200	Creek	.2N 4.7W of Jefferson	Wood Stringer/Multi-beam or girder	1950	FO
E0190	Creek	1.1N 3E of Jefferson	Wood Stringer/Multi-beam or girder	1950	SD
E0270	Creek	3.2S 4E of Pond Creek	Wood Stringer/Multi-beam or girder	1950	SD
E0270	Creek	.1E .7S .8W of Salt Fork	Wood Stringer/Multi-beam or girder	1950	SD
E0280	Creek	.1E 1.8S 6.8Eof Salt Fork	Steel Stringer/Multi-beam or girder	1950	SD
U.S. 81	Creek	6.7 MI N Jct SH 11	Steel Stringer/Multi-beam or girder	1926	SD
E0180	Creek	.8W 4S .4E of SH11/US81	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0280	Creek	1.8S 6W of Salt Fork	Wood Stringer/Multi-beam or girder	1950	SD
E0270	Creek	.8S 3.3W of Salt Fork	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0090	Creek	5N 1.3E of SH11/SH74	Wood Stringer/Multi-beam or girder	1950	SD
E0200	Creek	6.S 3.8E of SH11/SH74	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
N2930	Creek	.3N2.8W1.9S of US81/SH11	Wood Stringer/Multi-beam or girder (2 spans)	1950	FO
N2790	Creek	.7E 1.2N of Nash	Steel Stringer/Multi-beam or girder	1950	SD
N2780	Creek	.3W 1.1S of Nash	Concrete Slab (2 spans)	1930	SD
E0250	Creek	.3N2.1E1N1.6 of Salt Fork	Wood Stringer/Multi-beam or girder (4 spans)	1950	SD
E0200	Creek	4N .1E of US 60/US81	Steel Truss - Thru	1930	SD
E0020	Creek	.2N5.7E4N.6E of Renfrow	Steel Stringer/Multi-beam or girder	1950	SD
E0280	Creek	4.2S 4.7E of Pond Creek	Wood Stringer/Multi-beam or girder	1950	SD
N3030	Creek	.2N .9W 1.3S of Salt Fork	Wood Stringer/Multi-beam or girder	1950	SD
E0040	Creek	2.6S .2W of Manchester	Wood Stringer/Multi-beam or girder	1950	SD
E0030	Creek	.5E 6N 3.4E of Wakita	Steel Stringer/Multi-beam or girder	1930	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0270	Creek	4S,.8W of 74 & 60	Wood Stringer/Multi-beam or girder	1950	SD
E0290	Creek	1.7E 5S of Nash	Steel Stringer/Multi-beam or girder	1930	SD
E0260	Creek	.3W 2S .1E of Nash	Wood Stringer/Multi-beam or girder	1950	SD
N2960	Creek	1.2S 4E of Pond Creek	Steel Stringer/Multi-beam or girder	1950	SD
N3090	Creek	.3N 3.2 E .5S of Lamont	Steel Stringer/Multi-beam or girder	1951	SD
E0220	Creek	.3N 4.3W of Lamont	Wood Stringer/Multi-beam or girder	1952	SD
N3090	Creek	.2N 5.1E .1N of Salt Fork	Wood Stringer/Multi-beam or girder (3 spans)	1952	SD
N3000	Creek	.3N 3.9W 1.3S of Salt Fork	Wood Stringer/Multi-beam or girder (2 spans)	1952	SD
E0270	Creek	3S 4.9E of Pond Creek	Wood Stringer/Multi-beam or girder	1955	SD
E0190	Creek	5S 1.5W of SH11/SH74	Wood Stringer/Multi-beam or girder	1955	SD
N2760	Creek	1.7S 3.2W of Manchester	Steel Box beam or girders - Multiple	1998	SD
N3010	Creek	.2N 2.9W of Salt Fork	Wood Stringer/Multi-beam or girder (3 spans)	1955	SD
N3040	Creek	2W .6S of SH11/SH74	Wood Stringer/Multi-beam or girder (2 spans)	1955	SD
E0250	Creek	1S 1.8W of Nash	Wood Stringer/Multi-beam or girder	1955	SD
N2960	Creek	.2E 7N of Medford	Wood Stringer/Multi-beam or girder (3 spans)	1959	SD
N2900	Creek	2E 2.3N of Co. Line/US81	Wood Stringer/Multi-beam or girder	1960	SD
N2860	Creek	.6W 3.8N of Wakita	Steel Other	1996	SD
N2770	Creek	2W 1.3S of Manchester	Steel Other	1996	SD
N2810	Creek	4.5W .5S of Wakita	Steel Box beam or girders - Multiple	1995	SD
E0070	Creek	3.4W 2N .3W of Wakita	Steel Other	1994	SD
N2770	Creek	1.3W .4N of Nash	Steel Stringer/Multi-beam or girder	1982	SD
N2850	Creek	6.7E 2.2N of Nash	Pre-stressed Stringer/Multi-beam or girder	1993	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0250	Creek	1.2S 3.E of Pond Creek	Steel Stringer/Multi-beam or girder	1987	SD
E0020	Creek	1.3W 4.1N .3E of Renfrow	Concrete Slab (2 spans)	1934	SD
N2760	Creek	3W 4.S of Manchester	Wood Stringer/Multi-beam or girder	1935	SD
E0030	Creek	1.7S 4.5E of Manchester	Wood Stringer/Multi-beam or girder	1935	SD
E0015	Creek	.6E of Manchester	Steel Stringer/Multi-beam or girder	1935	SD
N3030	Creek	2.7E 2N of Renfrow	Wood Stringer/Multi-beam or girder	1989	SD
N2850	Crooked Creek	.4W 6.8N of Wakita	Wood Stringer/Multi-beam or girder (2 spans)	1940	SD
S.H. 11	Crooked Creek	7 MI E Alfalfa c/l	Steel Truss - Thru	1946	SD
E0030	Crooked Creek	1.7S 5.9E of Manchester	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0040	Crooked Creek	10N 6.2E of SH11 & SH132	Steel Other	1994	SD
E0190	Dead Man Creek	4.1E 5S of US81/SH11	Wood Stringer/Multi-beam or girder (2 spans)	1945	SD
N3010	Dead Man Creek	.3N2.8W1N2W1.8Nof Lamont	Pre-stressed Tee beam (3 spans)	1989	--
E0150	Deer Creek	1S 2.8E of SH11/SH74	Steel Stringer/Multi-beam or girder (3 spans)	1988	SD
N3060	Deer Creek	4.4N of Jct SH74/SH11	Wood Stringer/Multi-beam or girder	1950	SD
N3060	Dry Creek	3.1N of SH74/SH 11	Wood Stringer/Multi-beam or girder	1951	SD
E0130	Duel Creek	1N 3.9E of SH11/SH132	Steel Stringer/Multi-beam or girder	1950	SD
E0110	Elm Creek	3N 6.3E of SH11/US81	Wood Stringer/Multi-beam or girder	1945	SD
E0100	Elm Creek	4N 6.5E of US81/SH11	Steel Stringer/Multi-beam or girder	1948	SD
E0270	Horse Creek	3S .9W of US64/US81	Wood Stringer/Multi-beam or girder	1949	SD
E0150	Little Antelope Creek	1S 1.4E of SH11/SH74	Steel Stringer/Multi-beam or girder	1950	SD
N3080	Little Antelope Creek	.2E 1.1 S of Deer Creek	Steel Stringer/Multi-beam or girder	1955	SD
N2840	Lynch Creek	1W .5S of SH11A/SH11	Steel Box beam or girders - Multiple	1997	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0150	Lynch Creek	1S 4.3E of SH11/SH132	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0150	Lynch Creek	1S 3.1E of SH11/SH132	Steel Stringer/Multi-beam or girder	1950	SD
E0150	Osage Creek	2.8W 1S .4W of SH11/US81	Steel Truss - Thru	1955	SD
N2930	Osage Creek	.3N2.8W2.2S of US81/SH11	Steel Other	1996	SD
N2930	Osage Creek	.3N2.8W2.5S of US81/SH11	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0060	Osage Creek	8.0 MI W of Renfrow	Steel Stringer/Multi-beam or girder	1950	SD
N2930	Osage Creek	2.9W 4.2N of US81/SH11	Steel Box beam or girders - Multiple	1998	SD
S.H. 11	Osage Creek	8.1 MI E Jct SH 11A	Steel Stringer/Multi-beam or girder (3 spans)	1940	SD
N2920	Osage Creek	.2N of Jefferson	Steel Truss - Thru	1930	SD
E0100	Osage Creek	4N 2.9W US81/ SH11	Steel Other	1995	SD
E0070	Osage Creek	6.5E 2N .5E of Wakita	Wood Stringer/Multi-beam or girder	1940	SD
U.S. 81	Osage Creek	4.5 MI N Jct US 60	Steel Stringer/Multi-beam or girder (3 spans)	1967	SD
N3010	Polecat Creek	.2N .7E 4.7S of Renfrow	Wood Stringer/Multi-beam or girder (3 spans)	1930	SD
N3000	Polecat Creek	.3W 3.7S of Renfrow	Steel Stringer/Multi-beam or girder	1950	SD
E0090	Polecat Creek	.3W 2.8S .2W of Renfrow	Steel Stringer/Multi-beam or girder	1940	SD
E0180	Polecat Creek	3.8S 4.9E of Medford	Steel Stringer/Multi-beam or girder	1995	SD
U.S. 81	Polecat Creek	6 MI N Jct SH 11	Steel Stringer/Multi-beam or girder (2 spans)	1926	SD
E0080	Polecat Creek	6N 3.2E of SH11/US81	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
E0210	Polecat Creek	7S 5.4W of SH11/SH74	Wood Stringer/Multi-beam or girder (3 spans)	1950	SD
N2910	Pond Creek	.3N 4.8W 3.3S of Medford	Steel Other	1994	SD
N2920	Pond Creek	.2N.8W1.6N of Jefferson	Steel Other	1997	SD
E0120	Pond Creek	.2S 1.4W of Clyde	Steel Other	1996	SD
N2980	Pond Creek	.2E.2N5E2.2S of Jefferson	Steel Stringer/Multi-beam or girder (3 spans)	1987	SD

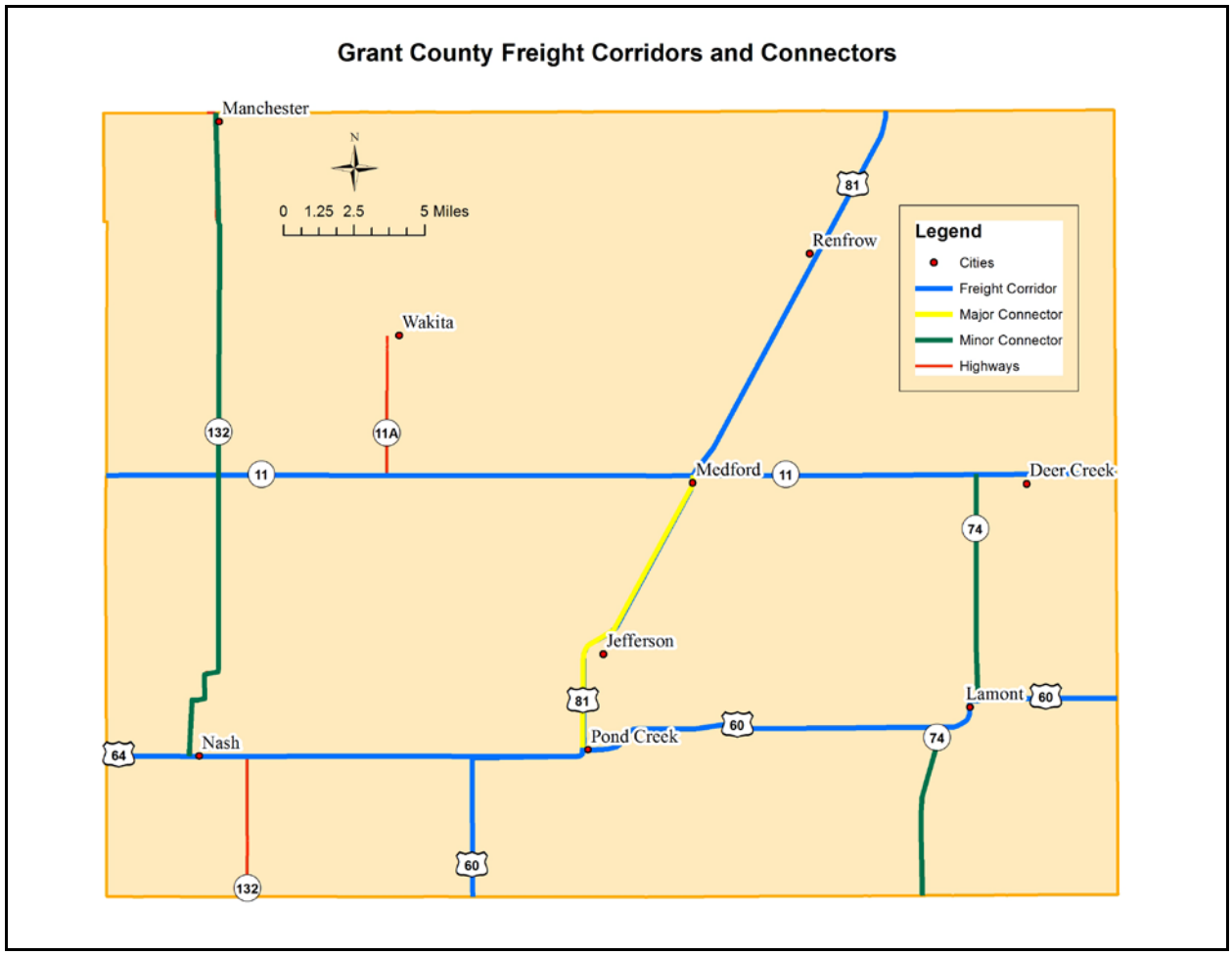
Carries	Crosses	Location	Design	Year Built	SD/ FO
E0070	Pond Creek	0.5E 2N 3.7E of Wakita	Wood Stringer/Multi-beam or girder (3 spans)	1940	SD
E0170	Pond Creek	4.8W 3S .4W of SH11/US81	Steel Other	1996	SD
E0150	Pond Creek	4.8W 1S .9Wof SH11/SH81	Steel Other	1996	SD
E0180	Pond Creek	3.8W 4S .4W of SH11/US81	Steel Other	1998	SD
N2920	Pond Creek	.2N .8W 1.4N of Jefferson	Steel Other	1994	SD
N2920	Pond Creek	.2W 5.5N of Pond Creek	Steel Other	1996	SD
U.S. 81	Pond Creek	3.8 MI N Jct US 60	Steel Stringer/Multi-beam or girder (3 spans)	1967	SD
N2950	Pond Creek	.2N 2.2E 1.7S of Jefferson	Steel Other	1993	SD
S.H. 11	Pond Creek	14.9 MI E Alfalfa Co	Steel Truss - Thru	1940	SD
N3057	Pond Creek	1.3 S of Lamont	Steel Truss - Thru (2 spans)	1940	SD
N2880	Salt Fork Arkansas Riv.	4.2N of US81/US64	Pre-stressed Stringer/Multi-beam or girder (9 spans)	1990	SD
N2800	Sand Creek	1N of Hawley	Wood Stringer/Multi-beam or girder (3 spans)	1991	SD
E0260	Sand Creek	3.7E 2.S of Nash	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD
N2830	Sand Creek	4.7E 1N of Nash	Steel Other	1994	SD
E0090	Sand Creek	5N .4E of SH11/SH132	Steel Truss - Thru	1940	FO
N2770	Sand Creek	6N 2W 2.2N of SH132/SH11	Steel Other (2 spans)	2000	SD
N2820	Sand Creek	3.7E .4S of Nash	Wood Stringer/Multi-beam or girder (2 spans)	1955	SD
E0250	Sand Creek	2.7E 1S .9E of Nash	Wood Stringer/Multi-beam or girder (2 spans)	1955	SD
N2780	Sand Creek	6N 1W .8N of SH11/SH132	Wood Stringer/Multi-beam or girder	1950	FO
E0180	Spring Creek	4S 1.6E of SH11/ SH11A	Steel Stringer/Multi-beam or girder	1940	SD
N3050	Spring Creek	.3N .8E .1N of Lamont	Wood Stringer/Multi-beam or girder (2 spans)	1950	SD

Carries	Crosses	Location	Design	Year Built	SD/ FO
E0190	Spring Creek	1W5S .7E of SH11/SH11A	Steel Other	1992	SD
N3050	Sullivan Creek	5N 4.7E of Renfrow	Steel Box beam or girders - Multiple	1997	SD
E0250	Wild Horse Creek	1.2S 2.5E of Pond Creek	Pre-stressed Stringer/Multi-beam or girder (3 spans)	1987	SD
E0280	Wild Horse Creek	4.2S 1.3W of Pond Creek	Wood Stringer/Multi-beam or girder (4 spans)	1955	SD
N2920	Wild Horse Creek	3.3S of Pond Creek	Concrete Stringer/Multi-beam or girder (3 spans)	1983	SD
N2910	Wild Horse Creek	1E 1.1N of Co. Line/US81	Wood Stringer/Multi-beam or girder (3 spans)	1955	SD
E0030	Wolf Creek	.3W 3.2N 3.9W of Renfrow	Wood Stringer/Multi-beam or girder (2 spans)	1940	SD

Source: Federal Highway Administration/National Bridges Inventory

Map 2.17 National Highway Freight Network, Oklahoma

Map 2.18 Grant County Freight Corridors and Connectors



Source: NORTPO

Table 2.12 Cherokee Strip Transit Ridership and Revenue for Grant County

Grant County	Oct. 2013-Sept. 2014	Oct. 2014-Sept. 2015
Trips	924	781
Passenger Miles	38,062.50	24,538.30
Revenue Miles	47,978.50	39,671.50

Source: Cherokee Strip Transit

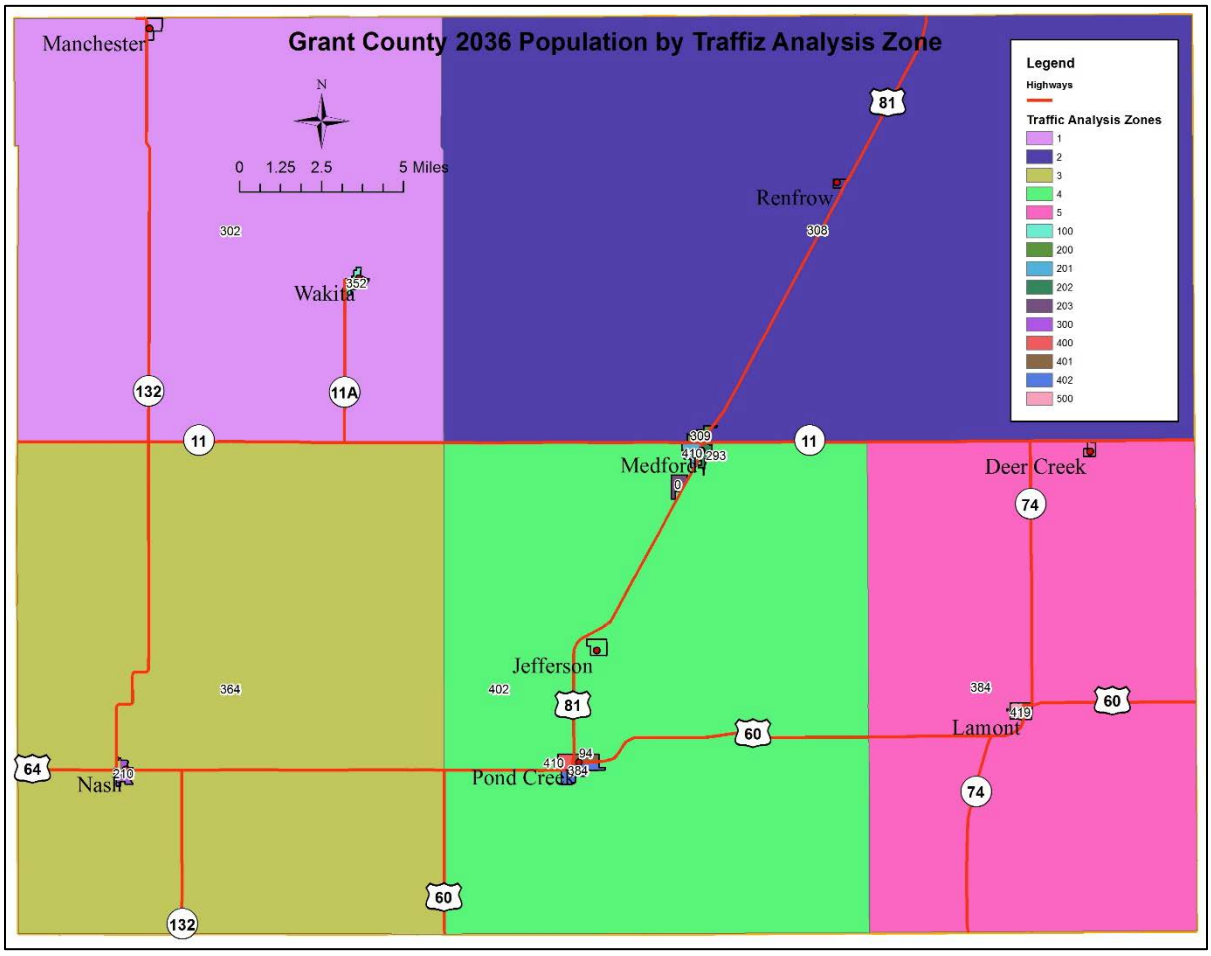
Appendix H-3
Chapter 3

Table 3.1 Grant County Population and Employment Projections

Grant	1% Per Decade	Civilian Labor Force
1980	6,518	
1990	5,689	
2000	5,144	
2010	4,527	2,175
2015	4,458	2,186
2020	4,572	2,197
2030	4,618	2,219
2036	4,641	2,230

Source: US Census Bureau

Map 3.1 Grant County 2036 Population Projection by TAZ



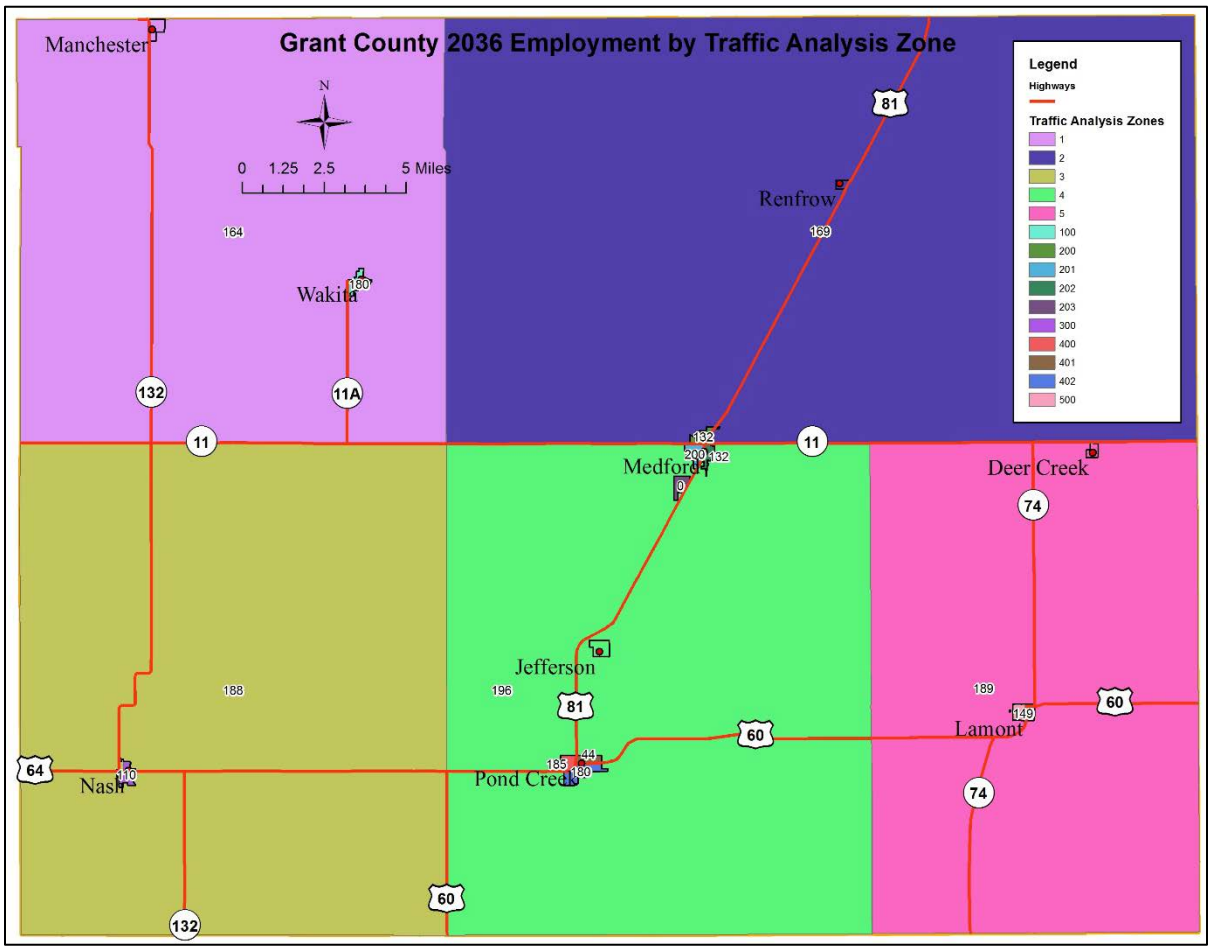
Source: NORTPO

Table 3.2 Grant County 2036 Population Projection

Grant County 2036 Population Projection by TAZ	
TAZ	2036 Population
1	302
2	308
3	364
4	402
5	384
100	352
200	309
201	410
202	293
203	0
300	210
400	410
401	94
402	384
500	419

Source: NORTPO

Map 3.2 Grant County 2036 Employment Projection by TAZ



Source: NORTPO

Table 3.3 Grant County 2036 Employment Projection

Grant County 2036 Employment Projection by TAZ	
TAZ	2036 Employment
1	164
2	169
3	188
4	196
5	189
100	180
200	132
201	200
202	132
203	0
300	110
400	185
401	44
402	180
500	149

Source: NORTPO

Table 3.4 ODOT Eight Year Work Program

Location	Project Type	Project Year	Project Cost
SH-11 over Deer Creek	Bridges & Approaches	FFY 2023	$1,060,000.00
SH-11 over Deer Creek	Right of Way	FFY 2020	$430,000.00
SH-11 over Deer Creek	Utilities	FFY 2020	$190,000.00
SH-11 from SH-74 E to I-35	Right of Way	FFY 2020	$1,500,000.00
SH-11 from SH-74 E to I-36	Utilities	FFY 2020	$1,500,000.00
SH-11 from 13 mi E of Alfalfa C/L E to US-81	Shoulder Improvement & Resurface	FFY 2017	$10,000,000.00
SH-11 over Cottonwood Creek	Bridges & Approaches	FFY 2017	$1,000,000.00
SH-11 over Osage Creek	Bridges & Approaches	FFY 2017	$1,000,000.00
SH-11 over Pond Creek	Bridges & Approaches	FFY 2017	$1,000,000.00

US-60 from US-81 in Pond Creek E 7 mi	Right of Way	FFY 2019	$780,000.00
US-60 from US-81 in Pond Creek E 7 mi	Utilities	FFY 2019	$780,000.00
		TOTAL:	$19,240,000.00

Source: Oklahoma Department of Transportation

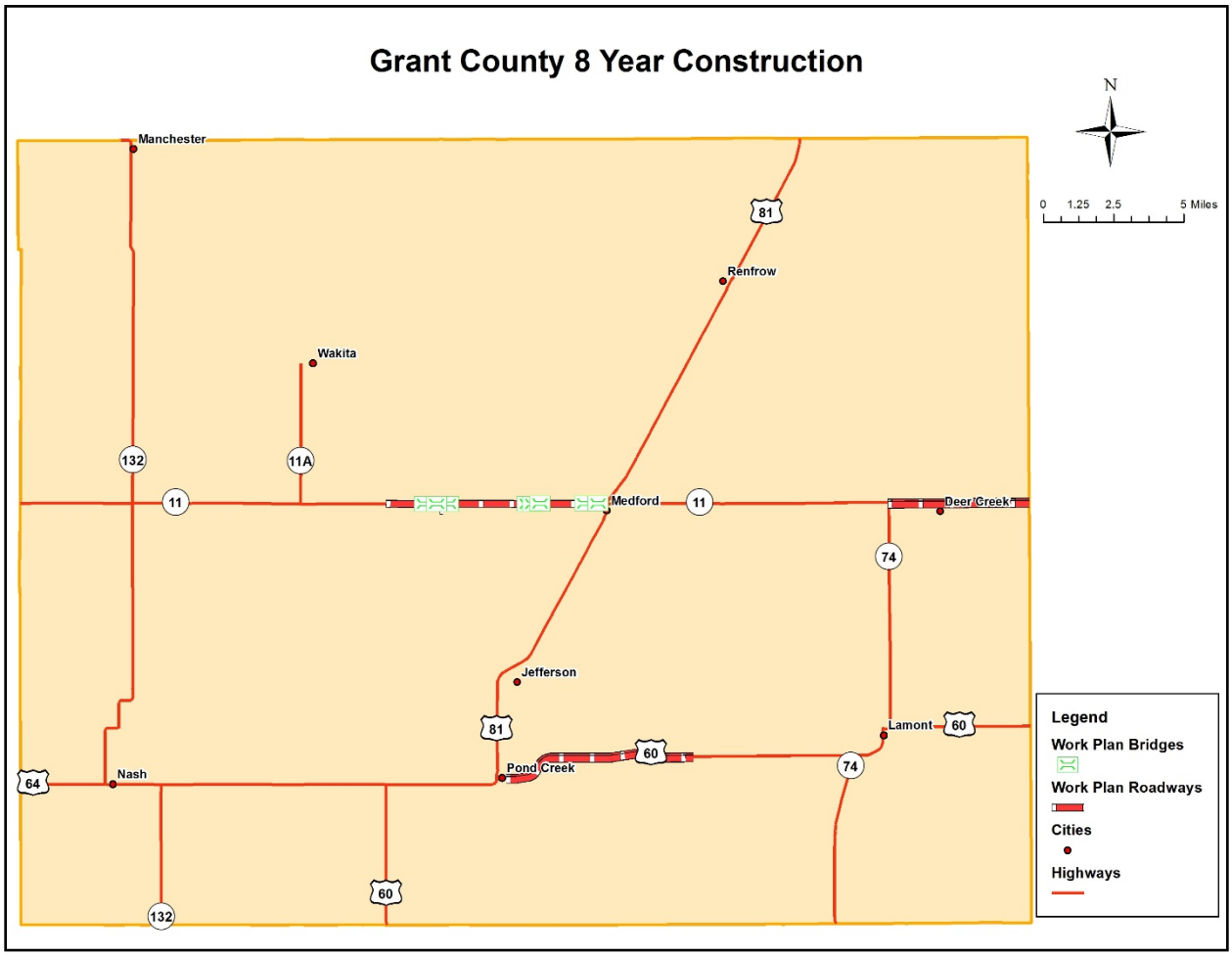
Table 3.5 ODOT CIRB Work Program

Fiscal Year	JP #	Stage #	Item	CIRB Funds	Other Funds	Estimated Total Cost
2017	28419	(05)	Construct for 4 miles overlay on EW-8 from NS-275 to 279 Ph 3 dist 1 Co RD EW 08 Beginning SH 132 and Ext W 4.0 Mi D1 Phase 3	$3,004,170.00	$0.00	$3,004,170.00
2017	28419	(06)	Right of Way for 4 miles overlay on EW-8 from NS-275 to 279 Ph 3 dist 1 Co RD EW 08 Beginning SH 132 and Ext W 4.0 Mi D1 Phase 3	$10,000.00	$0.00	$10,000.00
2017	28419	(07)	Utilities for 4 miles overlay on EW-8 from NS-275 to 279 Ph 3 dist 1 Co RD EW 08 Beginning SH 132 and Ext W 4.0 Mi D1 Phase 3	$10,000.00	$0.00	$10,000.00
2017	31221	(05)	Engineering STP BR 264 D1	$60,000.00	$0.00	$60,000.00
2017	27282	(04)	(20% Match C) BR D# 3 CN 138 BRO-127D(172)Co (2017 BR Funds) Co BR EW 16 over Sand Creek 2 Mi S and 1.4 Mi E of SH 11/ SH 132 JCT	$180,000.00	$720,000.00	$900,000.00
2017	29862	(04) CT	CT Construction D1 CN133 CIRB-227D(012)RB	$700,000.00	$0.00	$700,000.00
2018	31836	(05)	Engineering STP Bridge CN 301 D3	$75,000.00	$0.00	$75,000.00
2019	28416	(04)	Construction Co Bridge on EW 026 over Wild Horse Creek 2.2 Mi S and 1.1 Mi E of Pond Creek BR D#3 CN 230 (TRUSS)	$200,000.00	$800,000.00	$1,000,000.00
2019	28674	(05)	Engineering Dist 3 priority 3 EW 20 start at NS 288 end at NS 296	$200,000.00	$0.00	$200,000.00
2019	31844	(04)	Construction STP Road Clyde Road	$1,000,000.00	$1,200,000.00	$2,200,000.00

Fiscal Year	JP #	Stage #	Item	CIRB Funds	Other Funds	Estimated Total Cost
2019	2720191	(05)	Engineering CN 385 STP Bridge D2	$75,000.00	$0.00	$75,000.00
2019	29861	(04) CT	CT Construction D2 CN 370	$700,000.00	$0.00	$700,000.00
2020	2720201	(05)	Engineering STP CN 128 D1	$100,000.00	$0.00	$100,000.00
2020	31221	(04)	Construction STP BR 264 D1	$120,000.00	$480,000.00	$600,000.00
2021	31836	(04)	Construction STP Bridge CN 301 D3	$200,000.00	$800,000.00	$1,000,000.00
2021	28674	(07)	Util Dist 3 priority 3 EW 20 start at NS 288 end at NS 296 include one Bridge CN 177	$10,000.00	$0.00	$10,000.00
2021	28674	(06)	ROW Dist 3 priority 3 EW 20 start at NS 288 end at NS 296 include one Bridge CN 177	$10,000.00	$0.00	$10,000.00
2021	2720211	(05)	Engineering STP/BR CN 165 D3	$100,000.00	$0.00	$100,000.00
2022	2720221	(04)	Construction STP Bridge CN 385	$150,000.00	$600,000.00	$750,000.00
2023	28674	(04)	Const Dist 3 priority 3 EW 20 start at NS 288 end at NS 296	$6,500,000.00	$0.00	$6,500,000.00
2023	2720201	(04)	Construction STP CN 128 D1	$200,000.00	$800,000.00	$1,000,000.00
2024	2720211	(04)	Construction STP/BR CN 165 D3	$200,000.00	$800,000.00	$1,000,000.00
			Total	**$13,804,170.00**	**$6,200,000.00**	**$20,004,170.00**

Source: Oklahoma Department of Transportation

Map 3.3 ODOT Construction Work Program 2016-2024



Source: Oklahoma Department of Transportation

Appendix H-4
Chapter 4

Table 4.1 Funding Categories Summary

State	Funding Eligibility	Funding Limits
County Equipment Revolving Fund		$4.5 to$ 5 million a year
Industrial, Historic site and Lake Access Funds,	Can be used on city streets and county roads.	$2.5 million, FY 2011, industrial access $2.5 million, FY 2011, lake/historic access
County Improvements for Roads and Bridges (CIRB)	Only contract projects let through ODOT	Averages $75 million/year, divided evenly between ODOT's Field Divisions
Federal		
Federal Bridge Funds Bridge Replacement Funds (BR) Bridge Rehabilitation (BH) Preventive Maintenance (PM) Safety Bridge Inspection	Bridge <50 sufficiency rating & functionally obsolete or structurally deficient. Bridge between 50 & 80 sufficiency rating. Must have a systematic process for project selection. Mandated by Federal Highway Administration (FHWA) on bridge length structures.	BR, BH and PM all together limited to $16.5 million in odd numbered years and $20 million in even numbered years. Safety Bridge Inspection funded with $3.5 million in odd numbered years.
Surface Transportation Program	Road projects, grade, drain and surface on county major and minor collectors. Funding may provide up to 80 percent of the construction costs. Local governments fund the remaining 20 percent match plus costs for engineering, right of way and utility relocation.	$6 million for roadway projects $20 million for safety bridge inspections, replacement or repair of county bridges. ODOT is currently funding the 20 percent match on regular safety bridge inspection costs and 100 percent of all the county fracture critical bridge inspection costs.
Emergency Relief (ER) Funds	Disaster funding on Major x	
Emergency Transportation and Revolving Fund (ETR)	The funds are split amongst the eight CEDs. Counties can apply to their CED and borrow any amount of money from the fund.	In FY 2009, ODOT made a one-time appropriation of $25 million to the Emergency and Transportation Revolving Fund.
Circuit Engineering District		$3.5 million annually

Revolving fund		
County Road & Bridge Improvement Fund (CBR)	County Built, contract projects and maintenance on roads/bridges	
County Highway Fund		

Source: Oklahoma Department of Transportation

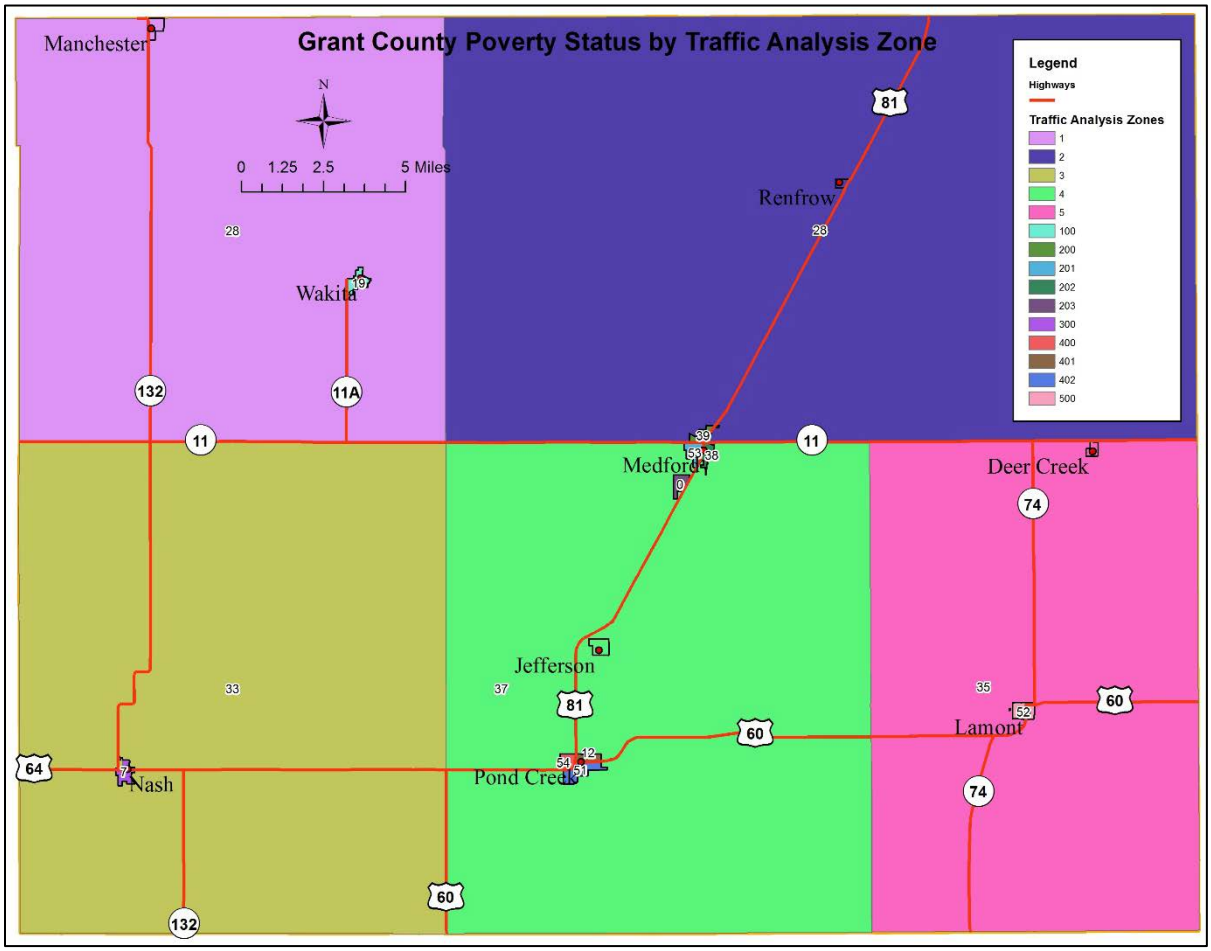
Table 4.2 State Funding Categories

	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Budget
State Transportation Fund	$206,405,702	$208,707,119	$197,228,227	$184,901,463
Motor Fuel Tax – HP Bridges	$6,047,108	$6,130,546	$6,238,149	$6,200,000
Income Tax	$297,400,000	$357,100,000	$416,800,000	$476,500,000
Total allocation	$509,852,810	$571,937,665	$620,266,376	$667,601,463
OTA Transfers	$41,340,937	$41,712,534	$44,049,331	$42,000,000
Total State Revenue	$551,193,747	$613,650,199	$664,315,707	$709,601,463
CIP Debt Service	$11,526,973	$11,358,296	$0	$0
ROADS Debt Service	$32,367,490	$35,971,788	$42,599,529	$36,434,743
Highways and Bridges	$495,399,284	$554,420,115	$612,316,178	$662,766,720
Lake & Industrial Access	$5,000,000	$5,000,000	$2,500,000	$3,500,000
Passenger Rail	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Public Transit	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Intermodal	$1,900,000	$1,900,000	$1,900,000	$1,900,000
Total Allocation	$551,193,747	$613,650,199	$664,315,707	$709,601,463

Source: Oklahoma Department of Transportation

Appendix H-5
Chapter 5

Map 5.1 2014 Grant County Poverty Status by TAZ



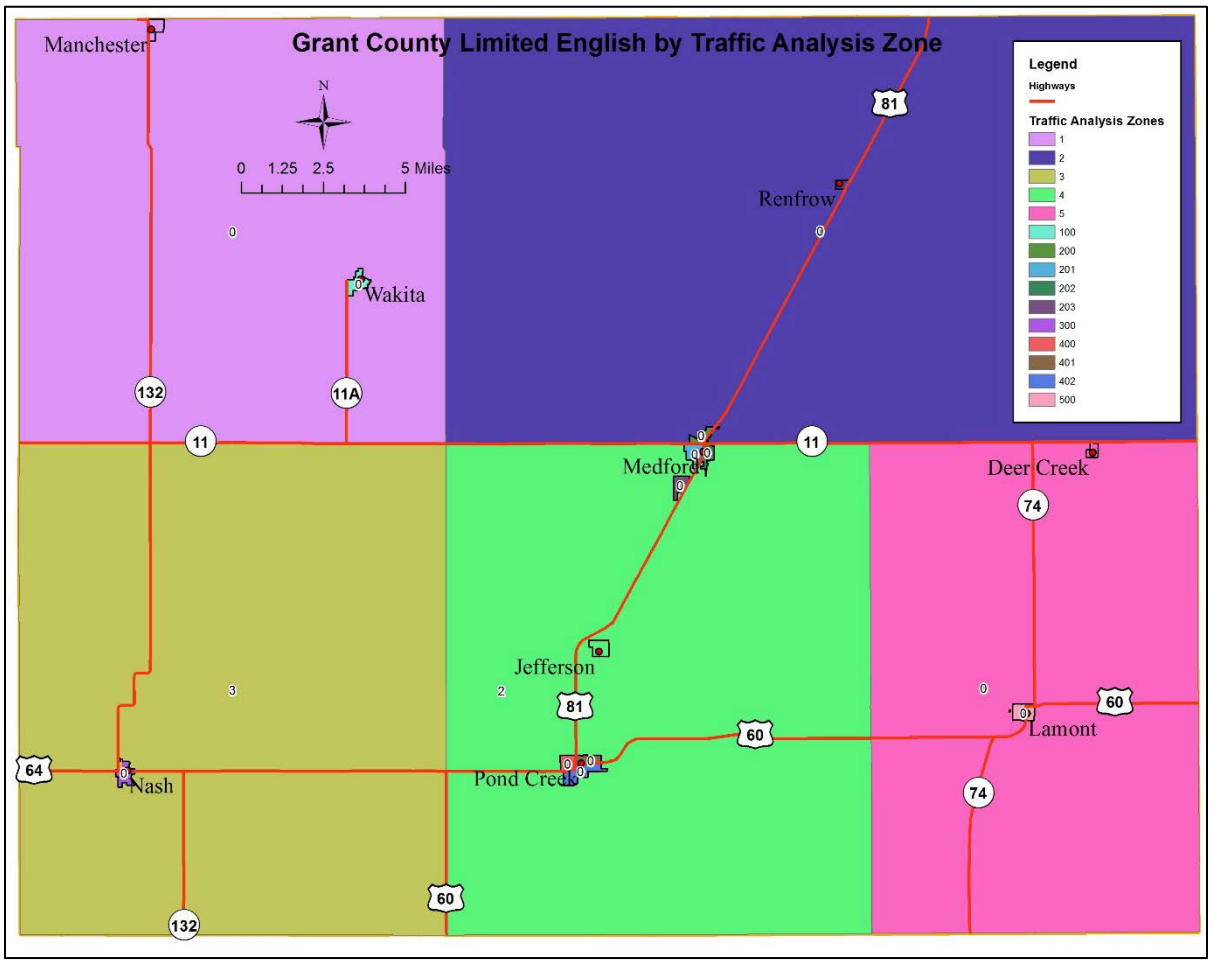
Source: NORTPO

Table 5.1 2014 Grant County Poverty Status by TAZ

Grant County Poverty Status by TAZ	
TAZ	Poverty
1	28
2	28
3	33
4	37
5	35
100	19
200	39
201	53
202	38
203	0
300	7
400	54
401	12
402	51
500	52

Source: NORTPO

Map 5.2 2014 Grant County Limited English Proficiency by Household by TAZ



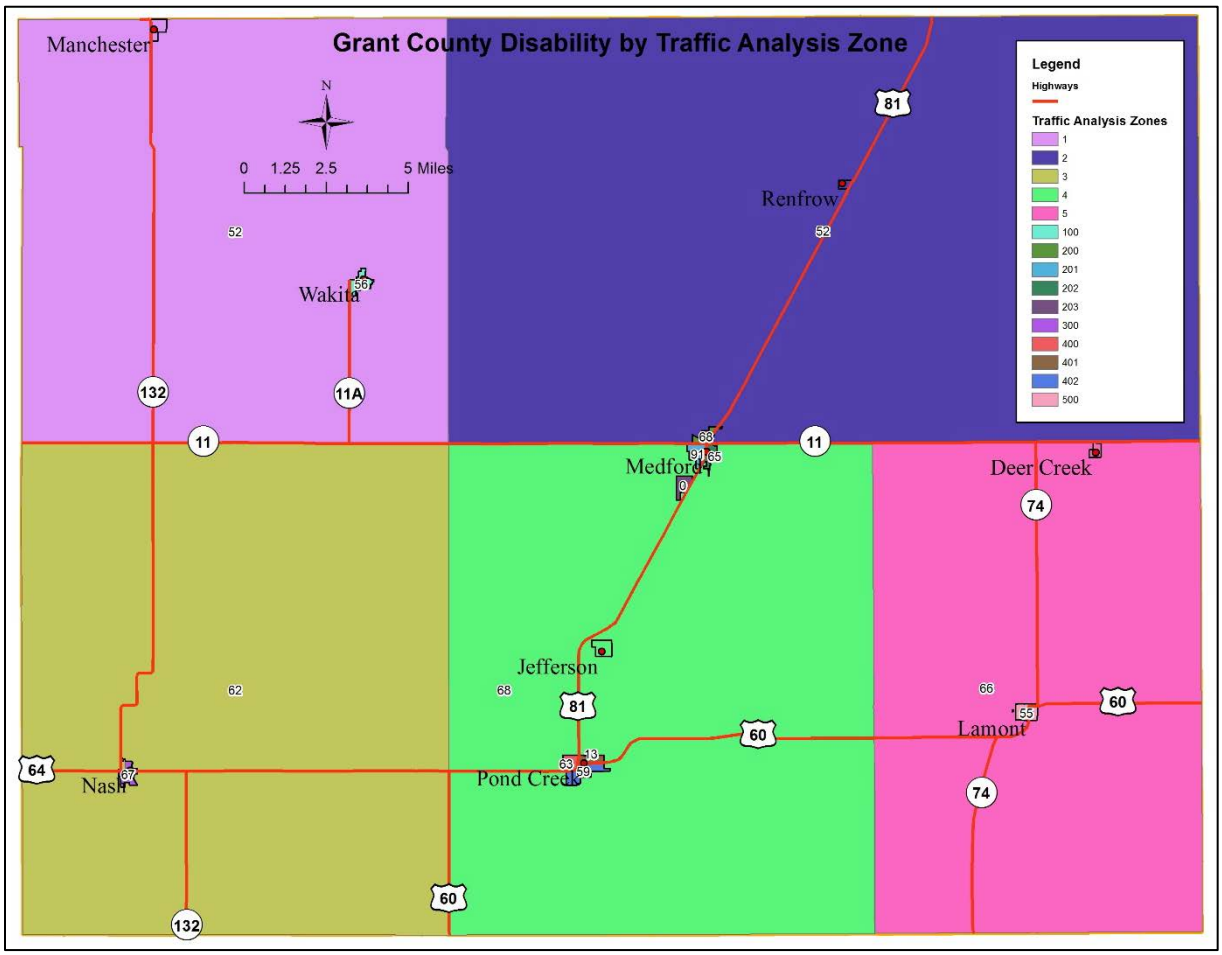
Source: NORTPO

Table 5.2 2014 Grant County Limited English Proficiency by Household by TAZ

Grant County Limited English Proficiency by Household by TAZ	
TAZ	Limited English
1	0
2	0
3	3
4	2
5	0
100	0
200	0
201	0
202	0
203	0
300	0
400	0
401	0
402	0
500	0

Source: NORTPO

Map 5.3 2014 Grant County Disabled Residents by TAZ



Source: NORTPO

Table 5.3 2014 Grant County Disabled Residents by TAZ

Grant County Disable Residents by TAZ	
TAZ	**Disabled**
1	52
2	52
3	62
4	68
5	66
100	56
200	68
201	91
202	65
203	0
300	67
400	63
401	13
402	59
500	55

Source: NORTPO

Table 5.4 2014 Grant County Residents by Race

Grant County Residents by Race		
Race	Total	Margin of Error
White	4,346	51
Black or African American	62	36
American Indian and Alaska Native	240	51
Asian	13	8
Native Hawaiian and Other Pacific Islander	0	9
Some other Race	124	32

Source: US Census Bureau

Stakeholder and Public Surveys Summary

1. In which City/County do you reside? *Grant; Wakita; Medford; Lamont; Blackwell; Deer Creek; Manchester*

2. In which City/County do you work? *Grant; Wakita; Medford; Lamont* or attend school?_____

3. How many days per week do you travel to work? *4(5) 5(18)* ____ to school?_____

4. What type of transportation do you use most often to go to work/school? (Circle one)
   Drive (alone) *(22)* Carpool Bus Motorcycle Bicycle
   Walk Other (please specify) *Pick-up*

5. How many miles do you travel (round trip) for work and/or school? (Circle one)

   Less than 1 mile *(10)* 2 – 5 miles 6-10 miles *(2)*
   11-20 miles *(3)* 21-30 miles *(5)* 31 – 50 miles *(4)* 50 miles +*(1)*

6. How much time does it usually take to travel to and from work? (Circle one)
   Less than 10 minutes *(9)* 11 to 15 minutes *(2)* 16-30 minutes *(8)*
   31-45 minutes *(1)* 46-60 minutes *(3)* 61 minutes +__

7. How much time does it usually take to travel to and from school? (Circle one)
   Less than 10 minutes *(1)* 11 to 15 minutes 16-30 minutes *(2)*
   31-45 minutes 46-60 minutes 61 minutes +___

8. How many total miles do you travel for other trips per day? (Circle your response)
   Less than 1 mile *(4)* 2 – 5 miles *(1)* 6-10 miles *(2)*
   11-20 miles *(3)* 21-30 miles *(2)* 31 – 50 miles *(6)* 50 miles + *(3)*

9. What are your usual methods of transportation for other trips such as shopping, appointments, entertainment?

	Every Day	3-4 Times a Week	1-2 Times Week	1-2 Times a Month	Never
Car (alone or with household members)	8	4	6	2	
Carpool with others		1		1	5
Bus/Public Transportation					7
Motorcycle		1	1	2	5
Bicycle/Walk			1		7
Other? Please list.			2	1	1

10. So that we can ensure this survey has reached a variety of individuals in the community, please provide the information below (Circle your response):

Your Age Group: 18-24 *(2)* 25-34*(1)* 35-44 *(3)* 45-54 *(5)* 55-65 *(7)* 65-74 *(4)* Over 75
Gender: Male *(18)* Female *(3)*
Household Income: Under $34,000 *(10)* $35,000 to $50,000 *(5)* $50,001 - $75,000 *(6)* Over $75,000 *(1)*
American Indian/Alaska Native *(2)* Asian __ Black or African American __ Hispanic __
Native Hawaiian or other Pacific Islander __ White *(21)* __ Other _____

11. Please indicate how important each of the transportation system components is to you.

	Not Important	Somewhat Important	Important	Very Important
Improve Technology of Signals	5	6	6	2
Intersection Improvements	2	4	9	4
Pedestrian Facilities/Sidewalks	5	6	6	2
Maintenance Improvements	3	4	11	2
Bicycle Lanes	11	7	1	
Public Transportation	10	5	2	2
Availability of Passenger Rail Service	13	4	2	
Connection to State or S Highways	2	6	7	3
Maintenance of Bridges	2	1	9	7
Protecting the environment	4	5	6	4
Improving access to freight rail service	9	5	3	1
Providing a smooth driving surface	1	3	4	12
Improve existing roadways	2	3	5	9
Add shoulders on State or US Highways		3	9	9
Improve signs along existing roadways	1	4	9	6

12. Which do you think should be a priority when selecting transportation projects?

	Not Important	**Somewhat Important**	**Important**	**Very Important**
Supports Economic Development	2	10	6	
Improves Safety		5	8	7
Reduces Congestion	1	7	5	5
Bicycle Lanes or Facilities	9	7	1	1
Improve Pedestrian walkways	8	4	6	
Improves Travel Choices	6	8	4	
Reduces Energy Consumption/Pollution	4	8	6	
Improves freight movement	4	6	4	2
Other (specify)				

13. In your community are there challenges to access the transportation system? Yes *(4)* No *(14)* (Circle one) Please describe access limitations:
We are a rural community *Rough Roads* *81 Highway*

14. What are some specific locations with traffic problems that you encounter through the day?
Nobody stops at stop signs. *Highway 11*
Holes (pot) coming off Hwy 11 on Hwy74, 81-11 stop signs
81 Highway *Rough Roads*

15. Please provide additional comments regarding transportation improvement needs
More Money *Wider Roads*
Quit waiting till roads are terrible before maintaining them.
Highways & bridges in Grant County. *Small towns need funding for roads.*