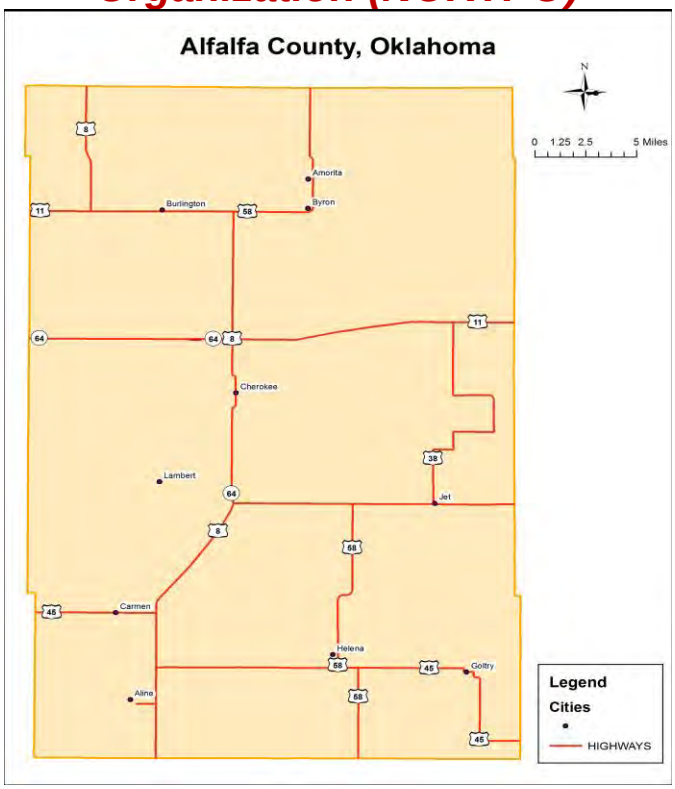
Northern Oklahoma Regional
Transportation Planning Organization

Alfalfa County Oklahoma
2036 Long Range Transportation Plan

Northern Oklahoma Regional Transportation Planning Organization (NORTPO)



Northern Oklahoma Development Authority

NODA
NORTHERN OKLAHOMA DEVELOPMENT AUTHORITY

Northern Oklahoma Regional Transportation Planning Organization

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In cooperation with:
The County of Alfalfa

The City of Cherokee

The Towns of Aline, Amorita, Burlington, Byron, Carmen, Goltry, Helena, Jet, and Lambert

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

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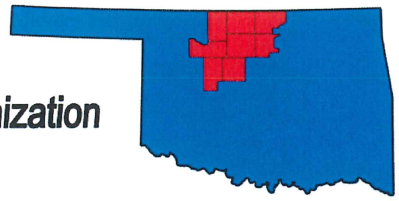

Resolution Adopting the Alfalfa County 2037 Long Range Transportation Plan

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 Alfalfa County 2037 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.

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

NOW, THEREFORE BE IT RESOLVED, that the NORTPO Policy Board hereby approves and adopts the Alfalfa County 2037 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 24th day of August, 2017.

Richard Rampe

NORTPO Policy Board Chairman

ATTEST:

Marci Hyde

NORTHERN OKLAHOMA DEVELOPMENT AUTHORITY - *Regional Solutions*

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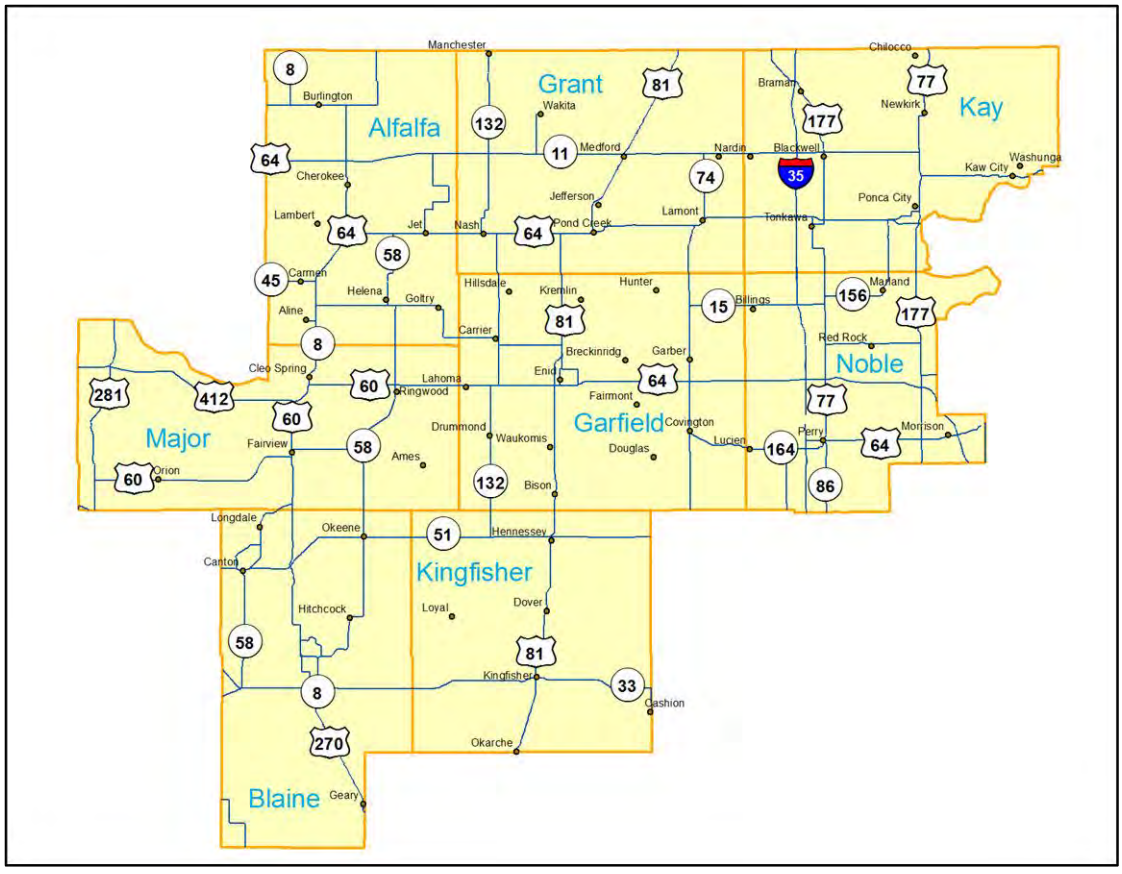
EXECUTIVE SUMMARY

The Northern Oklahoma Regional Transportation Planning Organization (NORTPO) developed the Alfalfa 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.

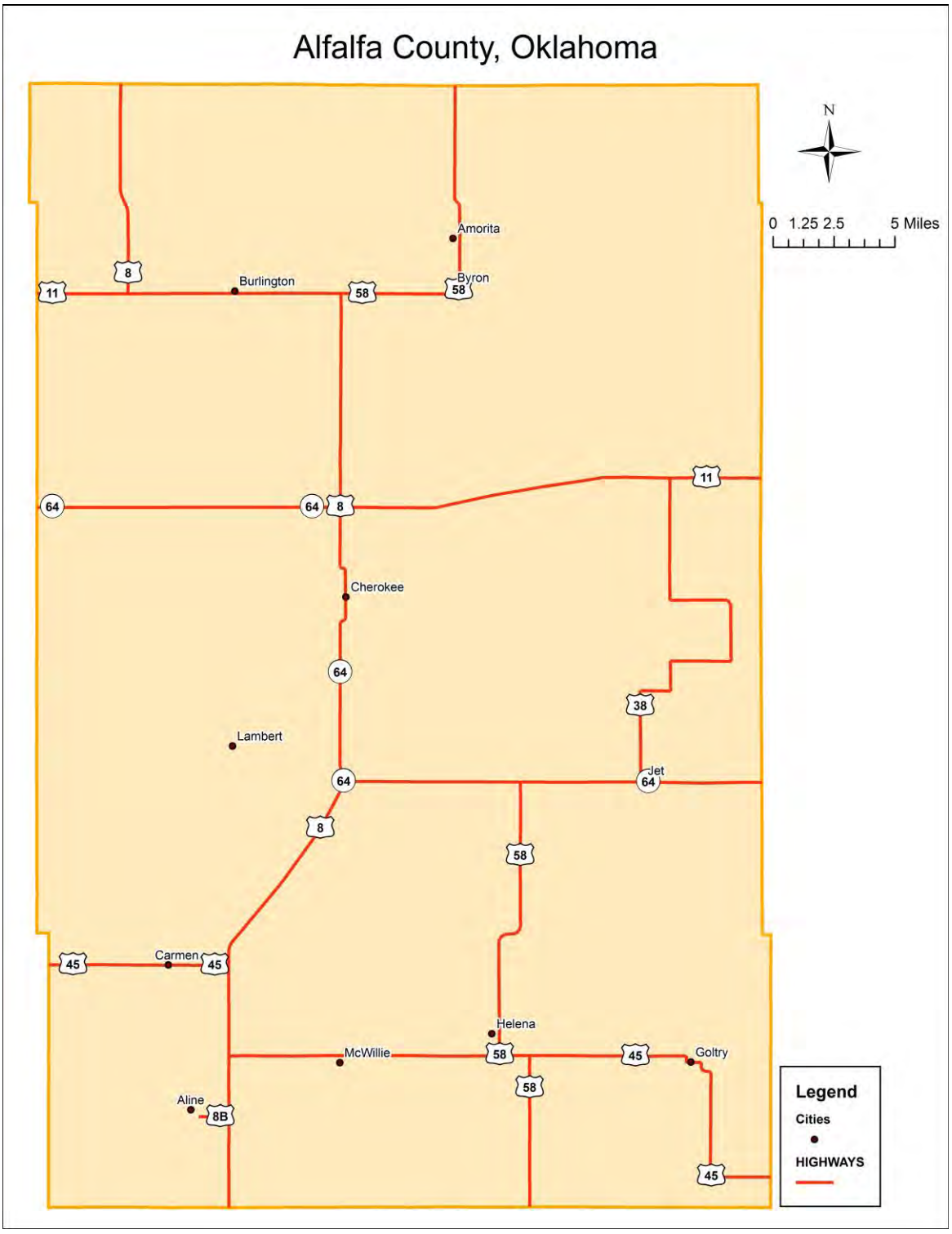
The Alfalfa County LRTP is part of a pilot project to help determine feasibility and organizational structure of an eventual statewide regional transportation improvement plan. This plan will be a part of the region-wide effort of NORTPO in their continuation of a regional approach to identify and examine 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 Alfalfa County



Alfalfa 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 Grant County on the east, Garfield County on the southeast, Major County on the south, and Woods County on the west, Alfalfa County has a total of 881 square miles of land and water.

CHAPTER 1
INTRODUCTION, GOALS AND KEY ISSUES

Introduction, Transportation Plan Purpose and Process

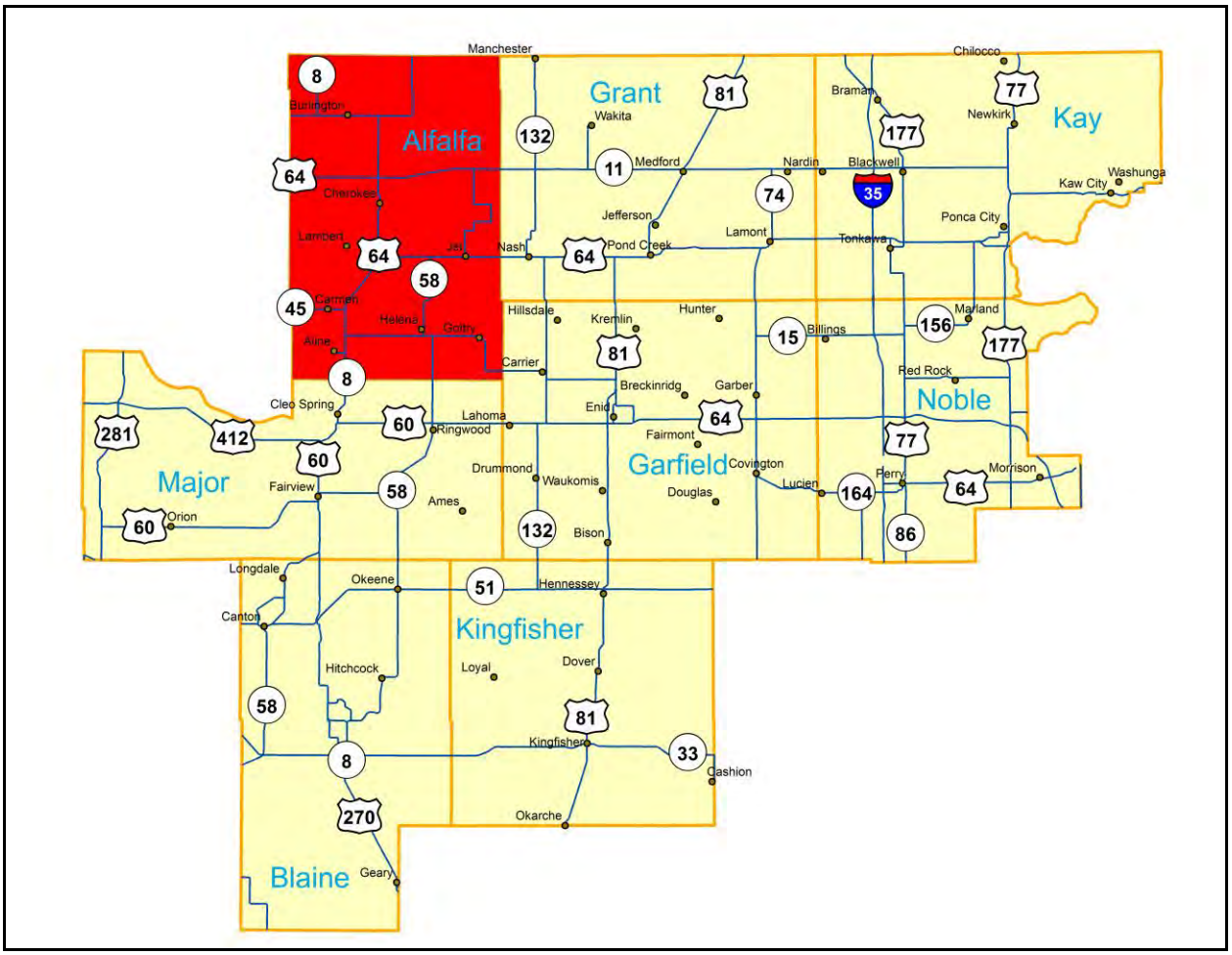
In 1970 Oklahoma's governor established 11 sub-state planning districts. Subsequently, the local governments served by the planning districts created the 11 Councils of Government (COG) using the sub-state planning district boundaries. These 11 districts make up the Oklahoma Association of Regional Councils (OARC). Throughout the past 44 years, the regional councils have evolved from conduits for regional planning and 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 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 Alfalfa 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.

Map 1.1 NORTPO and NODA Region



Source: NORTPO

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 Alfalfa County as well as the NORTPO region.

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 MAP-21 and the Fixing America's Surface Transportation Act (FAST Act).

Purpose of the Plan

The *Alfalfa County 2036 Long Range Transportation Plan* (LRTP) is a document that can be utilized by Aline, Amorita, Burlington, Byron, Carmen, Cherokee, Goltry, Helena, Jet, Lambert, Alfalfa County, Cherokee Strip Transit, MAGB Transportation, 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 Alfalfa County.

Aline, Amorita, Burlington, Byron, Carmen, Cherokee, Goltry, Helena, Jet, Lambert, Cherokee Strip Transit, MAGB Transportation, Alfalfa County Commissioners, regional stakeholders and the public were contacted to compile a countywide list of projects and prioritize a list of Alfalfa 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 eight planning factors identified in The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST) which was signed into law in December 2015. The FAST Act added two additional factors for a total of ten (Table 1), which NORTPO will strive to address through their LRTP planning process.

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 stormwater 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 Alfalfa County is:

Alfalfa 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.
7. 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 Alfalfa 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/Proper signage, and road shoulders on narrow roads

Challenges

The challenges facing the transportation system in Alfalfa 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
- Lack of designated freight route
- Lack of routes to major highways

Trends

Trends identified include:

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

CHAPTER 2
CURRENT CONDITIONS AND FUNDED IMPROVEMENTS

This chapter provides a "snapshot" of current conditions that relate to transportation in Alfalfa 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. Alfalfa County encompasses 881 square miles and includes ten cities and towns.

The economy of Alfalfa County is primarily based upon agriculture, mining, quarrying, oil, and gas extraction. 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 Aline, Amorita, Burlington, Byron, Carmen, Cherokee, Goltry, Helena, Jet, and Lambert. According to American Community Survey(ACS) 2015 census estimates, Alfalfa County has a total population of 5,755. Cherokee is the largest community in Alfalfa County with a population of 1,564. The second largest community is the Town of Helena with a population of 1,403. The remaining towns all have a population of less than 600 each: Carmen with 509, Aline with 245, Jet with 227, Goltry with 183, Burlington with 149, Lambert with 9 and Amorita with 6. The remaining population resides outside of any towns or cities.

Aline is a small town with a population of 245 according to the 2015 Census. The elementary school for grades pre-K-6 is located in Cleo Springs in Major County, Oklahoma. The high school for grades 7 - 12 is located in Aline. Agriculture, mining, quarrying, and oil and gas extraction are the largest industries for Aline, followed by educational services, and health care and social assistance. The Sod House Museum is located in Aline and encloses an original sod house, the only one still standing in Oklahoma that was built by a homesteader.

Amorita is a very small community located sixteen miles north of Cherokee and 9 miles east of Burlington with a population of 6 in the 2015 Census. The Burlington School District provides education for any school-age children living in Amorita. Amorita shares a fire district with Byron just two miles south.

Burlington is a small town located in Northwestern Alfalfa County with a population of 149 according to the 2015 Census. Burlington is an agricultural center and has a large grain elevator for Burlington COOP.

Byron is a small town and is located in northern Alfalfa County and in 2015 Census had a population of 39. Byron is seven and a half miles east of Burlington. Burlington schools provide education for school-age children residing in Byron.

Carmen is a small town located in south west Alfalfa County, five miles north of Aline and has a population of 509 according to the 2015 Census. Carmen shared a school district with the nearby town of Dacoma until it was closed in 1996. School-aged children now go to school in the Aline-Cleo school district.

Cherokee is the county seat for Alfalfa County and is located in central Alfalfa County. In the 2015 Census Cherokee had a population of 1,564. Cherokee Elementary School enrollment for pre-k-5 is 192 students. Cherokee Middle School enrollment grades 6-8 is 79 students. Cherokee High School enrollment grades 9-12 is 98 students. Cherokee is primarily a farming community, although historically, oil field activity has also played a significant role in the city's prosperity. Other major employers in Cherokee are Alfalfa Electric, United, and Cherokee Public Schools.

Goltry is a small town located in south east Alfalfa County that lies along State Highway 45. According to the 2015 census it has a population of 183. The main industries in Goltry are mining, quarrying, and oil and gas extraction. Elementary school students attend school at Timberlake Public Schools in Jet and high school and jr. high students at Timberlake Public Schools in Helena.

Helena is located in southern Alfalfa County with a population of 1,452 according to the 2015 census. The majority of the population comes from the James Crabtree Correctional Center with over 1,000 inmates. Children in elementary school attend Timberlake Public Schools in Jet, Oklahoma and high school students attend Timberlake Public Schools in Helena.

Jet is located in eastern Alfalfa County and lies where U.S. Highway 64 and State Highway 38 connect. According to the 2015 census Jet has a population of 227. Jet’s economy has been based on farming since its inception. Elementary school students attend Timberlake Public Schools in Jet and high school students attend Timberlake Public Schools in Helena.

Lambert is small community located in western Alfalfa County and has a population of only 6 people according to the 2015 Census. Even with the small population, Lambert is still considered an incorporated town.

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. Alfalfa 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 Alfalfa 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 Civilian Labor Force Not Adjusted. Table 2.3 illustrates employment by industry.

The County population is distributed 50.7% male and 49.3% female with a median age of 34.9. Alfalfa County's population 65 years and older (2011-2015 ACS) represents 18.5% 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 2011-2016 ranged from 2,290 to 2,977 a net increase of 687; while total labor force during this same time period ranged from 2,420 to 3,067.

Figure 2.1 illustrates the changes in the civilian labor force from 1990-2016.

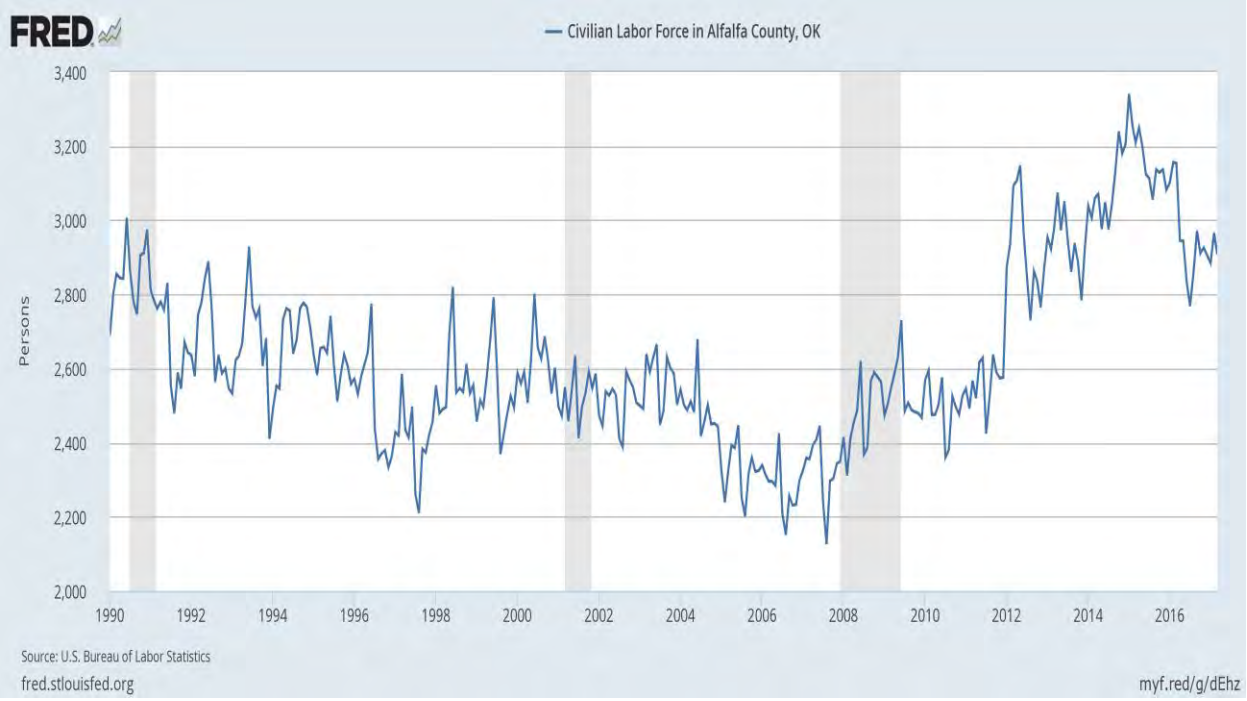


Table 2.4 summarizes vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Automobile and farm truck registration continues to show an increase annually. The data in the graph confirms that the primary vehicle is the automobile, which saw an increase of approximately 1,508 automobiles between 2012-2016. Data obtained from the 2011-2015 ACS reveals that 40.9% of the population had access to two or more vehicles available; while 3.6% of

the population did not have access to a vehicle. Commute patterns to work for Workers 16 years and older according to the 2011-2015 ACS identify that 77.8% of workers drove alone, 11.9% carpooled, and 4.5% worked at home. Mean travel time was estimated at 17.4 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 500 and employment thresholds of 300. In the future NORTPO will work cooperatively with ODOT in designation or revision to TAZ boundaries.

Geographically, Alfalfa County is subdivided into twelve TAZs. Because of the rural nature of Alfalfa County, there are a minimal amount of TAZs. Cherokee, Helena, and Carmen are the only cities in Alfalfa County that are located over multiple TAZs, because they are the areas with the highest population and work force. Helena has a specific traffic analysis zone for the James Crabtree Correctional Center which houses over 1000 inmates and has multiple employees. 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 Alfalfa County. Map 2.3 and table 2.5 show the population by TAZ. TAZ 403 has the largest concentration of population because of James Crabtree Correctional Center. Major employer data is found in table 2.6. Major employers by TAZ can be found in map 2.4. 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 Alfalfa 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 Alfalfa 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. Cherokee 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 Cherokee. The most significant commercial growth areas continue to occur in Cherokee.

According to information received from the public, lack of transportation is mentioned as one of the constraining factors. Maps 2.5, 2.6, and 2.7 depict the location of the highways, rivers, airports and railroad. The primary east/west corridors are State Highways (SH) 11 and 45 and US Highway (US) 64. BNSF Railroad provides Class 1 rail in the county. The airports in Alfalfa County include publicly owned Cherokee Municipal, and a private airport, Kegalman Air Force Auxiliary Field. Transit services are limited to call-on-demand van services provided by Cherokee Strip Transit and MAGB.

Alfalfa 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
- State Parks
- 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, Medicine Lodge River, Sandy Creek, Powell Creek, Wagon Creek, Turkey Creek, Clay Creek, East Clay Creek, West Clay Creek, Salty Creek, Rush Creek, Dry Creek, Little Mule Creek, Driftwood Creek, Eagle Chief Creek, Stink Creek, and Spring 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.

Alfalfa County Floodplains
Floodplains have only been determined for the incorporated areas of Alfalfa 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 Alfalfa 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 Alfalfa County properties are plotted on Map 2.8 and listed in Table 2.7. http://www.nationalregisterofhistoricplaces.com/ok/Alfalfa/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 Alfalfa 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. At this point in time air quality data is not collected.

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.

Alfalfa County currently has no wind farms, but has monitoring towers to study for future building of wind farms.

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 Alfalfa 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 Alfalfa 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 Cherokee, and Helena as illustrated in map 2.4.

Streets and roads considered to be most important in the development of a long range transportation plan are shown in Map 2.7. This includes the US and State Highways and those county roads considered to be critical to overall mobility in Alfalfa County. The majority of the roads in the county are two-lane undivided roads. The critical roads are functionally classified and illustrated in Map 2.9.

Road Classification

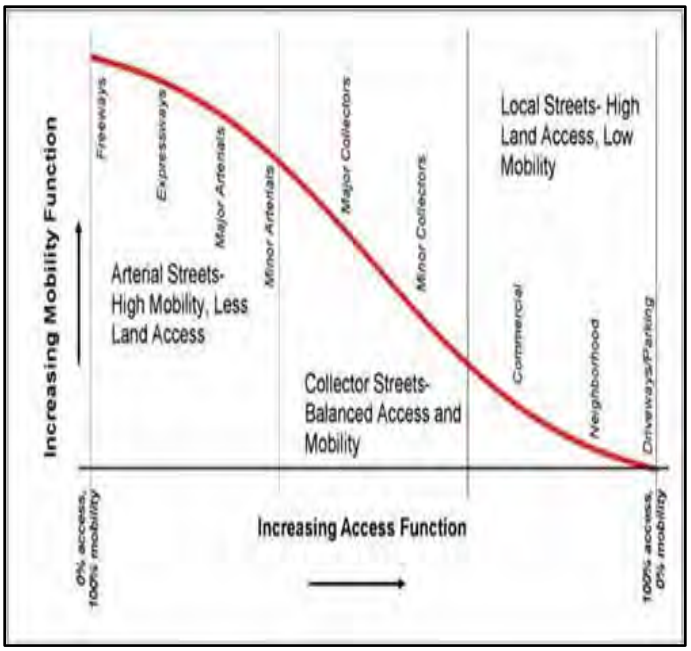
Functional classification is a well-established system utilized by the Federal Highway Administration (FHWA) for grouping streets and highways into classes based on roadway characteristics and intended services. Basic to this process is the recognition that individual roads and streets cannot serve travel 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 Alfalfa County are designated as rural. Figure 2.2 illustrates the functional classification hierarchy.

Figure 2.2



Traffic count data was collected from ODOT (Map 2.10). Traffic counts are collected by ODOT and data included in this plan reveal that the largest volume of traffic is carried on US 64 north and south of Cherokee and US 64 northwest of Cherokee heading into Woods County. Alfalfa County has no high volume truck corridors.

Public Safety Issues

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 Alfalfa County Multi-jurisdiction Hazard Mitigation Plan. Ongoing participation in these planning activities helps prepare for and to better manage transportation security situations.

MAP-21 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 539 total crashes involving 345 people and 9 fatality crashes killing 10 in Alfalfa County over the 2011-2015 timeframe with an average of 108 crashes per year. Map 2.11 shows the locations of collisions for 2011-2015. Table 2.8 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 and State Highway 8B south of Carmen. 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 2.11 illustrates the location of two lane highways with no shoulders. Map 2.12 illustrates the Steep Hill/Sharp Curves areas of concern (statewide). The County transportation system has approximately 1972 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.

Alfalfa County is served by many State Highways and has one US Highway, as well as municipally owned streets, and county roads.

The major access roads are:
- US 64 is the major east-west transportation corridors.
- SH 11 and SH 45 are also east-west corridors.
- SH 8 and SH 58 are the north-south corridors through Alfalfa 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 "9" 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 300 bridges in Alfalfa County. Map 2.14 shows the bridges and Table 2.9 lists the bridges by location. According to data received from ODOT, there are numerous deficient bridges, not only in Oklahoma but Alfalfa County as well. In the last few years repair and/or replacement of deficient bridges has been a priority of ODOT.

Table 2.10 lists bridges identified as structurally deficient and functionally obsolete for Alfalfa County.

Freight

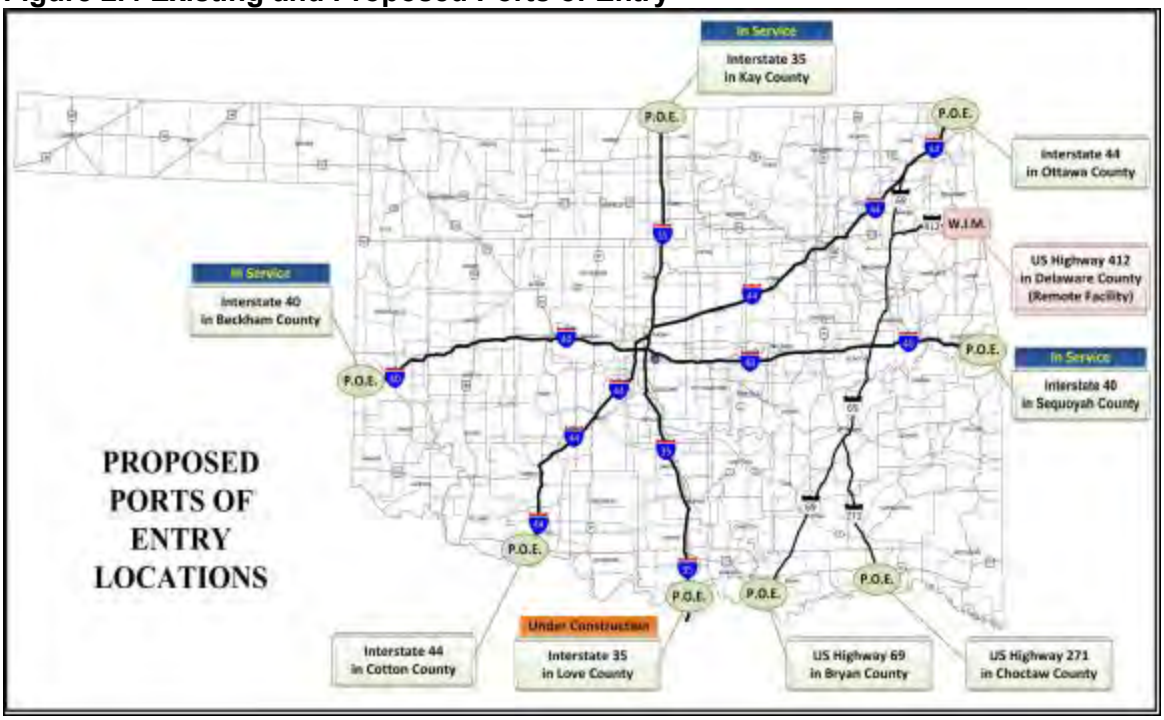
The Fixing America's Surface Transportation Act (FAST Act) repealed both the Primary Freight Network (PFN) and National Freight Network and directed the FHWA Administrator to establish a National Highway Freight Network (NHFN). The FAST Act included the Interstate System - including Interstate facilities 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 2.15). While Alfalfa County does not include roads identified in the PFN the NORTPO Policy Board recognizes that highways SH 11, SH 8 and US 64 are significant statewide and regional highway freight corridor. Alfalfa County Freight Corridors determined by the NORTPO Technical Committee are located on Map 2.16

The majority of freight movement in the region is by truck. I-35 east of Alfalfa 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 as industrial business grows. 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 allow 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 is the only Class I railroad in Alfalfa 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.

Grain, automotive, rock, and gravel products are the main freight transported through the County. Freight movement by rail in the NORTPO region is primarily used by the agricultural industries. There are approximately 1,375 miles of open rail track in the region. The rail

infrastructure is the responsibility of the railroads. Alfalfa 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 Alfalfa County and can service some of these military installations.

Figure 2.5

Passenger Rail

Currently there is no passenger rail service available in Alfalfa 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. Alfalfa 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) Alfalfas for rural transit operations.

Public transportation services for the area is limited to on demand van services provided by Cherokee Strip Transit and MAGB. 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 2.11 shows the ridership and revenue data for Cherokee Strip Transit from October 2014 - September 2015 and October 2015 - September 2016 for Alfalfa 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. Cherokee Municipal is a general aviation airport located 2 miles North of Cherokee covering 60 acres at 1,179 feet above mean sea level. Its one runway is designated 17/35, 3,770 by 60 feet (1149x18 meters), located at 36°47'18N 98°21'30W. The year ending March 31, 2016, the airport averaged 57 general aviation aircraft operations per week. At that time there were 10 aircraft based at this airport, eight single engine and two multi engine, 67% local general aviation and 33% transient general aviation.

Source: http://www.airnav.com /airport/4O5

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 plan are included in Appendix H-3.

Future Conditions

The population and employment projections for Alfalfa County were produced at the TAZ level for 2036. The 2036 population projection of 5,871 and employment projection of 3,409 were distributed through the TAZ. The projected population and employment data are illustrated in Map 3.1. Table 3.1 contains supporting data for the maps. Compared to the year 2010, population and employment is projected to remain consistent with the 2015 ACS estimated population of 5,775 and Oklahoma Employment Security Commission's LAUS employment data of 2,085 through 2036.

Population and employment projections are based upon available data. When utilizing this data, it is imperative to understand that the Alfalfa 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 Alfalfa 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 3.2 were obtained from the ODOT Eight Year Construction Program 2017-2024, CIRB Plan 2017-2020, County Commissioners, Local Governments and Transit operators. Map 3.2 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 2019-2023.

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 plan 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 Alfalfas 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.
- Subrecipients 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 subrecipients 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.
- Subrecipients 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 3.3 summarizes the CIRB for Alfalfa 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 Alfalfa (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 2015 population estimates, Alfalfa County's racial and ethnic composition is 88.5% White, followed by 4.2% American Indian and Alaska Native, then 5.3% Hispanic or Latino, and 4.3% African American. In comparison, Oklahoma's is 79.8% White, followed by 13.3% American Indian and Alaska Native, then 10.1% Hispanic or Latino, and 9.2% 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 Alfalfa 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
- MAP-21 Federal Planning Factors
- ODOT 2015-2040 Long Range Transportation Plan
- Cherokee 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 one public meeting in Alfalfa 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, Alfalfa County Fairgrounds, 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 Alfalfa 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 project.

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, and 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.		2016-2020	SPR, LOCAL			

Education and Awareness		2016-2020	SPR, LOCAL			
Economic Vitality		2016-2020	SPR, LOCAL, CDBG, USDA			
Environment		2016-2020	SPR, LOCAL, USDA			
Speed study at intersection locations with high accident severity index and corridors with major attractors.		2016-2020	LOCAL, STATE, FEDERAL			
24064(05) ROW: US-64 from 9.0 MI east of Woods Co. line, east 4.6 MI. ROW for 24064(04)		FFY2015	STIP	$630,700.00	$0.00	$630,700.00
24064(06) Utilities: US-64 from 9.0 MI east of Woods Co. line, east 4.6 MI. UT for 24064(04)		FFY2015	STIP	$750,000.00	$0.00	$750,000.00
27943(05) Right of Way: SH-8 bridge over Driftwood Cr., 0.9 MI north of SH-11 Jct. ROW for 27943(04)		FFY2015	STIP	$41,700.00	$0.00	$41,700.00
27943(06) Utilities: SH-8 bridge over Driftwood Cr., 0.9 MI north of SH-11 Jct. UT for 27943(04)		FFY2015	STIP	$106,000.00	$0.00	$106,000.00
28033(05) Right of Way: SH-38 over Salt Fork Arkansas Riv., 9.8 MI north of US-64 Jct. ROW for 28033(04)		FFY2015	STIP	$159,587.00	$0.00	$159,587.00
28033(06) Utilities: SH-38 over Salt Fork Arkansas Riv., 9.8 MI north of US-64 Jct. UT for 28033(04)		FFY2015	STIP	$162,675.00	$0.00	$162,675.00
29442(05) Right of Way: SH-8B over Eagle Chief Cr.,0.5 MI west of Jct. SH-8. ROW for 29442(04)		FFY2015	STIP	$57,000.00	$0.00	$57,000.00
29442(06) Utilities: SH-8B over Eagle Chief Cr.,0.5 MI west of Jct. SH-8. UT for 29442(04)		FFY2015	STIP	$119,500.00	$0.00	$119,500.00
17668(05) Right of Way: SH-8 from Major Co. line extend north 4 MI. ROW for 17668(04)		FFY2016	STIP	$152,723.00	$0.00	$152,723.00
17668(10) Reconstruct-no added lanes: SH-45 begin approx. 2.1 MI west of SH-8 & extend east 2.1 MI to SH-8.		FFY2016	STIP	$5,578,346.00	$0.00	$5,578,346.00
24124(07) Widen & Resurface: US-64 begin at 4.5 MI east of Woods co. line, extend east 4.5 MI		FFY2016	STIP	$7,012,038.00	$0.00	$7,012,038.00
26496(05) Right of Way: SH-8 from 4.90 MI north of Major Co. line,north 4.0 MI. ROW for 26496(04)		FFY2016	STIP	$125,280.00	$0.00	$125,280.00

27006(04) Bridge & Approaches: US-64 over Wagon Cr., 0.9 MI west of Grant Co. line		FFY2016	STIP	$2,650,000.00	$0.00	$2,650,000.00
17668(06) Utilities: SH-8 from Major Co. line extend north 4 MI. UT for 17668(04)		FFY2017	STIP	$369,962.00	$0.00	$369,962.00
24064(04) Grade, Draining, Bridge & Approaches: US-64 from 9.0 MI east of Woods Co. line, east 4.6 MI		FFY2017	STIP	$6,998,120.00	$0.00	$6,998,120.00
26496(06) Utilities: SH-8 from 4.0 MI north of Major Co. line, north 4.0 MI. UT for 26496(04)		FFY2017	STIP	$397,782.00	$0.00	$397,782.00
27943(04) Bridge & Approaches: SH-8 bridge over Driftwood Cr., 0.9 MI north of SH-11 Jct.		FFY2017	STIP	$1,497,056.00	$0.00	$1,497,056.00
28033(04) Bridge & Approaches: SH-38 over Salt Fork Arkansas Riv., 9.8 MI north of US-64 Jct.		FFY2017	STIP	$3,133,283.00	$0.00	$3,133,283.00
28032(04) Bridge & approaches: SH-58 over Medicine Lodge Riv. Overflow, 1.1 MI east of SH-8 N Jct.		FFY2018	STIP	$3,008,247.00	$0.00	$3,008,247.00
29442(04) Bridge & Approaches: SH8B over Eagle Chief Cr., 0.5 MI west of Jct. SH-8		FFY2018	STIP	$3,229,402.00	$0.00	$3,229,402.00
27943(04) Bridges & Approaches: SH-8 Bridge over Driftwood Cr., 0.9 MI north of SH-11 Jct.		FFY2017	FY 2017-2024 8 Year Construction Work Program			$2,465,000.00
17668(05) Right of Way: SH-8 from Major Co. line extend north 4 MI (ROW for 17668(04))		FFY2018	FY 2017-2024 8 Year Construction Work Program			$153,000.00
17668(06) Utilities: SH-8 from Major Co. line extend north 4 MI (UT for 17668(04))		FFY2018	FY 2017-2024 8 Year Construction Work Program			$400,000.00
17668(10) Reconstruct-no added lanes: SH-45 begin approx. 2.1 MI west of SH-8 & extend east 2.1 MI to SH-8		FFY2018	FY 2017-2024 8 Year Construction Work Program			$5,578,346.00
24124(07) Widen & Resurface: US-64 Begin at 4.5 MI east of Woods Co. line extend east 4.5 MI		FFY2018	FY 2017-2024 8 Year Construction Work Program			$6,700,000.00
26496(05) Right of Way: SH-8 from 4.0 MI north of Major Co. line north 4.0 MI ROW for 26496(04)		FFY2018	FY 2017-2024 8 Year Construction Work Program			$125,821.00

26496(06) Utilities: SH-8 from 4.0 MI north of Major Co. line north 4.0 MI UT for 26496(04)		FFY2018	FY 2017-2024 8 Year Construction Work Program			$400,000.00
24064(04) Grade, Draining, Bridge & Surface: US-64 from 9.0 MI east of Woods Co. line east 4.6 MI		FFY2019	FY 2017-2024 8 Year Construction Work Program			$8,400,000.00
17668(04) Grade, Draining, Bridge & Surface: SH-8 from Major Co. line extend north 4 MI		FFY2021	FY 2017-2024 8 Year Construction Work Program			$7,961,281.00
26496(04) Grade, Draining, bridge & Surface: SH-8 from 4.0 MI north of Major Co. line north 4.0 MI		FFY2022	FY 2017-2024 8 Year Construction Work Program			$6,300,000.00
24832(09) Grade, Drain & Surface: CR on NS-255 from EW-25 extend south 5.0 MI to SH-45 (PH III)		FFY2016	CIRB			$3,710,000.00
28671(04) Bridge & Approaches: Co. bridge on NS-260 over Cottonwood Cr., 1.0 MI west and 0.7 MI north of Cherokee		FFY2016	CIRB			$602,000.00
31769(05) Contract PE: CR from Goltry east to Garfield Co. line. PE for 31769(04)		FFY2016	CIRB			$60,000.00
28351(04) Bridge & Approaches: on NS-264 over Unnamed Cr., 3.0 MI east of Cherokee		FFY2017	CIRB			$520,000.00
29749(4) Bridges & Approaches: on EW-24 over Eagle Chief tributary 6.0 north, 2.9 west of Carmen. CT beams		FFY2017	CIRB			$500,000.00
29810(05) Contract PE: Bridge & approaches on EW-24 over Unnamed Cr., 2.9 MI west of SH-8. CT beams. PE for 29810(04)		FFY2017	CIRB			$46,000.00
31127(05) Contract PE: Bridge & approaches on EW-02 over West Clay Cr., 2/0 MI south & 1.2 MI west of Jct. US-64/SH-8. PE for 31127(04)		FFY2017	CIRB			$65,000.00
28661(05) contract PE: Co. bridge on NS-255 over Eagle Chief Cr., 1.9 MI south of Carmen. PE for 28661(04)		FFY2018	CIRB			$75,000.00

29783(04) Bridges & Approaches: on NS-274 over Wagon Wheel Cr., 3.0 MI east and 0.2 MI south of Jet. CT beams		FFY2018	CIRB			$800,000.00
30438(04) Bridges & Approaches: on EW-36 over Wagon Cr., 2.0 MI south & 1.9 MI east of Jet. CT beams		FFY2018	CIRB			$500,000.00
30467(04) Bridge & Approaches: on NS-254 over Dry Cr., 3.5 MI west & 0.6 MI south of Burington. CT beams		FFY2018	CIRB			$500,000.00
31772(05) Contract PE: Bridge and approaches on NS-272 over Turkey Cr., 3.1 MI south of Goltry. PE for 31772(04)		FFY2018	CIRB			$75,000.00
29785(04) Bridges & Approaches: CR (EW-30) over East Clay Cr., 7.6 MI east of Carmen		FFY2019	CIRB			$800,000.00
29798(04) Bridges & Approaches: On EW-21 over Unnamed Cr., 2.0 MI north and 0.3 MI west of Yewed. CT beams		FFY2019	CIRB			$500,000.00
29810(04) Bridge & Approaches: On EW-24 over Unnamed Cr., 2.0 MI west of SH-8. CT beams		FFY2019	CIRB			$500,000.00
30436(04) Bridges & Approaches: on EW-29 over West Clay Cr., 5.0 MI south & 1.9 MI west of Jct. US-64/SH-8. CT beams		FFY2019	CIRB			$500,000.00
31769(04) Resurface: CR EW-33 from Goltry east to Garfield Co. line		FFY2019	CIRB			$2,286,000.00
31806(05) Contract PE: Bridge and approaches on EW-2 over LWCat Cr., 4.0 north and 0.2 west of Amorita. PE for 31806(04)		FFY2019	CIRB			$75,000.00
28663(05) Contract PE: CR on NS-271, begin 7.0 MI south of Us-64 and extend north 7.0 MI. W 2 bridges. PE for 28663(04)		FFY2020	CIRB			$167,855.00
31127(04) Bridge & Approaches: on EW-26 over West Clay CR.,2.0 MI south & 1.2 MI west of Jct. US-64/SH-8		FFY2020	CIRB			$750,000.00
Statewide Maintenance		2016-2020				
Statewide Bridge		2016-2020				
Statewide Safety		2016-2020				

Statewide Transit		2016-2020				
Statewide Rail		2016-2020				
Transit Planning & Survey		2021-2025	SPR, LOCAL, CDBG, USDA			
Eduction and Awareness		2021-2025	SPR, LOCAL			
Bicycle and Pedestrian Planning		2021-2025	SPR, LOCAL,			
Evaluate the need and priority of expanding US 177 from 2 lanes to 4 lanes		2021-2025	SPR, LOCAL,			
Collect traffic count data at specific locations within the County		2021-2025	SPR, LOCAL			
Speed study at intersection locations with high accident severity index and corridors with major attractors.		2021-2025	SPR, LOCAL, SAFETY			
Railroad crossings (upgrade and improve)		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		2025-2029	TAP, LOCAL			
Eduction & Awareness		2025-2029	SPR, LOCAL			
Railroad crossings (upgrade and improve)		2025-2029	STATE, LOCAL			
Freight Planning		2025-2029	SPR, LOCAL			
Collect traffic count data at specific locations within the County		2025-2029	SPR, LOCAL			
Speed study at intersection locations with high accident severity index and corridors with major attractors.		2025-2029	SPR, LOCAL, STATE			
Statewide Maintenance		2026-2030				
Statewide Bridge		2026-2030				
Statewide Safety		2026-2030				
Statewide Transit		2026-2030				
Statewide Rail		2026-2030				
Bicycle & Pedestrian Projects		2031-2035	TAP, LOCAL			
Eduction & Awareness		2031-2035	SPR, LOCAL			

Railroad crossings (upgrade and improve)		2031-2035	STATE, LOCAL			
Collect traffic count data at specific locations within the County		2031-2035	SPR, LOCAL			
Speed study at intersection locations with high accident severity index and corridors with major attractors.		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				

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

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
AVC	Auto Vehicle Classifier
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
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
MAP-21	Moving Ahead for Progress in the 21st Century Act
NEPA	National Environmental Policy Act
NHS	National Highway System
NODA	Northern Oklahoma Development Authority
NORTPO	Northern Oklahoma Regional Transportation Planning Organization
ODEQ	Oklahoma Department of Environmental Quality
ODOT	Oklahoma Department of Transportation
PWP	Planning Work Program
RTPO	Regional Transportation Planning Organization
SAN	Study Area Network
SAFETEA-LU	Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users
SORTPO	Southwest Oklahoma Regional Transportation Planning Organization
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 – MAP-21

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.

Under MAP-21 US Department of Transportation (US DOT) will establish 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 areas in which performance measures will be developed:

- Safety – to achieve reduction in facilities and serious injuries on all public roads.
- Infrastructure Condition – to maintain highway infrastructure assets in state of good repair.
- Congestion Reduction – to achieve reduction in congestion on the National Highway System
- System Reliability – performance on the Interstate/Non Interstate system.
- Freight Movement – freight movement on the Interstate and Economic Vitality –
- Environment Sustainability to enhance the performance of the transportation system while protecting and enhancing the environment
- 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 in the project development and delivery process, including reducing regulatory burdens and improving agencies work practices.

As of today Notice of Proposed Rule Making (NPRM) has been released for Safety. Waiting on NPRM on statewide, metropolitan and non-metropolitan planning regulations that will provide guidance on how performance measures will be integrated. A second performance NPRM will focus on pavement, bridges and asset management and a third will focus on congestion, emissions, system performance, freight and public transportation. The schedule for the second and third release is unknown.

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. This NPRM proposes in 23 CFR 450.206 and 450.306 that States, MPOs, and providers of public transportation coordinate their targets. The MAP-21 requires that MPOs reflect those targets in their metropolitan transportation plan and encourages States to do the same in their long-range statewide transportation plan. Accordingly, this NPRM proposes that MPOs would reflect those targets in the metropolitan transportation plans. In addition, FHWA and FTA propose that States should reflect the targets in their long-range statewide transportation plans. Both States and MPOs would describe the anticipated effect toward achieving the targets in their respective transportation improvement programs.

The FHWA proposes to add language that funding shall be used for highway safety improvement projects that have the greatest potential net benefits and that achieve the State's fatality and serious injury performance targets in order to correlate this regulation with the provisions of section 1203 of MAP-21 regarding safety performance targets under 23 U.S.C. 150. The FHWA also proposes to clarify that prior to approving the use of HSIP funds for non-infrastructure related safety projects, FHWA will assess the extent to which other Federal funds provided to the States

for non-infrastructure safety programs (including but not limited to those administered by the National Highway Traffic Safety Administration (NHTSA) and Federal Motor Carrier Safety Administration) are programmed. The FHWA expects States to fully program these non-infrastructure funds prior to seeking HSIP funds for such uses.

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 described in 23 U.S.C. 150(b) and the general purposes described in 29 U.S.C. 5301. These processes are where decision-making and investment priorities would be linked to targets in key areas. See 23 U.S.C. 150 and 49 U.S.C. 5326 and 5329

The MAP-21 transforms the Federal-aid highway program and the Federal transit program by requiring a transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of Federal transportation funds. [11] As part of this new performance-based approach, recipients of Federal-aid highway program funds and Federal transit funds would be required to link the investment priorities contained in the STIP and TIP to achieving performance targets. This proposed rule is one of several proposed rules that would establish the basic elements of a performance driven, outcome-based program. This proposed rule is important to the FHWA's and FTA's overall implementation of the performance management provisions of MAP-21 because the planning process brings all of the elements together by tying performance to investment decision-making.

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 2.17 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.

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

Cherokee Comprehensive Plan
Alfalfa County Hazard Mitigation Plan
ODOT: http://ok.gov/odot/Programs_and_Projects/Transportation_Programs/LRTP_2015-2040.html
MAP-21 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.nationalregisterofhistoricplaces.com
www.fhwa.dot.gov

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

Map 3.1 Alfalfa County 2036 Population & Employment by TAZ

Table 3.1 Alfalfa County 2035 Population & Employment Projection by TAZ

Table 3.2 ODOT Eight Year Work Program

Table 3.3 ODOT CIRB Work Program

Map 3.2 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 2013 Alfalfa County Poverty Status by Census Block Group

Map 5.2 2013 Alfalfa County Limited English Proficiency by Household by Census Block Group

Table 5.1 2013 Alfalfa County Poverty Status by Census Block Group

Table 5.2 2013 Alfalfa County Limited English Proficiency by Household by Census Block Group

Map 5.3 2013 Alfalfa County Disabled Residents by Census Block Group

Table 5.3 2013 Alfalfa County Disabled Residents by Census Block Group

Table 5.4 2013 Alfalfa County Residents by Race

Alfalfa County Surveys

Appendix H-6 Chapter 6

Appendix H-2
Chapter 2

Table 2.1 NORTPO Counties Population Data

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

Source: US Census Bureau

Table 2.2 Alfalfa County Growth 1980-2015 ACS Estimate

	1980	1990	2000	2010	2015 ACS
Oklahoma	2,328,284	2,559,229	3,025,290	3,145,585	3,911,338
Alfalfa	7,077	6,416	6,105	5,642	5,755
Aline	313	265	214	207	245
Amorita	66	83	44	37	6
Burlington	206	168	156	152	149
Byron	67	57	45	35	39
Carmen	516	452	411	355	509
Cherokee	2,105	1,782	1,630	1,498	1,564
Goltry	305	295	268	249	183
Helena	710	1,040	443	1,403	1,452
Jet	352	270	230	213	227
Lambert	20	10	9	6	9
Remainder of County	2,417	1,994	2,655	1,487	1,372

Table 2.3 Employment by Industry

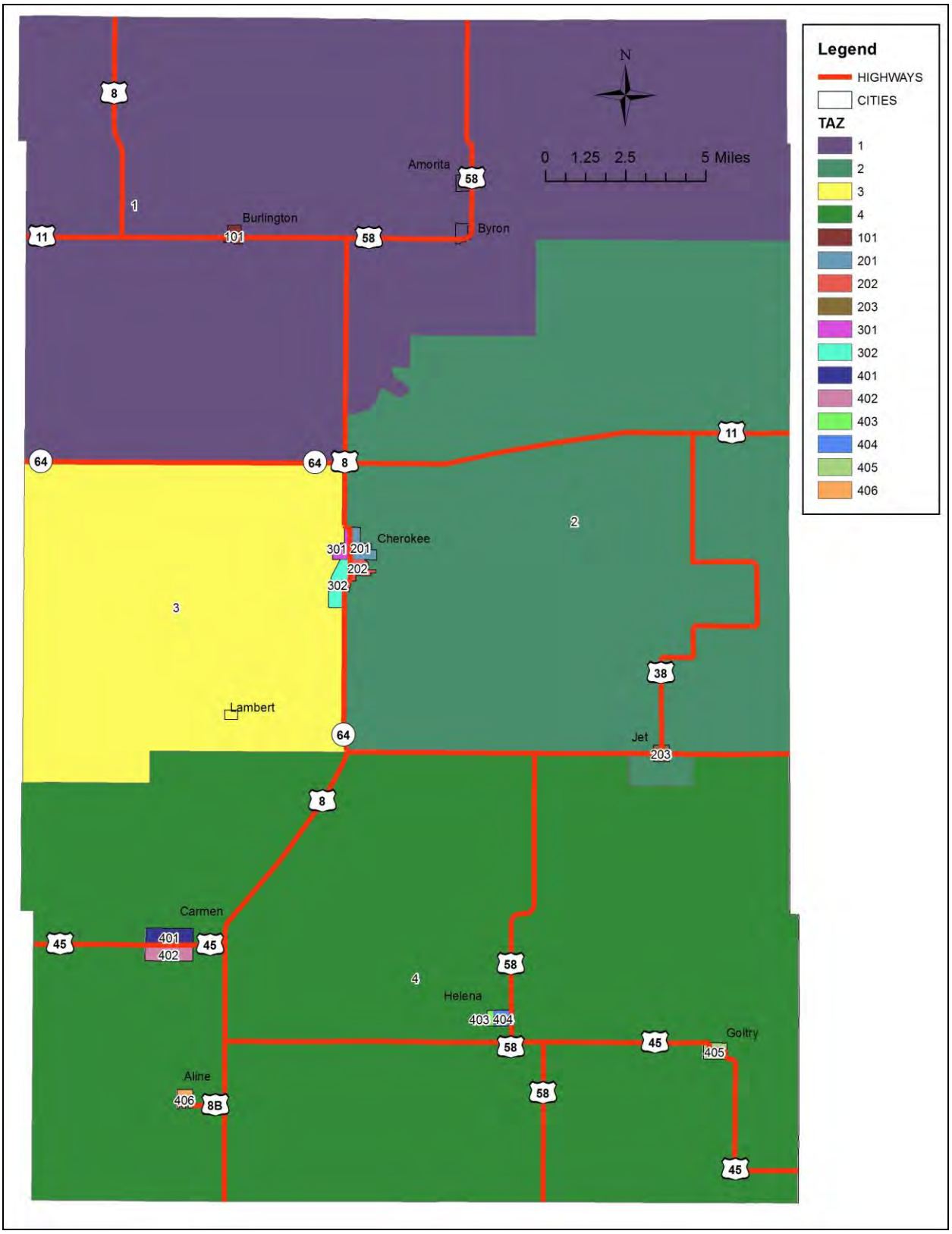
Industry	Alfalfa County, Oklahoma					
	Total		Percent Male		Percent Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian employed population 16 years and over	2,176	+/-149	60.7%	+/-2.8	39.3%	+/-2.8
Agriculture, forestry, fishing and hunting, and mining:	625	+/-94	91.0%	+/-4.4	9.0%	+/-4.4
Agriculture, forestry, fishing and hunting	354	+/-66	89.3%	+/-6.5	10.7%	+/-6.5
Mining, quarrying, and oil and gas extraction	271	+/-60	93.4%	+/-4.4	6.6%	+/-4.4
Construction	166	+/-47	96.4%	+/-3.5	3.6%	+/-3.5
Manufacturing	68	+/-29	94.1%	+/-7.8	5.9%	+/-7.8
Wholesale trade	69	+/-32	76.8%	+/-24.0	23.2%	+/-24.0
Retail trade	172	+/-48	29.7%	+/-8.8	70.3%	+/-8.8
Transportation and warehousing, and utilities:	184	+/-48	61.4%	+/-15.6	38.6%	+/-15.6
Transportation and warehousing	104	+/-40	59.6%	+/-26.7	40.4%	+/-26.7
Utilities	80	+/-30	63.8%	+/-16.2	36.3%	+/-16.2
Information	23	+/-15	26.1%	+/-28.8	73.9%	+/-28.8
Finance and insurance, and real estate and rental and leasing:	92	+/-34	34.8%	+/-17.6	65.2%	+/-17.6
Finance and insurance	68	+/-26	11.8%	+/-11.7	88.2%	+/-11.7
Real estate and rental and leasing	24	+/-22	100.0%	+/-47.5	0.0%	+/-47.5
Professional, scientific, and management, and administrative and waste management services:	78	+/-28	48.7%	+/-17.9	51.3%	+/-17.9
Professional, scientific, and technical services	61	+/-21	36.1%	+/-18.4	63.9%	+/-18.4
Management of companies and enterprises	0	+/-13	-	**	-	**
Administrative and support and waste management services	17	+/-16	94.1%	+/-18.4	5.9%	+/-18.4
Educational services, and health care and social assistance:	299	+/-51	24.7%	+/-7.1	75.3%	+/-7.1
Educational services	143	+/-37	29.4%	+/-9.1	70.6%	+/-9.1
Health care and social assistance	156	+/-44	20.5%	+/-10.4	79.5%	+/-10.4
Arts, entertainment, and recreation, and accommodation and food services:	96	+/-32	33.3%	+/-16.0	66.7%	+/-16.0
Arts, entertainment, and recreation	21	+/-18	81.0%	+/-23.5	19.0%	+/-23.5
Accommodation and food services	75	+/-27	20.0%	+/-14.3	80.0%	+/-14.3
Other services, except public administration	99	+/-30	33.3%	+/-16.1	66.7%	+/-16.1
Public administration	205	+/-49	46.8%	+/-11.8	53.2%	+/-11.8

Table 2.4 Alfalfa County Vehicle Registrations

	2012	2013	2014	2015	2016
Automobile	2,711	1,929	2,665	3,241	4,219
Farm Truck	1,274	991	1,289	1,464	1,862
Commercial Truck	112	91	144	171	201
Commercial Truck Tractor	32	27	28	43	40
Commercial Trailer	29	35	52	67	112
Motorcycles	117	84	136	176	233

Source: Oklahoma Tax Commission Annual Vehicle Registration Reports

Map 2.1 Alfalfa County Traffic Analysis Zones



Map 2.2 Alfalfa County Population by Traffic Analysis Zone

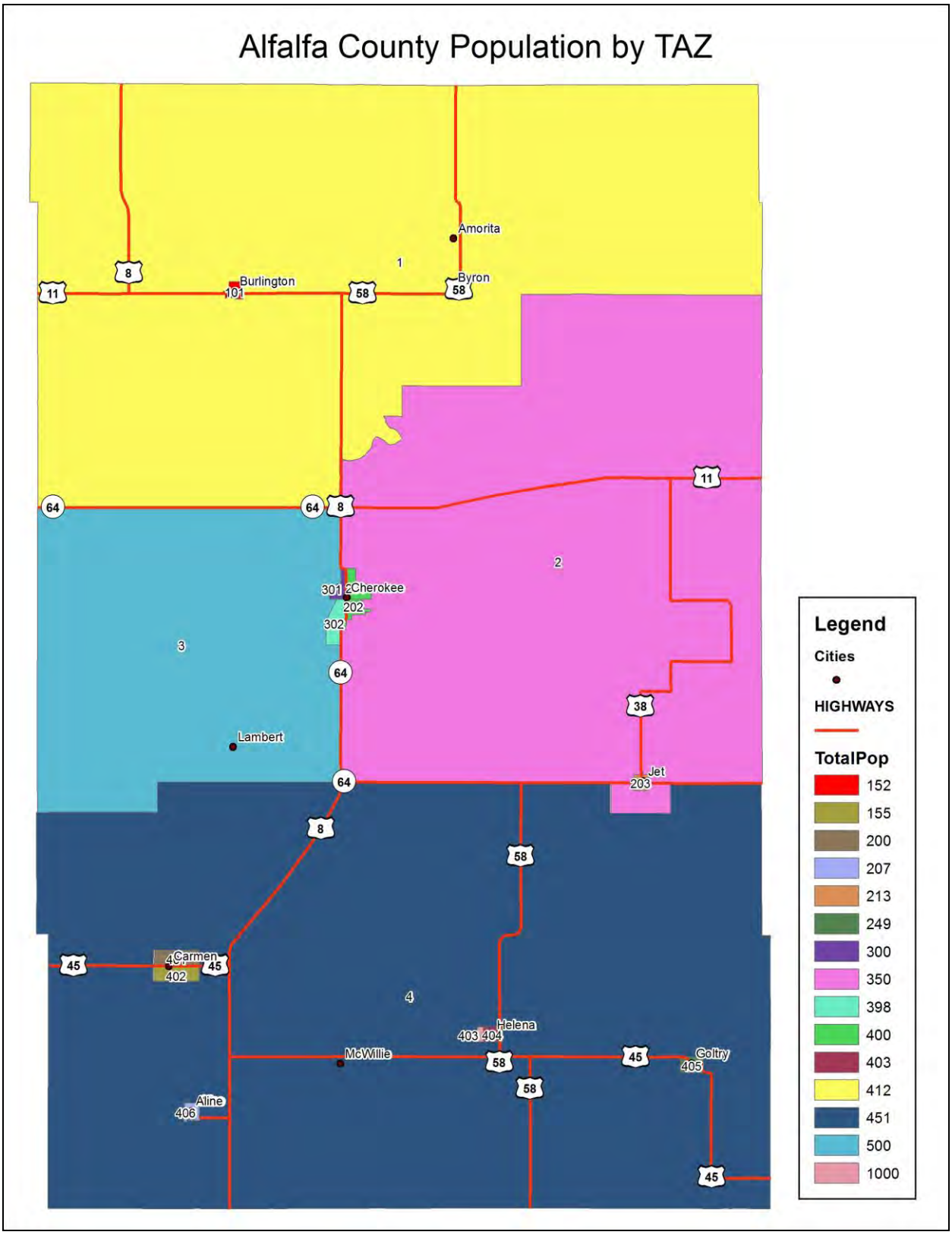
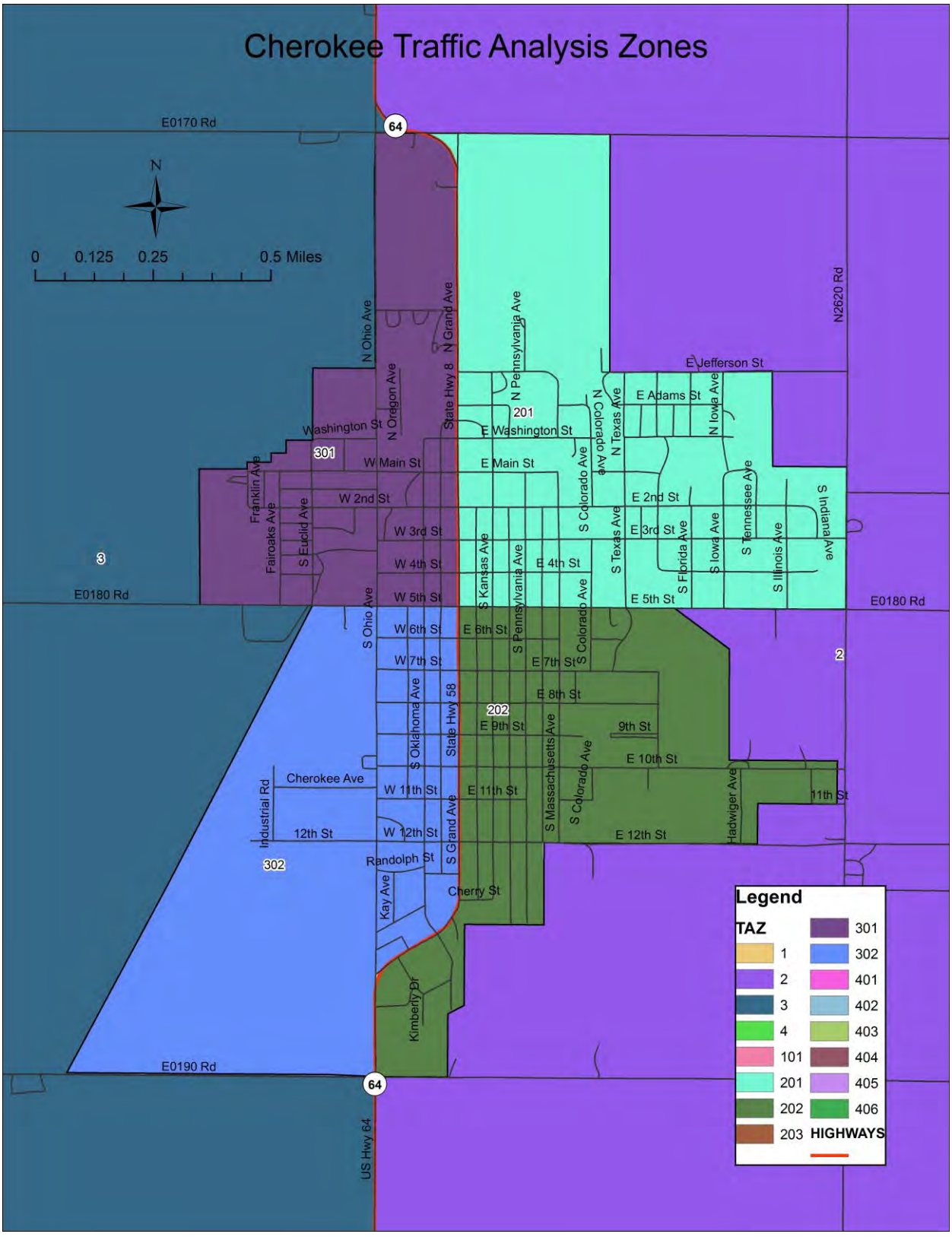


Table 2.5 Alfalfa County Population by Traffic Analysis Zone

TAZ	Population
1	412
2	350
3	500
4	451
101	152
201	400
202	400
203	213
301	300
302	398
401	200
402	155
403	1000
404	403
405	249
406	207

Map 2.3 Cherokee Traffic Analysis Zones



Map 2.4 Alfalfa County Major Employers by TAZ

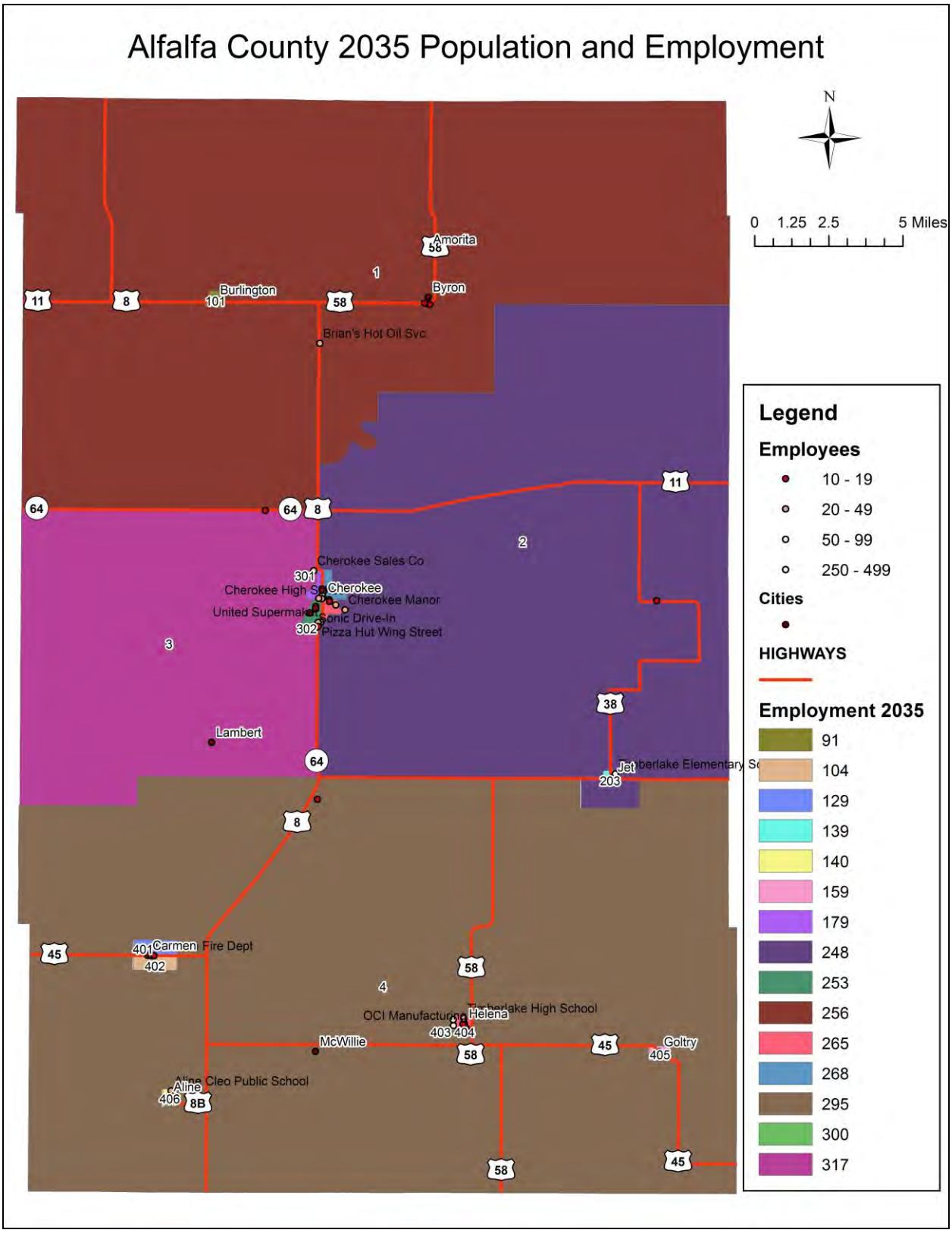
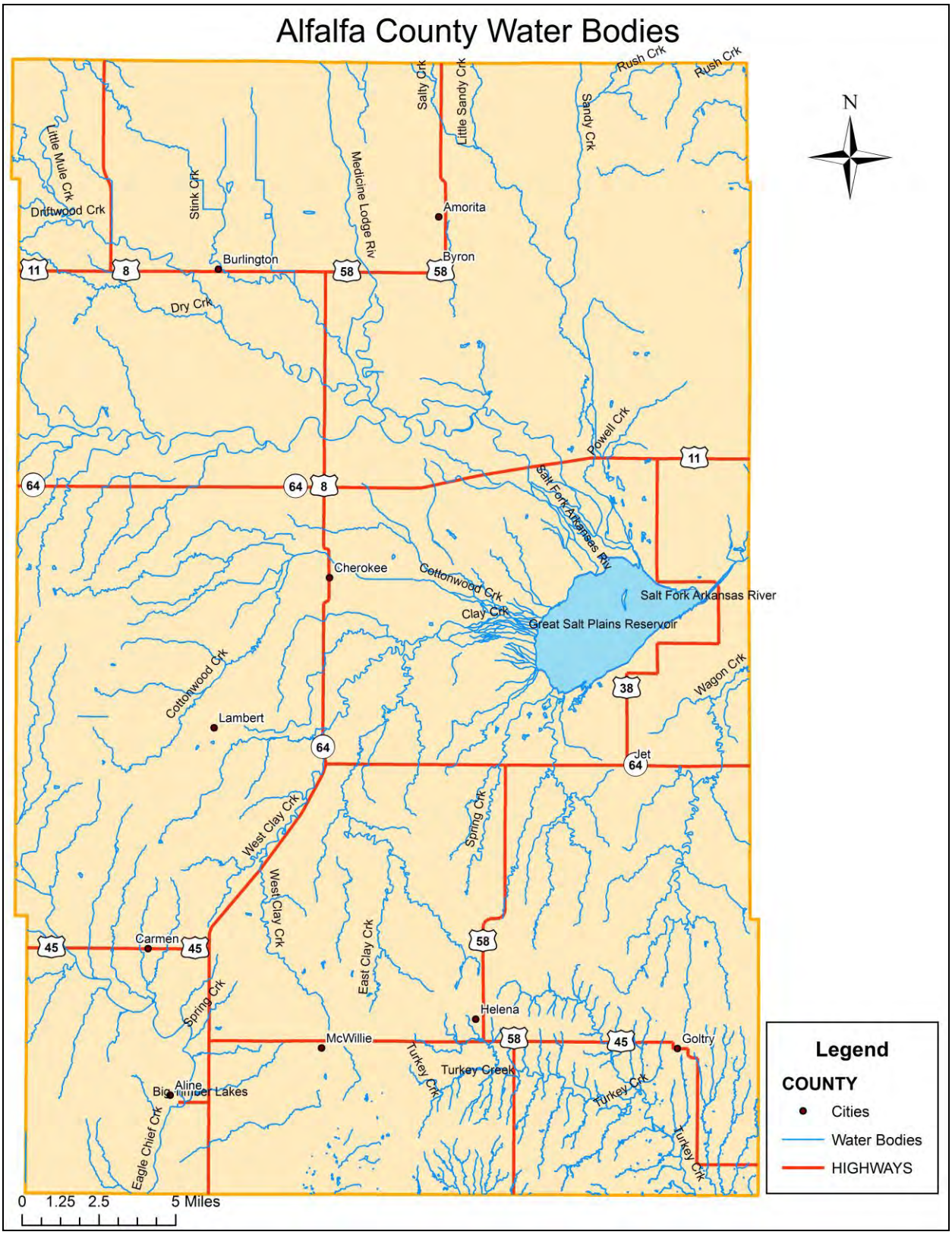


Table 2.6 Alfalfa County Major Employers

Company Name	Address	City	# of Employees
Aline Cleo Public Schools	301 E Ash	Aline	[20 - 49]
Alfalfa County Dist No 1	64784 Latimer Rd	Burlington	[10 - 19]
Burlington Convenience Store	Highway 11 & Main St	Burlington	[10 - 19]
Burlington Cooperative Assn	602 Main St	Burlington	[10 - 19]
Burlington Fire Dept	603 Main	Burlington	[10 - 19]
Burlington School District	401 Main St	Burlington	[20 - 49]
Amorita & Byron Fire Dept	Highway 85	Byron	[10 - 19]
Carmen Ambulance	Carmen	Carmen	[10 - 19]
Carmen Fire Dept	421 W Main St	Carmen	[20 - 49]
Kinder Morgan Inc	321 W Main St	Carmen	[10 - 19]
ACB Bank	323 S Grand Ave	Carmen	[10 - 19]
Alfalfa County Ambulance	121 N Grand Ave	Cherokee	[20 - 49]
Alfalfa County E M S	107 W Washington St	Cherokee	[10 - 19]
Alfalfa Electric	121 E Main St	Cherokee	[50 - 99]
Bass Home Health Care	221 S Grand Ave	Cherokee	[20 - 49]
Brian's Hot Oil Svc	32660 State Highway 8	Cherokee	[20 - 49]
Burlington Welding LLC	1101 Industrial Blvd	Cherokee	[10 - 19]
Cherokee City Manager	121 N Grand Ave	Cherokee	[10 - 19]
Cherokee Elementary School	700 W Nebraska Ave	Cherokee	[20 - 49]
Cherokee High school	412 E 5th St	Cherokee	[20 - 49]
Cherokee Manor	1100 Memorial Dr	Cherokee	[20 - 49]
Cherokee Public Sch Dist I-46	6th & Massachusetts	Cherokee	[10 - 19]
Cherokee Public School Dist	412 E 5th St	Cherokee	[20 - 49]
Cherokee Sales Co	60902 Harmon Rd	Cherokee	[20 - 49]
Cherokee Station	1710 S Grand Ave	Cherokee	[10 - 19]
Farmers Exchange Bancorp Inc	419 S Grand Ave	Cherokee	[20 - 49]
Great Salt Plains Health Ctr	405 S Oklahoma Ave	Cherokee	[20 - 49]
J P Energy Marketing	17182 County Road 610	Cherokee	[10 - 19]
Jiffy Trip	1745 S Grand Ave	Cherokee	[10 - 19]
Rick Caruthers Construction	821 S Ohio Ave	Cherokee	[10 - 19]
Sand Ridge Energy Inc	921 S Ohio Ave	Cherokee	[10 - 19]
Smok-Shak Inc	Highway 64 & 4th St	Cherokee	[10 - 19]
Sonic Drive-In	1745 S Grand Ave	Cherokee	[20 - 49]
United Supermarkets	1516 S Grand Ave	Cherokee	[20 - 49]
Wing Street	1612 S Grand Ave	Cherokee	[20 - 49]
Jet	805 Main St.	Cherokee	[10 - 19]
Croft Country Chevrolet Buick	1704 S Grand Ave	Cherokee	[10 - 19]

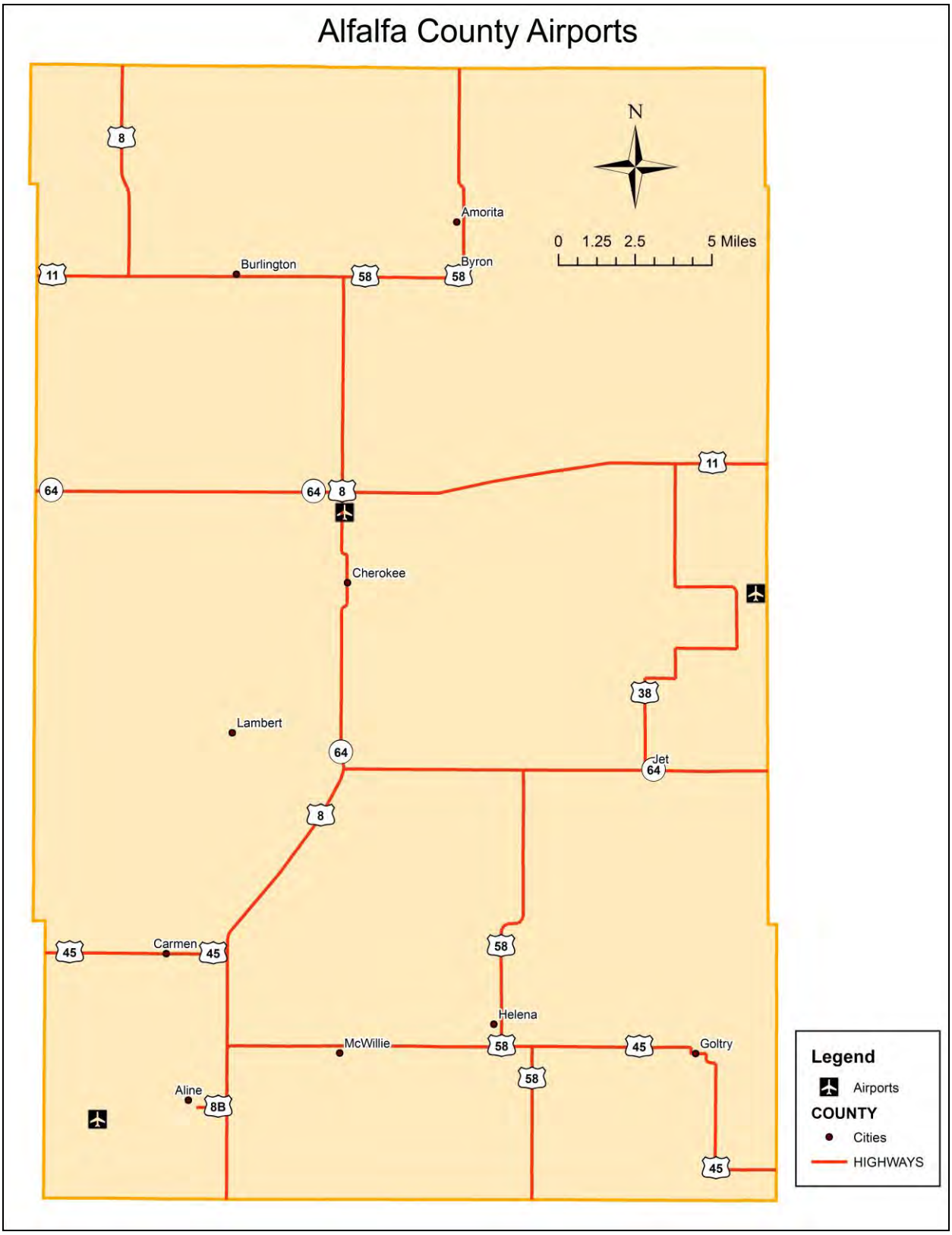
Alfalfa Count Barn	1st & Kingman St	Helena	[10 - 19]
Alfalfa County Ems	123 W Bird St	Helena	[10 - 19]
Aline , Goltry, Helena, and Jet Ambulance	32d St	Helena	[10 - 19]
OCI Manufacturing	216 N Murray St	Helena	[50 - 99]
Timberlake High School	601 N Main St	Helena	[20 - 49]
Timberlake Public School Supt	6th & Main St	Helena	[50 - 99]
Timberlake West Elementary	3rd & Magnolia	Helena	[50 - 99]
Nescatunga Rural Fire Dept	72553 Greer Rd	Helena	[10 - 19]
James Crabtree Correctional Center	3rd Street	Helena	[300-400]

Map 2.5 Alfalfa County Water Bodies



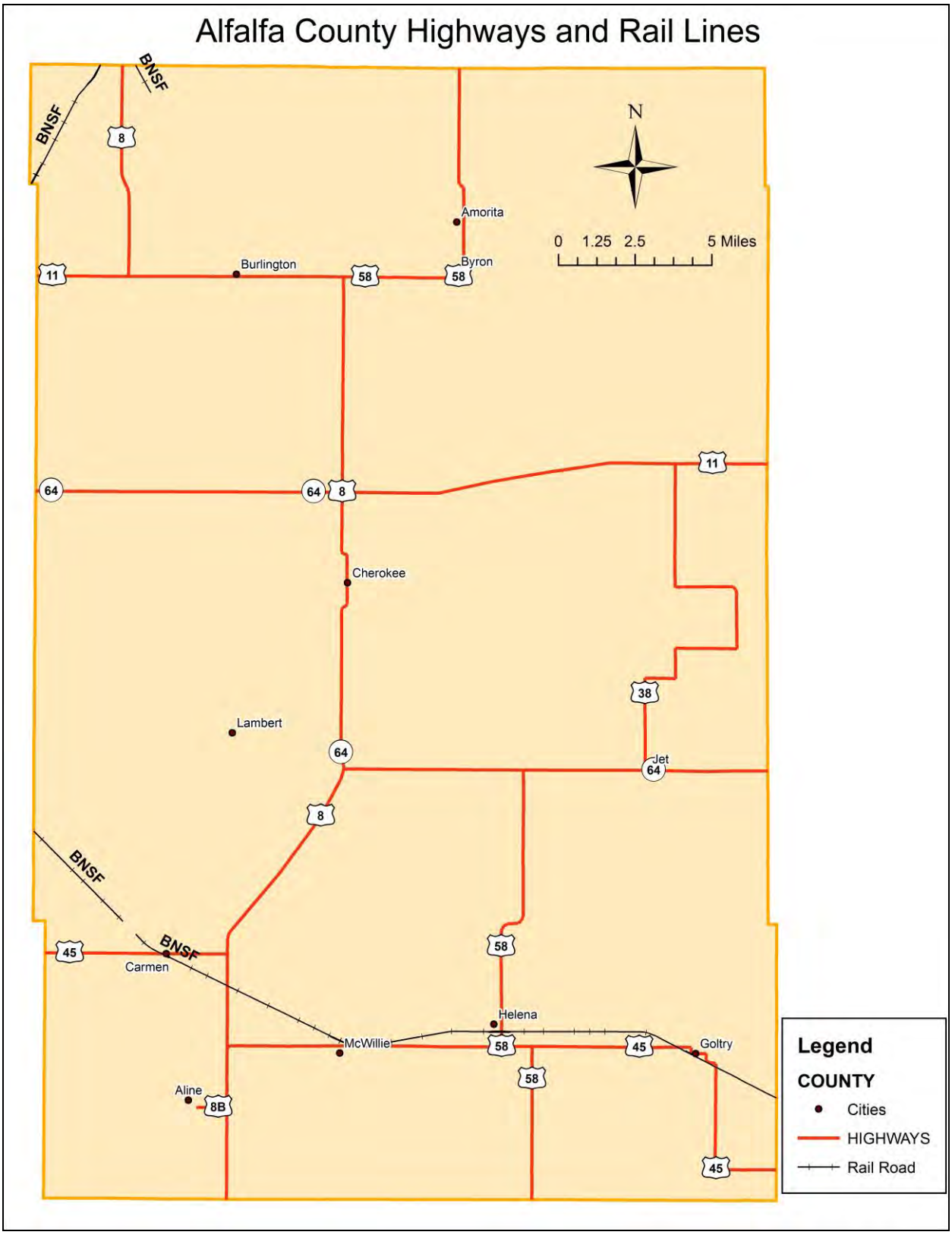
Source: csa.ou.edu

Map 2.6 Alfalfa County Airports



Source:csa.ou.edu

Map 2.7 Alfalfa County Highways and Rail Lines



Map 2.8 Alfalfa County Historic Places

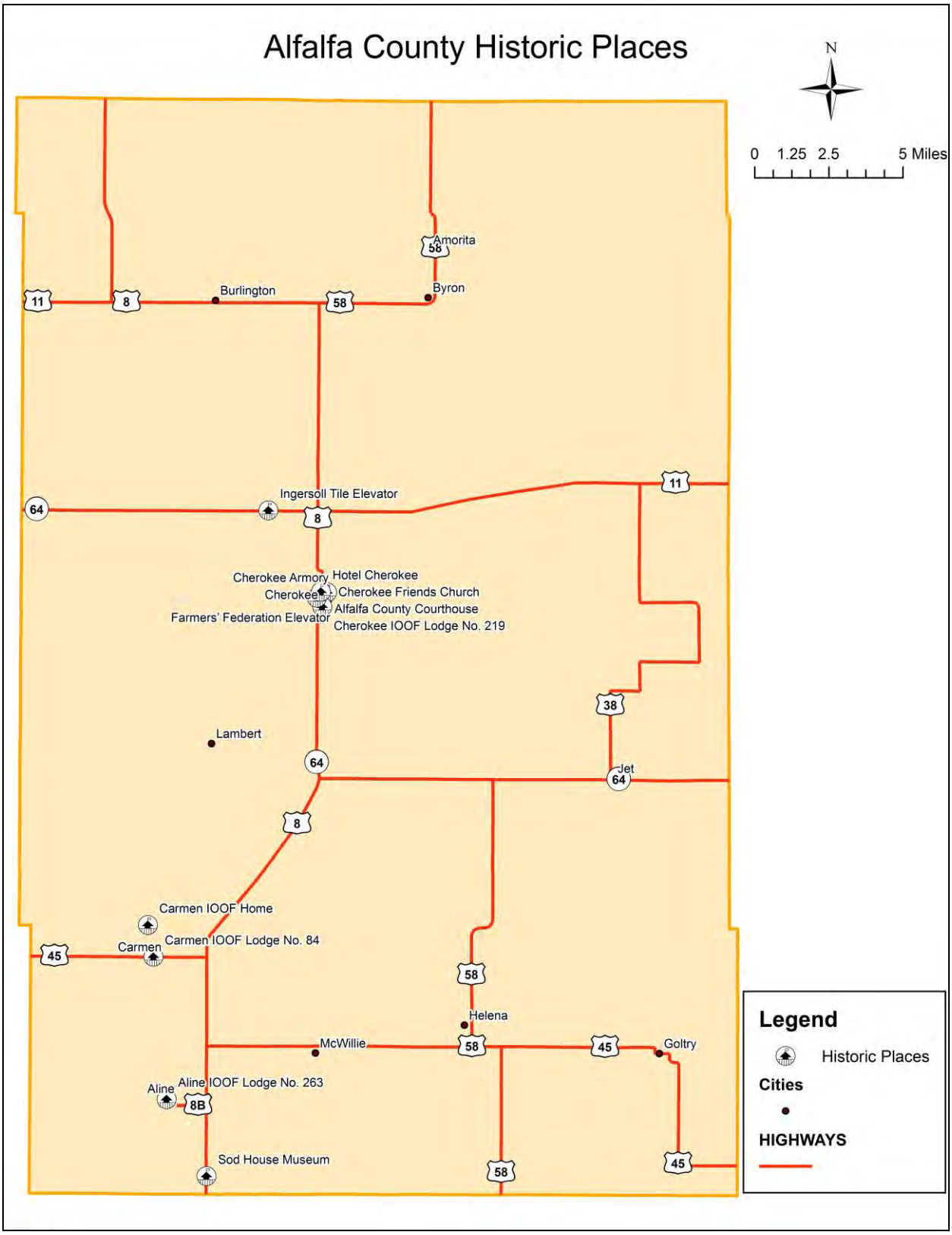
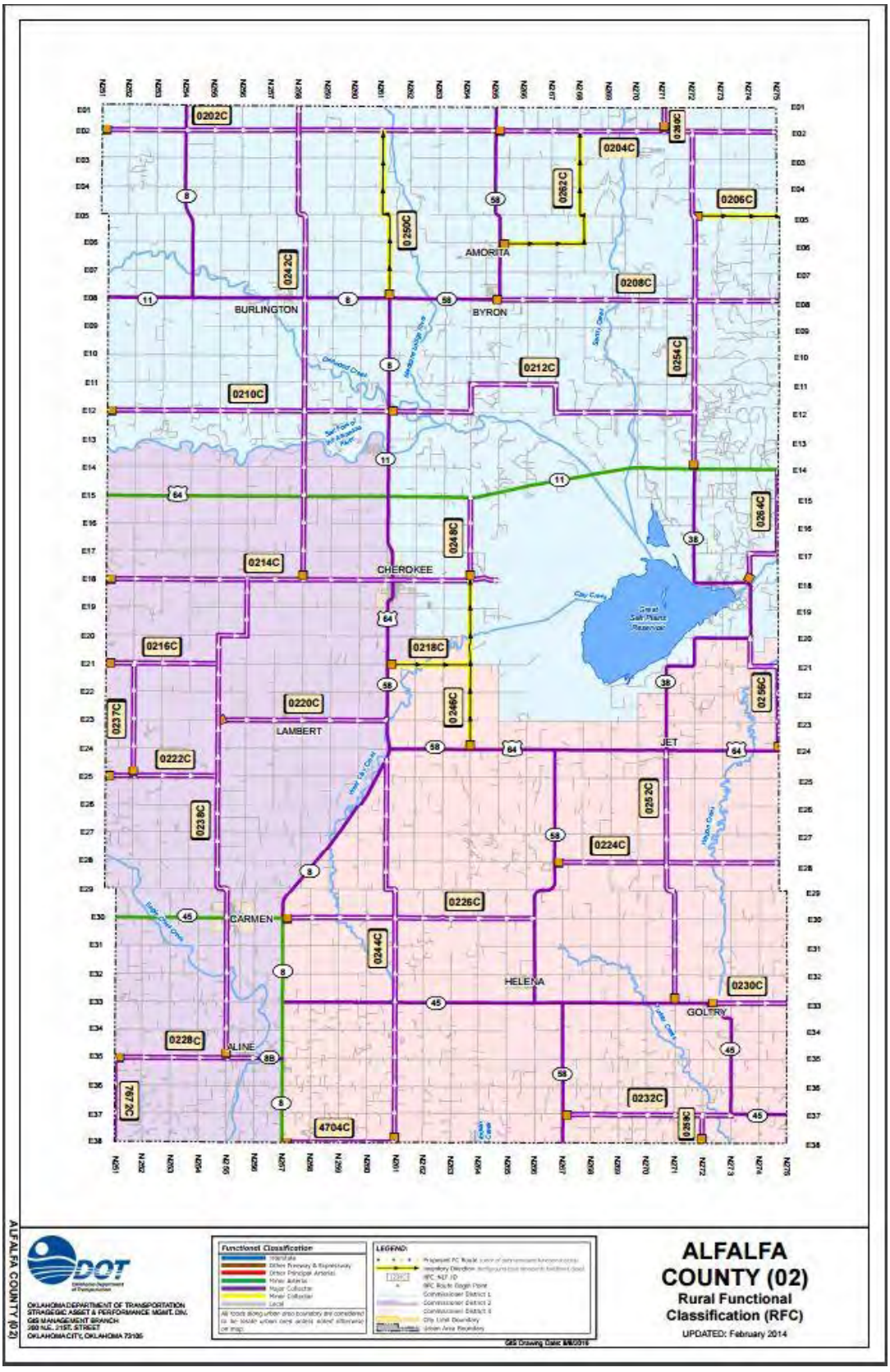


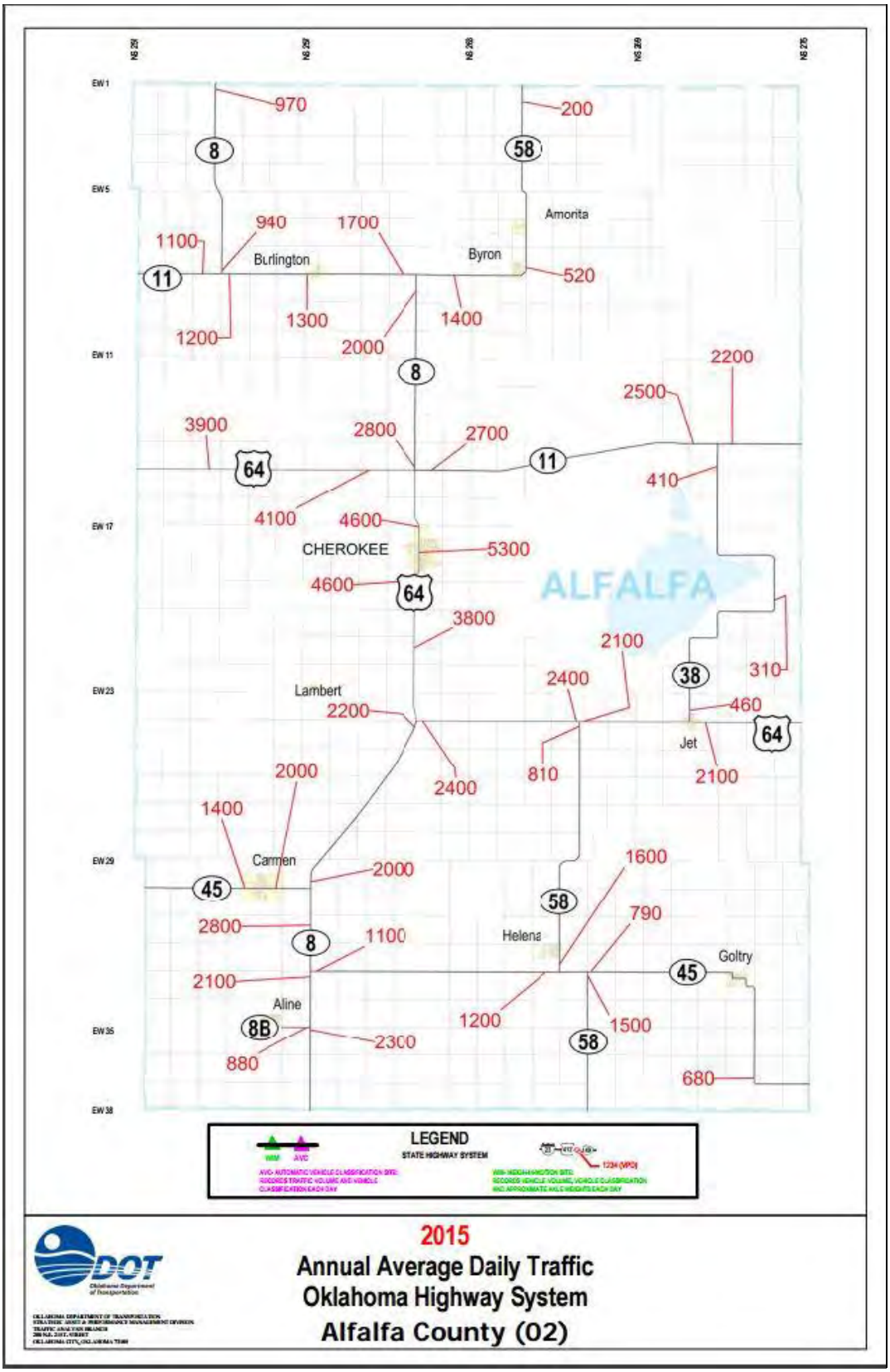
Table 2.9 Alfalfa County Historic Places

Name	Address	City	Owner	Category	Ownership
Alfalfa County Courthouse	Corner of Grand and Third Street	Cherokee	Multiple Ownership	Building	Public
Aline IOOF Lodge No. 263	Main & Broadway	Aline	Multiple Ownership	Building	N/A
Carmen IOOF Home		Carmen	Multiple Ownership	Building	Private
Carmen IOOF Lodge No. 84	Corner of Main and Fourth Street	Carmen	Multiple Ownership	Building	Public
Cherokee Armory	Corner of Second and Kansas Street	Cherokee	Various	Building	Public
Cherokee Friends Church	120 S Pennsylvania	Cherokee	City Owned	Building	Private
Cherokee IOOF Lodge No. 219	Corner of Grand and Second Street	Cherokee	Multiple Ownership	Building	N/A
Farmers' Exchange Elevator	SH-45	Cherokee	Farmer's Exchange of Goltry	Building	Private
Farmers' Federation Elevator	Ohio Avenue and 4th	Cherokee	Farmers' Co-op Elevator Assoc.	Building	Private
Hotel Cherokee	117 West Main Street	Cherokee	Alfalfa County Historical Society	Building	Private
Ingersoll Tile Elevators	Multiple off U.S. 64	Ingersoll	Kim Stauffel	Buildings	Private
Sod House	Between Aline and Cleo Springs on SH-8.	VIC. Cleo Springs	Oklahoma Historical Society		Public

Map 2.9 Alfalfa County Functional Classification



Map 2.10 Alfalfa County Average Daily Traffic Counts



Map 2.11 Alfalfa County Collisions by Severity

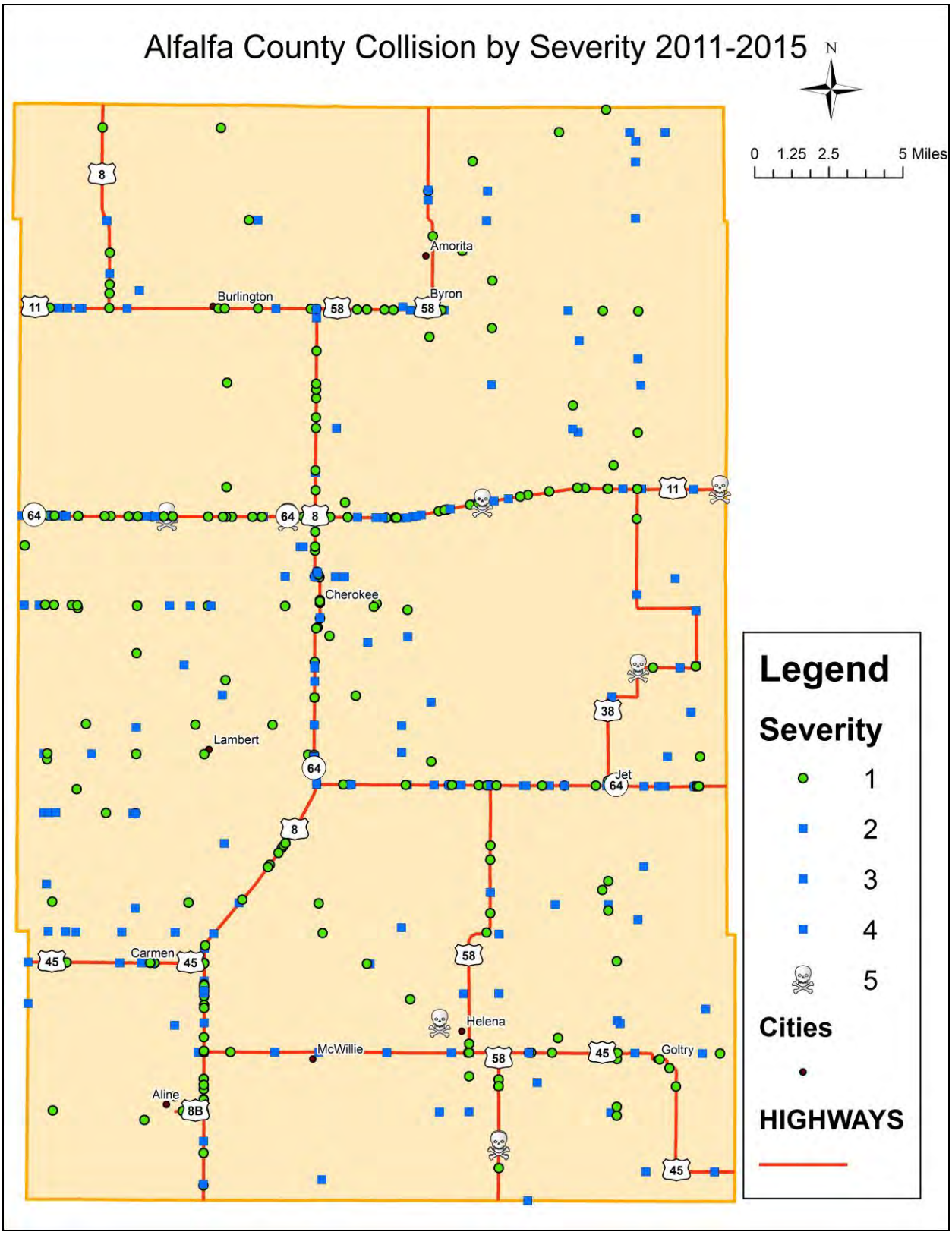


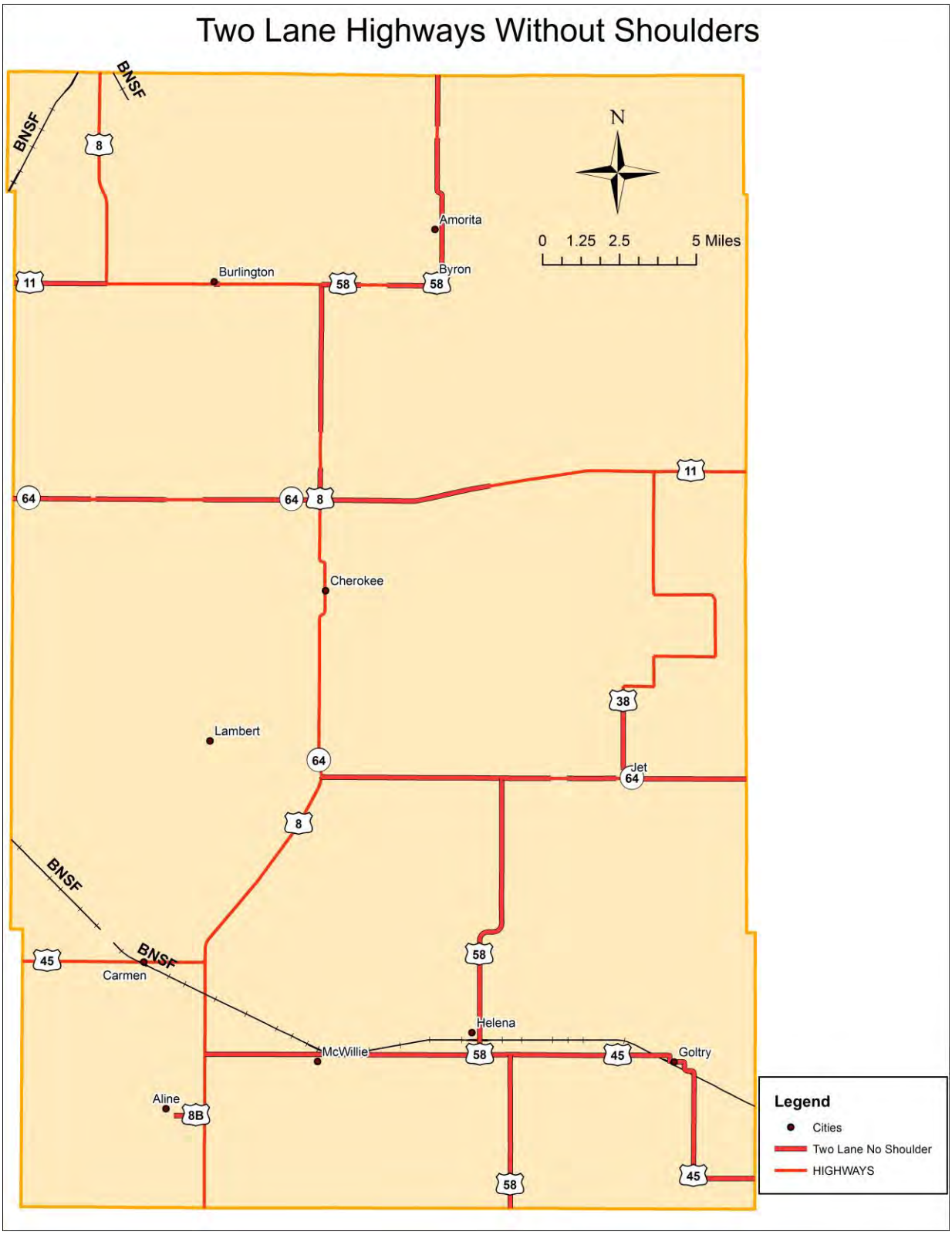
Table 2.8 Collision Concentration 2011- 2015

County: (02) ALFALFA

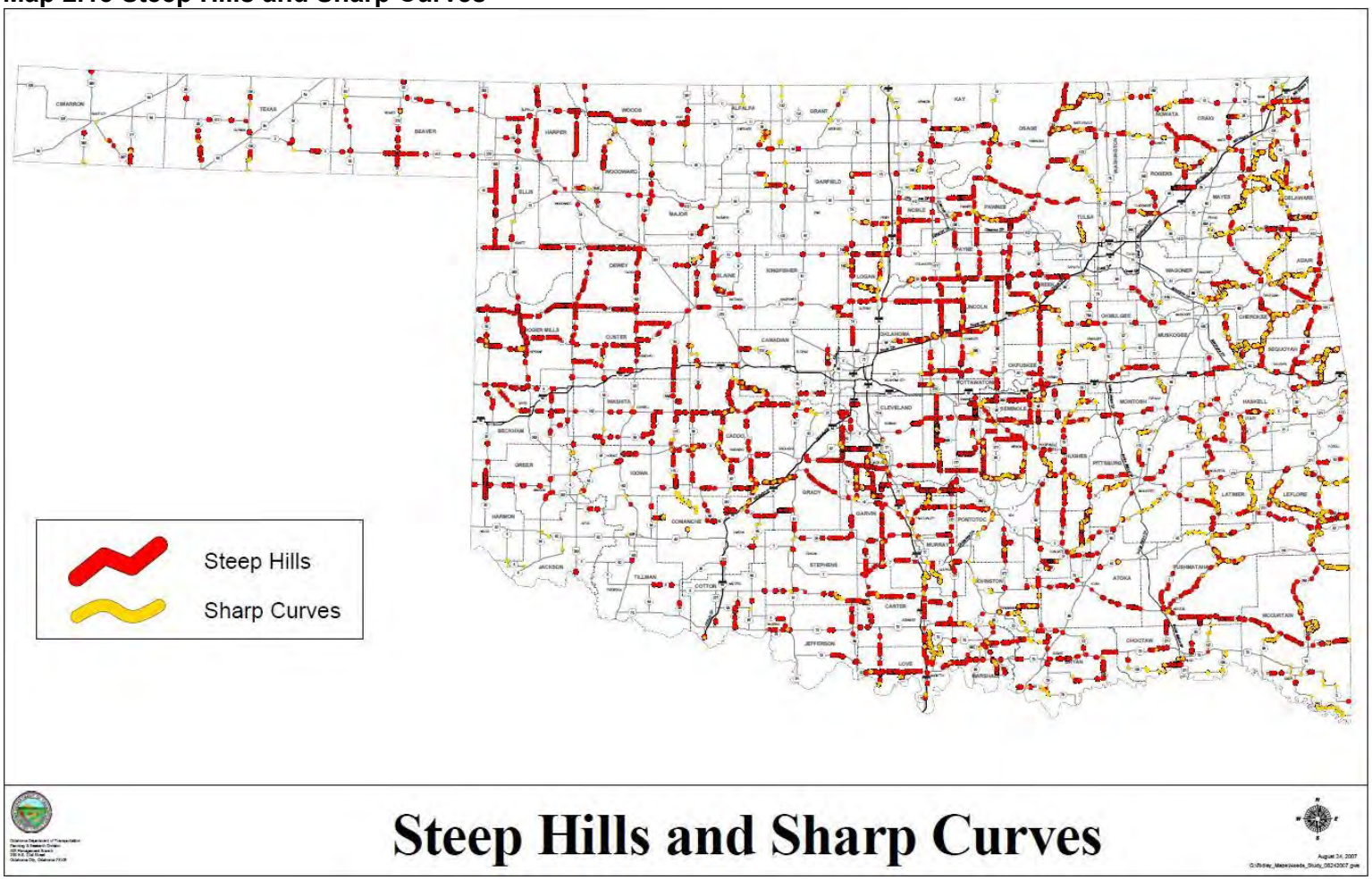
	HIGHWAY COLLISIONS				CITY STREET COLLISIONS				COUNTY ROAD COLLISIONS				TOTAL COLLISIONS			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
(00) - RURAL -	7	142	180	329					1	88	77	166	8	230	257	495
(15) BURLINGTON			1	1											1	1
(20) BYRON		1		1										1		1
(25) CARMEN		3	2	5		1	3	4						4	5	9
(30) CHEROKEE		1	8	9		3	6	9						4	14	18
(35) GOLTRY			2	2											2	2
(45) INGERSOLL		1	2	3										1	2	3
(50) JET		2	2	4		1		1						3	2	5
Total:	7	150	197	354		5	9	14	1	88	77	166	8	243	283	534

Source: ODOT Traffic Engineering Div. Collision Analysis and Safety Branch

Map 2.12 Alfalfa County Two Lane Highways Without Shoulders



Map 2.13 Steep Hills and Sharp Curves



Map 2.14 Alfalfa County Bridges

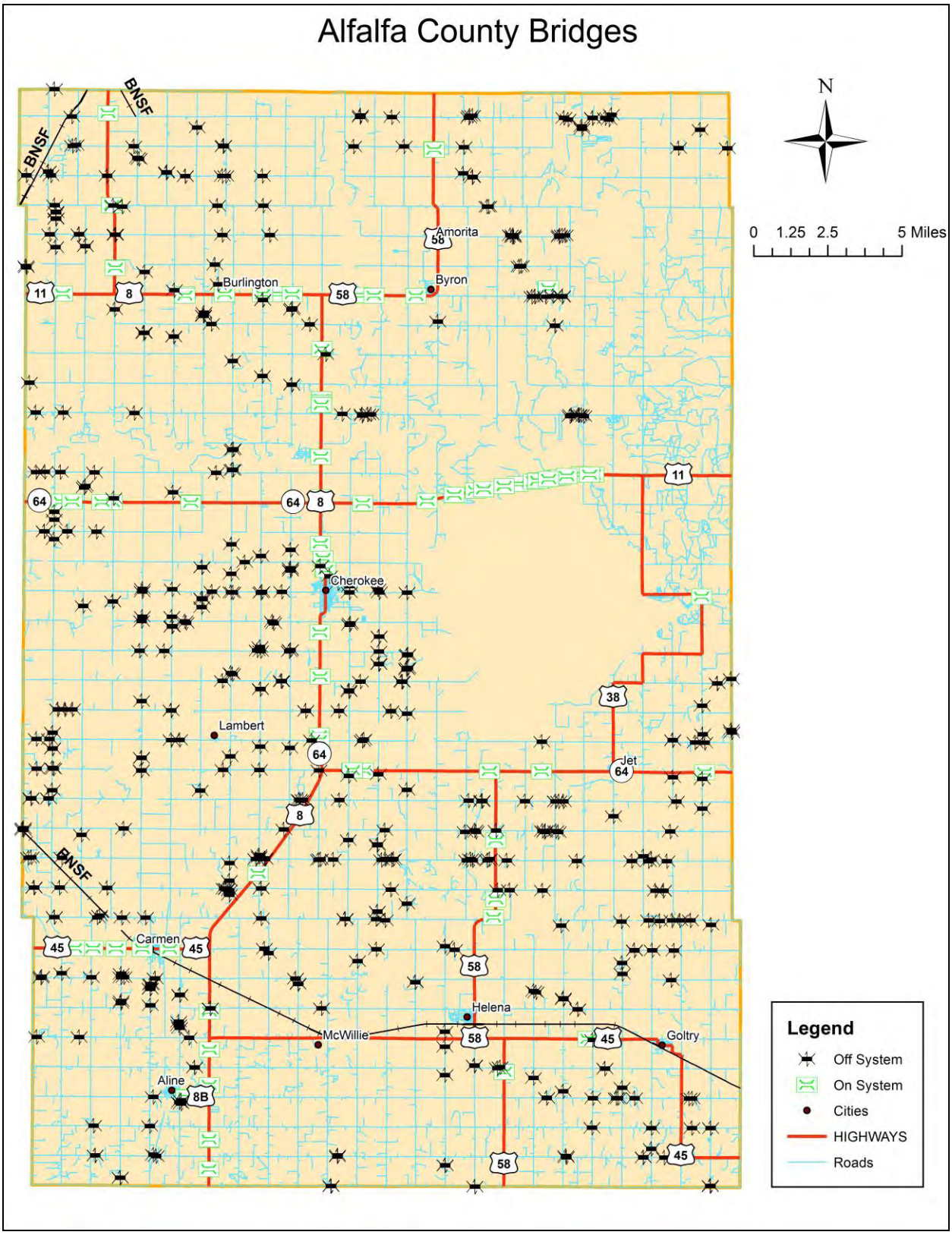


Table 2.9 Alfalfa County Bridges

Owner	City	Facility	Feature	Location	Year Built	Design	Material
STATE	Unknown	U.S. 64	CREEK	1.2 MI.E.WOODS CL	1930	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	CREEK	1.5 MI.E.WOODS CL	1930	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	CREEK	2.7 MI.E.WOODS CL	1930	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	CREEK	3.0 MI.E.WOODS CL	1930	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	UNNAMED CREEK	2.5W OF JCT S.H. 8	2011	GIRDER	PRESTRESSED CONC.
STATE	Unknown	U.S. 64	CREEK	1.36S JCT SH11/US64	2003	GIRDER	PRESTRESSED CONC.
STATE	Unknown	U.S. 64	CREEK	2.0 M. S. JCT. SH-11/US64	2003	GIRDER	PRESTRESSED CONC.
STATE	Unknown	U.S. 64	COTTONWOOD CREEK	2.4S JCT US64/SH11	2003	GIRDER	PRESTRESSED CONC.
STATE	Unknown	U.S. 64	CREEK	4.6 MI.S.SH11	1927	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	CREEK	3.2 MI.N.JCT.SH8	1927	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	LAMBERT CREEK	1.4 MI.N.JCT.SH8	1975	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	WEST CLAY CREEK	1.1 MI.N.JCT.SH8	1972	GIRDER	STEEL
STATE	Unknown	U.S. 64	EAST CLAY CREEK	1.0 MI.E.OF JCT.SH8	1929	GIRDER	STEEL
STATE	Unknown	U.S. 64	CREEK	1.5 MI.E.JCT.SH8	1929	CULVERT	CONCRETE
STATE	Unknown	U.S. 64	SPRING CREEK	0.2 MI.W.JCT.SH58	1929	GIRDER	STEEL
STATE	Unknown	U.S. 64	TWINS SPRINGS CREEK	1.6E JCT. S.H. 58	2011	GIRDER	PRESTRESSED CONC.
STATE	Unknown	U.S. 64	WAGON CREEK	0.9 MI.W.GRANT CL	1928	GIRDER	STEEL
STATE	Unknown	S.H. 8	CREEK	0.6 MI.N.MAJOR CL	1951	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	3.4S OF S.H. 45	2009	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	3.5 MI.N.MAJOR CL	1951	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	4.7 MI.N.MAJOR CL	1951	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	5.9 MI.N.MAJOR CL	1951	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	WEST CLAY CREEK	3.2 MI.N.JCT.SH45	1955	GIRDER	STEEL
STATE	Unknown	S.H. 8	CREEK	0.2 MI.N.JCT.US64	1930	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	SALT FORK ARKANSAS RIVER	1.6 MI.N.JCT.US64	1957	GIRDER	STEEL CONTINUOUS
STATE	Unknown	S.H. 8	DRIFTWOOD CREEK	3.3N JCT U.S. 64	2012	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 8	CREEK	5.3 MI.N.JCT.US64	1932	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	8.0 MI.N&W.JCT.US64	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	8.5 M.E OF WOODS C/L	1953	CULVERT	CONCRETE

STATE	Unknown	S.H. 8	CREEK	8 M. E. OF WOODS C/L	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	STINK CREEK	IN BURLINGTON	1953	SLAB	CONCRETE
STATE	Unknown	S.H. 8	DRIFTWOOD CREEK	1.0 MI.W.BURLINGTON	1999	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 8	DRIFTWOOD CREEK	0.7 MI.N.JCT.SH8	1948	GIRDER	STEEL
STATE	Unknown	S.H. 8	CREEK	3.8 MI.S.KANSAS LINE	1958	CULVERT	CONCRETE
STATE	Unknown	S.H. 8	CREEK	0.7 MI.S.KANSAS LINE	1958	CULVERT	CONCRETE
STATE	Unknown	S.H. 8B	EAGLE CHIEF CREEK	0.5 MI.W.JCT.SH8	1974	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	CREEK	1.2 MI.E. WOODS CL	1950	CULVERT	CONCRETE
STATE	Unknown	S.H. 11	CREEK	1.5 MI.E. JCT. US 64	1936	CULVERT	CONCRETE
STATE	Unknown	S.H. 11	CREEK	3.8 MI.E. JCT US 64	1935	GIRDER	STEEL
STATE	Unknown	S.H. 11	CREEK	4.7 MI.E. JCT US 64	1935	GIRDER	STEEL
STATE	Unknown	S.H. 11	CREEK	5.1 MI.E. JCT. US 64	1935	GIRDER	STEEL
STATE	Unknown	S.H. 11	CREEK	5.7 MI.E. JCT. US 64	1950	GIRDER	STEEL
STATE	Unknown	S.H. 11	SALT FORK ARK RIV O'FLOW	6.4 MI.E. JCT. US 64	1935	GIRDER	STEEL
STATE	Unknown	S.H. 11	SALT FORK ARKANSAS RIVER	6.8 MI.E. OF JCT.US64	1935	GIRDER	STEEL
STATE	Unknown	S.H. 11	SALT FORK ARK. RIV TRIB.	7.45E JCT. US64/SH8 & 11	2006	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	SALT FORK ARKANSAS RIVER	7.8E JCT. US 64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	SALT FORK ARK. RIV TRIB.	7.99E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	SALT FORK ARK. RIV TRIB.	8.2E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	SALT FORK ARK. RIV TRIB.	8.42E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	SANDY CREEK	8.91E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	POWELL CREEK	9.2E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 11	CREEK	9.33E JCT. US64/SH 8 & 11	2005	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 45	CREEK	JCT. SH45 & SH58	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 45	TURKEY CREEK	3.9 MI.E. OF JCT.SH58	1986	CULVERT	CONCRETE
STATE	Unknown	S.H. 45	EAGLE CHIEF CREEK	1.2 MI.E. OF WOODS CL	1956	GIRDER	STEEL CONTINUOUS
STATE	Unknown	S.H. 45	CREEK	1.4 MI.E. OF WOODS CL	1955	CULVERT	CONCRETE
STATE	Unknown	S.H. 45	CREEK	1.4 MI.E. OF WOODS CL	1930	CULVERT	CONCRETE
STATE	Unknown	S.H. 45	CREEK	2.8 MI.E. OF WOODS CL	1930	CULVERT	CONCRETE

STATE	CARMEN	S.H. 45	CREEK	3.7 MI.E. OF WOODS CL	1955	CULVERT	CONCRETE
STATE	CARMEN	S.H. 45	CREEK	4.6 MI.E. OF WOODS CL	1927	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	CREEK	4.6 MI.N.OF JCT.SH45	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	SPRING CREEK	5.3 MI.N.OF JCT.SH45	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	CREEK	2.3 MI.S.OF JCT.US64	1953	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	MEDICINE CREEK O'FLOW	1.1 MI.E.OF JCT.SH8	1947	GIRDER	STEEL
STATE	Unknown	S.H. 58	MEDICINE CREEK	1.3 MI.E.OF JCT.SH8	1967	GIRDER	STEEL CONTINUOUS
STATE	Unknown	S.H. 58	CREEK	1.6 MI.E.OF JCT.SH8	1967	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	CREEK	3.1 MI.E.OF JCT.SH8	1980	CULVERT	CONCRETE
STATE	Unknown	S.H. 58	SALTY CREEK	1.9 MI.S.OF KANSAS SL	1996	GIRDER	PRESTRESSED CONC.
STATE	Unknown	S.H. 58	CREEK	1.1 MI.S. OF JCT.SH45	1963	GIRDER	STEEL
STATE	Unknown	S.H. 38	SALT FORK ARKANSAS RIVER	9.8 MI.N.OF JCT.US64	1941	GIRDER	STEEL
COUNTY	Unknown	E0010	LITTLE MULE CREEK	1.8 MI W OF SH 8	1987	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	0202C	CREEK	1.7 MI E WOODS C/L	1947	GIRDER	STEEL
COUNTY	Unknown	FAS 0224	MEDICINE LODGE RIVER	7.3 MI E OF SH 8	1982	GIRDER	STEEL
COUNTY	Unknown	FAS 0224	CREEK	8.5E OF SH8	2001	GIRDER	STEEL
COUNTY	Unknown	FAS 0224	CREEK	9.6 MI E OF SH 8	1960	GIRDER	STEEL
COUNTY	Unknown	FAS 0224	CREEK	1.3 MI E OF SH 58	1998	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	FAS 0224	SANDY CREEK	4.5 MI E OF SH 58	1994	TEE BEAM	CONCRETE
COUNTY	Unknown	E0020	RUSH CREEK TRIB.	5.5E OF S.H. 58	2011	CULVERT	STEEL
COUNTY	Unknown	FAS 0224	RUSH CREEK	5.9 MI E OF SH 58	1994	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0030	LITTLE MULE CREEK	5 N. 1.1 E. SH 8/11 JCT.	1995	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0030	STINK CREEK	5 N. 0.9 E. SH 8/11 JCT.	1937	GIRDER	STEEL
COUNTY	Unknown	E0030	STINK CREEK	5 MI. N. OF BURLINGTON	1991	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	E0030	LITTLE SANDY CREEK	5N 1.1E OF BRYON	2002	GIRDER	STEEL
COUNTY	Unknown	E0030	CREEK	5. N 9.9 E OF BYRON	1929	GIRDER	STEEL
COUNTY	Unknown	E0040	LITTLE DRIFTWOOD CREEK	4N 2.8W OF SH8/SH11 JCT	2012	GIRDER	STEEL

COUNTY	Unknown	E0040	LITTLE MULE CREEK	3M S. KANSAS 2E. OF WOODS	2006	GIRDER	STEEL
COUNTY	Unknown	E0040	BARROW DRAIN	4 N 0.1 W SH 8/11 JCT.	1962	CULVERT	CONCRETE
COUNTY	Unknown	E0040	CREEK	4 N. OF BURLINGTON	1937	GIRDER	STEEL
COUNTY	Unknown	E0040	STINK CREEK	4N OF BURLINGTON	2012	GIRDER	STEEL
COUNTY	Unknown	E0040	STINK CREEK TRIB.	1.5 E 4 N OF BURLINGTON	1990	GIRDER	STEEL
COUNTY	Unknown	E0040	SANDY CREEK	4N 1.3E OF BYRON	2001	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0050	LITTLE MULE CREEK	3 N 2.1 W SH 8/11 JCT	1938	GIRDER	STEEL
COUNTY	Unknown	E0050	BARROW DRAIN	3 N SH 8/11 JCT	1996	GIRDER	STEEL
COUNTY	Unknown	E0050	CREEK	3N .2W OF BURLINGTON	2005	GIRDER	STEEL
COUNTY	Unknown	E0050	LITTLE SANDY CREEK	1. N 1.8 E OF AMORITA	1990	GIRDER	STEEL
COUNTY	Unknown	E0050	SANDY CREEK O'FLOW	1. N 1.9 E OF AMORITA	1950	GIRDER	STEEL
COUNTY	Unknown	E0060	CREEK	2 N 2.3 W SH 8/11 JCT	1939	CULVERT	CONCRETE
COUNTY	Unknown	E0060	LITTLE DRIFTWOOD CREEK	2N 1.2W SH 8/11 JCT	1913	TRUSS-THRU	STEEL
COUNTY	Unknown	E0060	BARROW DRAIN	2 N. OF SH 8/11 JCT.	1962	CULVERT	CONCRETE
COUNTY	Unknown	E0060	BARROW DRAIN	2 N. OF SH 8/11 JCT.	1962	CULVERT	CONCRETE
COUNTY	Unknown	E0060	STINK CREEK TRIB.	2 N 1.8 E OF BURLINGTON	1940	CULVERT	CONCRETE
COUNTY	Unknown	E0060	LITTLE SANDY CREEK	2.4E 2N OF BYRON	2002	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0060	LITTLE SANDY CREEK	2.5E 2N OF BYRON	2002	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0060	BIG SANDY CREEK O'FLOW	2.0N 4.3E OF BYRON	2000	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0070	SANDY CREEK	2.8 E 1. N OF BYRON	1993	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	FAS 0218	SANDY CREEK	3.2 MI E OF SH 58	2000	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0218	CREEK	3.6 MI E OF SH 58	1998	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0218	SANDY CREEK	4.2 MI E OF SH 58	2002	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	E0090	DRIFTWOOD CREEK	1 MI. S. BURLINGTON	1935	GIRDER	STEEL

COUNTY	Unknown	E0090	STINK CREEK	MI WEST OF SH-58	1990	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0090	BIG SANDY CREEK	3.9E 1.0S OF BYRON	1915	TRUSS-THRU	STEEL
COUNTY	Unknown	E0100	STINK CREEK	2 M. S,0.25 M. E SH11/58	1938	GIRDER	WOOD OR TIMBER
COUNTY	Unknown	E0110	CREEK	0.1 MILE E. COUNTY LINE	1938	GIRDER	STEEL
COUNTY	Unknown	FAS 0216	CREEK	0.3 M. E OF COUNTY LINE	1974	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0216	CREEK	1.3 M. E OF COUNTY LINE	1965	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0216	CREEK	4 M. S,3.3 M. W BURLINGTO	1972	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0216	DRIFTWOOD CREEK	0.7 MI E OF SH 11	1989	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0216	MEDICINE CREEK	1.4 MI E OF SH 11	1997	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0216	MEDICINE CREEK O'FLOW	1.6 MI E OF SH 11	1960	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	FAS 0216	BIG SANDY CREEK TRIB.	10.5E OF S.H. 11	2005	GIRDER	STEEL
COUNTY	Unknown	FAS 0216	BIG SANDY O'FLOW	10.7 MI E OF SH 11	1982	GIRDER	CONCRETE
COUNTY	Unknown	FAS 0216	BIG SANDY CREEK	10.8 MI E OF SH 11	1982	GIRDER	CONCRETE
COUNTY	Unknown	FAS 0216	SANDY CREEK TRIB.	4S 4.9E OF BRYON	2005	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0140	CREEK	7.6W 1N OF INGERSOLL	2002	GIRDER	STEEL
COUNTY	Unknown	E0140	CREEK	6.8 M. W,1 M. N INGERSOLL	1941	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0140	CREEK	5.2W 1N .6W OF INGERSOLL	2001	GIRDER	STEEL
COUNTY	Unknown	E0140	CREEK	1N, 1.5W OF INGERSOL	2007	GIRDER	STEEL
COUNTY	Unknown	E0160	SALT FORK TRIB.	7.3W 1S OF INGERSOLL	2012	GIRDER	STEEL
COUNTY	Unknown	E0160	SALT FORK TRIB.	6.5W 1.S OF INGERSOL	1945	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0160	SALT FORK OF ARK. TRIB.	5.5 W,1 S. INGERSOLL	1948	CULVERT	CONCRETE
COUNTY	Unknown	0214C	CREEK	5 M W OF OHIO ST, CHEROKE	1950	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0227	CREEK	3.7MI W OHIO ST,CHER.	1947	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0227	CREEK	2 MI W OHIO ST IN CHER	1947	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0227	COTTONWOOD CREEK	1.3 MI W OF OHIO ST	1947	CULVERT	CONCRETE

COUNTY	Unknown	FAS 0227	CREEK	1.0 MI E OF SH 58	1938	CULVERT	CONCRETE
COUNTY	Unknown	E0190	COTTONWOOD CREEK TRIB.	4.N 3.1W OF YEWED	1947	GIRDER	STEEL
COUNTY	Unknown	E0190	COTTONWOOD CREEK TRIB.	5.5W 1S OF CHEROKEE	2005	GIRDER	STEEL
COUNTY	Unknown	E0190	CREEK	1S, 1.6W OF CHEROKEE	2008	GIRDER	STEEL
COUNTY	Unknown	E0200	COTTONWOOD CREEK TRIB.	6.1W,2S OF CHEROKEE	1950	GIRDER	STEEL
COUNTY	Unknown	E0210	CREEK	2. N .3 W OF YEWED	1938	GIRDER	STEEL
COUNTY	Unknown	E0210	CREEK	1.1W .3S OF CHEROKEE	2007	GIRDER	STEEL
COUNTY	Unknown	0218C	WEST CLAY CREEK	3. N 1.4 E OF US 64	1955	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	0218C	EAST CLAY CREEK	7.2 W 3. N OF JET	1999	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0207	CREEK	3.5 MI N US 64	1911	TRUSS-THRU	STEEL
COUNTY	Unknown	E0220	EAGLE CHIEF CREEK TRIB.	5.9 W 1. N OF YEWED	1936	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0220	CREEK	5.6 W 1. N OF YEWED	1955	GIRDER	STEEL
COUNTY	Unknown	E0220	CREEK	1. N 5.4 W OF YEWED	1955	GIRDER	STEEL
COUNTY	Unknown	E0220	COTTONWOOD CREEK	10.5W 2N OF JET	2012	GIRDER	STEEL
COUNTY	Unknown	E0220	WEST CLAY CREEK	2. N .7 E OF US 64	1965	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0220	EAST CLAY CREEK	7.5 W 2. N OF JET	1937	GIRDER	STEEL
COUNTY	Unknown	E0230	EAGLE CHIEF CREEK	6.0 MI W OF LAMBERT	1955	GIRDER	STEEL
COUNTY	Unknown	E0230	EAGLE CHIEF CREEK TRIB.	5.6 MI W OF LAMBERT	1955	GIRDER	STEEL
COUNTY	Unknown	FAS 0213	CREEK	1.5 MI W OF LAMBERT	1962	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0213	CREEK	1.2 MI W OF LAMBERT	1962	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0213	CLAY CREEK	0.2 MI W OF SH 58	1963	GIRDER	STEEL
COUNTY	Unknown	E0230	EAST CLAY CREEK	4.5 MI E OF YEWED	1994	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	E0230	SPRING CREEK	1. N 2.4 W OF JET	1950	GIRDER	STEEL
COUNTY	Unknown	E0230	WAGON CREEK	2.8 E .9 N OF JET	1991	GIRDER	STEEL
COUNTY	Unknown	E0230	WAGON CREEK	3. E .9 N OF JET	1983	GIRDER	STEEL
COUNTY	Unknown	E0240	EAGLE CHIEF CREEK TRIB.	6. N 3.5 W OF CARMAN	1950	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0240	EAGLE CHIEF CREEK TRIB.	6. N 2.9 W OF CARMEN	1947	GIRDER	STEEL CONTINUOUS

COUNTY	Unknown	E0240	CLAY CREEK TRIB.	1. S .2 W OF YEWED	1949	GIRDER	STEEL
COUNTY	Unknown	E0240	CREEK	2.0 MI W OF SH 8	1949	GIRDER	STEEL
COUNTY	Unknown	E0240	WEST CLAY CREEK	0.1 MI W OF SH 8	1987	FLOORBM	CONCRETE
COUNTY	Unknown	0222C	CREEK	5. N 3.7 W OF CARMEN	1948	GIRDER	STEEL
COUNTY	Unknown	0222C	CREEK	5. N 3.1 W OF CARMEN	1948	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0250	CREEK	1 M. S,0.7 M. W US64/SH8	1940	GIRDER	STEEL
COUNTY	Unknown	E0250	WEST CLAY CREEK	1. S .6 W OF SH 58	2002	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	E0250	EAST CLAY CREEK	1. S 9.3 W OF JET	1937	GIRDER	STEEL
COUNTY	Unknown	E0250	SPRING CREEK TRIB.	1. S 4.9 W OF JET	1957	GIRDER	STEEL
COUNTY	Unknown	E0250	BRANCH SPRING CREEK	1S 4.5W OF JET	2004	GIRDER	STEEL
COUNTY	Unknown	E0250	CREEK	_	2005	GIRDER	STEEL
COUNTY	Unknown	E0250	TWIN SPRINGS CREEK	2. W 1. S OF JET	1956	GIRDER	STEEL
COUNTY	Unknown	E0250	TWIN SPRINGS CREEK	1S 1.8W OF JET	2011	GIRDER	STEEL
COUNTY	Unknown	E0260	EAGLE CHIEF CREEK TRIB.	4. N 3.9 W OF CARMAN	1946	GIRDER	STEEL
COUNTY	Unknown	E0260	CREEK	4. N .5 W OF CARMEN	1948	GIRDER	STEEL
COUNTY	Unknown	E0260	WEST CLAY CREEK	4. N 4.8 E OF CARMEN	1953	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0260	SPRING CREEK	2S 4.7W OF JET	2001	GIRDER	STEEL
COUNTY	Unknown	E0260	CREEK	4. W 2. S OF JET	1935	CULVERT	CONCRETE
COUNTY	Unknown	E0260	TWIN SPRINGS CREEK	2. S 2.5 W OF JET	1928	GIRDER	STEEL
COUNTY	Unknown	E0260	TWIN SPRINGS CREEK	2S 2.4W OF JET	2002	GIRDER	STEEL
COUNTY	Unknown	E0260	TWIN SPRING CREEK	2M S. 1.9MI W OF JET	2006	CULVERT	STEEL
COUNTY	Unknown	E0260	WAGON CREEK	2. S 1.9 E OF JET	1957	GIRDER	STEEL
COUNTY	Unknown	E0270	CREEK	3N 3.8W OF CARMEN	2002	GIRDER	STEEL
COUNTY	Unknown	E0270	CREEK	3. N 2.6 W OF CARMEN	1956	GIRDER	STEEL
COUNTY	Unknown	E0270	WEST CLAY CREEK TRIB.	3N 3.9E OF CARMEN	2012	GIRDER	STEEL
COUNTY	Unknown	E0270	WEST CLAY CREEK	3N 4.2E OF CARMEN	2000	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	E0270	EAST CLAY CREEK TRIB.	3 M. S,0.1 M. E US64/SH8	1936	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0270	CREEK	3 M. S, 0.5 M. E US64/SH8	1936	GIRDER	STEEL CONTINUOUS

COUNTY	Unknown	E0270	EAST CLAY CREEK	NW OF HELENA,3S OF US64	2005	CULVERT	CONCRETE
COUNTY	Unknown	E0270	EAST CLAY CREEK	3S 7.5W OF JET	2002	GIRDER	STEEL
COUNTY	Unknown	E0270	SPRING CREEK	3S 4.9W OF JET	2002	CULVERT	CONCRETE
COUNTY	Unknown	E0270	SPRING CREEK TRIB.	3S 4,2W OF JET	2004	GIRDER	STEEL
COUNTY	Unknown	E0270	TWIN SPRINGS CREEK	3. S 3.6 W OF JET	1986	CULVERT	CONCRETE
COUNTY	Unknown	E0270	TWIN SPRINGS CREEK	3. S 1.3 W OF JET	1954	GIRDER	STEEL
COUNTY	Unknown	E0270	WAGON CREEK	3. S .5 E OF JET	1953	GIRDER	STEEL
COUNTY	Unknown	E0270	CREEK	3S 1.2E OF JET	2000	GIRDER	STEEL
COUNTY	Unknown	E0270	WAGON CREEK	3. S 1.8 E OF JET	1990	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	E0280	EAGLE CHIEF CREEK	2N 4 W OF CARMEN	2011	GIRDER	STEEL
COUNTY	Unknown	E0280	CREEK	2N 1.5W OF CARMEN	2011	GIRDER	STEEL
COUNTY	Unknown	E0280	WEST CLAY CREEK TRIB.	2N 2.9E OF CARMEN	2002	GIRDER	STEEL
COUNTY	Unknown	E0280	WEST CLAY CREEK	4 M. S,1.9 M. W US64/SH8	1965	GIRDER	STEEL
COUNTY	Unknown	FAS 0226	W FORK OF SPRING CREEK	4 MI S 3.9 MI W JET	1986	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0226	W FORK TWIN SPRING CREEK	4 MI S 3.5 MI W JET	1954	GIRDER	STEEL
COUNTY	Unknown	FAS 0226	TWIN SPRINGS CREEK	4 MI S 2.4 MI W JET	1989	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	0224C	WAGON CREEK	4. S 1.4 E OF JET	1975	GIRDER	STEEL
COUNTY	Unknown	0224C	WAGON CREEK	4. S 1.7 E OF JET	1954	GIRDER	STEEL
COUNTY	Unknown	E0290	EAGLE CHIEF CREEK	3.2W, 1N OF CARMEN	2012	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	E0290	EAGLE CHIEF CREEK TRIB.	1.5NW CARMEN, N OF SH45	2004	CULVERT	CONCRETE
COUNTY	Unknown	E0290	CREEK	1. N .9 W OF CARMEN	1938	GIRDER	STEEL
COUNTY	Unknown	E0290	WEST CLAY CREEK	5 M. S,1.9 M. W US64/SH8	1951	GIRDER	STEEL
COUNTY	Unknown	E0290	CREEK	5S, .9E OF US64/SH8	2010	GIRDER	STEEL
COUNTY	Unknown	E0290	EAST CLAY CREEK	4N 3.4W OF HELENA	2001	GIRDER	STEEL
COUNTY	Unknown	E0290	WAGON CREEK TRIB.	4N OF GOLTRY	2002	GIRDER	STEEL
COUNTY	Unknown	E0290	WAGON CREEK	4. N .8 E OF GOLTRY	1919	GIRDER	STEEL
COUNTY	Unknown	E0290	WAGON CREEK	4. N 1.4 E OF GOLTRY	1947	GIRDER	STEEL
COUNTY	Unknown	FAS 0212	CREEK	3 M. N,1.8 M. E SH45/SH8	1937	GIRDER	CONC. CONTINUOUS

COUNTY	Unknown	FAS 0212	EAST CLAY CREEK	5.6 MI E OF SH 45	1932	GIRDER	STEEL
COUNTY	Unknown	FAS 0212	EAST CLAY CREEK	3 M. N,0.7 M. W SH45/SH8	1932	GIRDER	STEEL
COUNTY	Unknown	E0300	WAGON CREEK	3N, .6W OF GOLTRY	2010	GIRDER	STEEL
COUNTY	Unknown	E0300	WAGON CREEK	3. N .8 E OF GOLTRY	1958	GIRDER	STEEL
COUNTY	Unknown	E0310	EAGLE CHIEF CREEK TRIB.	1S 3.7W OF CARMEN	2000	GIRDER	STEEL
COUNTY	Unknown	E0310	EAGLE CHIEF CREEK	1S 2E OF CARMEN	2012	GIRDER	STEEL
COUNTY	Unknown	E0310	WEST CLAY CREEK	E0310N2590009	1936	GIRDER	STEEL
COUNTY	Unknown	E0310	WAGON CREEK	2. N .7 E OF GOLTRY	1936	GIRDER	STEEL
COUNTY	Unknown	E0320	SPRING CREEK	2S .2E OF SH 45	2009	GIRDER	STEEL
COUNTY	Unknown	E0320	WEST CLAY CREEK	1. N .2 W OF MC WILLIE	1940	GIRDER	STEEL
COUNTY	Unknown	E0320	TURKEY CREEK	1N 2.5W OF GOLTRY	2012	GIRDER	STEEL
COUNTY	Unknown	E0330	EAGLE CHIEF CREEK TRIB.	2. N 4.9 W OF ALINE	1951	GIRDER	STEEL
COUNTY	Unknown	E0330	EAGLE CHIEF CREEK TRIB.	2. N 3.4 W OF ALINE	1936	GIRDER	STEEL
COUNTY	Unknown	E0330	EAGLE CHIEF CREEK	2. N .3 E OF ALINE	1988	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	E0340	EAGLE CHIEF CREEK	1. N .5 E OF ALINE	1913	TRUSS-THRU	STEEL
COUNTY	Unknown	E0340	TURKEY CREEK	1. S 4.8 E OF HELENA	1993	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	E0340	TURKEY CREEK	1S,1.6W OF GOLTRY	2008	GIRDER	STEEL
COUNTY	Unknown	0222C	CREEK	0.9 MI W OF ALINE	1965	GIRDER	STEEL
COUNTY	Unknown	E0350	TURKEY CREEK TRIB.	2. S 2.5 E OF HELENA	1939	GIRDER	STEEL
COUNTY	Unknown	E0350	TURKEY CREEK	2. S 1.9 W OF GOLTRY	1967	GIRDER	STEEL
COUNTY	Unknown	E0350	TURKEY CREEK	2. S 1.2 W OF GOLTRY	1998	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	E0360	CREEK	2.9 W 1. S OF ALINE	1945	GIRDER	STEEL
COUNTY	Unknown	E0360	TURKEY CREEK TRIB.	3. S 3.9 E OF HELENA	1955	CULVERT	CONCRETE
COUNTY	Unknown	E0360	TURKEY CREEK TRIB.	3. S .3 E OF GOLTRY	1938	GIRDER	STEEL
COUNTY	Unknown	E0360	CREEK	3. S 2. E OF GOLTRY	1938	GIRDER	STEEL
COUNTY	Unknown	E0370	CREEK	2. S 2.9 W OF ALINE	1938	GIRDER	STEEL
COUNTY	Unknown	E0370	EAGLE CHIEF CREEK	2S .9W OF ALINE	2005	GIRDER	STEEL
COUNTY	Unknown	E0370	CREEK	4.5 .3E OF MC WILLIE	2006	GIRDER	STEEL

COUNTY	Unknown	FAS 0211	TURKEY CREEK TRIB.	2.1E OF S.H. 58	2004	GIRDER	STEEL
COUNTY	Unknown	FAS 0211	TURKEY CREEK TRIB.	4.7 MI E OF SH 58	1929	GIRDER	WOOD OR TIMBER
COUNTY	Unknown	FAS 0211	CREEK	5.4 MI E OF SH 58	1982	TEE BEAM	CONCRETE
COUNTY	Unknown	E0380	CREEK	5S, .1E OF MCWILLIE	2008	GIRDER	STEEL
COUNTY	Unknown	E0380	INDIAN CREEK	5. S .1 E OF HELENA	1952	GIRDER	STEEL
COUNTY	Unknown	N2510	DRIFTWOOD CREEK	3W .9N JCT SH8/11	2001	GIRDER	STEEL
COUNTY	Unknown	N2510	CREEK	.9N 4.W OF CARMEN	1994	GIRDER	STEEL
COUNTY	Unknown	N2520	LITTLE MULE CREEK	2 W. 4.2 N OF SH 8/11 JCT	1965	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2520	LITTLE MULE CREEK	2W 2.7N OF SH8/SH11 JCT	2012	GIRDER	STEEL
COUNTY	Unknown	N2520	LITTLE DRIFTWOOD CREEK	2W 2.5N OF SH8/SH11 JCT	2012	CULVERT	STEEL
COUNTY	Unknown	N2520	DRIFTWOOD CREEK	2W 1.6N OF SH8/11 JCT	2011	GIRDER	STEEL
COUNTY	Unknown	N2520	SALT FORK TRIB.	9.W OF CHEROKEE .3S 64	1950	GIRDER	STEEL
COUNTY	Unknown	N2520	SALT FORK TRIB.	9W OF CHEROKEE,0.6S US64	1938	GIRDER	STEEL
COUNTY	Unknown	N2520	SALT FORK TRIB.	7 M. W,1.3 M. S INGERSOLL	1940	GIRDER	STEEL
COUNTY	Unknown	FAS 0228	CREEK	2.2 MI N 0222C	1946	GIRDER	STEEL
COUNTY	Unknown	0237C	CREEK	6.6N 3.W OF CARMEN	1946	GIRDER	STEEL
COUNTY	Unknown	FAS 0228	CREEK	4.1 MI W OF 0238C	1984	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0228	CREEK	3.3 MI W OF 0238C	1984	CULVERT	CONCRETE
COUNTY	Unknown	N2520	EAGLE CHIEF CREEK	3.W .9S CARMEN	1984	GIRDER	CONCRETE
COUNTY	Unknown	N2530	DRIFTWOOD CREEK	1.6 N 1 W OF SH 8/11 JCT.	1915	TRUSS-THRU	STEEL
COUNTY	Unknown	N2530	CREEK	6 W 0.5 N OF INGERSOL	1995	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2530	CREEK	8W 0.4S OF CHEROKEE	1938	GIRDER	STEEL
COUNTY	Unknown	N2530	CREEK	3.7N 2.W OF CARMEN	1937	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2530	EAGLE CHIEF CREEK	2.W .9S OF CARMEN	1990	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2540	DRY CREEK	3.5 M. W,0.6 M. S BURLING	1939	GIRDER	STEEL
COUNTY	Unknown	N2540	CREEK	7W, .1S OF CHEROKEE	2008	GIRDER	STEEL

COUNTY	Unknown	N2540	CREEK	7W,0.4S OF CHEROKEE	1939	GIRDER	STEEL
COUNTY	Unknown	N2540	CREEK	1W .9S OF CARMEN	2001	GIRDER	STEEL
COUNTY	Unknown	N2540	EAGLE CHIEF CREEK	1 W AND 1.8 S OF CARMEN	1995	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2540	CREEK	2.8S 2.W OF ALINE	1970	GIRDER	STEEL
COUNTY	Unknown	N2550	STINK CREEK	4.6N 1E. S.H. 8 / 11 JCT.	2006	GIRDER	STEEL
COUNTY	Unknown	N2550	DRIFTWOOD CREEK	2.5 W, 0.8 N BURLINGTON	1984	GIRDER	CONCRETE
COUNTY	Unknown	N2550	DRY CREEK	2.5W 1.3S OF BURLINGTON	2002	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2550	CREEK	6W,0.1N OF CHEROKEE	1939	GIRDER	STEEL
COUNTY	Unknown	N2550	CREEK	6W,0.9S OF CHEROKEE	1938	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0227	COTTONWOOD CREEK	8.6MI NO OF CARMEN	1947	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0227	COTTON WOOD CREEK	6.8 MI N FAS204	1938	GIRDER	STEEL
COUNTY	Unknown	FAS 0227	CREEK	2.5W 1.1S. OF LAMBERT	1938	GIRDER	STEEL
COUNTY	Unknown	N2550	CREEK	3.8N 1W OF ALINE	2007	GIRDER	STEEL
COUNTY	Unknown	N2550	EAGLE CHIEF CREEK TRIB.	4.7W & N OF ALINE	2012	GIRDER	STEEL
COUNTY	Unknown	FAS 0227	EAGLE CHIEF CREEK	1.9S OF SH 45 AT CARMEN	1982	GIRDER	STEEL
COUNTY	Unknown	N2550	BARROW DRAIN	1.W .9S OF ALINE	1938	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2560	STINK CREEK	_	2005	GIRDER	STEEL
COUNTY	Unknown	N2560	DRIFTWOOD CREEK	1.5 M. W,0.1 M. N BURLING	1987	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2560	DRIFTWOOD CREEK TRIB.	1.4S 1.5W OF BURLINGTON	2002	GIRDER	STEEL
COUNTY	Unknown	N2560	CREEK	_	2005	GIRDER	STEEL
COUNTY	Unknown	N2560	CREEK	5W, .1N OF CHEROKEE	2007	GIRDER	STEEL
COUNTY	Unknown	FAS 0227	CREEK	5W,0.9S OF CHEROKEE	1955	GIRDER	STEEL
COUNTY	Unknown	FAS 0227	CREEK	1.2 SW OF CHEROKEE	2002	GIRDER	STEEL
COUNTY	Unknown	N2560	CREEK	1N 1.5W OF LAMBERT	2012	GIRDER	STEEL
COUNTY	Unknown	N2560	CREEK	3.5N OF ALINE & END OF	1937	GIRDER	STEEL
COUNTY	Unknown	N2560	EAGLE CHIEF CREEK	1E & 2.6S OF CARMEN	2005	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2560	EAGLE CHIEF CREEK	0.2 S OF 8B @ ALINE	1996	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2570	CREEK	5.6 N OF BURLINGTON	1937	GIRDER	STEEL CONTINUOUS

COUNTY	Unknown	N2570	DRIFTWOOD CREEK	.5W .7S OF BULRINGTON	2008	TEE BEAM	PRESTRESSED CONC.
COUNTY	Unknown	N2570	COTTONWOOD CREEK TRIB.	4W .8N OF CHEROKEE	2012	GIRDER	STEEL
COUNTY	Unknown	N2570	CREEK	4W .2S OF CHEROKEE	2002	GIRDER	STEEL
COUNTY	Unknown	N2570	CREEK	4W,0.5S OF CHEROKEE	1945	GIRDER	STEEL
COUNTY	Unknown	N2570	CREEK	1.W 1.7S OF YEWED	1939	GIRDER	STEEL
COUNTY	Unknown	N2575	CREEK	.5N OF BURLINGTON	2009	GIRDER	STEEL
COUNTY	Unknown	FAS 0209	STINK CREEK	6.8 MI N OF US 64	1993	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	FAS 0209	DRIFTWOOD CREEK	4.8 MI N OF US 64	1974	TEE BEAM	CONCRETE
COUNTY	Unknown	FAS 0209	SALT FORK ARKANSAS RIVER	1.8 MI N US 64	1992	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	0242C	CREEK	1. W 1.1 N OF INGERSOLL	1998	CULVERT	CONCRETE
COUNTY	Unknown	N2580	CREEK	1W, 1.3S OF INGERSOL	2007	GIRDER	STEEL
COUNTY	Unknown	N2580	CREEK	3 W & 0.5 N OF CHEROKEE	1996	GIRDER	STEEL
COUNTY	Unknown	N2580	CREEK	31'-26' I-BM SPAN	2002	GIRDER	STEEL
COUNTY	Unknown	N2580	WEST CLAY CREEK TRIB.	.5E .5S OF LAMBERT	1937	GIRDER	STEEL
COUNTY	Unknown	N2580	WEST CLAY CREEK TRIB.	2.9N 3.E OF CARMEN	1937	GIRDER	STEEL
COUNTY	Unknown	N2580	WEST CLAY CREEK TRIB.	3.E 2.3N OF CARMEN	1936	GIRDER	STEEL
COUNTY	Unknown	N2580	WEST CLAY CREEK TRIB.	3.E 1.9N OF CARMEN	1937	GIRDER	STEEL
COUNTY	Unknown	N2580	WEST CLAY CREEK TRIB.	3.E 1.8N OF CARMEN	1937	GIRDER	STEEL
COUNTY	Unknown	N2583	CREEK	2.2N OF YEWED	2007	GIRDER	STEEL
COUNTY	Unknown	N2590	STINK CREEK	2W .2S OF SH11/SH58	2012	GIRDER	STEEL
COUNTY	Unknown	N2590	DRIFTWOOD CREEK	2W, 2.7S OF SH58/SH11	2010	GIRDER	STEEL
COUNTY	Unknown	N2590	COTTONWOOD CREEK TRIB.	2 W., 1.2 N. CHEROKEE	1921	CULVERT	CONCRETE
COUNTY	Unknown	N2590	COTTONWOOD CREEK TRIB.	2W,0.1S OF CHEROKEE	1987	CULVERT	CONCRETE
COUNTY	Unknown	N2590	CREEK	1E 1.7N OF YEWED	2012	GIRDER	STEEL
COUNTY	Unknown	N2590	CLAY CREEK TRIB.	1.E .2S OF YEWED	1962	GIRDER	STEEL
COUNTY	Unknown	N2590	WEST CLAY CREEK	3.1N 4E OF CARMEN	2007	GIRDER	STEEL
COUNTY	Unknown	N2590	WEST CLAY CREEK	2 E, 0.1 S SH45/SH8	1995	GIRDER	STEEL
COUNTY	Unknown	N2600	STINK CREEK	1W&.5S OF JCT SH8 & SH58	1993	GIRDER	STEEL

COUNTY	Unknown	N2600	DRIFTWOOD CREEK	1W 3.1S JCT SH58&SH11	2009	GIRDER	STEEL
COUNTY	Unknown	N2600	COTTONWOOD CREEK TRIB.	1W .8N OF CHEROKEE	2011	GIRDER	STEEL
COUNTY	Unknown	N2600	COTTONWOOD CREEK	1 W, 0.7 N CHEROKEE	1940	GIRDER	STEEL
COUNTY	Unknown	N2600	WEST CLAY CREEK TRIB.	1W, 6.1N OF SH8/US64 JCT	2009	GIRDER	STEEL
COUNTY	Unknown	N2600	WEST CLAY CREEK TRIB.	2 E, 0.3 S OF YEWED	1964	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2600	WEST CLAY CREEK	4E, 1.2S OF CARMEN	2010	GIRDER	STEEL
COUNTY	Unknown	N2610	COTTONWOOD CREEK	OHIO STREET IN CHEROKEE	1990	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	FAS 0204	CREEK	1.0 MI E SH8	1936	GIRDER	STEEL CONTINUOUS
CITY	CHEROKEE	N2614 (N. PENN AVE	COTTONWOOD CREEK	.2E SH64, .3N WASHINGTON	1965	GIRDER	STEEL
COUNTY	Unknown	N2617	COTTON WOOD CREEK	.6E S.H.64, .22N NEBRASKA	1997	GIRDER	STEEL
COUNTY	Unknown	N2620	CREEK	EAST SIDE OF CHEROKEE	1936	GIRDER	STEEL
COUNTY	Unknown	N2620	CREEK	4E 3.9N OF YEWED	2000	GIRDER	STEEL
COUNTY	Unknown	N2620	WEST CLAY CREEK	1.0E2.7N OF S.H.8/U.S.64	2010	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2620	EAST CLAY CREEK	1E .2S OF US 64/SH 8	2009	GIRDER	STEEL
COUNTY	Unknown	N2620	CREEK	3W,2.6N OF HELENA	1955	GIRDER	STEEL
COUNTY	Unknown	N2630	CREEK	2. E .1 N OF CHEROKEE	1998	GIRDER	STEEL
COUNTY	Unknown	N2630	FIELD DRAIN	2 E 4.5 N SH8/US64 JCT	1950	GIRDER	STEEL
COUNTY	Unknown	N2630	WEST CLAY CREEK	2E, 3.6N OF SH8/US64 JCT	2011	GIRDER	STEEL
COUNTY	Unknown	N2630	EAST CLAY CREEK	2E, 2.5S OF U.S.64/S.H.8	2007	GIRDER	STEEL
COUNTY	Unknown	N2630	EAST CLAY CREEK TRIB.	4.7 S, 2 E US64/SH8	1947	GIRDER	STEEL
COUNTY	Unknown	N2640	BARROW DRAIN	3 S. OF KS 1 W. SH 8	1969	CULVERT	CONCRETE
COUNTY	Unknown	FAS 0215	CREEK	3.0 MI S OF SH 11	1914	TRUSS-THRU	STEEL
COUNTY	Unknown	N2640	WEST CLAY CREEK	3SW CHEROKEE, 4N OF US 64	2004	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2640	EAST CLAY CREEK	3SW OF CHEROKEE,4N US 64	2004	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	0246C	CREEK	3.E 1.9N OF US64 SH8	1965	GIRDER	STEEL

COUNTY	Unknown	N2640	CREEK	7.W .6S OF JET	1950	GIRDER	STEEL
COUNTY	Unknown	N2640	EAST CLAY CREEK	2W 4.5N OF SH45/SH58	2009	GIRDER	STEEL
COUNTY	Unknown	N2640	EAST CLAY CREEK	2W 1.8N OF SH45/SH58	2012	GIRDER	STEEL
COUNTY	Unknown	N2650	CREEK	0.9 S. OF BYRON	1939	GIRDER	STEEL
COUNTY	Unknown	N2650	CREEK	4.3S 1W OF HELENA	2011	GIRDER	STEEL
COUNTY	Unknown	N2660	BIG SANDY CREEK	4.1 N. 1.0 E. OF BYRON	1932	GIRDER	STEEL
COUNTY	Unknown	N2660	TURKEY CREEK	.9S OF HELENA	2012	GIRDER	STEEL
COUNTY	Unknown	N2680	TURKEY CREEK	2E 1.6N OF HELENA	2003	GIRDER	STEEL
COUNTY	Unknown	N2680	TURKEY CREEK	2. E 1.4 S OF HELENA	1965	GIRDER	STEEL
COUNTY	Unknown	N2690	TURKEY CREEK	3E 1.4N OF GULTRY	2002	GIRDER	STEEL
COUNTY	Unknown	N2690	TURKEY CREEK	3.E 1.8S HELENA	1992	GIRDER	PRESTRESSED CONC.
COUNTY	Unknown	N2700	RUSH CREEK	5E, 5.7N OF BYRON	2007	GIRDER	STEEL
COUNTY	Unknown	N2700	TURKEY CREEK	2.W .1S OF GOLTRY	1936	GIRDER	STEEL
COUNTY	Unknown	FAS 0205	CREEK	0.9 MI S OF KANSAS	1982	GIRDER	STEEL
COUNTY	Unknown	FAS 0205	CREEK	1.5 MI S OF JET	1960	GIRDER	STEEL
COUNTY	Unknown	FAS 0205	CREEK	4.0 MI N SH 45	1961	GIRDER	STEEL
COUNTY	Unknown	N2710	WAGON CREEK TRIB.	2.2N S.H45 1.0W GOULTRY	2008	CULVERT	CONCRETE
COUNTY	Unknown	N2710	CREEK	_	2005	GIRDER	STEEL
COUNTY	Unknown	N2720	TURKEY CREEK	3.1 S GOLTRY 1. W SH45	1967	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2720	CREEK	3.7S OF GOLTRY	1937	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2730	CREEK	2E 1.1N OF JET	1965	GIRDER	STEEL
COUNTY	Unknown	N2730	WAGON CREEK	2. E JET .2 S OF US 64	1955	GIRDER	STEEL
COUNTY	Unknown	N2740	WAGON CREEK	3E 2.2N OF JET	1950	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2740	WAGON CREEK	3E 1.2N OF JET	1911	GIRDER	STEEL
COUNTY	Unknown	N2740	WAGON CREEK	3. E .2 S OF JET	1965	GIRDER	STEEL CONTINUOUS
COUNTY	Unknown	N2740	CREEK	1E 4.9S OF GOLTRY	2011	GIRDER	STEEL
COUNTY	Unknown	FAS 0207	BNSF R.R.	4 E, 1.4 N OF JET	1995	GIRDER	PRESTRESSED CONC.

Table 2.10 Structurally Deficient and Functional Obsolete Bridges

CROSSES	LOCATIN	DESIGN	YEAR BUILT	SD/FO
COTTONWOOD CREEK	1.3W OF OHIO ST	Concrete Culvert	1947	SD
WAGON CREEK	0.9 MI.W.GRANT CL	Steel Stringer/Multi-beam or girder	1928	SD
RUSH CREEK	5.9E OF SH 58	Steel Stringer/Multi-beam or girder	1994	SD
EAST CLAY CREEK	5.6E OF SH 45	Steel Stringer/Multi-beam or girder	1932	SD
TURKEY CREEK	2W .1S OF GOLTRY	Steel Stringer/Multi-beam or girder	1936	SD
WEST CLAY CREEK	E0310N2590009	Steel Stringer/Multi-beam or girder	1996	SD
CREEK	1E OF SH8	Steel Stringer/Multi-beam or girder	1936	SD
BARROW DRAIN	3N OF SH 8/11 JCT	Steel Stringer/Multi-beam or girder	1996	SD
WAGON CREEK	2N .7E of GOLTRY	Steel Stringer/Multi-beam or girder	1936	SD
WEST CLAY CREEK TRIB.	3E 2.3N OF CARMEN	Steel Stringer/Multi-beam or girder	1936	SD
WEST CLAY CREEK TRIB.	2.9N 3E OF CARMEN	Steel Stringer/Multi-beam or girder	1937	SD
WEST CLAY CREEK TRIB.	3E 1.9N OF CARMEN	Steel Stringer/Multi-beam or girder	1937	SD
STINK CREEK	5N .9E OF SH 8/11 JCT.	Steel Stringer/Multi-beam or girder	1937	SD
CREEK	4N OF BURLINGTON	Steel Stringer/Multi-beam or girder	1937	SD
CREEK	3.7N 2W of CARMEN	Steel Stringer/Multi-beam or girder	1937	SD
CREEK	3.7S OF GOLTRY	Steel Stringer/Multi-beam or girder	1937	SD
CREEK	5.6N OF BURLINGTON	Steel Stringer/Multi-beam or girder	1937	SD
CREEK	8W .4S OF CHEROKEE	Steel Stringer/Multi-beam or girder	1999	SD
EAST CLAY CREEK	7.2W 3N OF JET	Prestressed Tee beam	1938	SD
STINK CREEK	2S .25E OF SH11/58	Wood Stringer/Multi-beam or girder	1938	SD

TURKEY CREEK TRIB.	3S .3E of GOLTRY	Steel Stringer/Multi-beam or girder	1938	SD
CREEK	3S 2E OF GOLTRY	Steel Stringer/Multi-beam or girder	1938	SD
CREEK	.1E OF COUNTY LINE	Steel Stringer/Multi-beam or girder	1938	SD
LITTLE MULE CREEK	3N 2.1W OF SH 8/11 JCT	Steel Stringer/Multi-beam or girder	1938	SD
CREEK	2N .3W OF YEWED	Steel Stringer/Multi-beam or girder	1938	SD
CREEK	.9S OF BYRON	Steel Stringer/Multi-beam or girder	1939	SD
DRY CREEK	3.5W .6S of BURLING	Steel Stringer/Multi-beam or girder	1939	SD
CREEK	1W 1.7S OF YEWED	Steel Stringer/Multi-beam or girder	1939	SD
CREEK	1S .7W OF US64/SH8	Steel Stringer/Multi-beam or girder	1940	SD
WEST CLAY CREEK	1N .2W OF MC WILLIE	Steel Stringer/Multi-beam or girder	1940	SD
COTTONWOOD CREEK	1W .7N OF CHEROKEE	Steel Stringer/Multi-beam or girder	1940	SD
SALT FORK ARKANSAS RIVER	9.8 MI.N.OF JCT.US64	Steel Stringer/Multi-beam or girder	1941	SD
CREEK	3W 1S of JET	Steel Stringer/Multi-beam or girder	2005	SD
CREEK	2.2N OF 0222C	Steel Stringer/Multi-beam or girder	1946	SD
EAGLE CHIEF CREEK TRIB.	4N 3.9W of CARMAN	Steel Stringer/Multi-beam or girder	1946	SD
WAGON CREEK	4N 1.4E OF GOLTRY	Steel Stringer/Multi-beam or girder	1947	SD
CREEK	3.7W of OHIO ST, CHER.	Concrete Culvert	1947	SD
CREEK	2W OF OHIO ST	Concrete Culvert	1947	SD
CREEK	4W .2S OF CHEROKEE	Steel Stringer/Multi-beam or girder	2002	SD
MEDICINE CREEK O'FLOW	1.1 MI.E.OF JCT.SH8	Steel Stringer/Multi-beam or girder	1947	SD
CREEK	4N .5W OF CARMEN	Steel Stringer/Multi-beam or girder	1948	SD
DRIFTWOOD CREEK	0.7 MI.N.JCT.SH8	Steel Stringer/Multi-beam or girder	1948	SD

SALT FORK TRIB.	9W OF CHEROKEE .3S OF 64	Steel Stringer/Multi-beam or girder	1950	SD
SANDY CREEK O'FLOW	1N 1.9E of AMORITA	Steel Stringer/Multi-beam or girder	1950	SD
SPRING CREEK	1N 2.4W of JET	Steel Stringer/Multi-beam or girder	1950	SD
WEST CLAY CREEK	5S 1.9W of US64/SH8	Steel Stringer/Multi-beam or girder	1951	SD
TWIN SPRINGS CREEK	3S 1.3W of JET	Steel Stringer/Multi-beam or girder	1954	SD
WAGON CREEK	2E OF JET .2S OF US 64	Steel Stringer/Multi-beam or girder	1955	SD
CREEK	5W .9S OF CHEROKEE	Steel Stringer/Multi-beam or girder	1955	SD
CREEK	3N 2.6W of CARMEN	Steel Stringer/Multi-beam or girder	1956	SD
SPRING CREEK TRIB.	1S 4.9W OF JET	Steel Stringer/Multi-beam or girder	1957	SD
WAGON CREEK	2S 1.9E of JET	Steel Stringer/Multi-beam or girder	1957	SD
WAGON CREEK	3N .8E of GOLTRY	Steel Stringer/Multi-beam or girder	1958	SD
CREEK	1.5S OF JET	Steel Stringer/Multi-beam or girder	1960	SD
CREEK	1.2W OF LAMBERT	Concrete Culvert	1962	SD
WEST CLAY CREEK TRIB.	2E .3S OF YEWED	Steel Stringer/Multi-beam or girder	1964	SD
CREEK	2E 1.1N OF JET	Steel Stringer/Multi-beam or girder	1965	SD
TURKEY CREEK	2E 1.4S OF HELENA	Steel Stringer/Multi-beam or girder	1965	SD
WEST CLAY CREEK	2N .7E OF US 64	Steel Stringer/Multi-beam or girder	1965	SD
WAGON CREEK	3E .2S OF JET	Steel Stringer/Multi-beam or girder	1965	SD
COTTONWOOD CREEK	.2E SH64 .3N WASHINGTON	Steel Stringer/Multi-beam or girder	1965	SD
CREEK	.3E OF COUNTY LINE	Concrete Culvert	1974	SD
EAGLE CHIEF CREEK	0.5 MI.W.JCT.SH8	Prestressed Stringer/Multi-beam or girder	1974	SD
BIG SANDY O'FLOW	10.7E of SH 11	Concrete Stringer/Multi-beam or girder	1982	SD

BIG SANDY CREEK	10.8 MI E OF SH 11	Concrete Stringer/Multi-beam or girder	1982	SD
CREEK	4.1W of 0238C	Concrete Culvert	1984	SD
EAGLE CHIEF CREEK	3W .9S of CARMEN	Concrete Stringer/Multi-beam or girder	1984	SD
W FORK OF SPRING CREEK	4S 3.9W of JET	Concrete Culvert	1986	SD
COTTONWOOD CREEK TRIB.	2W .1S OF CHEROKEE	Concrete Culvert	1987	SD
WAGON CREEK	4N .8E OF GOLTRY	Steel Stringer/Multi-beam or girder	1919	SD
WAGON CREEK	3S 1.8E OF JET	Prestressed Tee beam	1990	SD
WAGON CREEK	2.8E .9N of JET	Steel Stringer/Multi-beam or girder	1991	SD
CREEK	.9N 4.W of CARMEN	Steel Stringer/Multi-beam or girder	1994	SD
CREEK	5N 9.9E of BYRON	Steel Stringer/Multi-beam or girder	1929	FO
EAGLE CHIEF CREEK TRIB.	2N 3.4W OF ALINE	Steel Stringer/Multi-beam or girder	1936	FO
BARROW DRAIN	1W .9S OF ALINE	Steel Stringer/Multi-beam or girder	1938	FO
SALT FORK TRIB.	6.5W 1S OF INGERSOL	Steel Stringer/Multi-beam or girder	1945	FO

Map 2.15 National Highway Freight Network, Oklahoma

Map 2.16 Alfalfa County Freight Corridors and Connectors

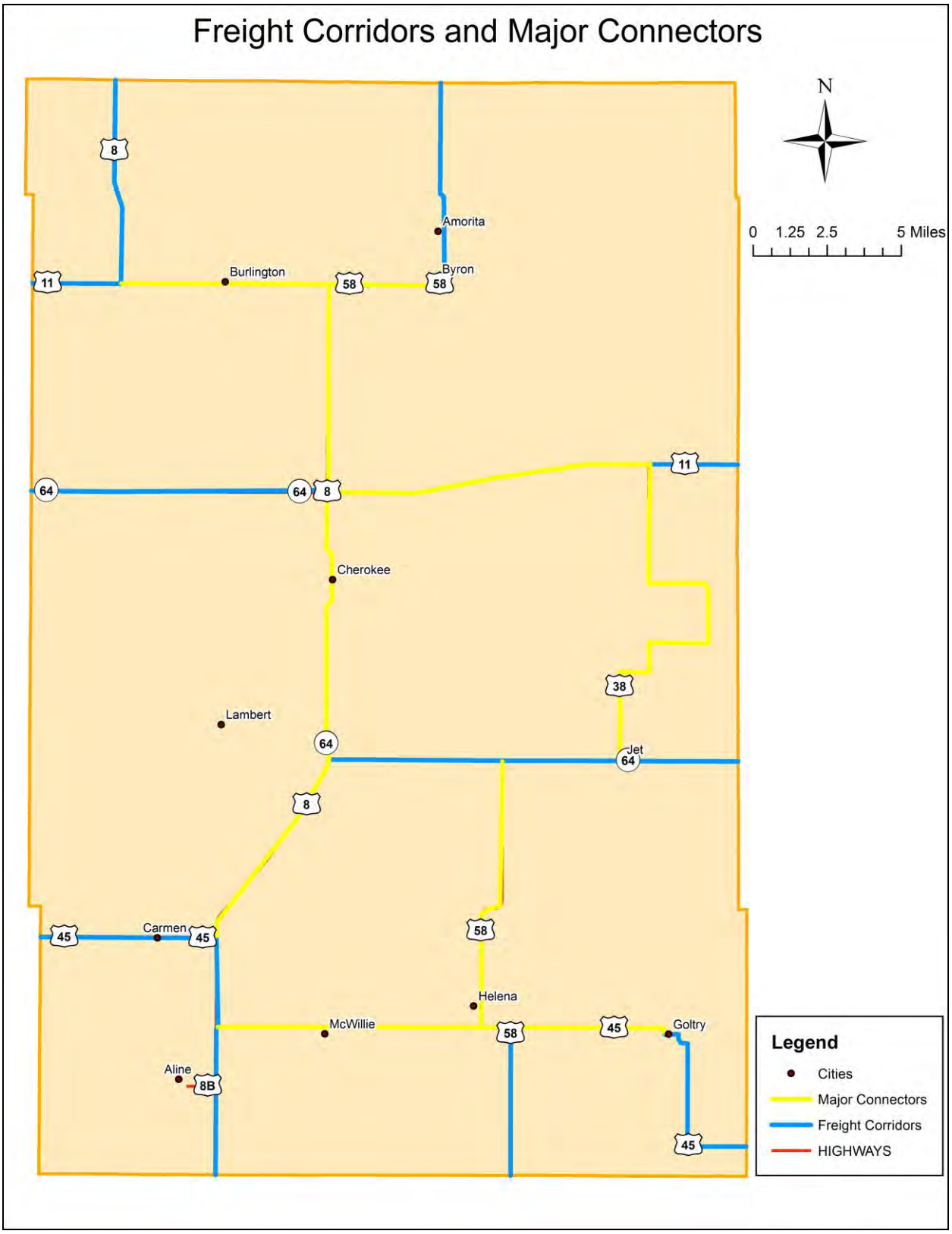


Table 2.11 Cherokee Strip Transit Ridership and Revenue for Alfalfa County

Alfalfa County	October 2014-Sept 2015	October 2015-Sept 2016
Trips	353	187
Passenger Miles	19,868.4	12,432.2
Revenue Miles	28,562	16,643

Source: Cherokee Strip Transit

Appendix H-3
Chapter 3

Map 3.1 Alfalfa County 2035 Population & Employment Projection by TAZ

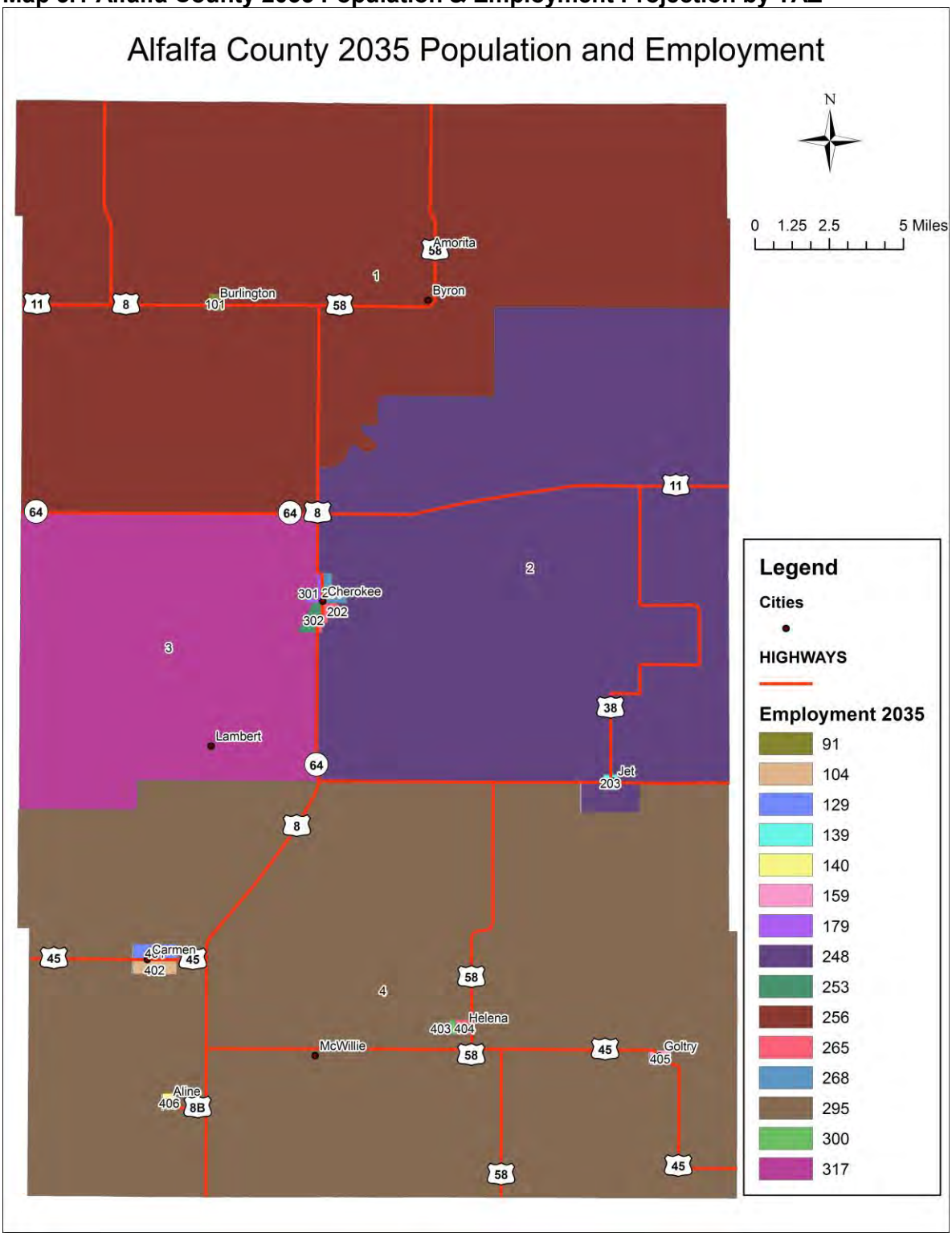


Table 3.1 – Alfalfa County 2035 Population & Employment

	Alfalfa 1% Per Decade	Civilian Labor Force
1980	7,077	
1990	6,416	
2000	6,105	
2010	5,642	2,571
2015	5,755	3,341
2020	5,784	3,358
2030	5,842	3,392
2035	5,871	3,409

Table 3.2 ODOT Eight Year Work Program

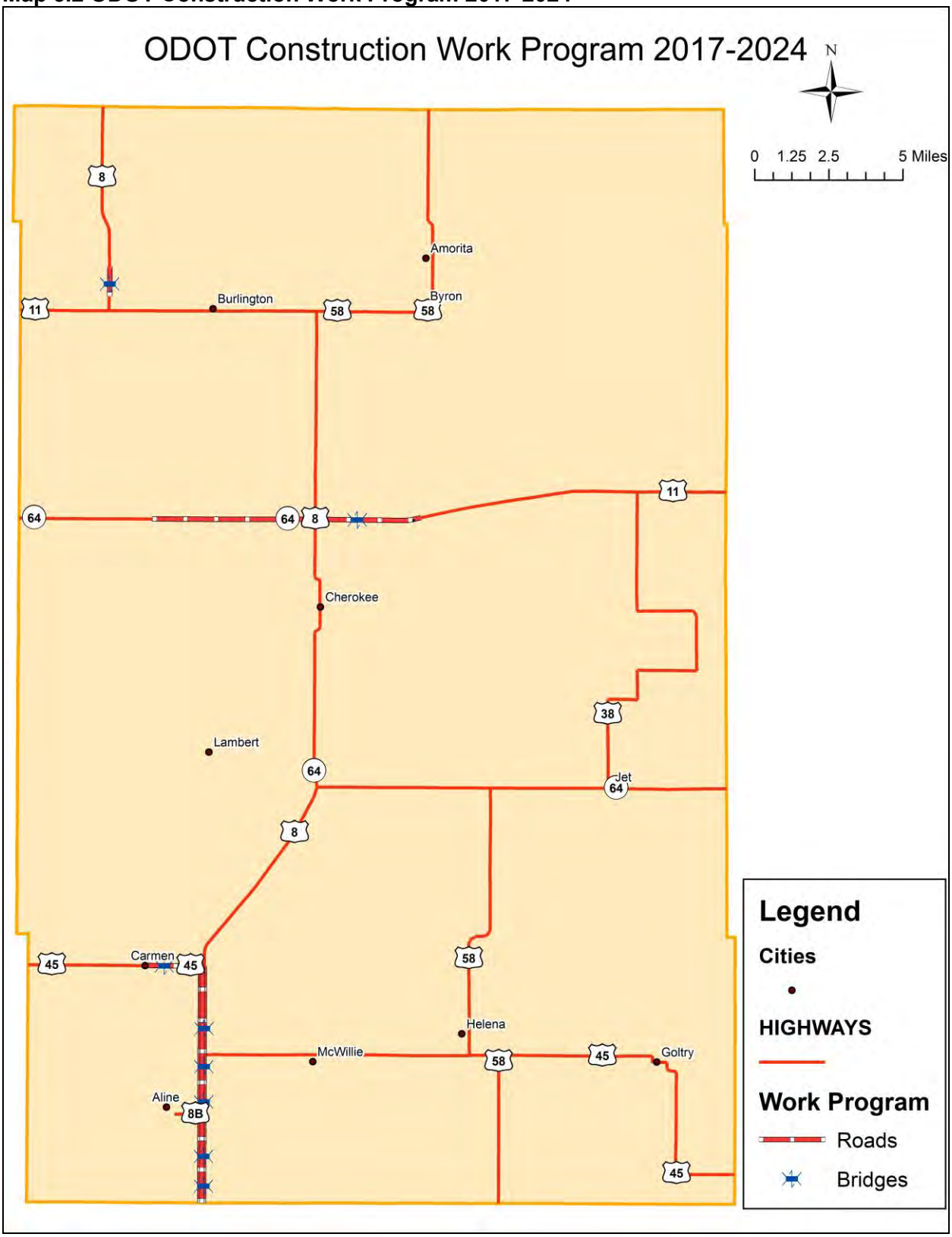
Location	Project Type	Project Year	Project Cost
SH-8 from 4.0 MI north of Major Co. line north 4.0 MI	Grade, Draining, Bridge & Surface	FFY 2022	$6,300,000.00
SH-8 from Major Co. line extend north 4 MI	Grade, Draining, Bridge & Surface	FFY 2021	$7,961,281.00
US-64 from 9.0 MI east of Woods Co. line east 4.6 MI	Grade, Draining, Bridge & Surface	FFY 2019	$8,400,000.00
SH-8 from 4.0 MI north of Major Co. line north 4.0 MI	Utilities	FFY 2018	$400,000.00
SH-8 from 4.0 MI north of Major Co. line north 4.0 MI ROW for	Right of Way	FFY 2018	$125,821.00
US-64 Begin at 4.5 MI east of Woods Co. line extend east 4.5 MI	Widen & Resurface	FFY 2018	$6,700,000.00
SH-45 begin approx. 2.1 MI west of SH-8 & extend east 2.1 MI to SH-8	Reconstruct-no added lanes	FFY 2018	$5,578,346.00
SH-8 from Major Co. line extend north 4 MI	Utilities	FFY 2018	$400,000.00
SH-8 from Major Co. line extend north 4 MI	Right of Way	FFY 2018	$153,000.00
SH-8 Bridge over Driftwood Cr., 0.9 MI north of SH-11 Jct.	Bridges & Approaches	FFY 2017	$2,465,000.00
		TOTAL:	$38,483,448.00

Table 3.3 ODOT CIRB Work Program

Fiscal Year	JP #	Stage #	Item	CIRB Funds	Other Funds	Estimated Total Cost
2016	24832	(09)	Grade, Drain & Surface: CR on NS-255 from EW-25 extend south 5.0 MI to SH-45 PHASE 3	$3,710,000.00	$0.00	$3,710,000.00
2016	28671	(04)	Bridge & Approaches: Co. bridge on NS-260 over Cottonwood Cr., 1.0 MI west and 0.7 MI north of Cherokee	$602,000.00	$0.00	$602,000.00
2016	31769	(05)	Contract PE: CR from Goltry east to Garfield Co. line.	$60,000.00	$0.00	$60,000.00
2017	28351	(04)	Bridge & Approaches: on NS-264 over Unnamed Cr., 3.0 MI east of Cherokee	$520,000.00	$0.00	$520,000.00
2017	29749	(04)	Bridges & Approaches: on EW-24 over Eagle Chief tributary 6.0 north, 2.9 west of Carmen. CT beams	$500,000.00	$0.00	$500,000.00
2017	29810	(05)	Contract PE: Bridge & approaches on EW-24 over Unnamed Cr., 2.9 MI west of SH-8. CT beams.	$46,000.00	$0.00	$46,000.00

2017	31127	(05)	Contract PE: Bridge & approaches on EW-02 over West Clay Cr., 2/0 MI south & 1.2 MI west of Jct. US-64/SH-8.	$65,000.00	$0.00	$65,000.00
2018	28661	(05)	Contract PE: Co. bridge on NS-255 over Eagle Chief Cr., 1.9 MI south of Carmen.	$75,000.00	$0.00	$75,000.00
2018	29783	(04)	Bridges & Approaches: on NS-274 over Wagon Wheel Cr., 3.0 MI east and 0.2 MI south of Jet. CT beams	$800,000.00	$0.00	$800,000.00
2018	30438	(04)	Bridges & Approaches: on EW-36 over Wagon Cr., 2.0 MI south & 1.9 MI east of Jet. CT beams	$500,000.00	$0.00	$500,000.00
2018	30467	(04)	Bridge & Approaches: on NS-254 over Dry Cr., 3.5 MI west & 0.6 MI south of Burington. CT beams	$500,000.00	$0.00	$500,000.00
2018	31772	(05)	Contract PE: Bridge and approaches on NS-272 over Turkey Cr., 3.1 MI south of Goltry.	$75,000.00	$0.00	$75,000.00
2019	29785	(04)	Bridges & Approaches: CR (EW-30) over East Clay Cr., 7.6 MI east of Carmen	$800,000.00	$0.00	$800,000.00
2019	29798	(04)	Bridges & Approaches: On EW-21 over Unnamed Cr., 2.0 MI north and 0.3 MI west of Yewed. CT beams	$500,000.00	$0.00	$500,000.00
2019	29810	(04)	Bridge & Approaches: On EW-24 over Unnamed Cr., 2.0 MI west of SH-8. CT beams	$500,000.00	$0.00	$500,000.00
2019	30436	(04)	Bridges & Approaches: on EW-29 over West Clay Cr., 5.0 MI south & 1.9 MI west of Jct. US-64/SH-8. CT beams	$500,000.00	$0.00	$500,000.00
2019	31769	(04)	Resurface: CR EW-33 from Goltry east to Garfield Co. line	$2,286,000.00	$0.00	$2,286,000.00
2019	31806	(05)	Contract PE: Bridge and approaches on EW-2 over LWCat Cr., 4.0 north and 0.2 west of Amorita.	$75,000.00	$0.00	$75,000.00
2020	28663	(05)	Contract PE: CR on NS-271, begin 7.0 MI south of Us-64 and extend north 7.0 MI. W 2 bridges.	$167,855.00	$0.00	$167,855.00
2020	31127	(04)	Bridge & Approaches: on EW-26 over West Clay CR.,2.0 MI south & 1.2 MI west of Jct. US-64/SH-8	$750,000.00	$0.00	$750,000.00
			total	$26,836,025.00	$0.00	$26,836,025.00

Map 3.2 ODOT Construction Work Program 2017-2024



Source: ODOT

Appendix H-4
Chapter 4

Table 4.1 Funding Category Summary

State	FUNDING ELIGIBITY	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 thru 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 the 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)	Disaster funding on Major x	

Funds		
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 Revolving fund		$3.5 million annually
County Road & Bridge Improvement Fund (CBR)	County Built, contract projects and maintenance on roads/bridges	
County Highway Fund		

Source: ODOT

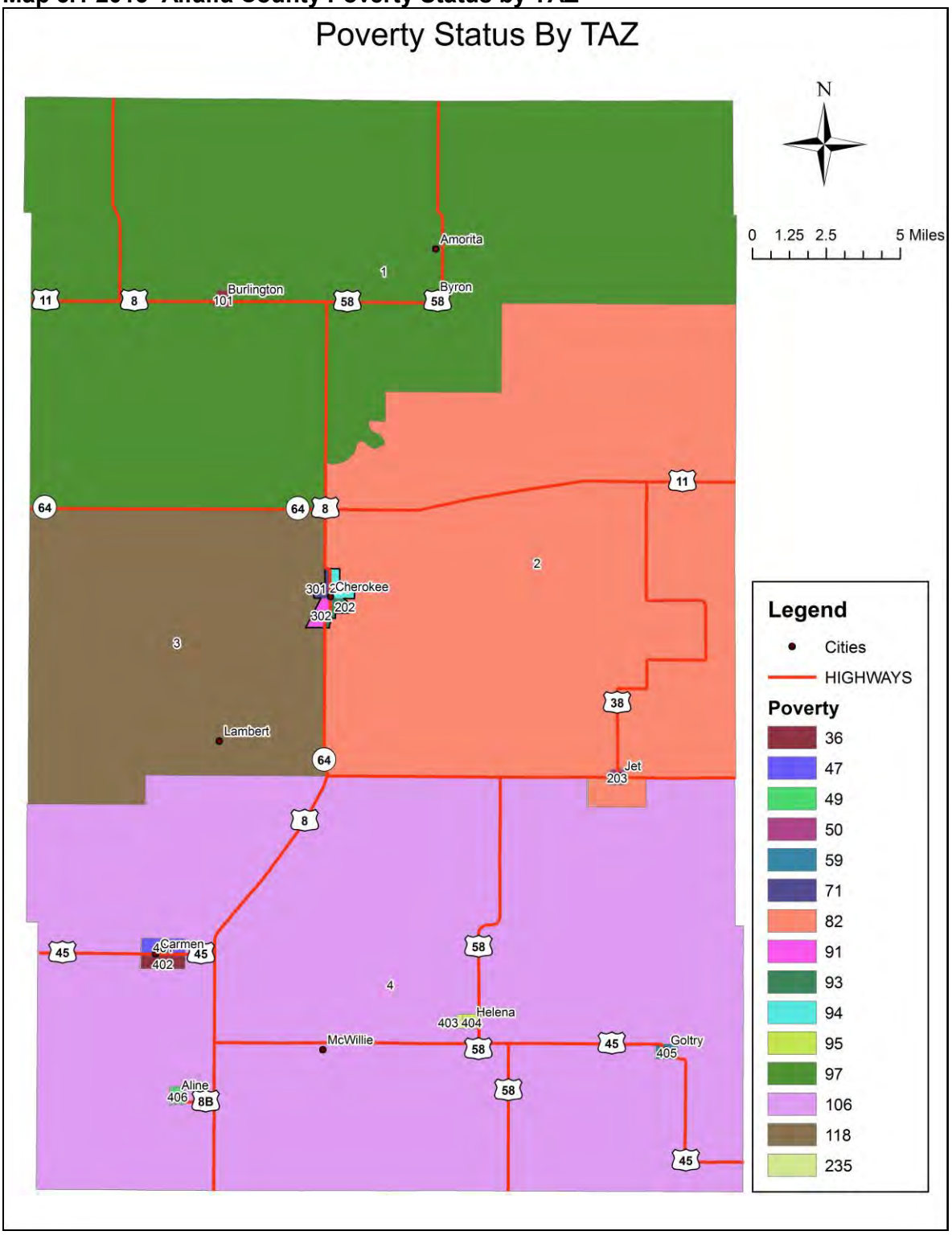
Table 4.2 State Funding Categories

	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Budget
State Transportation Fund	$208,707,119	$197,228,227	$184,901,463	$154,958,361
Motor Fuel Tax – HP Bridges	$6,130,546	$6,238,149	$6,182,915	$6,200,000
Income Tax	$357,100,000	$416,800,000	$445,695,431	$300,395,432
Total allocation	$571,937,665	$620,266,376	$637,629,809	$462,403,793
OTA Transfers	$41,712,534	$44,049,331	$45,755,547	$42,000,000
Total State Revenue	$613,650,199	$664,315,707	$683,385,356	$504,403,793
CIP Debt Service	$11,358,296	$0	$0	$0
ROADS Debt Service	$35,971,788	$42,599,529	$36,434,744	$56,881,177
Highways and Bridges	$554,420,115	$612,316,178	$637,715,612	$438,572,615
Lake & Industrial Access	$5,000,000	$2,500,000	$1,485,000	$1,200,000
Passenger Rail	$2,000,000	$2,000,000	$2,850,000	$2,850,000
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	$613,650,199	$664,315,707	$683,385,356	$504,403,792

Source: ODOT

Appendix H-5
Chapter 5

Map 5.1 2015 Alfalfa County Poverty Status by TAZ



Map 5.2 Alfalfa County 2015 Limited English Proficiency by Household by TAZ

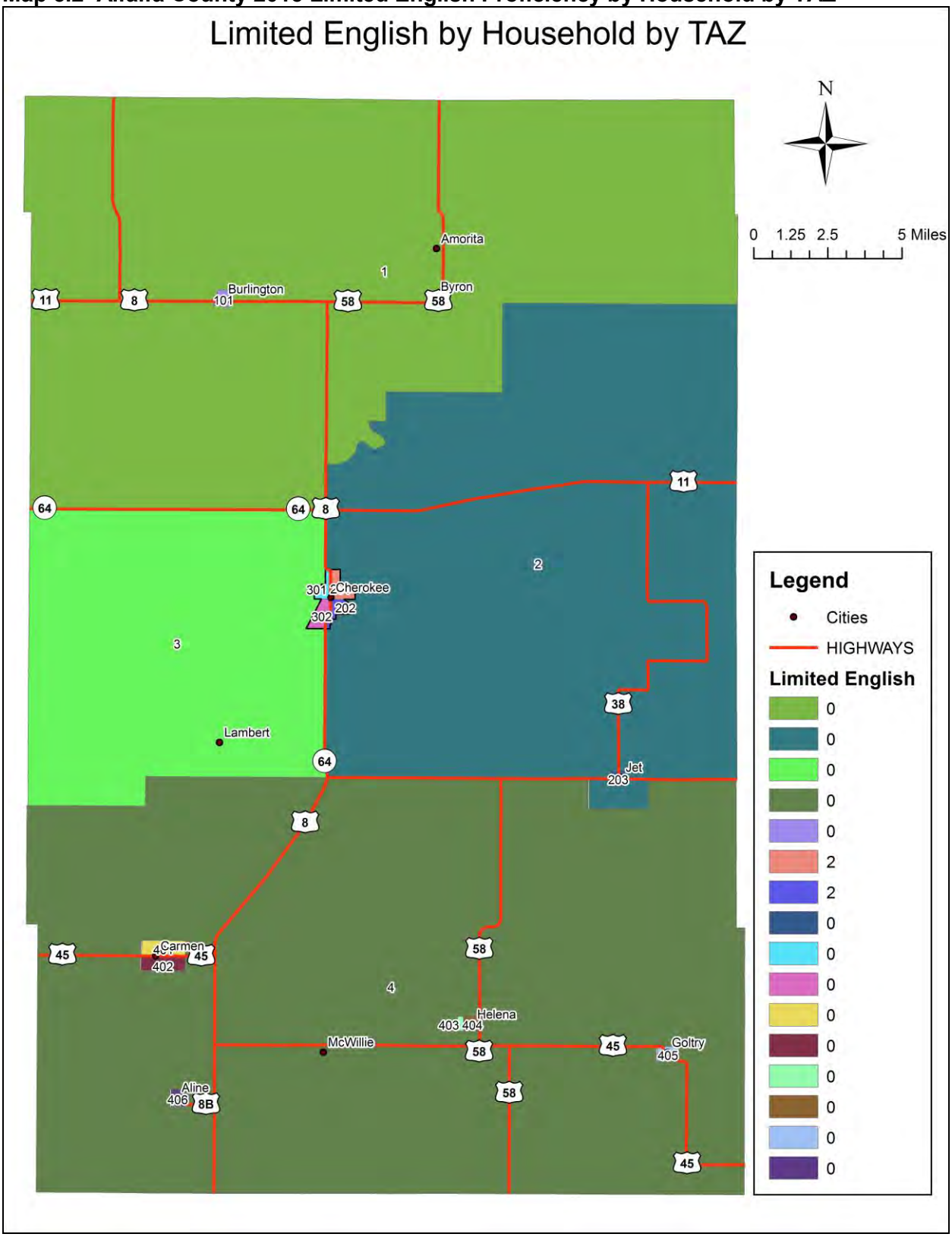


Table 5.1 2015 Alfalfa County Poverty Status by TAZ

Poverty Status by TAZ	
TAZ	**Poverty Status**
1	97
2	92
3	118
4	106
101	36
201	94
202	93
203	50
301	71
302	91
401	47
402	36
403	235
404	95
405	59
406	49

Table 5.2 2015 Alfalfa County Limited English Proficiency by Household by TAZ

Poverty Status by TAZ	
TAZ	**Limited English**
1	0
2	0
3	0
4	0
101	0
201	2
202	2
203	0
301	0
302	0
401	0
402	0
403	0
404	0
405	0
406	0

Map 5.3 2015 Alfalfa County Disabled Residents by TAZ

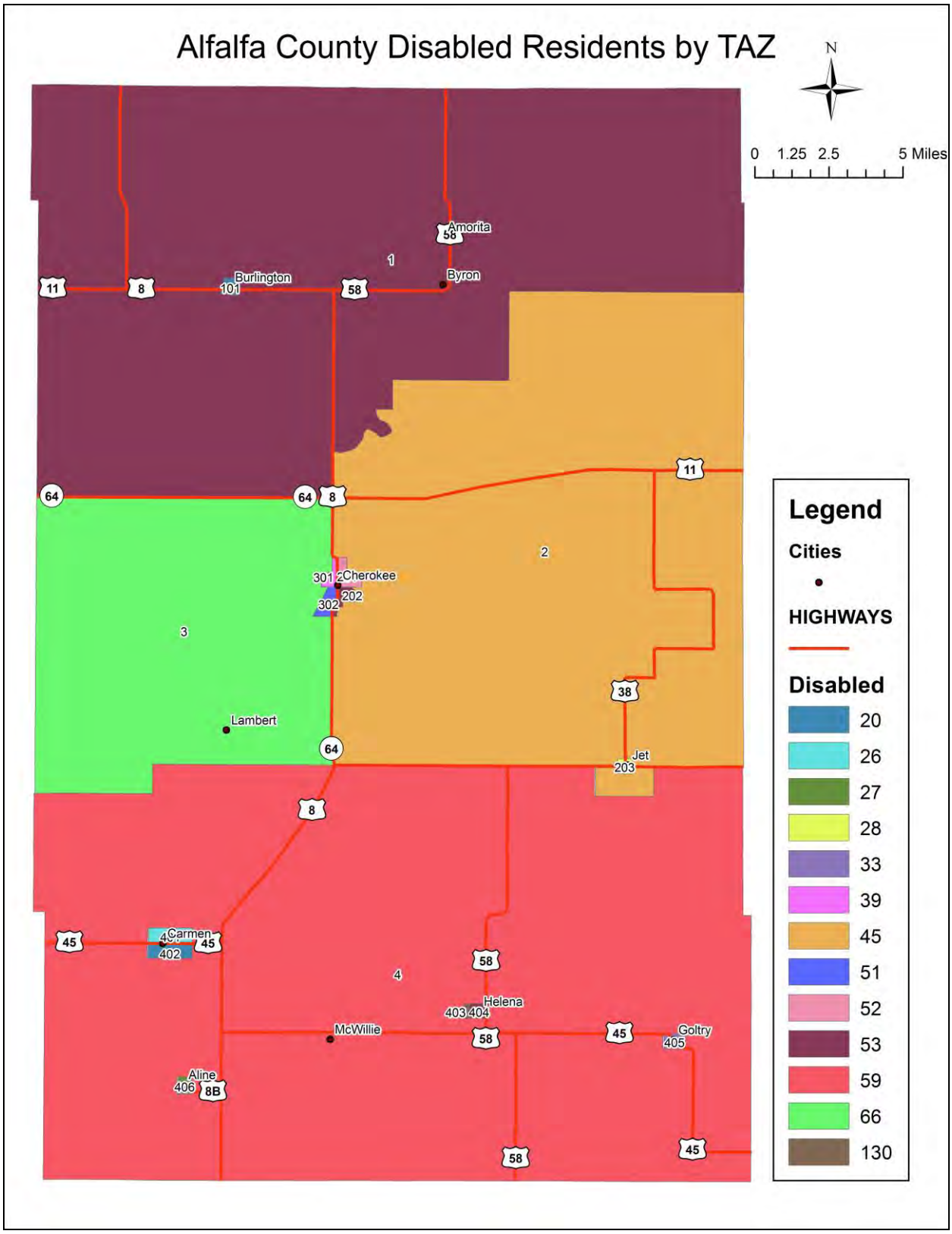


Table 5.3 2015 Alfalfa County Disabled Residents by TAZ

Disabled Residents by TAZ	
TAZ	**With Disability**
1	53
2	45
3	66
4	59
101	20
201	52
202	53
303	28
301	39
302	51
401	26
402	20
403	130
404	53
405	33
406	27

Table 5.4 2015 Alfalfa County Residents by Race

Alfalfa County Residents by Race		
Race	**Total**	**Margin of Erron**
White	4,510	147
Black or African American	110	36
American Indian and Alaska Native	81	36
Asian	2	3
Native Hawaiian and Other Pacific Islander	0	13
Some other Race	110	38
Two or More Races	942	134

Stakeholder and Public Surveys

1. In which City/County do you reside? *Burlington, Aline, Cherokee (2), Alfalfa (2)*

2. In which City/County do you work? *Alfalfa (5), Cherokee* or attend school? _____

3. How many days per week do you travel to work? 7(1); 6();5(4); 4(): 3(); 2(); 1() to school? 5()

4. What type of transportation do you use most often to go to work/school? (Circle one)
   Drive (alone) (5) Carpool () Bus Motorcycle () Bicycle Walk ()
   Other (please specify) *Farming; Pickup*

5. How many miles do you travel (round trip) for work and/or school? (Circle one)
   Less than 1 mile (1) 2-5 miles () 6-10 miles (1)
   11-20 miles (2) 21-30 miles () 31-50 miles (2) 50 miles + ()

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

7. How much time does it usually take to travel to and from school? (Circle one)
   Less than 10 minutes () 11-15 minutes () 16-30 minutes ()
   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 () 2-5 miles () 6-10 miles ()
   11-20 miles () 21-30 miles (1) 31-50 miles (2) 50 miles + (2)

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 a Week	1-2 Times a Month	Never
Car (alone or with household members)	3		1		
Carpool with others				1	1
Bus/Public Transportation					2
Motorcycle					2
Bicycle/Walk			2		
Other - Please list. *Company vehicle*	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 () 25-34 () 35-44 (1) 45-54 (3) 55-65 (2) 65-74 () 75+ ()

Gender: Male (4) Female (2)

Household Income: Under $35,000 () $35,000 to $50,000 (4) $50,001 - $75,000 (1) $75,000+ (1)

American Indian/Alaska Native __ Asian __ Black or African American __ Hispanic __
Native Hawaiian or other Pacific Islander __ White 5 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	1		4	
Intersection Improvements			4	1
Pedestrian Facilities/Sidewalks		2	3	
Maintenance Improvements		1	2	1
Bicycle Lanes	5			
Public Transportation	3	1	1	
Availability of Passenger Rail Service	5			
Connection to State or US Highways	1	1	3	
Maintenance of Bridges			4	1
Protecting the environment		2	2	1
Improving access to freight rail service	3	2		
Providing a smooth driving surface			2	3
Improve existing roadways			2	2
Add shoulders on State or US Highways			2	3
Improve signs along existing roadways		1	3	

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

	Not Important	Somewhat Important	Important	Very Important
Supports Economic Development		2	3	
Improves Safety		2		3
Reduces Congestion	2	2	1	
Bicycle Lanes or Facilities	4	1		
Improve Pedestrian walkways	2	1	2	
Improves Travel Choices	1	3		1
Reduces Energy Consumption/Pollution	1		3	1
Improves freight movement	1	2	1	1
Other (specify)	1			

13. In your community are there challenges to accessing the transportation system? (Circle one)

Yes 1 No 2

Please describe access limitations:

14. **What are some specific locations with traffic problems that you encounter through the day**?

Maintenance of roadways

15. **Please provide additional comments regarding transportation improvement needs**:
More education for community on funding for roads