Northern Oklahoma Regional
Transportation Planning Organization

Blaine County Oklahoma
2038 Long Range Transportation Plan

Northern Oklahoma Regional Transportation Planning Organization (NORTPO)

Northern Oklahoma Development Authority

NODA

Northern Oklahoma Regional Transportation Planning Organization

Prepared by:

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In cooperation with:

The County of Blaine

The Cities of Geary & Watonga

The Towns of Canton, Greenfield, Hitchcock, Longdale, & Okeene

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

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Supporting/endorsing resolutions from the County Commissioners and Cities/Towns within the county will be executed after the public review period has ended.

Northern Oklahoma Regional
Transportation Planning Organization

Resolution Adopting the Blaine County 2038 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 Blaine County 2038 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 regulation, and

NOW, THEREFORE BE IT RESOLVED, that the NORTPO Policy Board hereby approves and adopts the Blaine County 2038 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 25th day of October, 2018.

Richard Rampe

NORTPO Policy Board Chairman

ATTEST:

Marci Hyde

EXECUTIVE SUMMARY

The Northern Oklahoma Regional Transportation Planning Organization (NORTPO) developed the Blaine County 2038 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 LRTP also identifies existing and potential future transportation improvement needs.

The Blaine 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) includes the NODA region and its eight counties plus the OEDA region and its eight counties for a total of sixteen counties. The region is approximately 18,900 square miles, more than one hundred cities and towns, and twenty conservation districts. The area is predominately rural, with the majority of the population within the incorporated cities of Enid, Ponca City, Woodward, and Guymon.

Map ES.2 Blaine County

Blaine County is located in north-central Oklahoma. It is surrounded by Kingfisher and Canadian Counties to the East, Dewey and Custer Counties to the West, Caddo County to the South, and Major County to the North. Blaine County has a total of 939 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's boundaries. These 11 districts make up the Oklahoma Association of Regional Councils (OARC). Throughout the past 48 years, the regional councils have evolved from conduits for regional planning and major 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. These COGS have developed Regional Transportation Planning Organizations (RTPOs): Northern Oklahoma Regional Transportation Planning Organization (NORTPO), South Western Oklahoma Regional Transportation Organization (SORTPO), and Central Oklahoma Regional Transportation 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.

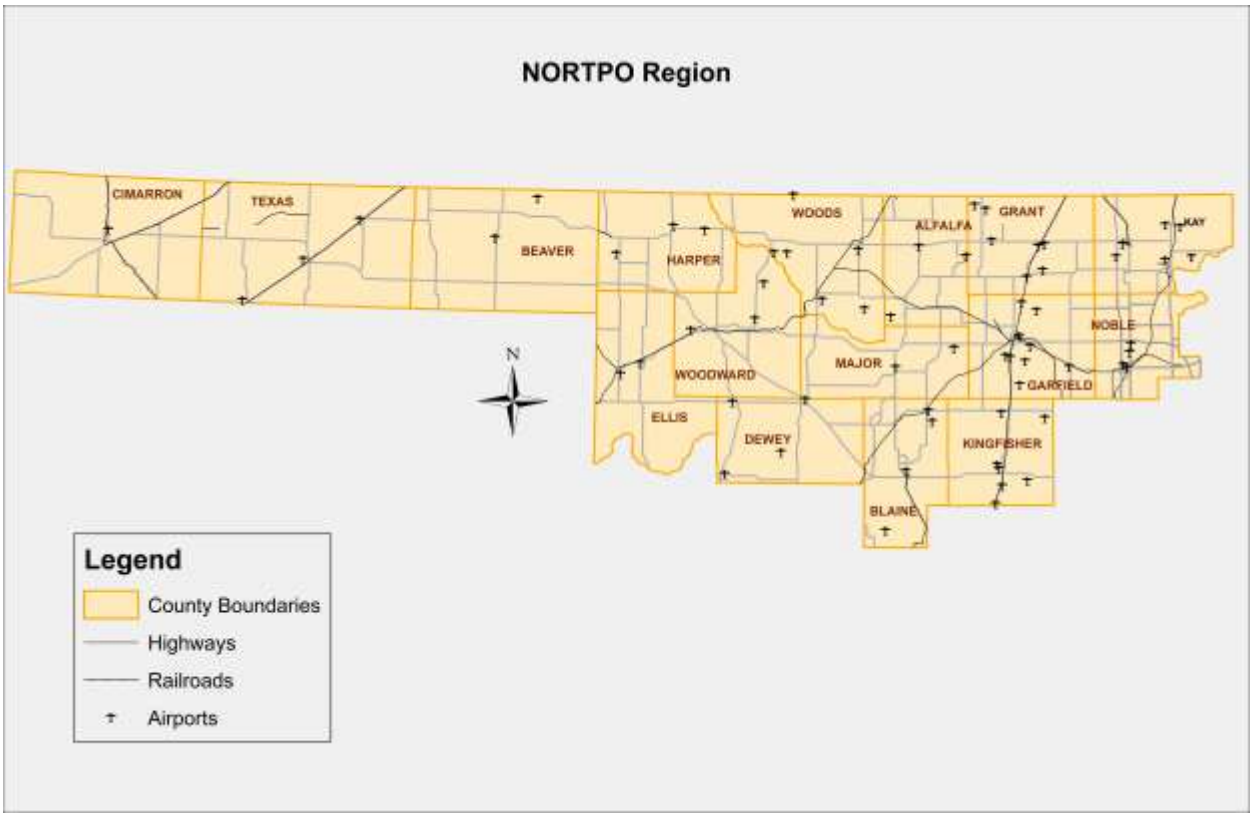
The Northern Oklahoma Development Authority (NODA) on June 16, 2010 created Northern Oklahoma Regional Transportation Planning Organization (NORTPO). In 2017, Oklahoma Economic Development Authority (OEDA) joined NORTPO to grow the region to sixteen counties total, as illustrated in Map G1.1. Additional tables and maps referred to in this chapter are included in Appendix G-1.

NORTPO is tasked with developing a Long Range Transportation Plan (LRTP) for Blaine 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 G1.1 NORTPO 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 priority sets. The process allows the community to focus their attention on transportation in the context of Blaine 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 with the regulatory framework of Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act).

Purpose of the Plan

The *Blaine County 2038 Long Range Transportation Plan (LRTP)* is a document that can be utilized by Canton, Geary, Greenfield, Hitchcock, Longdale, Okeene, Watonga, Blaine County, and residents as a guide to maintain and improve the County's transportation system through 2038. 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 2038 was chosen as the planning horizon year for the LRTP for the following reasons:

- The year 2038 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 later in this chapter and are 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 Blaine County.

Canton, Geary, Greenfield, Hitchock, Longdale, Okeene, Watonga, Blaine County, Blaine County Commissioners, regional stakeholders, and the public were contacted to compile a county-wide list of projects and prioritize a list of Blaine 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 MAP-21 and the FAST Act which was signed into law in December 2015. The FAST Act added two additional factors for a total of ten, 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 planed growth and economic patterns.
6. Enhance the integration and connectivity of the transportation system across and between modes, people, and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm-water impacts of surface transportation.
10. Enhance travel and tourism.

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

In addition, The FAST Act continues MAP-21 requirement to state departments of transportation and Metropolitan Planning Organizations (MPO) to use a performance-based approach to support seven national goals for the transportation system. This requirement has not been mandated to non-metropolitan areas. Though specific performance measures are not identified in this plan, NORTPO recognizes the significance of such measures and will begin the collection of data needed to establish standards in future plans.

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, and typically are more tangible statements of approach related to attaining the set goals. Policies identified in the Plan are formal statements of approach related to attaining the set goals and 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 Blaine County is:

Blaine County Transportation Goal Categories

Goal	Description
1. Community and Economic Vitality	Facilitate the easy movement of people and goods and improve interconnectivity of regions. 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. The transportation system will support and improve the economic vitality of the county and region by providing access to economic opportunities.
2. Environment	Reduce impacts to the County's natural environment, historic areas and under-represented communities resulting from transportation programs and projects.
3. Finance and Funding	A cooperative process between RTPO partners, state officials, and private interests in the pursuit and funding of transportation improvements.
4. 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.
5. Safety and Security	The transportation system will safely ad securely support the people, goods and emergency preparedness.

Goal 1. Community and Economic Vitality

Facilitate the easy movement of people and goods and improve interconnectivity of regions. 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. The transportation system will support and improve the economic vitality of the county and region by providing access to economic opportunities.

Objectives

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.

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

Policies

1. Support transportation projects serving already-developed locations of residential or commercial/industrial activity.
2. Consider local economic development activities in the transportation planning process.
3. Coordinate with local and tribal governments on the placement of regionally significant developments.
4. Maintain local and state support for the general aviation airports that serve the region.
5. Prioritize transportation projects that serve major employment areas, activity centers, and freight corridors.
6. The RTPO will coordinate with other agencies planning and pursuing transportation investments that strengthen connections to support economic vitality.
7. Emphasize improvements to the major truck freight corridors.
8. The 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.
9. Design the transportation network to protect cultural, historical and scenic resources, community cohesiveness, and quality of life.

Goal 2: 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. RTPO partners will avoid, minimize, and mitigate disproportionately high and adverse impacts of transportation projects to the County's under-represented communities.

Goal 3: 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 4: 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 5: 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 travelling 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 Blaine County.

Key issues

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

- Maintenance and preservation of the existing transportation system
- Road flooding/drainage

- Safety/Lack of proper signage at intersections
- Localized congestion in cities and towns
- Traffic caused by the oil/gas industry's vehicles

Challenges

The challenges facing the transportation system in Blaine 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 funding for public transportation
- Lack of commercial airline

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 Blaine 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 G-2.

Transportation planning in Oklahoma has typically been limited to urban areas. Rural or regional transportation planning is evolving into an opportunity to consider both the short and long term transportation needs for locations 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 their natural, historic and cultural resources.

As the population fluctuates (either through economic changes in or out migration or shifting within the region) the needs of the communities include education, health care, social services, employment, and transportation. In rural areas they 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 investments.

Covering northwest and north central Oklahoma, the Northern Oklahoma Regional Transportation Planning Organization (NORTPO) region is predominately rural with the majority of the population located within the incorporated cities of Enid (a population of 50,122), Ponca City, (24,220), Woodward (12,051) and Guymon (11,442) from the 2016 American Community Survey (ACS) estimates. Tables and maps are located in the appendix, and Table G2.1 provides population data for NORTPO Counties.

Each county in the region, although a separate entity as far as governmental services, 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. Blaine County’s deviations in population and employment patter is attributed to volatile nature of the oil and gas industry and subsequent impact to declines in prices in those industries. Although current data indicates this decline, historical data found on Table G2.2 in the appendices illustrates Blaine County’s growth from 1980 to 2016.

According to ACS 2012-2016 population census estimates, Blaine County has a total population of 9,498. The County encompasses 939 square miles and include seven cities and towns. Watonga is the largest community in Blaine County with a population of 3,921, Geary is the second largest with a population of 1,205 and Okeene coming in third with 1,081. The remaining towns all have a population of less than 500 each: Canton with 465, Longdale with 234, Greenfield with 112, and Hitchcock with 82. The remaining 2,677 population resides outside of any towns or cities.

Historically, Blaine County's economy was based principally upon agriculture and it remains a significant source of income. Mineral production is also important to the county's economy with oil, natural gas, and gypsum mining. Tourism and recreation are also important in Blaine County with major facilities located at Roman Nose State Park including Lake Watonga and Boecher Lake, Canton Lake, and American Horse Lake west of Geary. Blaine County is the site of the first gypsum mill in Oklahoma Territory, the Ruby Stucco Mill. Southard, an unincorporated community, is the site of one of the purest gypsum deposits in the United States and is home to the U.S. Gypsum Company, the largest industrial plant in the county.

Watonga is the county seat and was named for Arapaho Chief Wa-ton-gha, whose name means Black Coyote. It is also the home of the annual Watonga Cheese Festival every fall. Notable citizens include Theresa Hunt Tyler, the town's first dentist at a time when few women practiced that profession, and native son Clarence Nash provided the voice of Walt Disney's cartoon character Donald Duck. Major employers include Feather Warrior Casino, Roman Nose State Park, and Wheeler Brothers Grain Company.

Geary is the second largest city and named for Edmund Guerrier, a scout and an interpreter for the U.S. Army. He was of French and Cheyenne descent. Because his name was difficult for people to pronounce, the town became Geary. It was labeled a "first class city" because of its population over 2,000 (as was the requirement), but by statehood the population decreased significantly. Jesse Chisholm's final resting place was nearby and his grave was made a historical site in 1971. He was instrumental in establishing peaceful trade relations. Major employers include First Choice Home Medical Inc., Geary Public Schools, and Geary Police Department.

Okeene was originally pronounced in three syllables, O-Kee-Ne, for its Cherokee and Cheyenne roots. For such a small town, it has three major industries to offer Blaine County in regard to its economy. Okeene Milling Company (producer of flour and feed), Seaboard Farms (milled feed to hog farms), and Mountain Country Foods (pet food manufacturer). Also its hospital and clinic serve their community and surrounding towns. The International Association of Rattlesnake Hunters was headquartered there and hosts The Annual Rattlesnake Round-up.

The County population is distributed 49.15% male and 50.85% female with a median age of 40. Blaine County's population 65 years and older (2011-2016 ACS) represents 18.67% 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 the city, town, or rural 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 2012-2017 ranged from 4,123 to 4,453 a net increase of 330; while total labor force during the same time period ranged from 4,355 to 4,585.

Figure 2.1 illustrates the changes in the civilian labor force from 1990-2018.

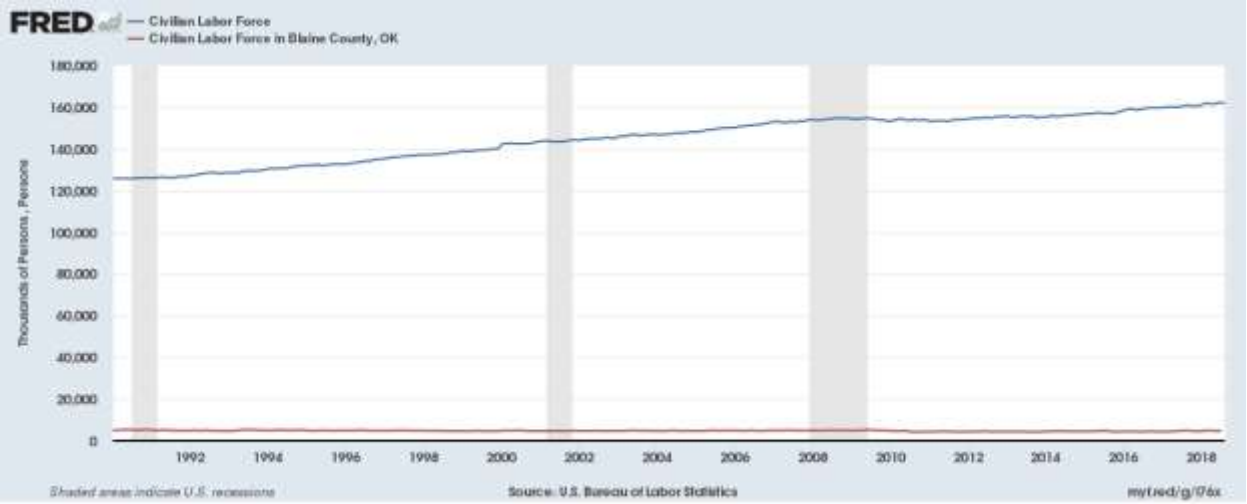


Table G2.3 summarizes vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Automobile and farm truck registration continues to show little fluctuation from years 2013 to 2017. The data on the table in the appendix confirms that the primary vehicle is the automobile. Data obtained from the 2012-2016 ACS reveals that 46.1% of the working population had access to two or more vehicles; while 1.7% of the working population did not have access to a vehicle. Commute patterns to work for workers 16 years and older according the 2012-2016 ACS identify that 87.23% of workers drove alone, less than 1% carpooled, and a little over 7% work from home. Mean travel time was estimated at less than 10 minutes to get to work.

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 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, Blaine County is subdivided into 17 TAZs. Because of the rural nature of Blaine County, there are a minimal amount of TAZs. Watonga and Geary are the only cities in Blaine County that are located over multiple TAZs, because they are the areas with the highest population and work force or have a highway running through the community. 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 C.1 illustrates the TAZs for Blaine County. Map C.2 and Table C.2 show the population by TAZ. Major employer data is found in Table C.1. Major employers by TAZ can be found in Map C.1. 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 Blaine 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 Blaine 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. A comprehensive plan has not been completed for Blaine County or its cities/towns, however a list was given of future transportation projects which is noted later in this LRTP.

According to information received from the public lack of public transportation is mentioned as one of the constraining factors for development. Maps G2.6, G2.8, and G2.9 depict the location of the highways, rivers, airports and railroad. The primary east/west corridor is State Hwy 8 & State Hwy 51. Grainbelt Corporation (GNBC) and Austin, Todd, & Ladd (AT&L) provides Class III rail. The airports in Blaine County include publicly-owned Christman Airfield Airport and Watonga Regional Airport. Transit services are limited to call-on-demand van services provided by MAGB Transportation Inc. and Cherokee Strip Transit (CST).

Blaine 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 2038 LRTP.

These include (but are not necessarily limited to):

- Threatened and Endangered Species
- Wetlands
- Floodplains
- Surface and Ground Waters
- Storm water Management and Erosion and Sediment Control
- Hazardous Materials
- Air Quality
- Historically/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 E.)

Bodies of water in Blaine County include Canton Lake, American Horse Lake, Boecher Lake, and Lake Watonga. North Canadian River, and Canadian River are major rivers that flow through Blaine County. 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.

Blaine County Floodplains

Floodplains have been mapped for Canton, Geary, Greenfield, Okeene, and Watonga plus the unincorporated areas of Blaine 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 the website www.msc.fema.gov.

Earthquakes
Although earthquakes have become a reoccurring issue in Blaine 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 preservation, or minimization and mitigation of impact. Such Blaine County properties are listed in Table G2.4. For additional information visit the website noted here:
http://www.nationalregisterofhistoricplaces.com/ok/Blaine/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 Blaine County may include: Whooping Crane, Interior Least Tern, Black-capped Viero, Piping Plover, and Arkansas River Shiner. Additional information can be found at:
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. Blaine County currently has one wind farm in development.

County and Community Development

Planning in Oklahoma has been nonexistent or very limited outside of urbanized cities and towns. This LRTP will consider growth and development patterns in the County. A critically important component to transportation planning is growth areas that may generate significant demands on the transportation system. The predominant land use in Blaine County is agricultural with limited commercial and residential use 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 Blaine 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 Watonga, Southard, and Okeene as illustrated in Map C.1.

Streets and roads considered to be most important in the development of a LRTP are shown in Map G2.2. This includes the US and State Highways and those county roads considered to be critical to overall mobility in Blaine County. The majority of the roads in the county are two-lane undivided roads. The critical roads are functionally classified and illustrated in Map G2.1.

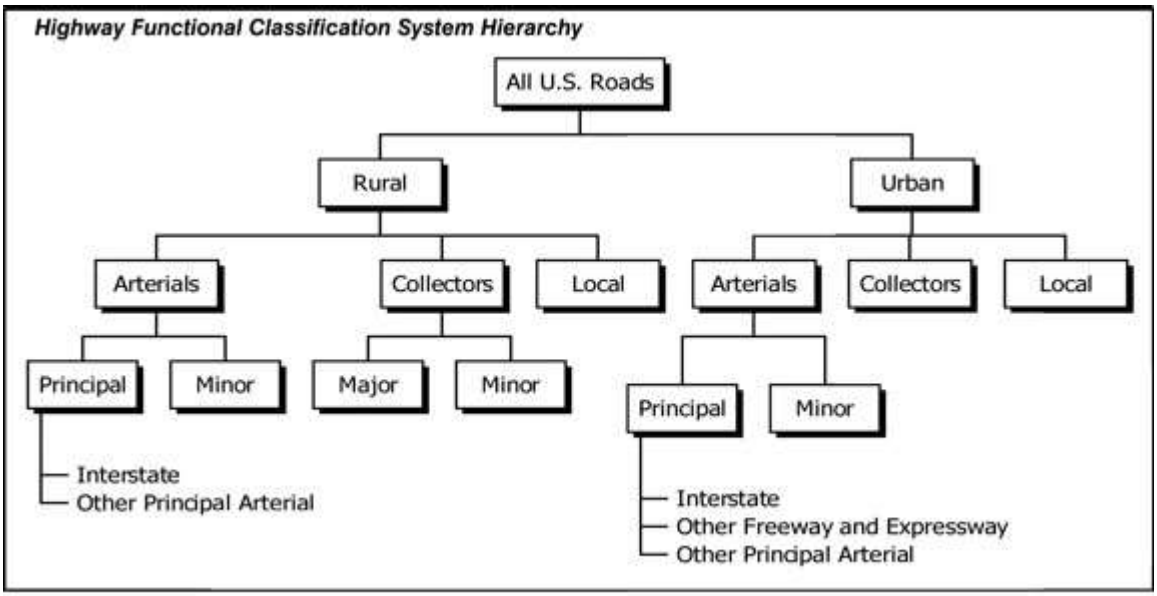
Road Classification

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 to operational and maintenance responsibility, but also in how roadway improvement projects can be funded. Map G2.1 illustrates Blaine County's Rural Functional Classification.

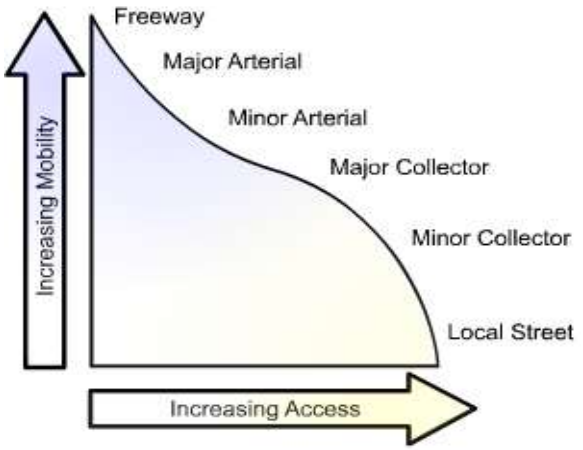
An efficient transportation system includes a proper balance between movement of traffic and access to abutting land. The majority of the roads in Blaine County are designated as rural. See Functional Classification Hierarchy Charts below in Figure 2.2 and Figure 2.3. Figure 2.4 shows the relationship between functional classification and travel characteristics.

Figure 2.2 Highway Functional Classification System Hierarchy.



Source: FHWA Functional Classification Guidelines.

Figure 2.3 Conceptual Roadway Functional Hierarchy



Source: FHWA

Figure 2.4 Functional Classification and Travel Characteristics

Functional Classification	Distance Served (and Length of Route)	Access Points	Speed Limit	Distance between Routes	Usage (AADT and DVMT)	Significance	Number of Travel Lanes
Arterial	Longest	Few	Highest	Longest	Highest	Statewide	More
Collector	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Local	Shortest	Many	Lowest	Shortest	Lowest	Local	Fewer

Funding eligibility limitations include:

- FHWA National Highway Performance Program (NHPP) can be used only on the National Highway System (NHS), 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.

Traffic counts collected by ODOT for 2016 are illustrated in Map G2.2. This data reveals that the largest volume of traffic is on US 281 between Geary and Watonga, SH 8 between Okeene and Watonga, SH 58 between Canton and Watonga. Blaine County does not have 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 the update of the Blaine County Multi-Jurisdiction Hazard Mitigation Plan. Ongoing participation in these planning activities helps prepare for and better manage transportation security situations.

FAST Act required all states to prepare and annually evaluate their Strategic Highway Safety Plan (SHSP). A SHSP is a statewide, coordinated safety plan which includes goals, objectives and emphasis areas for reducing highway fatalities and serious injuries on all public roads. More information on the Oklahoma SHSP can be found on the State of Oklahoma Highway Safety Office's website (http://ohso.ok.gov/strategic-planning-results).

The safety of the travelling 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 2012-2016 which is the most completed and up-to-date data.

There were 628 total crashes involving 456 people and 23 fatality crashes killing 24 people in Blaine County over the 2012-2016 timeframe with an average of 133 crashes per year. Map G2.3 shows the locations of collisions for 2012-2016. Table G2.2 crash data for 2012-2016 shows total crashes and fatalities. The highest concentration of collisions occurred along SH 8 and US 270. The majority of collisions occurred were with a fixed object and of those crashes had no improper action involved. The second highest was due to unsafe speeds.

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. Below is a chart of locations and severity index of collisions in Blaine County. Below is Figure 2.5, a chart of locations and severity index of collisions in Blaine County. *(Source: ODOT)*

Figure 2.5 Severity Index of Collisions in Blaine County

								------INTERSECTING------					
COUNTY	CITY	HWY CL	INT ID	CS/ ST.1	HWY	INT-REL/ TERM-LOC	CITY STREET NAME	CITY STREET NAME	HWY	MILE/ ST.2	SEV INDEX	NUM COLLS	RANK
(06)BLAINE	(00)	4	07	20	SH-51	INTER		(NORTH)	SH-51A	08.84	46	20	1
(06)BLAINE	(00)	4	13	02	US-270	INTER		/SH-58	SH-33	03.34	44	21	2
(06)BLAINE	(35)WATONGA	8	12	02	US-270	INTER	C ST.	CLARENCE NASH BLVD	SH-3	12.85	14	8	3
(06)BLAINE	(00)	4		24	SH-51A	INTER		NS 254(17)		07.00	11	3	4
(06)BLAINE	(00)	4	05	20	SH-51	INTER			SH-58	03.61	10	6	5
(06)BLAINE	(00)	4		10	SH-3	INTER		NS 261(31)		03.80	9	3	6
(06)BLAINE	(00)	4		10	SH-3	INTER		NS 267(43)		09.70	9	3	7
(06)BLAINE	(00)	1		04	US-270	INTER		885 RD.		07.90	8	3	8
(06)BLAINE	(00)	4	10	14	SH-8	INTER			SH-8A	04.25	8	2	9
(06)BLAINE	(00)	4	03	20	SH-51	INTER			SH-58A	01.99	7	5	10
(06)BLAINE	(40)GEARY	7	14	04	US-270	INTER	BROADWAY	SOUTH ST.	US-281	16.85	7	5	11
(06)BLAINE	(00)	4		14	SH-8	INTER		EW 78(46)		02.80	7	3	12
(06)BLAINE	(00)	1		04	US-270	INTER		EW 84(34)		03.00	7	2	13

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 NORTPO Technical Committee and NORTPO Policy Board, and information obtained via public comment, data areas of concern were identified. The major areas of concern are:

- Russworm Dr, east/west & Clarence Nash Blvd, north/south in Watonga - Congestion and non-functioning traffic lights
- Oilfield trucks – Congestion and tearing up roads
- SH 33 between Kingfisher and Watonga – narrow, two-lane, no shoulder roads
- No shoulder for farm trucks

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 12,265 centerline miles as measured in one direction along the dividing strip 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, highways, and railroads. On average passenger vehicles, buses and trucks travelled more than 68.8 million vehicle miles each day (daily vehicle miles travelled or DVMT) in 2017 on the state-owned highway system (not including toll roads).

Oklahoma's rural nature and historically agriculture 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 G2.4 illustrates the location of two lane highways with no paved shoulders.

Map G2.5 illustrates the Steep Hill/Sharp Curves areas of concern (statewide). Blaine County transportation system has approximately 2,096 miles of roadways that make up the road network. *(source: ODOT)*

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 2017 reveals about 28% or approximately 3,466 of the State's 12,265 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.

Blaine County is served by four State Highways and has two US Highways, as well as municipally owned streets and county roads.

The major highways are:

- US 270 (connecting Geary to Watonga)
- SH 3 (east/west connecting Kingfisher to Watonga)
- SH 8 (main north/south connecting Okeene and Watonga)
- SH 51 (east/west connecting Okeene to Canton)
- SH 58 (north/south connecting Canton to Watonga)

The NORTPO network of roads consists of more than 10,000 lane miles (centerline miles multiplied by the number of lanes). 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 (sediment removal from moving water causing holes) around bridge piers.

Bridges are rated on a numerical scale of "1" to "7" that translates into arrange 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 section; 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. 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. More information can be found in Appendix G2.

The NORTPO planning area has more than 4,300 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 288 bridges in Blaine County. Map G2.6 shows the bridges and Table G2.6 lists the bridges by location and identifies structurally deficient and functionally obsolete. According to data received from ODOT, there are numerous deficient bridges, not only in Oklahoma but Blaine County, as well. In the last few years repair and/or replacement of deficient bridges has been a priority of ODOT.

Freight

The Fixing America's Surface Transportation Act (FAST Act) repealed both the Primary Freight Network (PFN) and Nation 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 systems' roadways may not yet be reflected on the national and state NHFN maps (Map G2.7). While Blaine County does not include roads identified in the NHFN the NORTPO Policy Board recognizes that highways US 270, US 281, SH 3, SH 8, SH 51, and SH 58 are significant statewide and regional highway freight corridors. Blaine County Freight Corridors that were recommended by the NORTPO Technical Committee are located on Map G2.8. The majority of freight movement in the region is by truck and rail. Figure 2.6 shows the average daily long haul traffic on the National Highway System (NHS) for 2015.

Figure 2.6 - Average Daily Long Haul Traffic

Note: Major flows include domestic and international freight moving by truck on highway segments with more than twenty five FAF trucks per day and between places typically more than fifty miles apart.
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 4.3, 2017.

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 constructed. The POE 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 2.7 illustrates existing and proposed ports of entry.

Figure 2.7 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. *(source: ODOT)*

There are three Class I railroads and 19 Class III railroads in Oklahoma. Grainbelt Corporation (GNBC) and Austin, Todd & Ladd Railroad(AT&L) are both Class III railroads in Blaine 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 the 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. Map G2.9 shows the railroads in Blaine County.

Grain and mining 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 more than 1,375 miles of open rail track in the region. The rail infrastructure is the responsibility of the railroads. 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) (Figure 2.8), 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 “connector line” through Blaine County and can service some of these military installations.

Figure 2.8 STRACNET

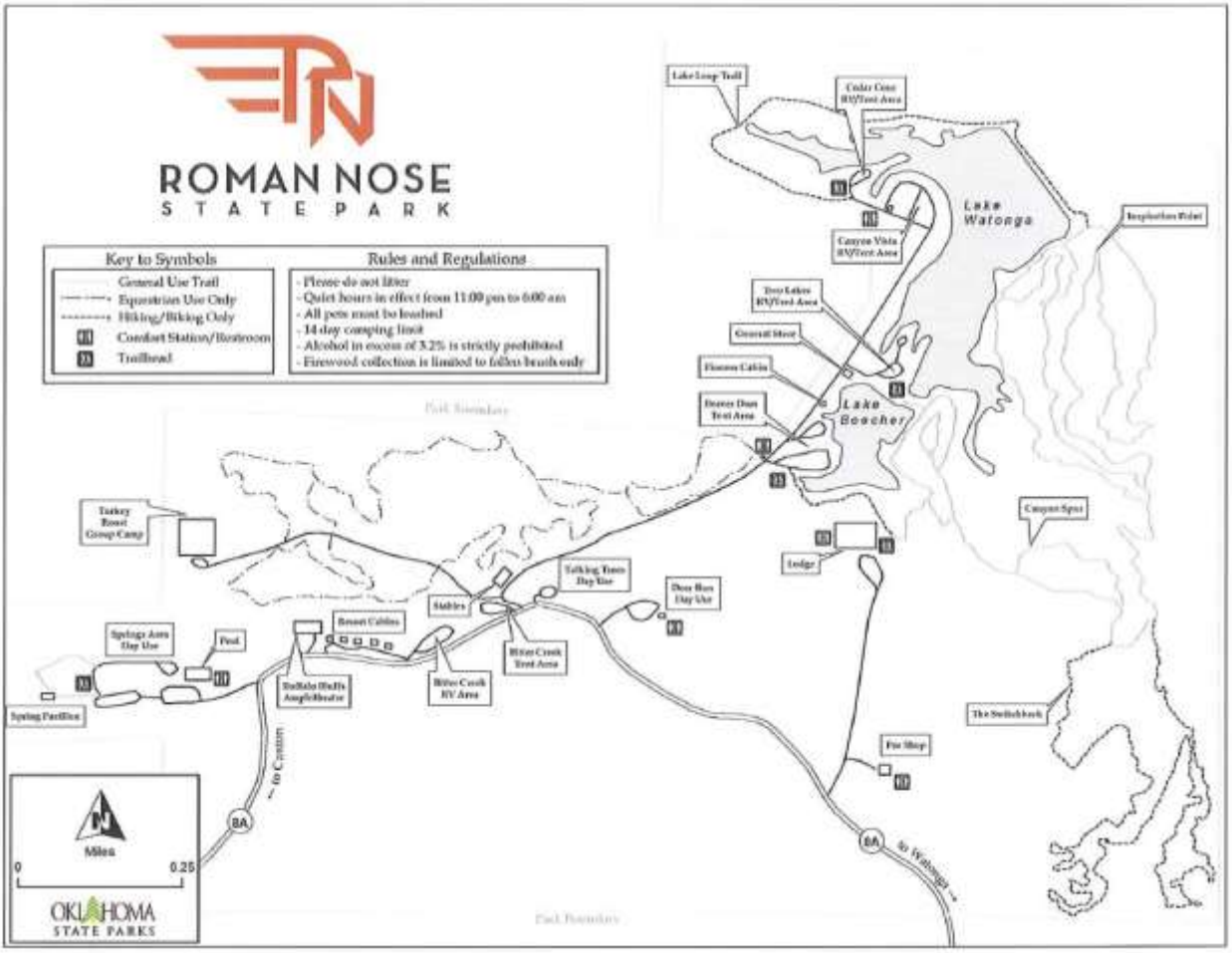
Source:https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistant/RND%20Publications/STRACNET%202018_Reduced.pdf

Bicycle and Pedestrian Network

Bicycle and pedestrian facilities are located at Canton Lake and Roman Nose State Park (Figure 2.9) plus local sidewalks. Watonga, Canton, Okeene, and Geary are communities that 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. Blaine County's rural nature has limited the available investment in a bicycle and pedestrian network.

Figure 2.9 Roman Nose State Park Trail Map



Source: https://www.travelok.com/state-parks/6460/maps-and-resources#state-park-menu-tabs

Transportation Alternative Program (TAP) administered by ODOT is a grant program for Oklahoma communities to receive funding for transportation access other than motor vehicles. Roman Nose State Park received a TAP grant in 2016 construct a multi-use trail. Another round of applications are being sought for 2018 awards.

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 end-of-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. Services needed for doctor appointments, transportation to and from special events, and to accommodate wheelchairs including motorized versions, just to name a few. Federal, state and especially local funding is limited. This limits the type and level of service (LOS) that can be provided. ODOT's Transit Programs Division is responsible for the administration of the Federal Transit Administration (FTA) for rural transit operations.

Public transportation services for the area is limited to on demand van services provided by (Major, Alfalfa, Grant, & Blaine) MAGB Transportation, Inc. and Cherokee Strip Transit (CST) through NODA.

MAGB Transportation, Inc. serves all of NW Oklahoma, while focusing on Major, Alfalfa, Grant, and Blaine Counties. Their main office is located in Fairview, Oklahoma. They serve not only passengers that are 60 and older, but also low/moderate income residents. Table G2.7 shows MAGB's ridership and revenue data.

CST, originally known as Garber Elderly Transportation Systems (GETS), merged and expanded to include most of north central Oklahoma. Their main office remained in Garber, Ok (Garfield County), but also offices in Perry (Noble County), Tonkawa (Kay County), Watonga (Blaine County), and Kingfisher (Kingfisher County). They have several routes to accommodate most of the region. Table G2.8 shows CST's ridership and revenue data.

Aviation

NORTPO area consists of more than 25 general aviation airports (Figure 2.10) 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. Watonga Regional Airport is a general aviation airport located at Airport Road and Clarence Nash Blvd (state highway 8) at the Northwest corner of the City. It has a 4001' x 60' lighted runway and an Automated Weather Observation System (AWOS). Aircraft operation average 56 per week. Christman Airfield is located one mile southeast of Okeene. It has a 1196' asphalt runway. Aircraft operations averages 57 per week. *Source: http://www.airnav.com/airport and https://www.cityofwatonga.org/airport*

Figure 2.10 List of NORTPO Airports

County	Towns	Airports
Alfalfa County	Cherokee	Cherokee Municipal Airport
Beaver County	Beaver	Beaver Municipal Airport
Blaine County	**Okeene**	**Christman Airfield**
	Watonga	**Watonga Regional Airport**
Cimarron County	Boise City	Boise City Airport
Dewey County	Seiling	Seiling Airport
	Vici	Vici Municipal Airport
Ellis County	Gage	Gage Airport
Garfield County	Enid	Enid Woodring Regional Airport
Grant County	Medford	Medford Municipal Airport
	Pond Creek	Pond Creek Municipal Airport
Harper County	Buffalo	Buffalo Municipal Airport
	Laverne	Laverne Municipal Airport
Kay County	Blackwell	Blackwell-Tonkawa Municipal Airport
	Ponca City	Ponca City Regional Airport
Kingfisher	Kingfisher	Kingfisher Airport
Major County	Fairview	Fairview Municipal Airport
Noble County	Perry	Perry Municipal Airport
Texas County	Guymon	Guymon Municipal Airport
	Hooker	Hooker Municipal Airport
	Texhoma	Municipal Airport
Woods County	Alva	Alva Regional Airport
	Freedom	Freedom Municipal Airport
	Waynoka	Waynoka Municipal Airport
Woodward County	Mooreland	Mooreland Municipal Airport
	Woodward	West Woodward Airport

Source: http://www.tollfreeairline.com/oklahoma.htm

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 2038. 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 2038. Tables and maps referred to in this plan are included in Appendix G3.

Future Conditions

The population and employment projections for Blaine County were produced at the TAZ level for 2038. The 2038 population projection of 8,683 and employment projection of 3,511 were distributed through the Census Block Groups. The projected population and employment data are illustrated in Map G3.1 and G3.2. Table G3.1 contains supporting data for the maps. Compared to the 2010, population and employment is projected to remain consistent with the 2016 ACS estimated population of 8,513 and Oklahoma Employment Security Commission’s LAUS employment data of 3,504 through 2038. *(Source: NORTPO)*

Population and employment projections are based upon available data. When utilizing this data, it is imperative to understand that 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 Blaine 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.

2038 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 G3.2 were obtained from the ODOT 8-Year Construction Program 2018-2025, County Improvements for Roads & Bridges Program (CIRB) Plan 2018-2022 (Table G3.3), County Commissioners, Local Governments, and Transit operators. Map G3.3 illustrates the location of projects included in the ODOT 8-Year Construction Program 2018-2025.

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. After contacting the individual towns and cities in Blaine County, only the County had a list of potential projects. When and if funds are available over the next 5 years, the Commissioners for Blaine County provided the list below:

- 7 miles East of Geary on HWY 270, there is a dangerous situation with a narrow bridge in a curve.
- East and West of Watonga on HWY 33, road needs repaired and needs turning lanes.
- The 4-way in Watonga needs to be repaired. (Intersection at Russworm Dr. and Clarence Nash Blvd.)
- Railroad Crossing in Carlton, which is from HWY 51/51A Junction, 3 ½ South and 2 ¼ West, needs lights and/or cross arms.
- Railroad Crossing on HWY 51 East of 4-way in Okeene is very rough.
- 4-way in Canton possibly needs a flashing light installed. (intersection at Main St and Broadway)
- A speed study needs to be done on the Railroad tracks South of Okeene.
- TAP: Roman Nose State Park multi-use trail to connect the three springs to one another plus improvements to area around pavilion and middle spring; Okeene construct sidewalks on Broadway, Elm, and Main Streets for phase one. For the second phase sidewalks on Main, 6th, Broadway and to the Golf Course.

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 G-6

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 normal 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 (FHWA). 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 Federal Transit Administration (FTA) to each state through a system of formula Majors and discretionary allocations. Motor fuels taxes, consisting of the 17 cents per gallon tax on gasoline and 14 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 and municipalities 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 funded taxes.

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 seventeen cents ($0.17) per gallon for gasoline and diesel at fourteen cents ($0.14) per gallon. There is also a transportation-dedicated five cents ($0.05) 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 but capped at $575 million annually. In FY 2017 the Fund received $571.7 million. In addition, the County Improvement for Roads and Bridges (CIRB) fund, created in 2006 and administered by ODOT, was increased to twenty percent (20%) of motor vehicle registration fees and capped at $120 million beginning in SFY 2016.

Public transportation funding for rural transit agencies is as follows:

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

- Sub recipients are reimbursed for eligible administrative, operational, and capital expense, at specific rates, for services performed within their total pre-approved Section 5311 service areas.

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

County

The main funding program for county roads and bridges is the County Highway Fund, which consists of revenues from the state taxes on gasoline and diesel fuels, as well as, motor vehicle registration fees and a portion of the 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 seven percent (7%) state 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 Blaine 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 CDBG through Oklahoma Department of Commerce, EDA, and US Department of Agriculture Rural Development (USDA RD) programs. Oklahoma has limited funding available for projects through 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 2016 population estimates, Blaine County's racial and ethnic composition is 77.9% White, followed by 5.4% American Indian and Alaska Native, and then 5.2% African American. In comparison, Oklahoma's is 72.9% White, followed by 7.4% American Indian and Alaska Native, and then 7.3% African American. The LRTP process identified EJ populations through a comparison of the racial and ethnic composition of the county.

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. The review included:

- FAST Act Federal Planning Factors (MAP-21 Federal Planning Factors)
- ODOT 2015-2040 Long Range Transportation Plan
- Freight Flow study
- 2012 Transit Gap Overview and Analysis
- Oklahoma Mobility Plan
- STIP: http://www.okladot.state.ok.us/p-r-div/stip/STIP_2018-21/Complete_2018-21_STIPSEP2018.pdf
- https://www.ok.gov/odot/Programs_and_Projects/8_Year_Construction_Work_Plan/
- 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 in 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 to take an active role in the decision making process.

NORTPO hosted one public meeting in Blaine County and 16 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, held at Blaine County Fairgrounds, and were available on NORTPO's website (www.nortpo.org), and is shown in Appendix D.

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 (such as, Emergency Operation Procedures, Hazard Mitigation Plans, Capital Improvement Plans, etc.) 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 Blaine County projects included in the ODOT eight-year FFY2018-2025 construction program and CIRB will be constructed by the year 2038.

The projects included in the LRTP are primarily funded by ODOT, some have additional funding from local grants and/or local funds. When implementing this plan, NORTPO and its partners 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 G3.2 and Table G3.3 in the appendix shows the recommended transportation projects both funded projects from ODOT's eight-year Construction Program (2018-2025) and CIRB's five-year Construction Program (2018-2022).

Implementation policies and solutions include:

Roadway

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

Rail

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

Bicycle and Pedestrian

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

Safety

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

Public Transportation

- Increase inter- and intra- county transit services.
- Promote transit systems providing service to major activity centers and enhance coordination among providers.
- Measure transit service and identify needs.

Planning and Community

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

The projects included in the LRTP may have potential funding from a single source or multiple sources. Each project has its own unique components relative to only that project and while there are many funding programs within various state and federal agencies, each project must be evaluated on its own merits to determine which programs will apply. It should be noted that that some projects have multiple funding sources, these represent the primary sources and additional sources not listed may also be available. Additional sources could include funding from sources such as but not limited to Economic Development Administration (EDA), United States Department of Agriculture (USDA), Community Development Block Grant (CDBG), Rural Economic

Action Plan (REAP) Grant, Industrial Access, Lake Access, and Transportation Alternative Programs (TAP).

Committed Improvements

The ODOT eight-year Construction 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. Transportation projects that are part of the ODOT eight-year plan (Table G3.2), CIRB (Table G3.3), and county lists are described in Chapter 3.

Figure 6.1 Blaine County Projects

LOCATION/DESCRIPTION	PROJECT TYPE	PROJECT YEAR	PROGRAM	PROJECT COST
Tap Project: Okeene to construct sidewalks in 2 phases	TAP Grant	FFY2018	Blaine County	
SH-8: Bridge & Approaches over Spring Creek located 1.2 miles south of the SH-51 Jct. .350miles	Bridge & Approaches	FFY2018	ODOT 8-year	$1,688,832.00
SH-3: From 1 mile east of the US-270 Jct in Watonga, east 4.5 miles	Utilities	FFY2018	ODOT 8-year	$245,665.30
SH-3: Begin 5.5 miles east of the US-270 Jct in Watonga & extend east 6.41 miles to the Kingfisher C/L. 6.41 miles	Utilities	FFY2018	ODOT 8-year	$478,928.37
SH-51, over N. Canadian River & Overflow 3.1 & 3.3 miles east of the Dewey C/L. 0.440 miles	Bridge & Approaches	FFY2018	ODOT 8-year	$4,154,420.00
MC +A10:E1706-52C - FROM SH51 EXTENDING N 3.3 MI THEN WEST 2.0 MILES ON MC 06-60C UT FOR 2870604. CO RD 5.50 MI.	UTILITIES	FFY2018	CIRB 5-year	$200,000

CROSSTOWN BEAM BRIDGE OVER TRIB OF SPRING CREEK (N257E064.9) 9.0 MI E & 1.1 MI N OF JCT SH-58/SH-51 IN CANTON (UT FOR 3004004). COBRGE 0.03 MI	UTILITIES	FFY2018	CIRB 5-year	$10,000
LOCATION/DESCRIPTION	**PROJECT TYPE**	**PROJECT YEAR**	**PROGRAM**	**PROJECT COST**
OVER WEAVER CREEK CROSSTOWN BEAMS (N251&E082.8) 6 MI W & 1.8 MI S OF JCT US-270/SH-8 IN WATONGA. COBRGE 0.23 MI.	BRIDGE & APPROACHES	FFY2018	CIRB 5-year	$550,000
EW-72 (0616C) BEG @ KINGFISHER C/L, EXT WEST APPROX 4.0 MILE TO NS-265 (0662C). CO RD 4.00 MI.	GRADE, DRAIN & SURFACE	FFY2018	CIRB 5-year	$4,000,000
CO BR ON EW-065 OVER SPRING CREEK APPROX. 3.0 MI SOUTH AND 3.5 MI WEST OF SH-51/SH-8 JCT. IN OKEENE. COBRGE 0.50 MI.	BRIDGE & APPROACHES	FFY2018	CIRB 5-year	$437,500
TAP Project: Roman Nose State Park. Multi-use trail to connect three springs, plus improvements to area around pavillion and middle spring.	TAP Grant	FFY2018	Blaine County	
CROSSTOWN BEAM BRIDGE OVER TRIB OF SPRING CREEK (N257E064.9) 9.0 MI E & 1.1 MI N OF JCT SH-58/SH-51 IN CANTON. COBRGE 0.03 MI	BRIDGE & APPROACHES	FFY2018	CIRB 5-year	$550,000
SH-3: Begin 1 mile east of the US-270 Jct in Watonga & extend east 4.5 miles	Widen & Resurface	FFY2019	ODOT 8-year	$6,963,830.00
CO RD. MAJOR COLLECTOR 06-30C AND 06-40C GRADE SURFACE FROM AMERICAN HORSE LAKE RD E. 5 MILES.	RESURFACE	FFY2019	CIRB 5-year	$200,000
OVER CHICKEN CREEK LOCATED 6.0 MILES SOUTH OF WATONGA (ENGINEERING). COBRGE 0.25 MI.	BRIDGE & APPROACHES CONTRACT P.E. (AS OF 10/1/2013)	FFY2019	CIRB 5-year	$45,000

7 miles east of Geary on HWY 270. Widen Bridge.	Bridge & Approaches	FFY2019-2023	Blaine County	
East & west of Watonga on HWY 33, road repaires plus turning lanes	Widen & Resurface	FFY2019-2023	Blaine County	
LOCATION/DESCRIPTION	**PROJECT TYPE**	**PROJECT YEAR**	**PROGRAM**	**PROJECT COST**
Intersection at Russworm Dr. & Clarence Nash Blvd. needs repaired	Widen & Resurface	FFY2019-2023	Blaine County	
Railroad Crossing in Carlton, which is from HWY 51/51A Junction, 3 1/2 south and 2 1/4 west, needs lights and/or cross arms.	Utilities	FFY2019-2023	Blaine County	
Railroad Crossing on HWY 51 east of 4-way in Okeene. Needs leveled and resurfaced.	Utilities	FFY2019-2023	Blaine County	
4-way (intersection at Main St. & Broadway) in Canton needs a flashing light installed.	Utilities	FFY2019-2023	Blaine County	
SH-3: Begin 5 miles east of the US-270 Jct in Watonga & extend east 6.41 miles to the Kingfisher c/l.	Widen & Resurface	FFY2020	ODOT 8-year	$8,298,649.00
SH-8 over Salt Creek, .2 mile south SH-51	Bridge & Approaches	FFY2020	ODOT 8-year	$2,751,240.60
SH-58: Over Minnehaha Creek approx. 7.3 miles south of SH-51	Bridge & Approaches	FFY2020	ODOT 8-year	$1,572,319.20
CO BR ON EW-068 OVER SALT CREEK, APPROX. 6.0 MI SOUTH AND 1.75 MI EAST OF OKEENE (PE FOR 32914(04). COBRGE 0.50 MI.	CONTRACT P.E. (AS OF 10/1/2013)	FFY2020	CIRB 5-year	$45,000
MC 06-52C - FROM SH51 EXTENDING N 3.3 MI THEN WEST 2.0 MILES ON MC 06-60C GRADE-DRAIN-SURFACE. CO RD 5.50 MI	WIDEN & RESURFACE	FFY2020	CIRB 5-year	$6,000,000

OVER CHICKEN CREEK LOCATED 6.0 MILES SOUTH OF WATONGA. COBRGE 0.25 MI.	BRIDGE & APPROACHES	FFY2020	CIRB 5-year	$437,500
CO RD. MAJOR COLLECTOR 06-30C AND 06-40C GRADE SURFACE FROM AMERICAN HORSE LAKE RD E. 5 MILES. CO RD 5.00 MI.	WIDEN & RESURFACE	FFY2021	CIRB 5-year	$5,000,000
LOCATION/DESCRIPTION	**PROJECT TYPE**	**PROJECT YEAR**	**PROGRAM**	**PROJECT COST**
CO BR ON EW-068 OVER SALT CREEK, APPROX. 6.0 MI SOUTH AND 1.75 MI EAST OF OKEENE (E068&N264.8). COBRGE 0.50 MI.	BRIDGE & APPROACHES	FFY2021	CIRB 5-year	$437,500
CO BR (N268& E080) OVER UNNAMED CR 9.8 MI E OF WATONGA ON EW-80 PRELIMINARY ENGINEERING. COBRGE 0.00 MI.	CONTRACT P.E. (AS OF 10/1/2013)	FFY2021	CIRB 5-year	$45,000
CO BR (N268& E080) OVER UNNAMED CR 9.8 MI E OF WATONGA ON EW-80. COBRGE 0.25 MI.	BRIDGE & APPROACHES	FFY2022	CIRB 5-year	$437,500

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

Acronyms

ACS	American Community Survey (Census)
ADA	Americans with Disabilities Act
AT&L	Austin, Todd & Ladd Railroad
AWOS	Automated Weather Observation System
CDBG	Community Development Block Major
CIRB	County Improvements for Roads and Bridges
COG	Council of Government
CST	Cherokee Strip Transit
C/L	County Line
DVMT	Daily Vehicle Miles Travelled
EDA	Economic Development Administration
EJ	Environmental Justice
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GETS	Garber Elderly Transportation Systems
GIS	Geographic Information System
GNBC	Grainbelt Corporation
HTF	Federal Highway Trust Fund
IRR	Indian Reservation Road
LAUS	Local Area Unemployment Statistic
LOS	Level of Service
LRTP	Long Range Transportation Plan
MAGB	Major, Alfalfa, Grant, Blaine (county transit system)
MI	Miles
NBI	National Bridge Inventory
NHFN	National Highway Freight Network
NHPP	National Highway Performance Program
NHS	National Highway System
NODA	Northern Oklahoma Development Authority
NORTPO	Northern Oklahoma Regional Transportation Planning Organization
ODOT	Oklahoma Department of Transportation
OTC	Oklahoma Tax Commission
PFN	Primary Freight Network

PHFS	Primary Highway Freight System
POE	Points of Entry
PWP	Planning Work Program
REAP	Rural Economic Action Plan
ROADS	Rebuilding Oklahoma Access and Driver Safety
RTPO	Regional Transportation Planning Organization
SHSP	Strategic Highway Safety Plan
STF	State Transportation Fund
STP	Surface Transportation Program
STRACNET	Strategic Rail Corridor Network
TAP	Transportation Alternate Program
TAZ	Traffic Analysis Zone
USDA-RD	US Department of Agriculture Rural Development
WIM	Weight in Motion

Appendix B
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-lined 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 Class I railroads.

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

Deck: The portion of the bridge that directly carries traffic.

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.

Culvert: A pipe or small structure used for drainage under a road, railroad or other embankment. A culvert with a span length greater than 20 feet is included in the National Bridge Inventory (NBI) and receives a rating using the NBI scale.

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 100-foot distance.

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.

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.

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.

Substructure: The portion of the bridge that supports the superstructure and distributes all bridge loads to below-ground bridge footings.

Superstructure: The portion of the bridge that supports the deck and connects one substructure element to another.

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 C

Traffic Analysis Zones (TAZ)

Map C.1 Blaine County TAZ

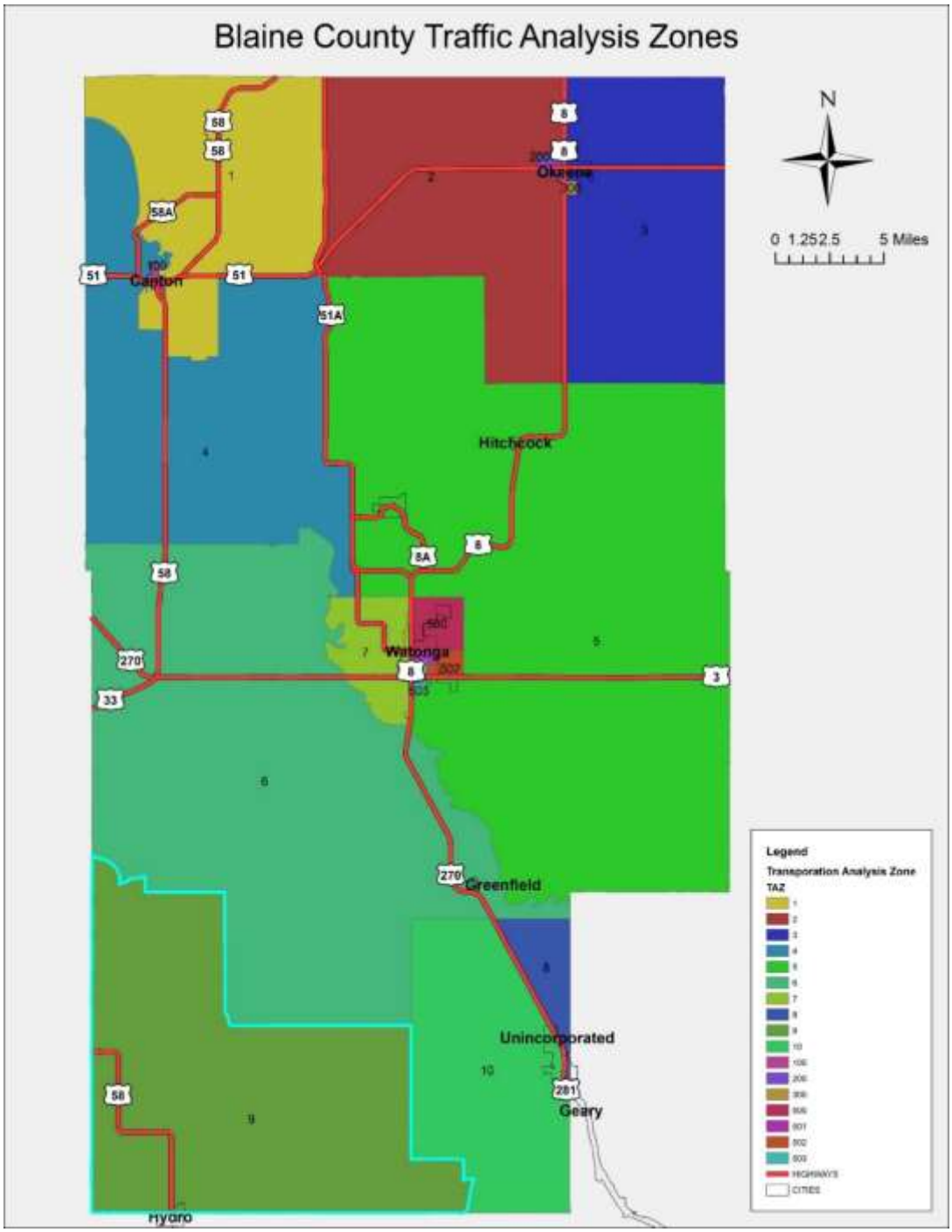


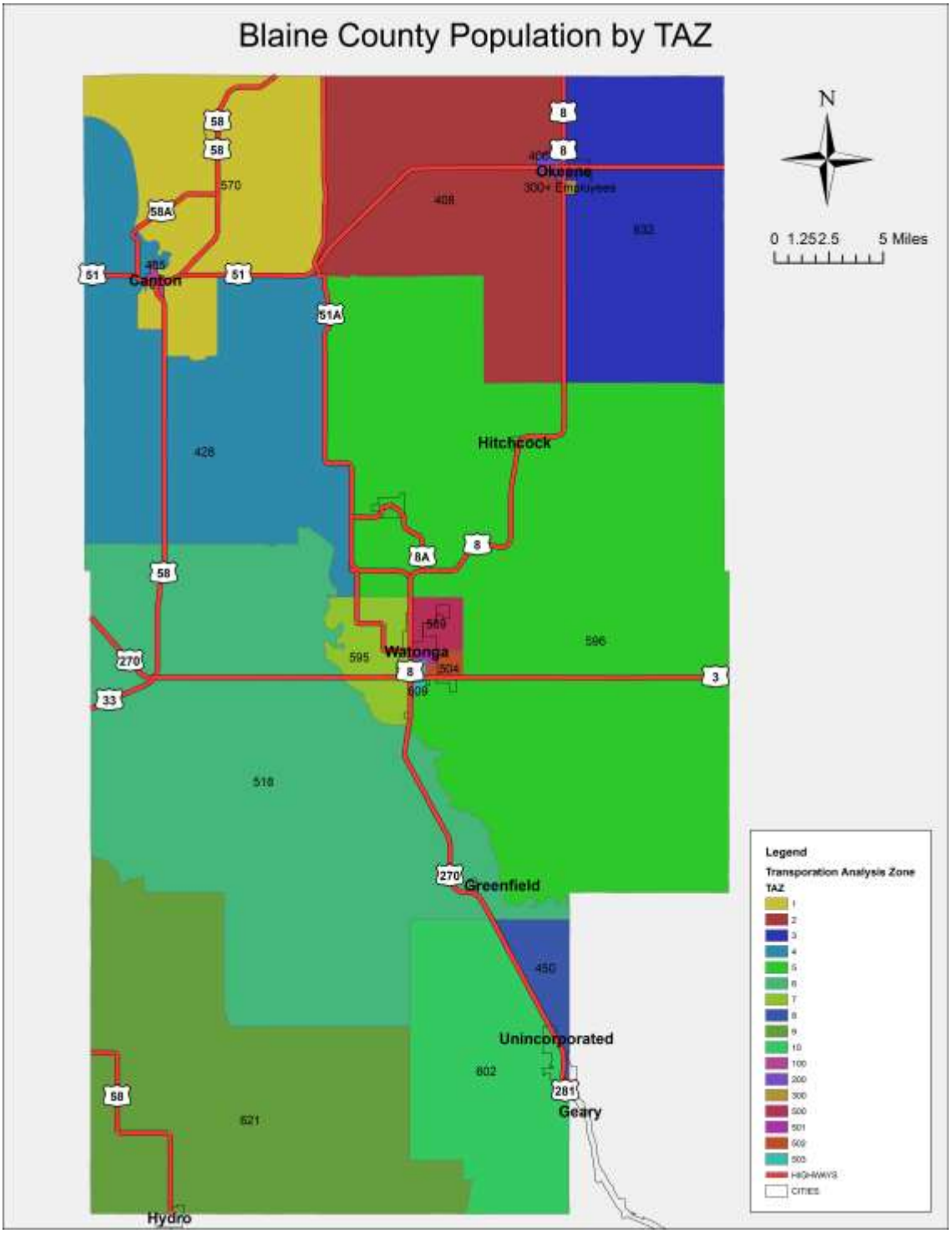
Table C.1 - Blaine County Major Employers by TAZ

Company Name	City	# of Employees
Mountain Country Foods	Okeene	100 - 249
Roman Nose State Park Lodge	Watonga	100 – 249
US G Office-Accounting	Southard	100 – 249
United States Gypsum Co	Southard	250 – 499
USG Personnel	Southard	250 – 499

Table C.2 – Blaine County Population by TAZ

TAZ	2016 Population
1	570
2	408
3	632
4	428
5	596
6	518
7	595
9	450
10	621
87	602
100	465
200	406
300	300+ Employees
500	509
501	600
502	504
503	609

Map C.2 – Blaine County Population by TAZ



Appendix D

Stakeholder Survey Summary

Stakeholder Survey for 2038 Regional Transportation Plan

1. In which City/County do you reside? **Blaine (15), Watonga (7), Okeene (4), Geary (1), Greenfield (2), Hitchcock (1)**

2. In which City/County do you work? **Blaine (3), Watonga (8), Okeene (3), OKC (1)** or attend school? **Okeene (1)**

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

4. What type of transportation do you use most often to go to work/school? (Circle one)
   Drive (alone) **(15)** Carpool () Bus Motorcycle () Bicycle Walk ()
   Other (please specify) ___

5. How many miles do you travel (round trip) for work and/or school? (Circle one)
   Less than 1 mile **(4)** 2-5 miles **(3)** 6-10 miles **(2)**
   11-20 miles **(1)** 21-30 miles **(1)** 31-50 miles **(1)** 50 miles + **(3)**

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

7. How much time does it usually take to travel to and from school? (Circle one)
   Less than 10 minutes **(2)** 11-15 minutes **(1)** 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 **(1)** 2-5 miles **(5)** 6-10 miles **(4)**
   11-20 miles () 21-30 miles **(2)** 31-50 miles () 50 miles + **(1)**

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)	8	4	3		
Carpool with others			1	1	7
Bus/Public Transportation					9
Motorcycle					9
Bicycle/Walk					9
Other - Please list.					

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 **(1)** 35-44 **(6)** 45-54 **(3)** 55-65 **(3)** 65-74 **(2)** 75+ ()

Gender: Male **(9)** Female **(4)**

Household Income: Under $35,000 **(3)** $35,000 - $50,000 **(3)** $50,001 - $75,000 **(4)** $75,000+ **(3)**

American Indian/Alaska Native **1** Asian __ Black or African American **1** Hispanic __

Native Hawaiian or other Pacific Islander __ White **10** Other _____

Stakeholder Survey for 2038 Regional Transportation Plan

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	2	3	5	4
Intersection Improvements	1	2	4	7
Pedestrian Facilities/Sidewalks	2	5	4	2
Maintenance Improvements	1	1	5	7
Bicycle Lanes	6	3	4	1
Public Transportation	5	3	3	2
Availability of Passenger Rail Service	6	4	2	1
Connection to State or US Highways	2	4	7	2
Maintenance of Bridges	1	1	5	7
Protecting the environment	1	4	4	5
Improving access to freight rail service	7	4	2	2
Providing a smooth driving surface	1		6	7
Improve existing roadways	1		6	7
Add shoulders on State or US Highways		3	3	8
Improve signs along existing roadways	3	5	4	3

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

	Not Important	Somewhat Important	Important	Very Important
Supports Economic Development	1	2	8	3
Improves Safety	1		10	4
Reduces Congestion	1	3	7	3
Bicycle Lanes or Facilities	6	7	1	
Improve Pedestrian walkways	2	5	6	1
Improves Travel Choices	2	9	3	
Reduces Energy Consumption/Pollution	1	11	1	1
Improves freight movement	3	5	4	2
Other (specify)	1			

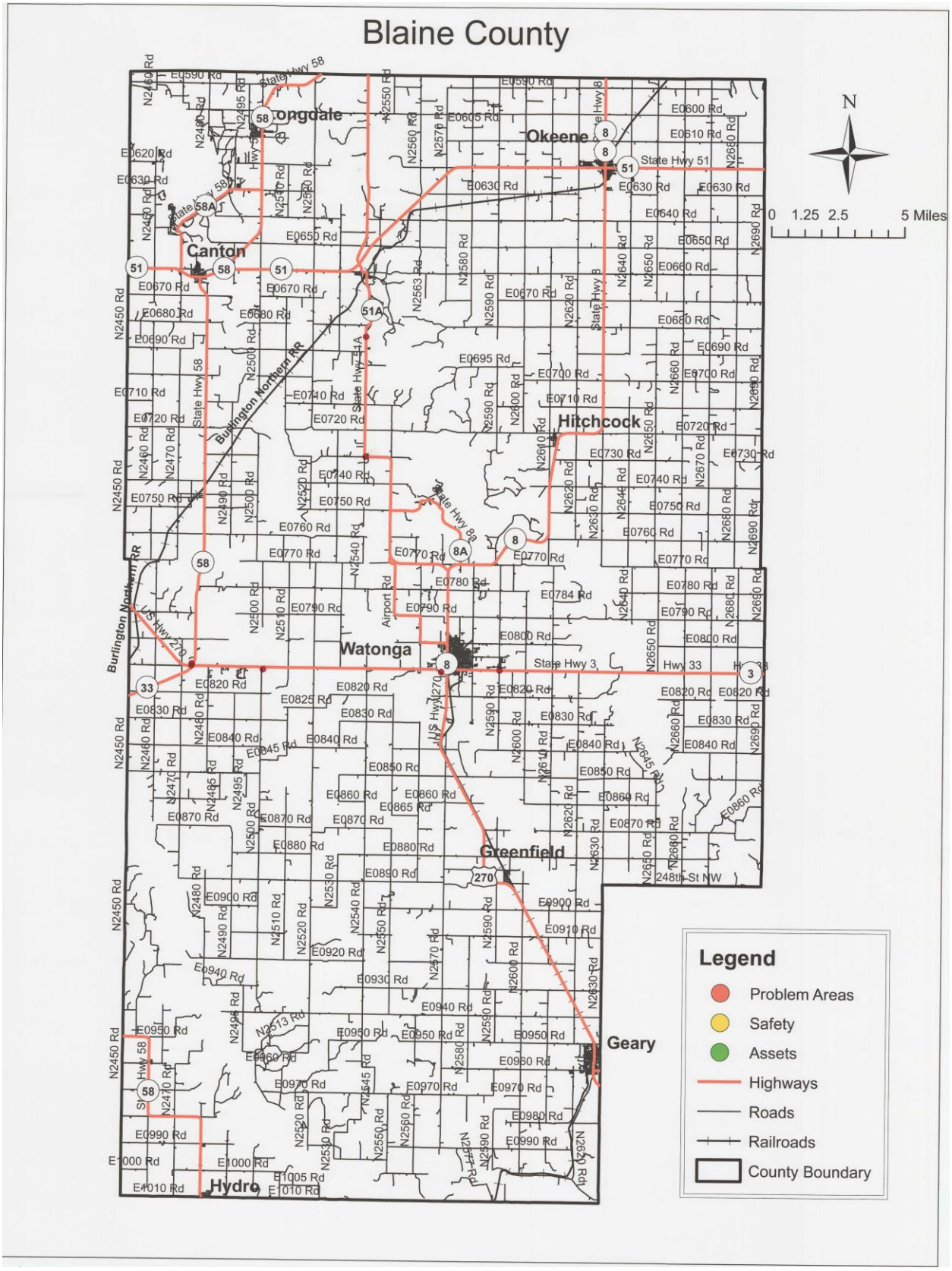
Stakeholder Survey for 2038 Regional Transportation Plan

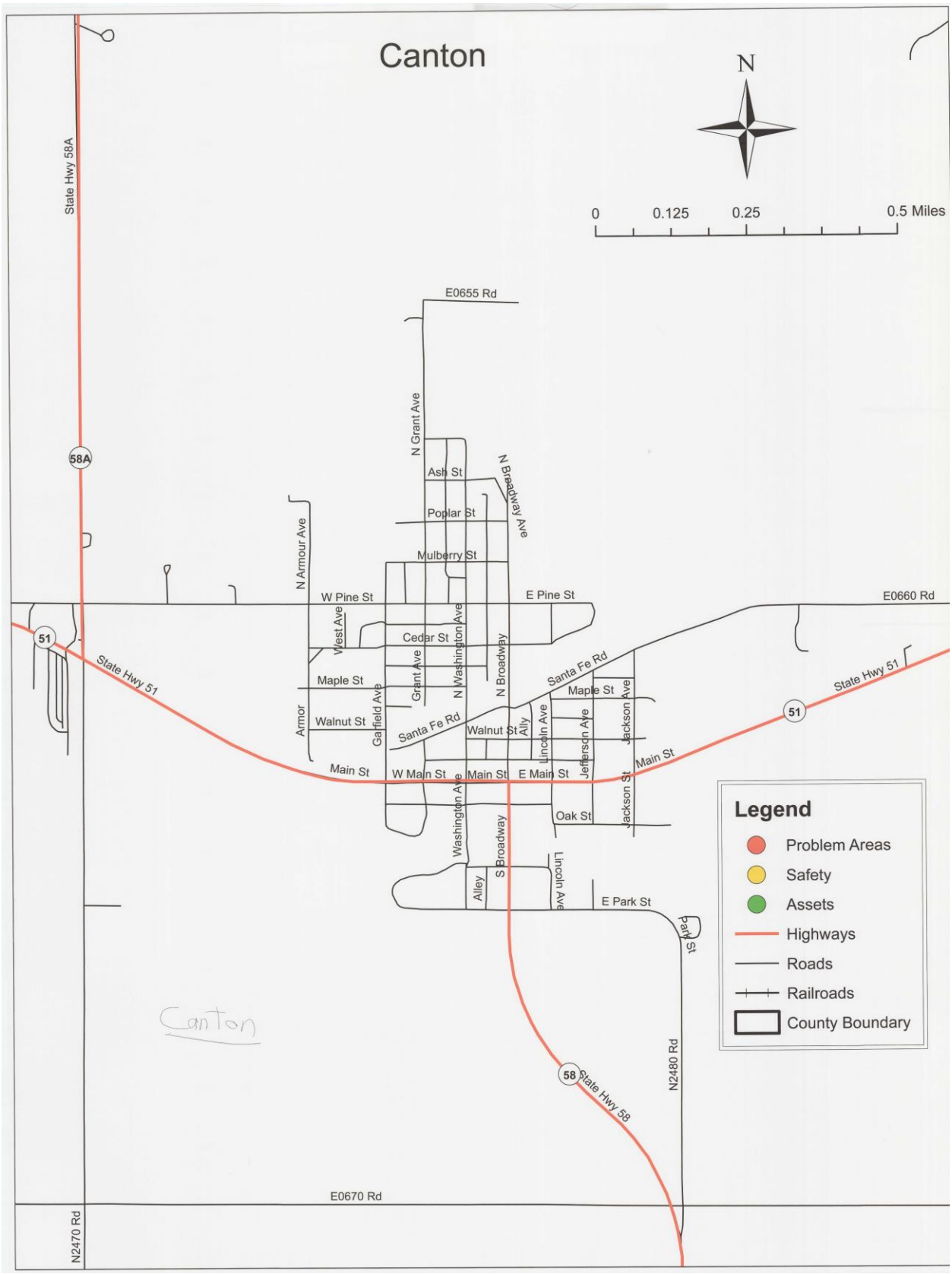
13. In your community are there challenges to accessing the transportation system? (Circle one)
    Yes **8** No **2**

    Please describe access limitations:
    Don't have any transportation system.
    Intersections.
    No public transportation.
    High freight transportation (oil field) tearing up roads, interfering with traffic flow.
    Only one stop light.
    Difficult to get on highway because of large amount of traffic.

14. **What are some specific locations with traffic problems that you encounter through the day**?
    Intersection at Clarence Nash Blvd & Highway 33.
    Russworm highway 33 & Clarence Nash Highway 8; Clarence Nash & Main St; Noble & Russworm
    Roads need improvement to surface.
    4-way stop in Watonga; Hwy 33 and 281.
    Four-way stop at hwy 33 & Clarence Nash Blvd.
    4-way stop.
    Intersection of Highways 33 and 270; Highways 8 and 51A.
    No shoulder for farm equipment – some trucks need traffic lights @ industrial park.
    Hwy 33 & 270 Intersection in Watonga.
    Too much oil field traffic.
    Oil field traffic.

15. **Please provide additional comments regarding transportation improvement needs**:
    Need a working light at the above intersection (Clarence Nash Blvd & Highway 33)
    Better shoulder in rural Oklahoma
    Train traffic frequently stops at intersection crossings which block emergency vehicles from responding to large business employees & physical plant.
    Oil field tearing up all the roads.
    All of them.


Blaine County
N
0 1.25 2.5 5 Miles
Canton
Okeene
Hitchcock
Watonga
Greenfield
Geary
Hydro
Longdale
Burlington Northern RR
State Hwy 58
State Hwy 51
State Hwy 8
State Hwy 8A
State Hwy 3
US Hwy 270
Airport Rd
248th St NW
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary


Canton
N
0
0.125
0.25
0.5 Miles
State Hwy 58A
58A
E0655 Rd
N Grant Ave
Ash St
N Broadway Ave
Poplar St
Mulberry St
N Armour Ave
W Pine St
E Pine St
E0660 Rd
West Ave
Cedar St
N Washington Ave
N Broadway
51
State Hwy 51
Maple St
Grant Ave
Santa Fe Rd
Armor
Walnut St
Garfield Ave
Alley
Lincoln Ave
Jefferson Ave
Jackson Ave
Main St
W Main St
E Main St
Oak St
Washington Ave
S Broadway
E Park St
Park St
Canton
58
State Hwy 58
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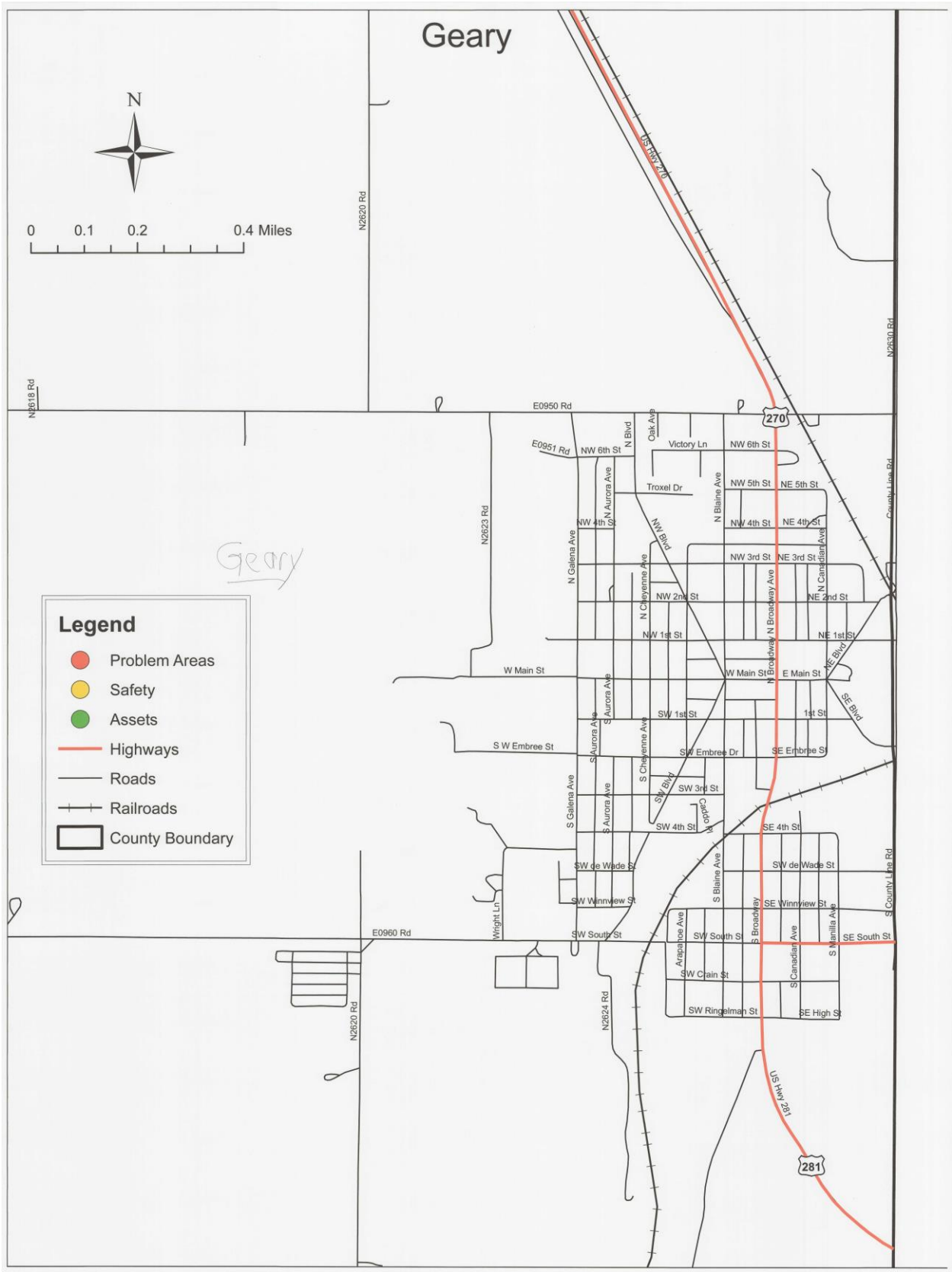
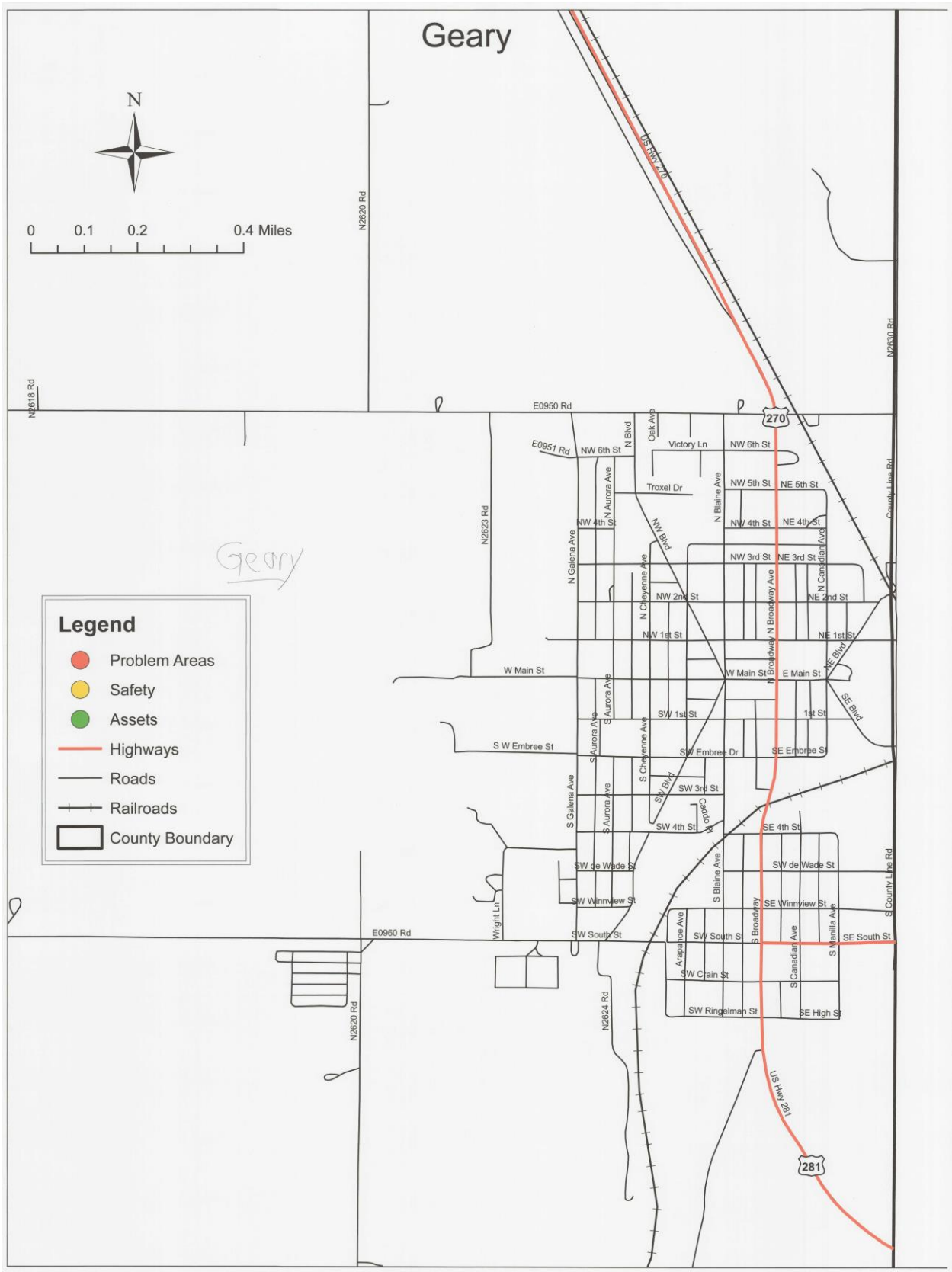
E0670 Rd
N2470 Rd
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary


Geary
N
0 0.1 0.2 0.4 Miles
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary
N2620 Rd
N2618 Rd
N2630 Rd
E0950 Rd
E0951 Rd
E0960 Rd
N2623 Rd
N2624 Rd
US HWY 270
270
US HWY 281
281
NW 6th St
Victory Ln
Troxel Dr
NW 5th St
NE 5th St
NW 4th St
NE 4th St
NW 3rd St
NE 3rd St
NW 2nd St
NE 2nd St
NW 1st St
NE 1st St
W Main St
E Main St
SW 1st St
1st St
S W Embree St
SW Embree Dr
SE Embree St
SW 3rd St
SW 4th St
SE 4th St
SW de Wade St
SE Winnview St
SW South St
SE South St
SW Crain St
SW Ringelman St
SE High St
N Blvd
Oak Ave
N Aurora Ave
N Blaine Ave
N Galena Ave
NW Blvd
N Cheyenne Ave
N Broadway Ave
N Canadian Ave
NE Blvd
S Aurora Ave
S Cheyenne Ave
SW Blvd
Capitol
S Galena Ave
S Blaine Ave
Arapahoe Ave
S Broadway
S Canadian Ave
S Manila Ave
SE Blvd
Wright Ln
S County Line Rd
County Line Rd


Geary
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Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary
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N2618 Rd
N2630 Rd
E0950 Rd
E0951 Rd
E0960 Rd
N2623 Rd
N2624 Rd
US HWY 270
270
US HWY 281
281
NW 6th St
Victory Ln
Troxel Dr
NW 5th St
NE 5th St
NW 4th St
NE 4th St
NW 3rd St
NE 3rd St
NW 2nd St
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SE Embree St
SW 3rd St
SW 4th St
SE 4th St
SW de Wade St
SE Winnview St
SW South St
SE South St
SW Crain St
SW Ringelman St
SE High St
N Blvd
Oak Ave
N Aurora Ave
N Blaine Ave
N Galena Ave
NW Blvd
N Cheyenne Ave
N Broadway Ave
N Canadian Ave
NE Blvd
S Aurora Ave
S Cheyenne Ave
SW Blvd
Capitol
S Galena Ave
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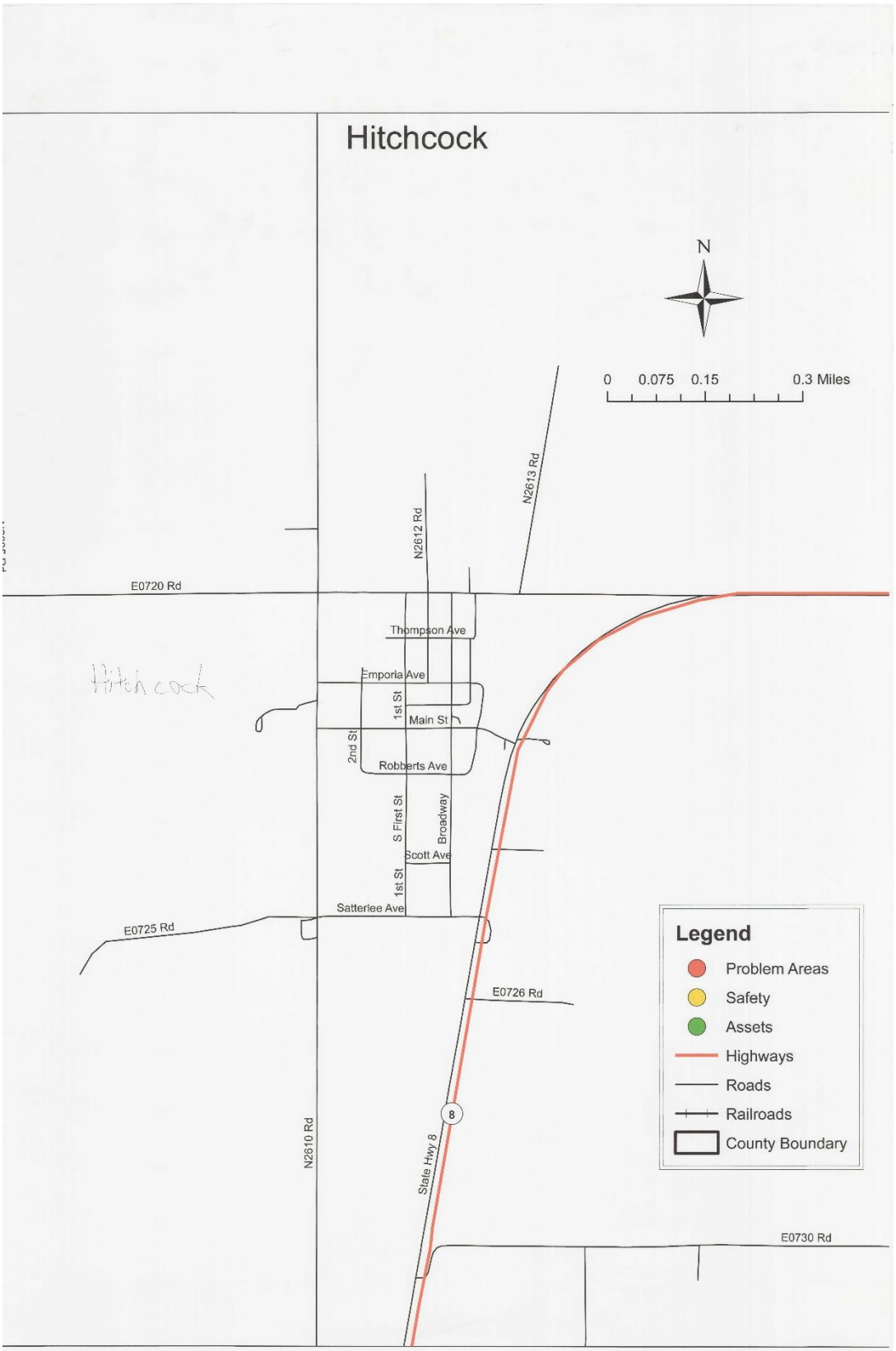
Arapahoe Ave
S Broadway
S Canadian Ave
S Manila Ave
SE Blvd
Wright Ln
S County Line Rd
County Line Rd


Hitchcock
N
0 0.075 0.15 0.3 Miles
N2613 Rd
N2612 Rd
E0720 Rd
Thompson Ave
Emporia Ave
1st St
Main St
2nd St
Robberts Ave
S First St
Broadway
Scott Ave
1st St
Satterlee Ave
E0725 Rd
E0726 Rd
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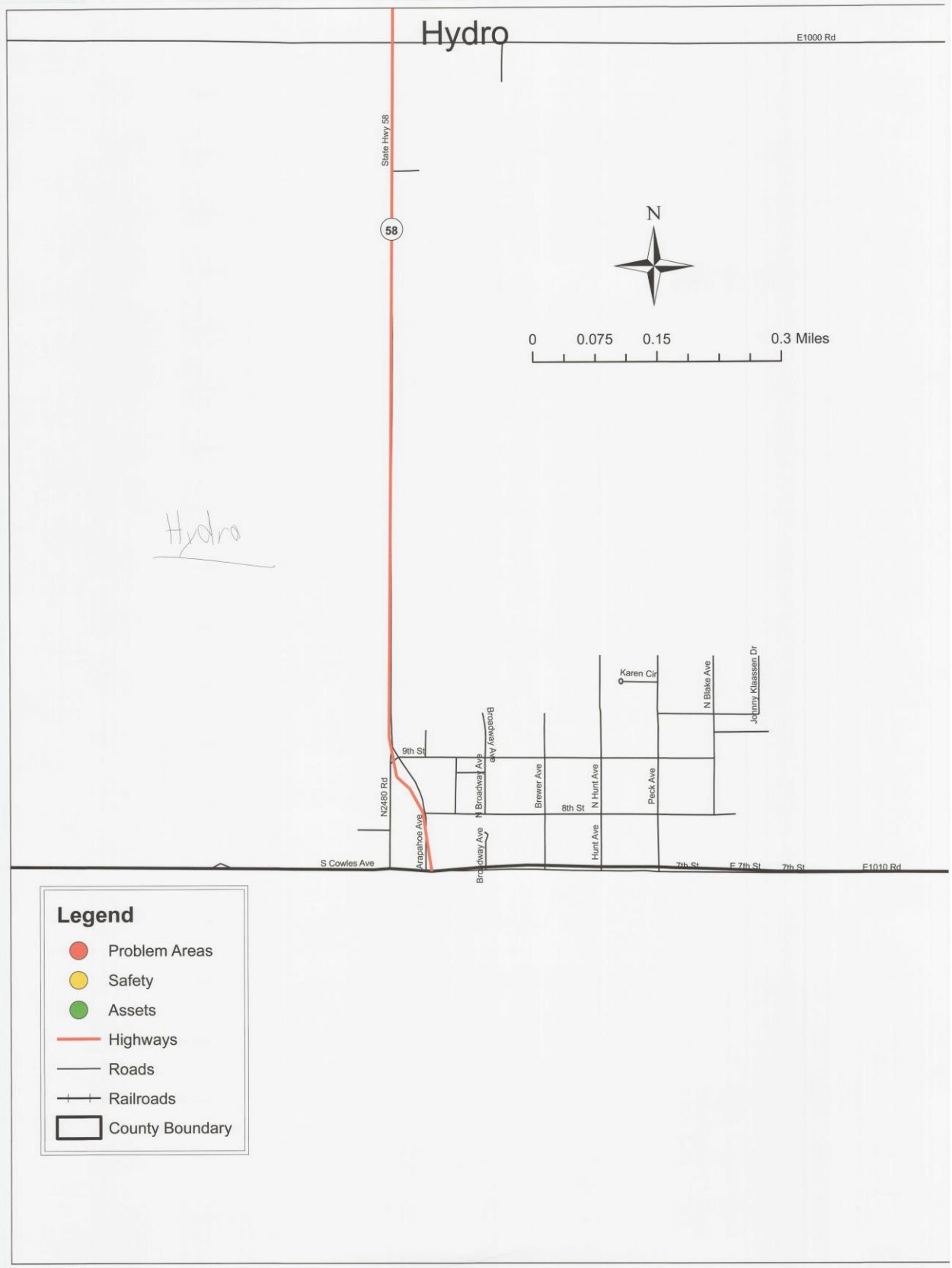
State Hwy 8
E0730 Rd
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary


Hydro
E1000 Rd
State Hwy 58
58
N
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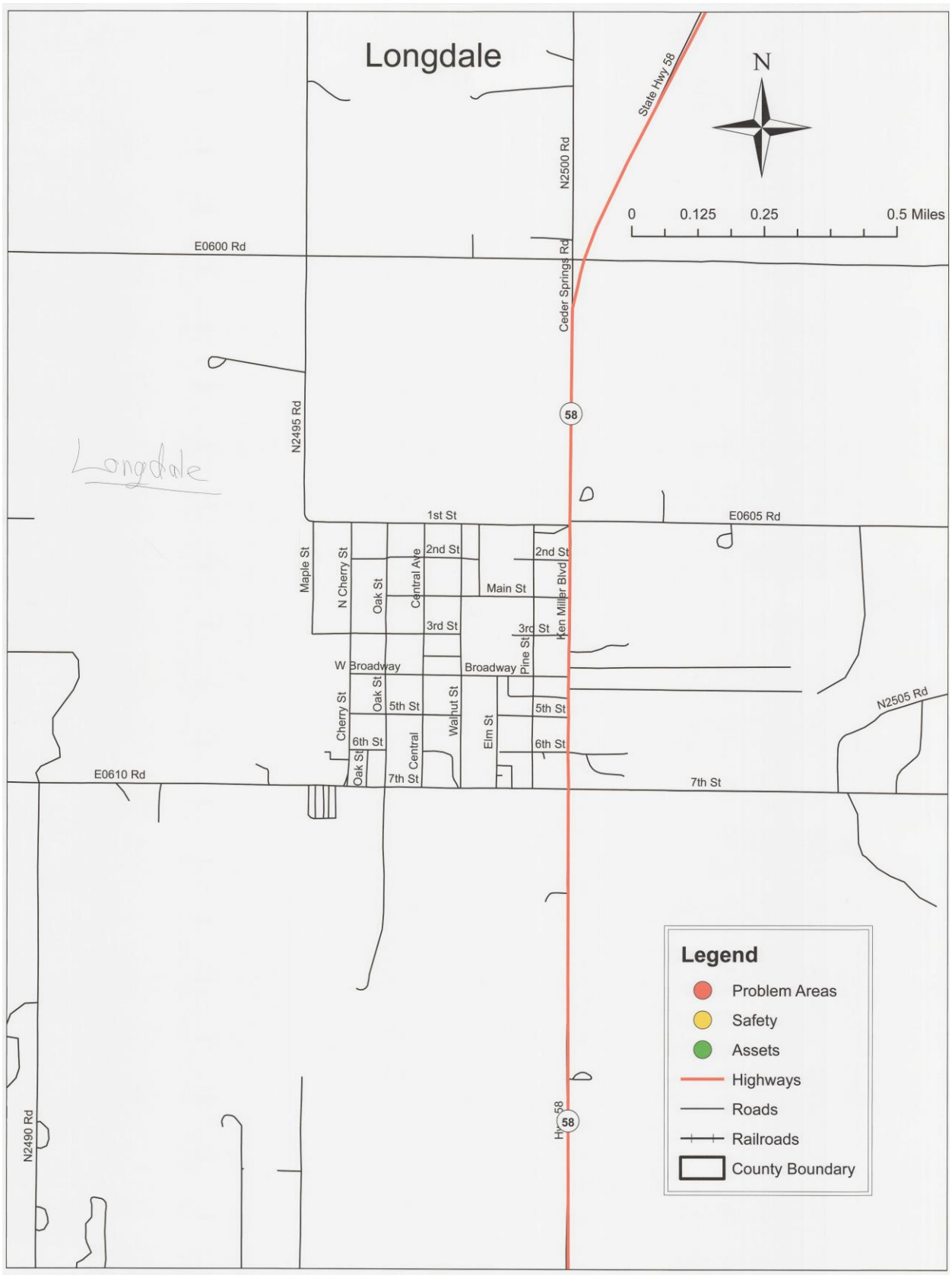
0.15
0.3 Miles
Hydro
Karen Cir
N Blake Ave
Johnny Klaassen Dr
9th St
Broadway Ave
N Broadway Ave
Brewer Ave
N Hunt Ave
Peck Ave
8th St
N2480 Rd
Arapahoe Ave
Broadway Ave
Hunt Ave
S Cowles Ave
7th St
E 7th St
7th St
E1010 Rd
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary


Longdale
State Hwy 58
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0.5 Miles
N2500 Rd
E0600 Rd
Ceder Springs Rd
58
N2495 Rd
Longdale
1st St
E0605 Rd
Maple St
N Cherry St
Oak St
Central Ave
2nd St
Main St
Ken Miller Blvd
3rd St
Pine St
W Broadway
Broadway
Cherry St
5th St
Walnut St
Elm St
6th St
Central
7th St
N2505 Rd
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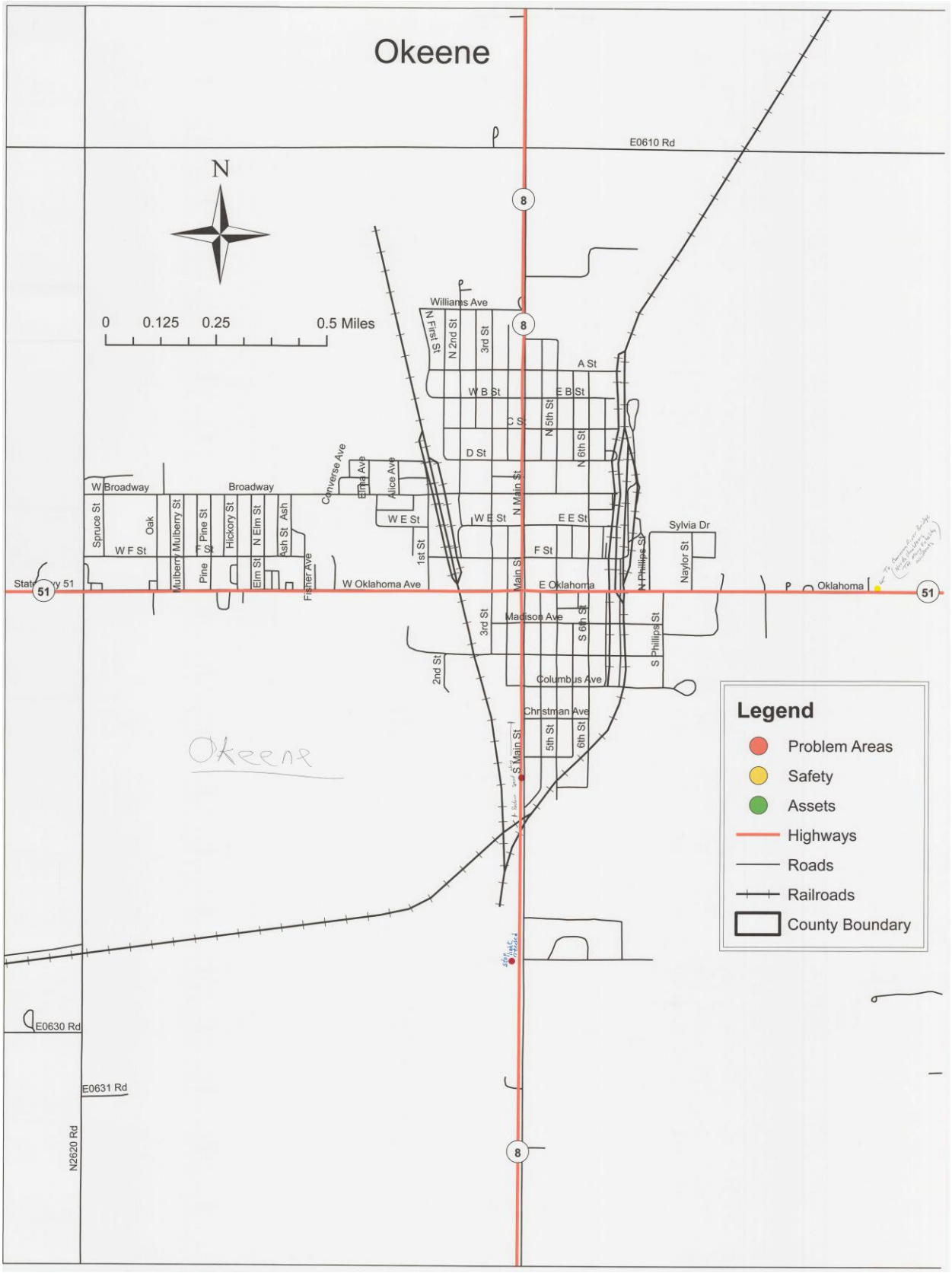
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary


Okeene
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N 2nd St
3rd St
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W B St
E B St
C St
N 5th St
N 6th St
D St
Converse Ave
Elma Ave
Alice Ave
W Broadway
Broadway
Spruce St
Oak
Mulberry St
Pine St
Hickory St
N Elm St
Ash St
W F St
W E St
E E St
N Main St
1st St
F St
Sylvia Dr
Naylor St
N Phillips St
Fisher Ave
W Oklahoma Ave
E Oklahoma
Oklahoma
Madison Ave
S 6th St
S Phillips St
2nd St
Columbus Ave
Christman Ave
5th St
6th St
S Main St
Okeene
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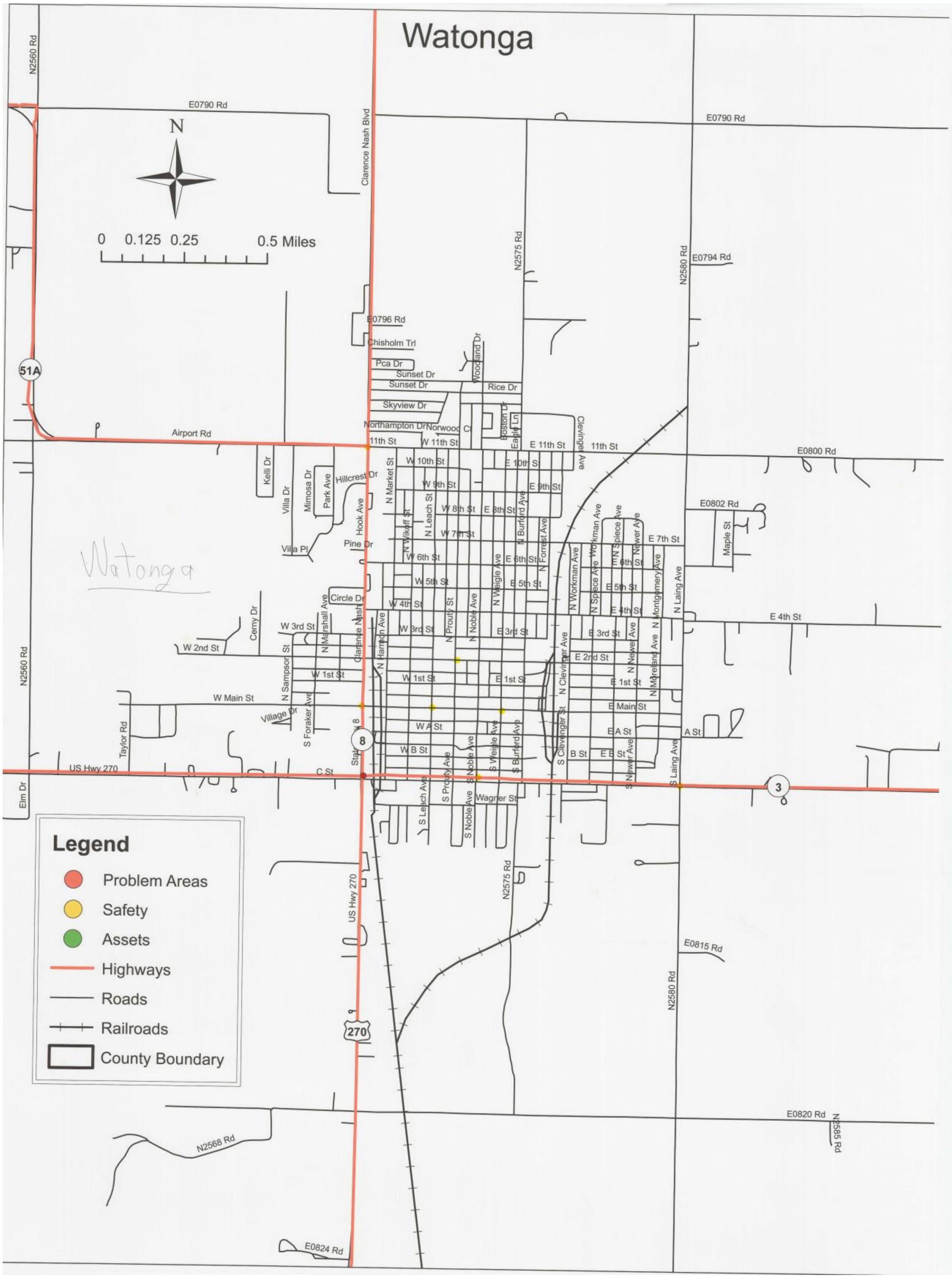
Railroads
County Boundary


Watonga
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Clarence Nash Blvd
N2575 Rd
N2580 Rd
E0794 Rd
E0796 Rd
Chisholm Trl
Pca Dr
Sunset Dr
Skyview Dr
Northampton Dr
Norwood Ct
Rice Dr
Woodland Dr
51A
Airport Rd
11th St
W 11th St
E 11th St
E0800 Rd
W 10th St
E 10th St
W 9th St
E 9th St
W 8th St
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W Main St
E Main St
W A St
E A St
A St
W B St
E B St
B St
C St
Kelli Dr
Villa Dr
Mimosa Dr
Park Ave
Hillcrest Dr
Hook Ave
Pine Dr
Villa Pl
Circle Dr
Cerny Dr
N Market St
N Leach St
N Burford Ave
N Forrest Ave
N Workman Ave
N Spiece Ave
N Newer Ave
N Laing Ave
Maple St
E0802 Rd
N Marshall Ave
N Sampson St
N Noble Ave
N Prouty St
N Weigle Ave
N Hamlin Ave
N Clevinger Ave
N Montgomery Ave
N Moreland Ave
Village Dr
S Foraker Ave
Taylor Rd
US Hwy 270
8
3
S Leach Ave
S Prouty Ave
S Noble Ave
S Weigle Ave
S Burford Ave
S Clevinger St
S Newer Ave
S Laing Ave
Wagner St
Elm Dr
US Hwy 270
270
E0815 Rd
E0820 Rd
N2585 Rd
N2568 Rd
E0824 Rd
Legend
Problem Areas
Safety
Assets
Highways
Roads
Railroads
County Boundary

Appendix E

Corresponding Websites and Plans

Blaine County Hazard Mitigation Plan http://nortpo.org/plans/#lrtp

http://www.okladot.state.ok.us/maps/railroad/2016-2017/RRmap1_2016-17_web.pdf

http://www.fhwa.dot.gov/

www.oksafe-t.org

www.census.gov

http://geography.brucemyers.com/bridges/county/40-11

https://www.ok.gov/odot/About_ODOT/Contact_ODOT_Divisions/Strategic_Asset_&_Performance_Management_(SAPM)_Division.html

http://www.odot.org/maps/aadt/index.htm

http://www.odot.org/maps/aadt/2016/06-Blaine.pdf

https://ok.gov/odot/Bridges.html

https://www.ok.gov/odot/Funding_Transportation_in_Oklahoma.html

http://www.airnav.com/airports/us/OK

http://www.tollfreeairline.com/oklahoma.htm

http://www.tollfreeairline.com/oklahoma/blaine.htm

http://nodanet.org/cherokee-strip-transit/

http://www.magb.org/

http://www.okladot.state.ok.us/newsmedia/pdfs/freight-goods-movement.pdf

http://www.okladot.state.ok.us/p-r-div/long_range_plan/ODOT%20Freight%20Flows%20Nov2012.pdf

http://www.okhistory.org

http://www.okladot.state.ok.us/rail/rail-plan/index.htm

http://www.okstatefreightplan.com/

https://ok.gov/odot/Programs_and_Projects/Transportation_Programs/LRTP_2015-2040.html

https://nationalregisterofhistoricplaces.com/ok/Blaine/state.html

https://www.wildlifedepartment.com/wildlifemgmt/endangered/State_Listed_by_County.pdf

https://www.okwindpower.com/oklahoma-wind/wind-farms/

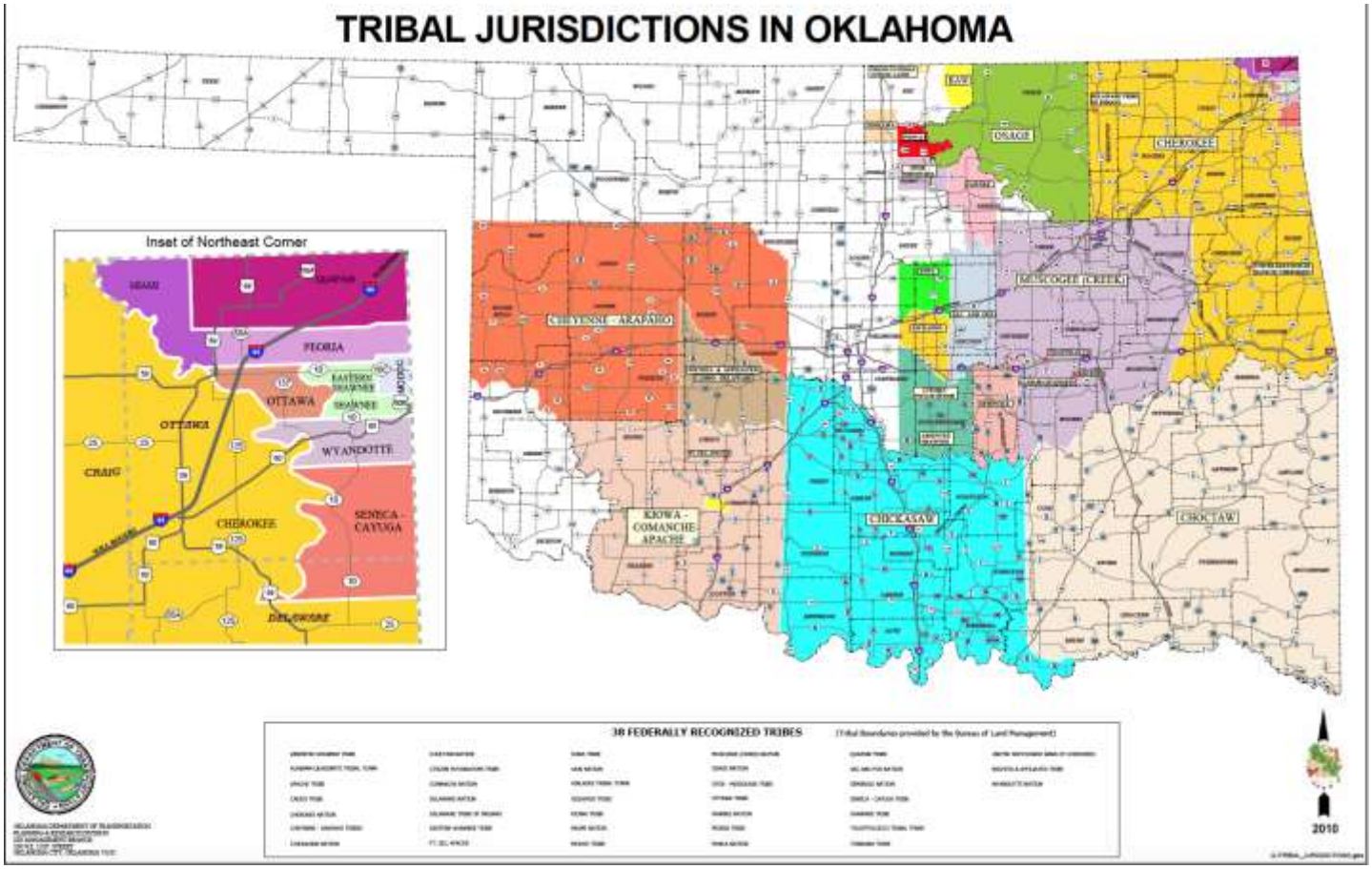
Appendix F

Tribal Information

Cheyenne & Arapaho Tribes: Concho, Ok

Wichita & Affiliated Tribes: Anadarko, Ok

Caddo – Delaware: Binger, Ok



Appendix G

Maps and Tables by Chapters

Appendix G-2 Chapter 2

Table G2.1 – NORTPO Population Data

Table G2.2 – Blaine County Growth Chart

Table G2.3 – Vehicle Registration Chart

Table G2.4 – Blaine County Historical Sites

Map G2.1 – Blaine County Rural Functional Classification

Map G2.2 – Traffic Count Data

Map G2.3 – Locations of Collisions

Table G2.5 – Crash Data

Map G2.4 – Location of Two-Lane Highways with no Paved Shoulder

Map G2.5 - Steep Hill and Sharp Curves Areas of Concern (Statewide)

Map G2.6 – Blaine County Bridges

Table G2.6 – Blaine County Bridges

Map G2.7 – NHFN maps

Map G2.8 – Blaine County Freight Corridors and Connectors

Map G2.9 – Blaine County Railroads

Table G2.7 – MAGB Ridership and Revenue Data

Table G2.8 – Cherokee Strip Transit (CST) Ridership and Revenue Data

Appendix G-3 Chapter 3

Map G3.1 – Projected Population Data by TAZ

Map G3.2 – Projected Employment Data by TAZ

Table G3.1 – Supporting Data for Projected Population and Employment

Map G3.3 – Location of Projects on the ODOT 8-year Construction Program 2018-2025

Table G3.2 – Funded Projects from ODOT 8-year Construction Program 2018-2025

Table G3.3 – CIRB 5-Year Construction Program 2018-2022

Appendix G-2

Chapter 2

Table 2.1 NORTPO Counties Population Data

NORTPO Counties	2016 Estimate	2015 Estimate	2014 Estimate	2013 Estimate	2012 Estimate	2010 Estimate
Alfalfa County	5,784	5,868	5,793	5,847	5,666	5,642
Blaine County	**9,777**	**9,833**	**9,896**	**9,720**	**9,785**	**11,943**
Beaver County	5,400	5,435	5,519	5,558	5,583	5,636
Cimarron County	2,170	2,202	2,271	2,307	2,383	2,475
Dewey County	4,886	4,961	4,949	4,844	4,805	4,810
Ellis County	4,083	4,215	4,116	4,132	4,077	4,151
Garfield County	62,481	63,569	62,977	62,267	61,189	60,580
Grant County	4,497	4,523	4,496	4,528	4,516	4,527
Harper County	3,794	3,842	3,894	3,873	3,706	3,685
Kay County	45,398	45,366	45,510	45,633	45,779	46,562
Kingfisher County	15,392	15,584	15,509	15,276	14,994	15,029
Major County	7,721	7,771	7,758	7,683	7,667	7,527
Noble County	11,470	11,554	11,519	11,446	11,546	11,561
Texas County	21,131	21,379	21,677	21,959	21,497	20,640
Woods County	9,134	9,283	9,231	8,981	8,834	8,878
Woodward County	20,924	21,575	21,518	21,224	20,656	20,081
NORTPO Region	147,128	164,059	163,458	162,400	161,142	163,371
Oklahoma	3,875,589	3,911,338	3,879,610	3,850,568	3,815,780	3,751,357

Source: US Census Bureau

Table G2.2 Blaine County Growth Chart 1980-2016 ACS Estimate

	1980	1990	2000	2010	2016
Oklahoma	2,328,284	2,559,229	3,025,290	3,145,585	3,875,589
Blaine County	**13,443**	**11,453**	**11,976**	**9,785**	**9,777**
Canton	854	636	623	625	465
Geary	1,700	1,347	1,349	1,280	1,205
Greenfield	233	200	123	93	112
Hitchcock	172	139	143	121	82
Hydro	938	975	1,070	969	1,031
Longdale	405	281	317	262	234
Okeene	1,601	1,347	1,240	1,204	1,081
Watonga	4,139	3,450	4,714	5,111	3,921
Remainder of County	3,401	3,078	2,397	120	1,646

Source: American Community Survey

Table G2.3 Vehicle Registration Chart

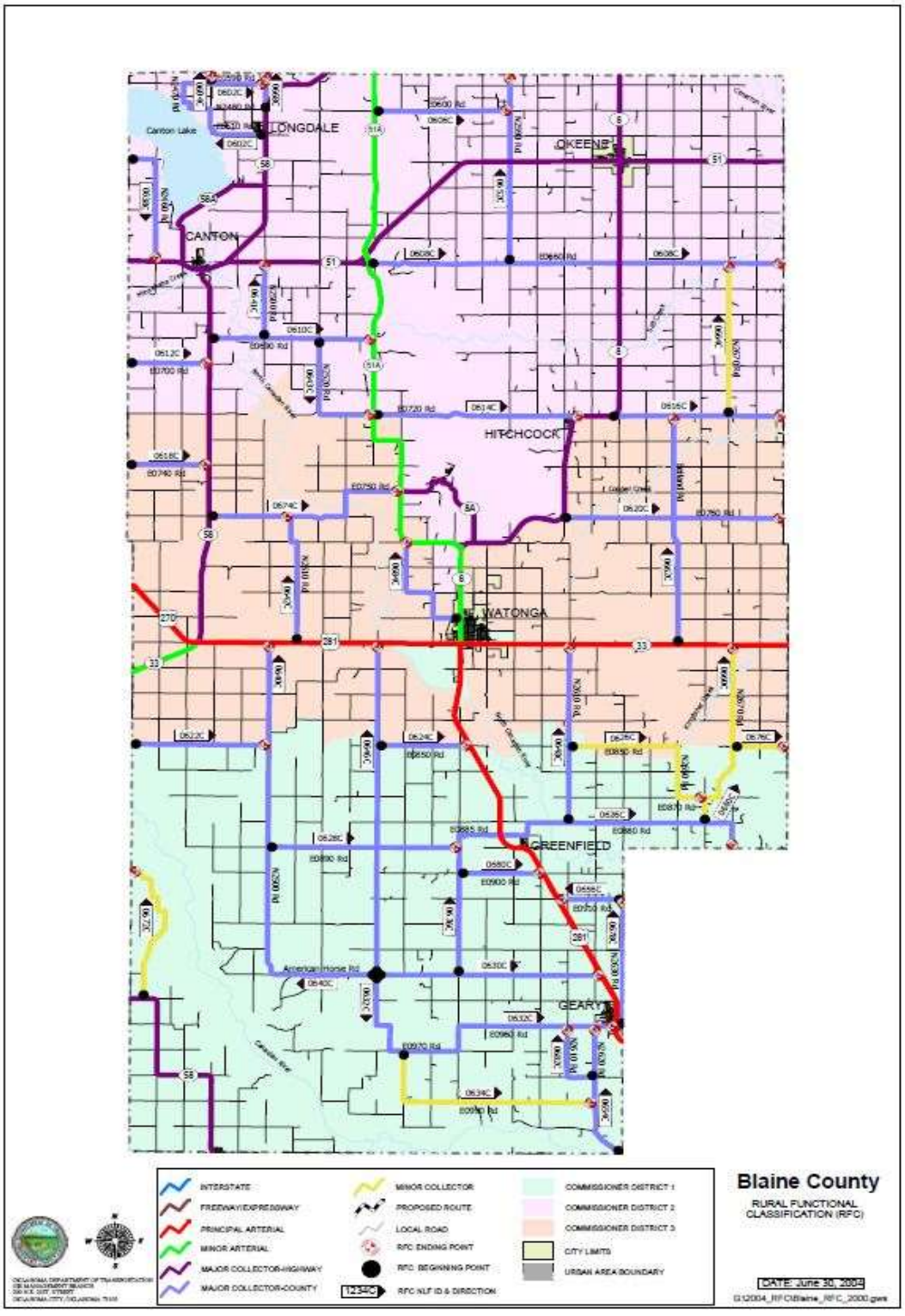
	2013	2014	2015	2016	2017
Automobile	7,104	7,246	7,290	8,044	7,742
Farm Truck	2,349	2,473	2,427	2,501	2,476
Commercial Truck	471	491	482	489	61
Commercial Truck Tractor	37	40	71	53	456
Commercial Trailer	177	192	152	195	231
Motorcycles	441	467	463	484	461

Source: ODOT

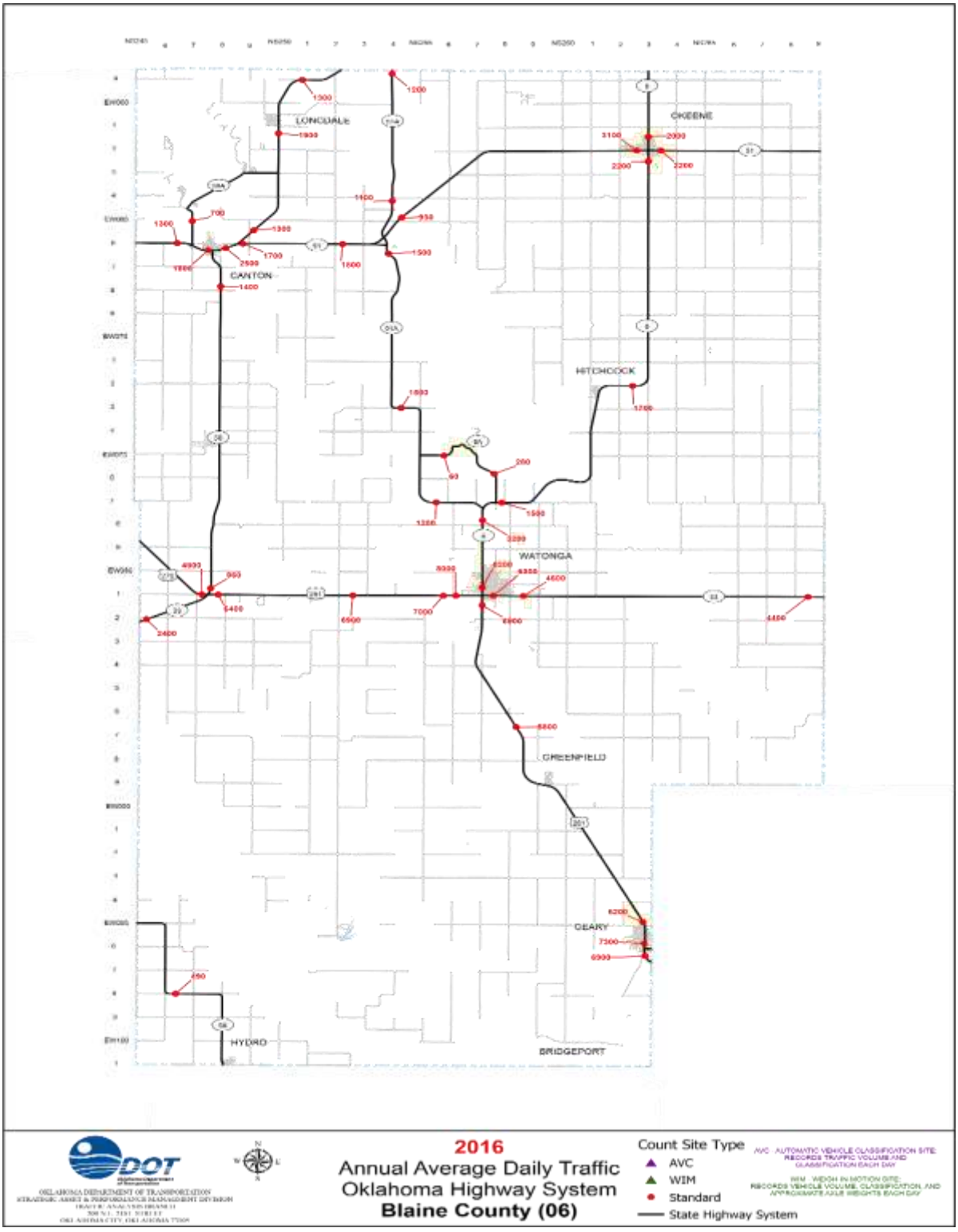
Table G2.4 Blaine County Historical Sites

Historical Site	Added	Located	Historical Function	Current Function	Owner
Blaine County CH	1984	N Weigle St, Watonga	Government 1900-1924	Government	Local
Cantoment AKA, Cantonment on the North Fork of the Canadian	1970	N of Canton, Canton	Defense, Govt, Religion 1900-1924, 1875-1899	Vacant	Local
Jesse Chisholm Grave Site AKA Left Hand Spring: Raven Spring	1971	NE of Geary near N Canadian River, Geary	Funerary 1850-1874	Funerary	State
Cronkhite Ranch House	1983	N of Watonga off OK 51A, Watonga	Domestic 1900-1924	Domestic	Private
Ferguson, Thompson Benton, House	1973	521 N Weigel St, Watonga	Domestic 1925-1949, 1900-1924	Recreation & Culture	State
Gillespie Bldg AKA American State Bank Bldg; Canadian Rivers Historical Muse	1989	102 E Main St, Geary	Commerce/Trade 1925-1949, 1900-1924	Recreation & Culture	Private
Noble Hotel AKA Bills, Abe, Rooming House	1996	112 N Noble St, Watonga	Domestic 1925-1949, 1900-1924	Commerce/Trade	Private
Okeene Flour Mill	1976	Off OK 51, Okeene	Industry/Processing/Extraction s 1900-1924	Commerce/Trade	Private
Old Pant Office Bldg, U.S. Gypsum Co.	1983	OK 51A, Southard	Commerce/Trade 1900-1924	Commerce/Trade	Private
Old Salt Works	1983	SE of Southard, Southard	Industry/Processing/Extraction 1875-1899	Vacant	Private
Public Water Trough	1989	Jct. Main, Canadian, & NE Blvd, Geary	Government, Transportation 1925-1949, 1900-1924	Recreation & Culture	Local
Shinn Family Barn	1983	SE of Okeene, Okeene	Agriculture/Subsistence 1900-1924	Agriculture/Subsistenc e	Private
Sooner Co-op Association Elevator (West)	2000	302 West F St, Okeene	Agriculture/Subsistence 1950-1974, 1925-1949	Agriculture/Subsistenc e	Private
United States Post Office Watonga	2009	121 N Noble Ave, Watonga	Government 1925-1949	Government	Federal
Wagner, J.H., House	1983	521 N Prouty Ave, Watonga	Domestic 1900-1924	Domestic	Private
Watonga Armory AKA National Guard Armory	1994	301 W Main, Watonga	Defense 1925-1949	Defense	State

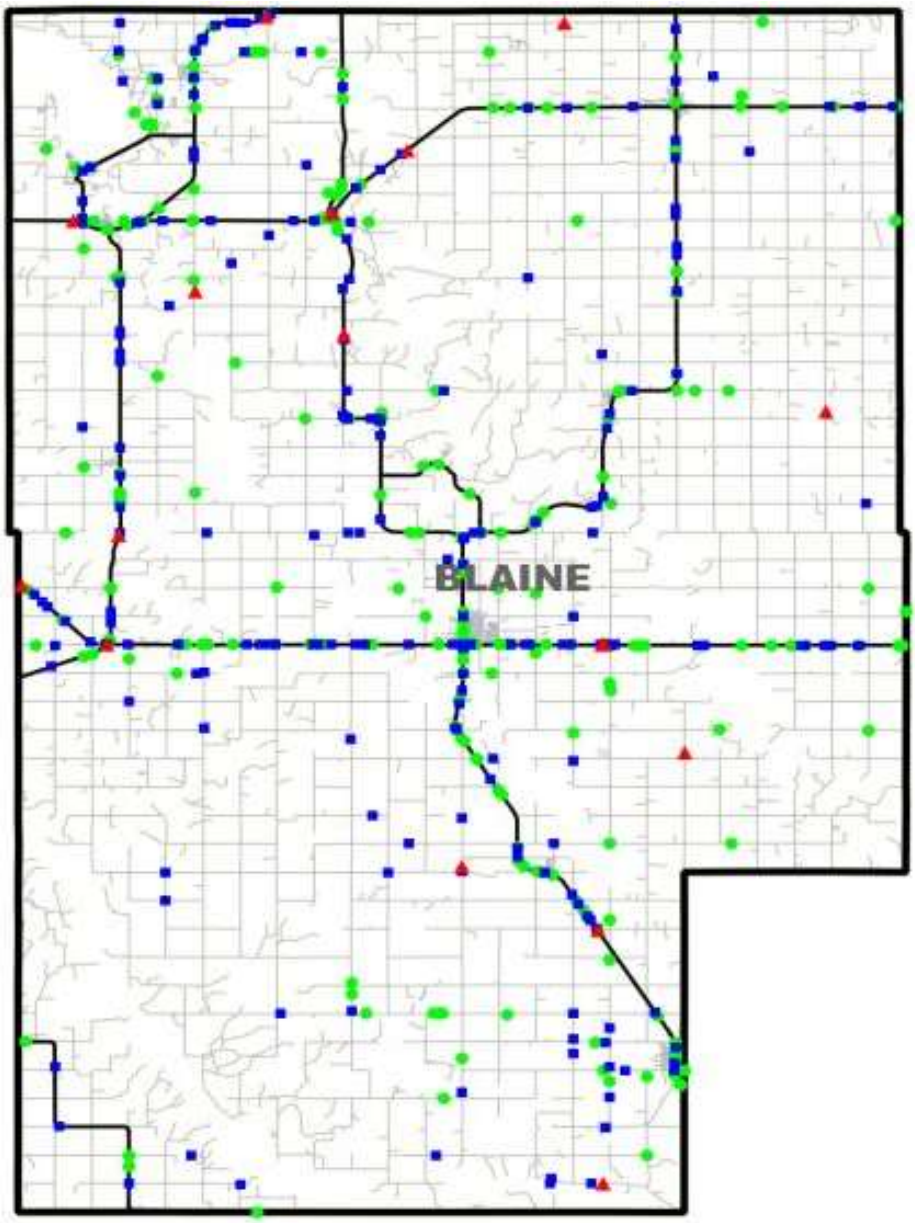
Map G2.1 – Blaine County Rural Functional Classification



Map G2.2 Traffic Count Data



Map 2.3 Locations of Collisions for 2012-2016



Program Provided by:
Traffic Engineering Division
Collision Analysis and Safety Branch
(405) 522-0985
Created: 10/23/2018
by NODA2

Study Map & Totals

Legend

- Fatality
- Injury
- Property Damage

N
W E
S

Table G2.5 Crash Data for 2012-2016

Date Range: 01-01-2012 thru 12-31-2016

	2012						2013						2014					
	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	7	14	30	26	92	169	4	12	17	26	56	115	6	14	18	17	55	110
Persons	8	19	43	52		122	4	15	34	52		105	6	17	26	26		75

	2015						2016					
	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	1	13	15	22	65	116	1	7	32	14	64	118
Persons	1	14	25	36		76	2	9	37	30		78

	Study Total					
	Fatality	Incapacitating Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
Collisions	19	60	112	105	332	628
Persons	21	74	165	196		456

** NONMAPPABLE COLLISIONS ARE NOT PLOTTED ON THE MAP DUE TO INSUFFICIENT LOCATION INFORMATION.

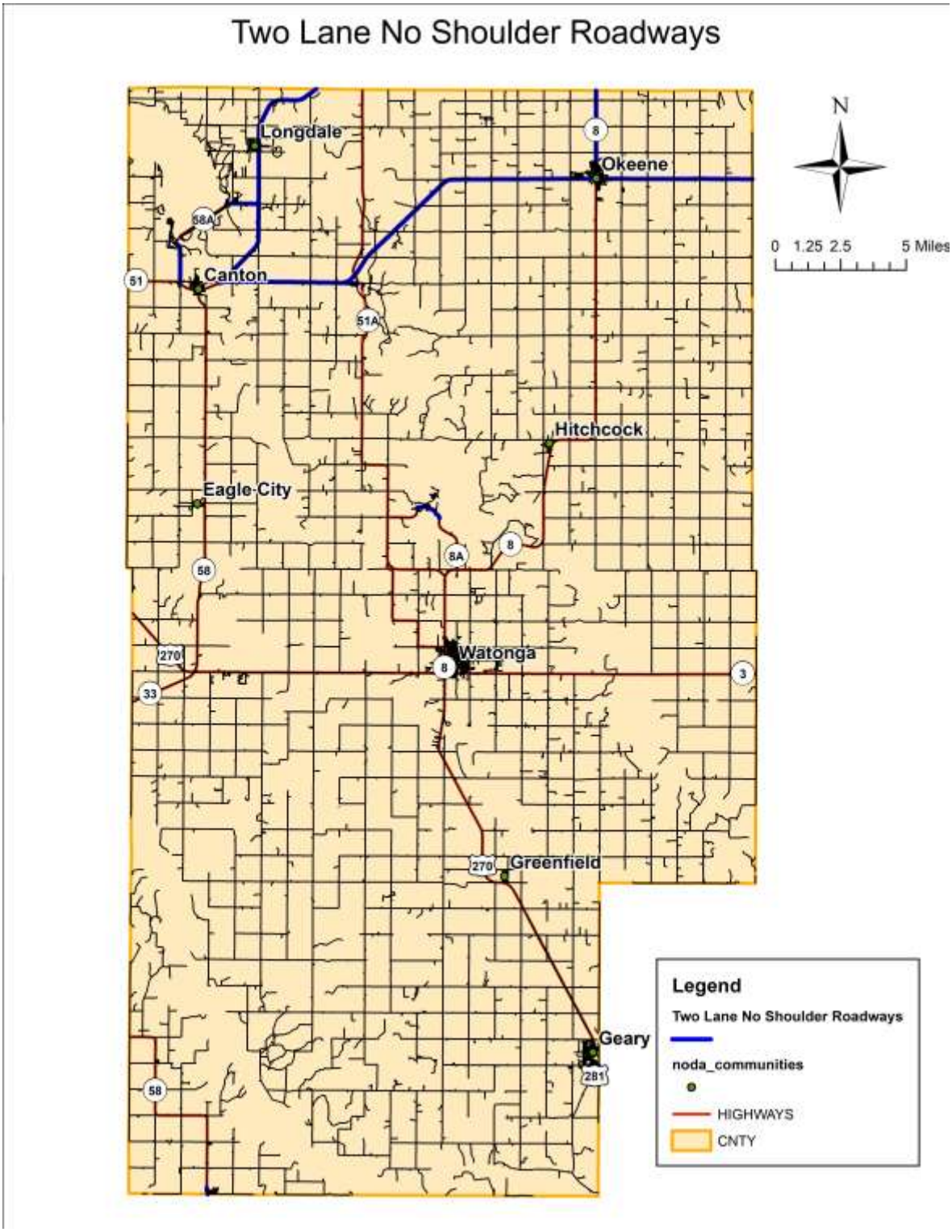
STUDY TOTALS

	HIGHWAY COLLISIONS				CITY STREET COLLISIONS				COUNTY ROAD COLLISIONS				TOTAL COLLISIONS			
Year	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
2012	4	44	55	103		6	19	25	3	20	18	41	7	70	92	169
2013	2	43	36	81	1	4	8	13	1	8	12	21	4	55	56	115
2014	5	40	37	82			4	4	1	9	14	24	6	49	55	110
2015	1	35	43	79		2	4	6		13	18	31	1	50	65	116
2016		38	44	82		1	4	5	1	14	16	31	1	53	64	118
Total:	12	200	215	427	1	13	39	53	6	64	78	148	19	277	332	628

County: (06) BLAINE

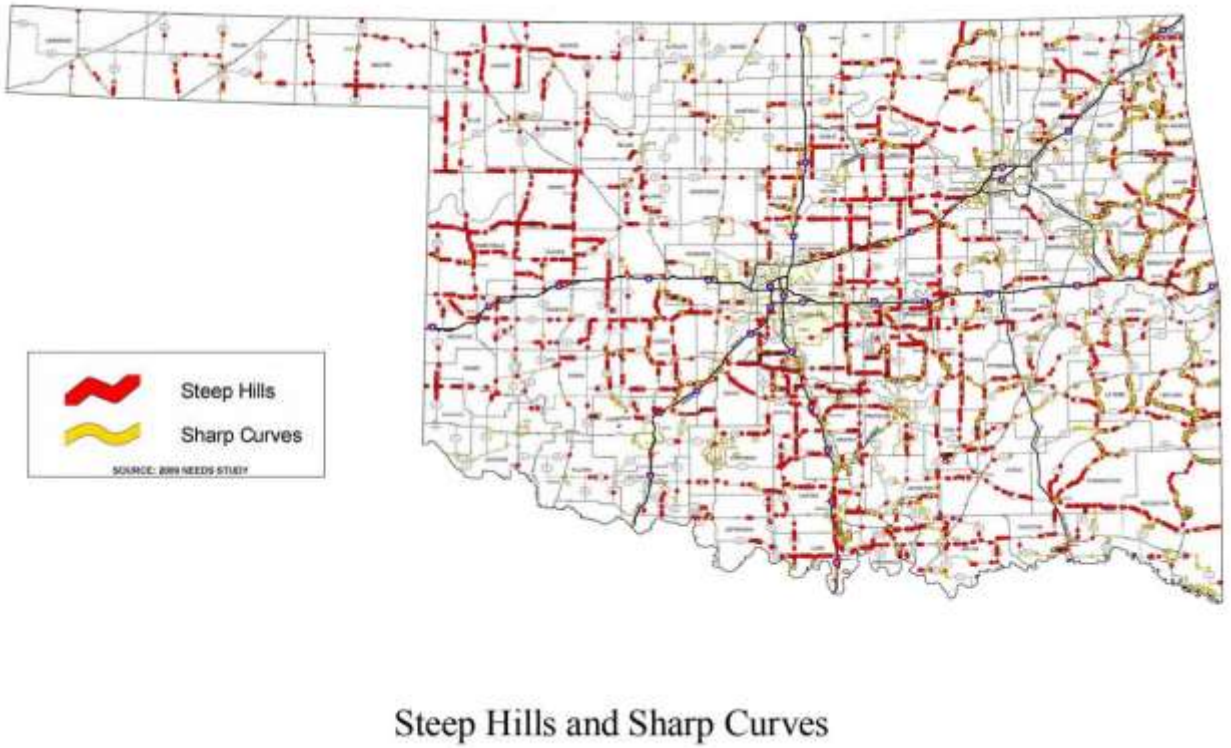
	HIGHWAY COLLISIONS				CITY STREET COLLISIONS				COUNTY ROAD COLLISIONS				TOTAL COLLISIONS			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
(00) - RURAL -	12	183	170	365					6	64	78	148	18	247	248	513
(05) CANTON			3	3			3	3							6	6
(15) GREENFIELD		1		1		1		1						2		2
(25) LONGDALE		1	2	3			1	1						1	3	4
(30) OKEENE			1	1											1	1
(35) WATONGA		12	23	35	1	9	23	33					1	21	46	68
(40) GEARY		3	16	19		3	10	13						6	26	32
(60) HYDRO							2	2							2	2
Total:	12	200	215	427	1	13	39	53	6	64	78	148	19	277	332	628

Map G2.4 Locations of Two-Lane Highways with no Paved Shoulder



Source: NORTPO

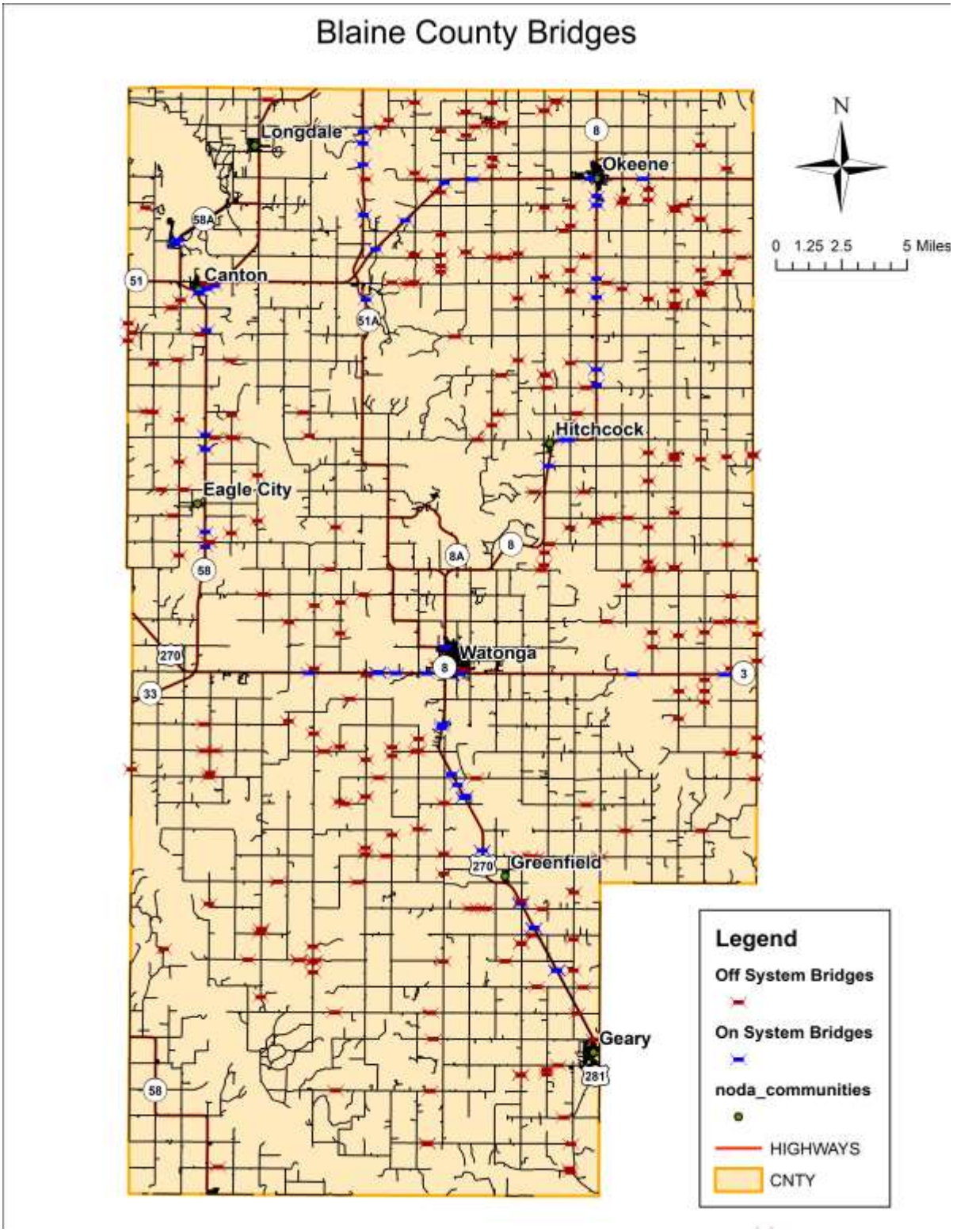
Map 2.5 Steep Hill and Sharp Curves Areas of Concern (Statewide)



Steep Hills and Sharp Curves

Source: ODOT

Map 2.6 Blaine County Bridges



Source: NORTPO

Table G2.6 Blaine County Bridges

Carries	Crosses	Location	Material	Design	Rating %	Status
N2690	CREEK	12.0 MI E OF WATONGA	Concrete	Arch - deck	49.5	Structurally deficient
N2510	WEAVERS CREEK	2.3 S 6.5 W OF WATONGA	Steel	Truss - thru	20.0	Structurally deficient
E0660	N. CANADIAN RIVER	.2S OF CANTON	Steel	Truss - thru	44.9	Functionally obsolete
N2570	CREEK	9.E 1.1N OF CANTON	Steel	Truss - thru	19.3	Structurally deficient
N2620	N. CANADIAN RIVER	3.5E .3S OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	67.9	Structurally deficient
IRR N2620	CREEK	2.3S 2.5E OF GREENFIEL	Concrete continuous	Slab	66.1	Structurally deficient
U.S. 270	CREEK	4.6 MI S S.H. 33 WATONGA	Concrete	Culvert	63.3	
N2620	CREEK	3.N .5W OF GEARY	Concrete	Slab	66.1	Structurally deficient
E0600	CREEK	6.N 2.W OF SOUTHARD	Steel	Stringer / Multi-beam or Girder	61.9	Structurally deficient
IRR E0820	CREEK	3.9 W 1.5 S WATONGA	Steel	Stringer / Multi-beam or Girder	84.8	
S.H. 58	CREEK	5.4 MI N JCT S.H. 33	Concrete	Culvert	97.9	
S.H. 58	CREEK	4.8 MI N JCT S.H. 33	Concrete	Culvert	97.9	
FAS 0619	CREEK	.5 N OF SH 51	Concrete	Culvert	95.9	
E0620	CREEK	6.7 W OF OKEENE	Concrete	Culvert	97.0	
FAS 0605	CREEK	1.5 N 6.3 W OF GEARY	Concrete	Culvert	95.9	
0636C	CREEK	0.5 N 3.7 E GREENFIELD	Concrete	Slab	92.1	
N2680	CEDAR CREEK	10.5 E 2.4 N WATONGA	Concrete	Slab	93.1	
0660C	CREEK	7.5 E 6.6.N GREENFIELD	Concrete	Slab	93.1	

Carries	Crosses	Location	Material	Design	Rating %	Status
0676C	CREEK	3.5 N 9.4 E GREENFIELD	Concrete	Slab	81.1	
U.S. 270	CREEK	7.7 MI E DEWEY C/L	Concrete	Culvert	83.6	
S.H. 3	CREEK	7.3 E. U.S. 270 WATONGA	Concrete	Culvert	79.1	
U.S. 270	CREEK	11.0 MI E DEWEY C/L	Concrete	Culvert	82.6	
S.H. 3	CREEK	10.8 E US-270 WATONGA	Steel	Stringer / Multi-beam or Girder	34.2	Structurally deficient
FAS 0608	CREEK	1 W 5.5N OF HITCHCOCK	Concrete	Slab	93.1	
N2640	CREEK	2.9 N 7. E OF WATONGA	Concrete	Slab	82.1	
0660C	CREEK	7.5 E 7.6 N GREENFIELD	Concrete	Slab	93.1	
N2660	CREEK	3.3 S 9. E OF WATONGA	Concrete	Slab	93.1	
N2680	CREEK	4.4 N 8.5 E GREENFIELD	Concrete	Slab	65.1	Structurally deficient
N2570	CREEK	.5N 2.5W OF GREENFIELD	Concrete continuous	Slab	93.1	
E0780	CREEK	7.5 W 2.5 N WATONGA	Concrete	Slab	93.1	
IRR E0840	CREEK	4. S 5.5 W WATONGA	Concrete	Slab	93.1	
FAS 0628	CREEK	1.3S 1.3W OF GREENFIEL	Concrete	Slab	81.1	
FAS 0628	CREEK	1.3S .3W OF GREENFIELD	Concrete continuous	Slab	93.1	
FAS 0605	CREEK	1.5 N 0.6 W OF GEARY	Concrete	Slab	89.7	
E0750	COOPER CREEK	3. S 3.2 E HITCHCOCK	Concrete	Slab	93.1	
N2470	CREEK	7.4 S 1. W CANTON	Concrete	Slab	93.1	

Carries	Crosses	Location	Material	Design	Rating %	Status
IRR FAS 0614	CREEK	6.0 W 2.0 N WATONGA	Concrete	Slab	93.1	
0660C	CREEK	7.5 E 7.0 N GREENFIELD	Concrete	Slab	66.1	Structurally deficient
IRR E0840	CREEK	5. W 3.5 S WATONGA	Concrete	Slab	93.1	
FAS 0628	HORSE CREEK	1.3 S .8 W OF GREENFIELD	Concrete	Slab	93.1	
E0750	COOPER CREEK	3. S 2.4 E OF HITCHCOC	Concrete	Slab	93.1	
E0750	CREEK	3. S 2.6 E HITCHCOCK	Concrete	Slab	93.1	
N2640	SALT CREEK	1.E 4.2S OF OKEENE	Concrete	Slab	93.1	
FAS 0609	CREEK	2.8 W OF HITCHCOCK	Concrete	Slab	93.0	
N2530	CREEK	4.5 W 2.2 N OF WATONGA	Concrete	Slab	93.1	
E0808	CREEK	W. MAIN	Concrete	Slab	93.1	
E0806	CREEK	2ND.ANDCERNY DR.	Concrete	Slab	93.1	
N2680	CREEK	10.5 MI E OF WATONGA	Concrete	Slab	82.1	
IRR FAS 0618	CREEK	6.3 W 1.0 S GEARY	Concrete	Slab	93.1	
IRR E0900	HORSE CREEK	2.3S .5E OF GREENFIELD	Concrete	Slab	93.1	
N2450	MINNEHAHA CREEK	2.8 W 2.S OF CANTON	Wood or Timber	Stringer / Multi-beam or Girder	27.9	Structurally deficient
0636C	CREEK	2.3 W 3.3 S GREENFIELD	Concrete	Slab	93.1	
0608C	LAUBUCH CREEK	4 MI S .4 E OF OKEENE	Concrete	Culvert	52.9	Structurally deficient
N2560	CHICKEN CREEK	3.5 S 1.3 W OF WATONGA	Wood or Timber	Stringer / Multi-beam or Girder	39.2	Structurally deficient
FAS 0604	CREEK	.5 N .6 E GREENFIELD	Concrete	Slab	77.7	

Carries	Crosses	Location	Material	Design	Rating %	Status
FAS 0604	CREEK	2 W OF GREENFIELD	Concrete	Slab	93.1	
FAS 0604	CREEK	.5 N .4 E OF GREENFLD	Concrete	Slab	92.1	
N2560	SPRING CREEK	8.E .1N OF CANTON	Wood or Timber	Stringer / Multi-beam or Girder	28.9	Structurally deficient
S.H. 51	CREEK	1.8 E JCT S.H. 8 OKEENE	Concrete	Culvert	86.9	
S.H. 51	CREEK	11.9 MI E DEWEY C/L	Concrete	Culvert	92.2	
S.H. 51	CREEK	6.0 MI. W. S.H. 8 OKEENE	Concrete	Culvert	92.2	
S.H. 51	CREEK	0.3 MI W S.H. 8 OKEENE	Concrete	Culvert	91.2	
FAS 0603	CREEK	4 S .2 E OF HITCHCOCK	Concrete	Culvert	40.0	Structurally deficient
S.H. 51	ELM CREEK	4.7 MI W S.H. 8 OKEENE	Concrete	Culvert	94.5	
IRR E0910	HORSE CREEK	2.5S 1.E OF GREENFIELD	Concrete	Culvert	96.0	
FAS 0618	CREEK	6.6 SW OF WATONGA	Concrete	Culvert	52.0	Structurally deficient
N2580	CREEK	2.6N 5.W OF OKEENE	Wood or Timber	Stringer / Multi-beam or Girder	33.0	Structurally deficient
N2570	CREEK	6.W .5S OF OKEENE	Steel	Stringer / Multi-beam or Girder	24.3	Structurally deficient
N2570	CREEK	9.E 1.9 N OF CANTON	Steel	Stringer / Multi-beam or Girder	64.0	
N2570	CREEK	9.E .7N OF CANTON	Steel	Stringer / Multi-beam or Girder	29.0	Structurally deficient
N2460	CREEK	4.9S 2.W CANTON	Wood or Timber	Stringer / Multi-beam or Girder	26.9	Structurally deficient
N2500	CREEK	2. E 7.4 S OF CANTON	Steel	Stringer / Multi-beam or Girder	65.5	
N2530	CHICKEN CREEK	2.5N 6.5W OF GREENFIEL	Steel	Stringer / Multi-beam or Girder	93.1	

Carries	Crosses	Location	Material	Design	Rating %	Status
E0860	CHICKEN CREEK	5.S 3.7W OF WATONGA	Steel	Stringer / Multi-beam or Girder	94.7	
E0700	CREEK	2.N OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	60.9	Structurally deficient
E0740	CREEK	2. S 2. E OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	33.0	Structurally deficient
E0650	CREEK	3.S .4W OF OKEENE	Wood or Timber	Stringer / Multi-beam or Girder	48.4	Structurally deficient
E0630	CREEK	1.S 3.5E OF OKEENE	Wood or Timber	Stringer / Multi-beam or Girder	35.0	Structurally deficient
N2670	CREEK	4.E 1.3N OF OKEENE	Wood or Timber	Stringer / Multi-beam or Girder	48.5	Structurally deficient
N2570	SPRING CREEK	6.W 3.5S OF OKEENE	Wood or Timber	Stringer / Multi-beam or Girder	26.9	Structurally deficient
N2590	BITTER CREEK	2.W .5N OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	70.8	
N2620	CREEK	.5N 1.E OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	24.3	Structurally deficient
N2660	KINGFISHER CREEK	8.5 E 1. N OF WATONGA	Steel	Stringer / Multi-beam or Girder	75.2	
E0680	CREEK	2.S 9.4E OF CANTON	Wood or Timber	Stringer / Multi-beam or Girder	54.3	Structurally deficient
E0680	SALT CREEK	6.S 3.1E OF OKEENE	Steel	Stringer / Multi-beam or Girder	34.9	Structurally deficient
N2680	KINGFISHER CREEK	1.6 N 10.5 E WATONGA	Steel	Stringer / Multi-beam or Girder	94.0	
N2690	CREEK	3. S 11.5 E OF WATONGA	Steel	Stringer / Multi-beam or Girder	61.8	Structurally deficient
E0790	CREEK	1.5 N 10. E WATONGA	Steel	Stringer / Multi-beam or Girder	93.1	
S.H. 58	CREEK	1.5 MI S S.H. 51 CANTON	Concrete	Culvert	89.6	
E0710	CREEK	5.S 2.2W OF CANTON	Wood or Timber	Stringer / Multi-beam or Girder	34.0	Structurally deficient

Carries	Crosses	Location	Material	Design	Rating %	Status
E0710	BITTER CREEK	1 N. 1.8W OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	69.3	
E0650	SPRING CREEK	1.N 11.4E OF CANTON	Wood or Timber	Stringer / Multi-beam or Girder	49.5	
N2550	WEAVER CREEK	2.5 W 3.3 S WATONGA	Steel	Stringer / Multi-beam or Girder	65.3	Functionally obsolete
E0640	SPRING CREEK	2.S 1.3W OF OKEENE	Steel	Stringer / Multi-beam or Girder	73.2	
N2560	SAND CREEK	6.E 1.9N LONGDALE	Wood or Timber	Stringer / Multi-beam or Girder	38.0	Structurally deficient
S.H. 58	MINNEHAHA CREEK	0.1 MI S JCT S.H. 51	Concrete	Slab	68.0	
E0780	NORTH CANADIAN RIVER	2.5 N 3.5 W WATONGA	Steel	Stringer / Multi-beam or Girder	69.7	
S.H. 8	CREEK	1.0 N. U.S. 270 WATONGA	Concrete	Culvert	88.5	
S.H. 8	CREEK	12.4 MI N U.S. 270	Concrete	Culvert	94.4	
S.H. 8	CREEK	7.8 MI S S.H. 51 OKEENE	Concrete	Culvert	95.4	
S.H. 8	CREEK	11.0 MI N JCT U.S. 270	Concrete	Slab	69.5	
S.H. 8	CREEK	12.6 N JCT US-270 WATONGA	Steel	Stringer / Multi-beam or Girder	69.8	
S.H. 8	CREEK	0.8 MI S JCT S.H. 51	Concrete	Culvert	96.2	
S.H. 8	ARAPAHO CREEK	4.5 MI S JCT S.H. 51	Concrete	Culvert	96.7	
S.H. 8	LAUBACH CREEK	3.9 MI S JCT S.H. 51	Concrete	Culvert	96.7	
S.H. 8	SPRING CREEK	1.2 MI S JCT S.H. 51	Steel	Stringer / Multi-beam or Girder	28.1	Structurally deficient
S.H. 8	SALT CREEK	7.3 MI S JCT S.H. 51	Steel	Stringer / Multi-beam or Girder	67.1	
S.H. 51	N. CANADIAN RIVER O'FLOW	3.4 MI E DEWEY C/L	Steel	Stringer / Multi-beam or Girder	61.4	

Carries	Crosses	Location	Material	Design	Rating %	Status
S.H. 51	N. CANADIAN RIVER	3.1 MI E DEWEY C/L	Steel continuous	Stringer / Multi-beam or Girder	37.8	Structurally deficient
FAS 0619	CREEK	2.9 N OF SH 51	Concrete	Culvert	95.9	
FAS 0619	CREEK	2.1 N OF SH 51	Concrete	Culvert	96.9	
FAS 0619	CREEK	.8 N OF SH 51	Concrete	Culvert	51.9	Structurally deficient
FAS 0613	OTTER CREEK	6.8 SE OF HITCHCOCK	Concrete	Culvert	94.4	
FAS 0613	WILLOW CREEK	3.5 E .5 S HITCHCOCK	Concrete	Culvert	93.4	
FAS 0613	COOPER CREEK	3.5E 1.6S OF HITCHCOCK	Concrete	Culvert	93.4	
FAS 0615	SQUAW CREEK	9.2 W 4.5 S GREENFIELD	Concrete	Stringer / Multi-beam or Girder	65.6	
FAS 0608	SALT CREEK	1 W 3 N OF HITCHCOCK	Concrete	Stringer / Multi-beam or Girder	97.0	
N2570	CREEK	6W. 1.9N. OF OKEENE	Steel	Stringer / Multi-beam or Girder	95.4	
N2660	COOPER CREEK	5. E .8 S OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	77.6	
IRR N2500	CREEK	2. E 9.2 S OF CANTON	Steel	Stringer / Multi-beam or Girder	95.0	
N2520	CREEK	10.5W 3.5N OF GEORY	Steel	Stringer / Multi-beam or Girder	65.7	
FAS 0629	CREEK	1.5W .5S OF GEARY	Concrete	Culvert	99.9	
E0830	CREEK	6. N 11.7 W GREENFIELD	Steel	Stringer / Multi-beam or Girder	96.0	
E0840	CREEK	5. N 11.8 W GREENFIELD	Steel	Stringer / Multi-beam or Girder	92.1	
E0660	CREEK	.4E OF CANTON	Steel	Stringer / Multi-beam or Girder	97.0	
E0950	CREEK	.5N OF GEARY	Steel	Stringer / Multi-beam or Girder	95.0	

Carries	Crosses	Location	Material	Design	Rating %	Status
E0870	CREEK	2.N 8.3E OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	95.8	
N2580	CREEK	5.W 1.9N OF OKEENE	Steel	Stringer / Multi-beam or Girder	75.9	
N2670	COOPER CREEK	6. E .7 S OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	49.5	
FAS 0629	CREEK	.5S 1.5W OF GEARY	Concrete	Culvert	100	
FAS 0607	CREEK	1.7 E OF SOUTHARD	Concrete	Culvert	96.9	
IRR E0950	CREEK	6W. .5N OF GEARY	Steel	Stringer / Multi-beam or Girder	71.2	
N2490	CREEK	6S 1E OF CANTON	Steel	Stringer / Multi-beam or Girder	87.8	
FAS 0607	CREEK	1.9 E OF SOUTHARD	Concrete	Culvert	96.9	
E0650	SPRING CREEK	3.S 3.4W OF OKEENE	Steel	Stringer / Multi-beam or Girder	53.3	
N2680	SPRING CREEK	5.E 2.S OF OKEENE	Steel	Stringer / Multi-beam or Girder	56.4	
E0680	SALT CREEK	6.S 1.8E OF OKEENE	Steel	Stringer / Multi-beam or Girder	60.5	Structurally deficient
FAS 0612	N. CANADIAN RIVER	4.0 W 5.5 N WATONGA	Steel	Stringer / Multi-beam or Girder	63.8	
FAS 0607	HORSE CREEK	1.1 E OF SOUTHARD	Concrete	Culvert	96.9	
S.H. 51 ALT.	CREEK	4.6 MI N JCT S.H. 51	Concrete	Culvert	99.2	
S.H. 51 ALT.	CREEK	5.4 MI N JCT S.H. 51	Concrete	Culvert	99.2	
S.H. 51 ALT.	CREEK	5.9 MI N JCT S.H. 51	Concrete	Culvert	98.2	
S.H. 51	U.S. GYPSUM RD. UNDER	10.4 MI E DEWEY C/L	Steel continuous	Stringer / Multi-beam or Girder	83.4	
FAS 0618	CREEK	1.5 W OF GEARY	Concrete	Culvert	100	
FAS 0601	CREEK	4.3 W OF HOMESTEAD	Prestressed concrete	Stringer / Multi-beam or Girder	92.9	
U.S. 270	N. CANADIAN RIVER	2.2 MI S SH 33	Steel continuous	Stringer / Multi-beam or Girder	83.7	

Carries	Crosses	Location	Material	Design	Rating %	Status
U.S. 270	N. CANADIAN RIVER O'FLOW	2.3 MI S JCT S.H. 33	Steel	Stringer / Multi-beam or Girder	83.7	
E0750	NINE MILE CREEK	8. S .3 W OF CANTON	Steel	Stringer / Multi-beam or Girder	79.2	
IRR E0920	CREEK	3.5S 7.4W OF GREENFIEL	Steel	Stringer / Multi-beam or Girder	94.7	
E0770	CREEK	5. S 3.9 E HITCHCOCK	Steel	Stringer / Multi-beam or Girder	93.1	
IRR N2520	CREEK	2.6 S 5.5 W OF WATONGA	Steel	Stringer / Multi-beam or Girder	77.6	
N2550	CHICKEN CREEK	3.7 S 2.5 W WATONGA	Steel	Stringer / Multi-beam or Girder	80.8	
E0740	SALT CREEK	2. S .6 W OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	75.6	
E0790	CREEK	7. S 3. E OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	79.2	
N2550	CREEK	5.E 1.N OF LANGDALE	Steel	Stringer / Multi-beam or Girder	94.7	
N2470	CREEK	5.9 S 1. W OF CANTON	Steel	Stringer / Multi-beam or Girder	80.8	
N2490	CREEK	9.6 S 1. E OF CANTON	Steel	Stringer / Multi-beam or Girder	90.0	
IRR N2520	CREEK	5.5 E 2.1 N OF WATONGA	Steel	Stringer / Multi-beam or Girder	96.0	
N2560	WEAVER CREEK	3. S 1.5 W WATONGA	Steel	Stringer / Multi-beam or Girder	87.5	
N2480	CREEK	11.5 W 4.1 N GREENFIEL	Steel	Stringer / Multi-beam or Girder	96.0	
N2520	CREEK	3.S 7.5E OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	92.1	
N2560	CREEK	4.5W & 2.1N OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	62.5	
FAS 0601	CREEK	.75 W OF HOMESTEAD	Concrete	Culvert	70.9	Structurally deficient

Carries	Crosses	Location	Material	Design	Rating %	Status
FAS 0613	CREEK	7MI E 4.6MI N WATONGA	Concrete	Culvert	55.9	Structurally deficient
FAS 0613	CREEK	7MI E 4.2MI N WATONGA	Concrete	Culvert	96.9	
N2620	SALT CREEK	3.3W OF OKEENE	Steel	Stringer / Multi-beam or Girder	89.8	
FAS 0613	CREEK	7MI E 1.7MI N WATONGA	Concrete	Culvert	96.9	
FAS 0613	CREEK	7 MI E 1 MI N WATONGA	Concrete	Culvert	99.9	
S.H. 51 ALT.	U.S. GYPSUM RD. UNDER	2.9 MI. N JCT S.H. 51	Prestressed concrete	Stringer / Multi-beam or Girder	83.0	
FAS 0618	CHICKEN CREEK	6 MI SW OF WATONGA	Steel	Stringer / Multi-beam or Girder	47.4	Structurally deficient
FAS 0604	N. CANADIAN RIVER	.5 N 1 E GREENFIELD	Steel continuous	Stringer / Multi-beam or Girder	95.9	
FAS 0618	CREEK	7.7 SW OF WATONGA	Concrete	Culvert	97.0	
N2690	CREEK	9.5 E 4.8 N GREENFIELD	Steel	Stringer / Multi-beam or Girder	61.0	Structurally deficient
FAS 0618	CREEK	3.1 SW OF WATONGA	Steel	Stringer / Multi-beam or Girder	94.1	
N2680	COOPER CREEK	7. E .7 S OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	69.7	
0672C	CREEK	1.7 W 9.2 N OF HYDRO	Steel	Stringer / Multi-beam or Girder	77.6	
FAS 0615	CREEK	2.9 MI E CUSTER C/L	Steel	Stringer / Multi-beam or Girder	90.9	
0618C	NINE MILE CREEK	8. S .8 W OF CANTON	Concrete	Culvert	97.0	
FAS 0624	CHICKEN CREEK	4.0 S 2.5 W WATONGA	Concrete	Culvert	97.0	
0618C	CREEK	8. S 1.7 W OF CANTON	Concrete	Culvert	97.0	
N2690	OTTER CREEK	8. E 5. S OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	95.8	

Carries	Crosses	Location	Material	Design	Rating %	Status
N2640	CREEK	5.5E 2.1N OF GREENFIEL	Steel	Stringer / Multi-beam or Girder	89.8	
E0970	CREEK	.5S 10.5W OF GEARY	Steel	Stringer / Multi-beam or Girder	87.5	
S.H. 3	CREEK	0.5 MI E JCT S.H. 8	Concrete	Culvert	92.6	
S.H. 3	CREEK	0.5 MI E JCT S.H. 8	Concrete	Culvert	98.6	
U.S. 270	CREEK	12.1 MI E DEWEY C/L	Concrete	Culvert	84.9	
U.S. 270	N. CANADIAN RIVER	10.2 MI E DEWEY C/L	Prestressed concrete	Stringer / Multi-beam or Girder	91.5	
E0920	CREEK	3.5N 13W OF GEARY	Steel	Stringer / Multi-beam or Girder	81.1	
E0840	CHICKEN CREEK	3.5 S 1.6 W WATONGA	Prestressed concrete	Tee beam	73.0	Structurally deficient
E0920	HORSE CREEK	3.3S OF GREENFIELD	Concrete	Culvert	100	
FAS 0619	CREEK	4.0 W 3.0 S OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	98.0	
N2470	MINNEHAHA CREEK	1 W .6S OF CANTON	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2670	KINGFISHER CREEK	9.5 E .9 N OF WATONGA	Concrete	Culvert	97.0	
E0930	CREEK	2.5N .5W OF GEARY	Steel	Stringer / Multi-beam or Girder	67.5	
N2530	CREEK	4.4 E 1. N OF WATONGA	Steel	Stringer / Multi-beam or Girder	96.0	
N2610	CREEK	2.W 1.1 S OF OKEENE	Steel	Stringer / Multi-beam or Girder	90.0	
E0720	CREEK	6. S 1.1 E OF CANTON	Steel	Stringer / Multi-beam or Girder	96.0	
E0710	CREEK	1.3W 1.N OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	77.6	
E0840	CREEK	11.2 W 5. N GREENFIELD	Steel	Stringer / Multi-beam or Girder	91.1	

Carries	Crosses	Location	Material	Design	Rating %	Status
0610C	N. CANADIAN RIVER	3. S .9 E OF CANTON	Prestressed concrete	Stringer / Multi-beam or Girder	99.9	
N2660	OTTER CREEK	5.8 E 2. S OF HITCHCOC	Steel	Stringer / Multi-beam or Girder	84.8	
N2530	CREEK	4.7 N 6.5 W WATONGA	Steel	Stringer / Multi-beam or Girder	91.1	
0634C	LUMPMOUTH CREEK	3.5 S 0.9 W OF GEARY	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2620	CREEK	1.1S 1.W OF OKEENE	Steel	Stringer / Multi-beam or Girder	83.3	
N2450	CREEK	14.5 W 3.7 N GREENFIEL	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0790	KINGFISHER CREEK	11.4 E 1.5 N WATONGA	Prestressed concrete	Tee beam	100	
0608C	SALT CREEK	4 S,4.3 E OF OKEENE	Concrete	Stringer / Multi-beam or Girder	100	
E0680	CREEK	6.S 3.5E OF OKEENE	Steel	Stringer / Multi-beam or Girder	88.7	
FAS 0612	CREEK	9.5 W 5.0 N WATONGA	Concrete	Culvert	100	
N2670	SPRING CREEK	1.6S 4.E OF OKEENE	Steel	Stringer / Multi-beam or Girder	97.0	
N2620	SPRING CREEK	1.1S 1.W OF OKEENE	Concrete	Culvert	100	
0634C	CREEK	3.5 S 6.2 W OF GEARY	Steel	Stringer / Multi-beam or Girder	76.7	
N2680	SALT CREEK	3.6S 5.E OF OKEENE	Concrete	Stringer / Multi-beam or Girder	100	
N2660	SALT CREEK	4.8 S & 3.0 E OF OKEENE	Steel continuous	Stringer / Multi-beam or Girder	93.0	Functionally obsolete
N2630	CREEK	.5N, 3.5E OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	93.1	
E0880	CREEK	7S, 2.2 W. OF WATONGA	Steel	Stringer / Multi-beam or Girder	95.0	
E0860	CREEK	2.5N, 3E OF GREENFIELD	Prestressed concrete	Tee beam	100	

Carries	Crosses	Location	Material	Design	Rating %	Status
IRR FAS 0629	CREEK	2.5 MI S, 1.5 MI W GEARY	Steel	Stringer / Multi-beam or Girder	77.6	
N2600	CREEK	2.5 W & .5 S OF GEARY	Prestressed concrete	Tee beam	100	
E0770	CREEK	3.5 N 4.8 W WATONGA	Steel	Stringer / Multi-beam or Girder	96.0	
N2520	CREEK	5W-0.5N OF WATONGA	Steel	Stringer / Multi-beam or Girder	96.0	
N2620	CREEK	4E & 5.6N OF WATONGA	Steel	Stringer / Multi-beam or Girder	94.1	
N2630	COOPER CREEK	3.2 S 2. E HITCHCOCK	Steel	Stringer / Multi-beam or Girder	86.2	
N2610	CREEK	2 W & 3.7S OF OKEENE	Steel	Stringer / Multi-beam or Girder	89.8	
N2640	SPRING CREEK	1. E .8S OF OKEENE	Concrete	Stringer / Multi-beam or Girder	100	
E0680	CREEK	2.S 2.8W OF CANTON	Prestressed concrete	Tee beam	100	
N2600	SPRING CREEK	3.W 2.9S OF OKEENE	Prestressed concrete	Tee beam	99.0	
E1000	LUMPMOUTH CREEK	4.5 S & 1.5 W OF GEARY	Steel	Stringer / Multi-beam or Girder	91.1	
N2660	SPRING CREEK	1.2 S & 3.0 E OF OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	100	
S.H. 51A	CREEK	1.5 MI S JCT S.H. 51	Concrete	Culvert	98.9	
IRR E0920	SQUAW CREEK	3.5N, 11.5W OF GEARY	Steel	Stringer / Multi-beam or Girder	96.0	
IRR E0920	SQUAW CREEK	3.5S 8.W OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	96.0	
U.S. 270	RELAY CREEK	5.2 MI S JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	85.5	
N2560	CREEK	8.E 1.1N OF CANTON	Steel	Stringer / Multi-beam or Girder	81.8	
U.S. 270	CREEK	4.1MI S JCT S.H. 33	Concrete	Culvert	69.9	

Carries	Crosses	Location	Material	Design	Rating %	Status
E0680	CREEK	2S OF CANTON	Concrete	Culvert	100	
N2660	CEDAR CREEK	4S 5.9E OF HITCHCOCK	Concrete	Culvert	100	
U.S. 270 /U.S. 281	HORSE CREEK	11 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
U.S. 270 /U.S. 281	CREEK	12.8 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
U.S. 270 /U.S. 281	HORSE CREEK	11.0 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
U.S. 270 /U.S. 281	CREEK	12.8 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2610	SALT CREEK	2.5N OF HITCHCOCK	Concrete	Stringer / Multi-beam or Girder	100	
E2670	SALT CREEK	5S 2.7E OF OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0850	N. CANADIAN RIVER	3.5N 1.3W OF GREENFIELD	Steel continuous	Stringer / Multi-beam or Girder	97.0	
FAS 0618	CREEK	5.5W, 1N GREENFIELD	Concrete	Culvert	98.0	
N2540	CREEK	5.5W, 1N GRANDFIELD	Concrete	Culvert	98.0	
U.S. 270 /U.S. 281	CREEK	9.9 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	97.1	
U.S. 270 /U.S. 281	CREEK	7.6 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
U.S. 270 /U.S. 281	CREEK	7.2 MI S/E JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	97.1	
N2610	CREEK	2.6N 2W OF OKEEN	Steel continuous	Stringer / Multi-beam or Girder	97.0	
E0610	CREEK	1N 3.6W OF OKEENE	Steel	Stringer / Multi-beam or Girder	97.0	
N2560	CREEK	7W .1N OF OKEENA	Steel	Stringer / Multi-beam or Girder	77.2	
E0890	CREEK	8.8W OF GREENFIELD	Steel	Stringer / Multi-beam or Girder	97.0	

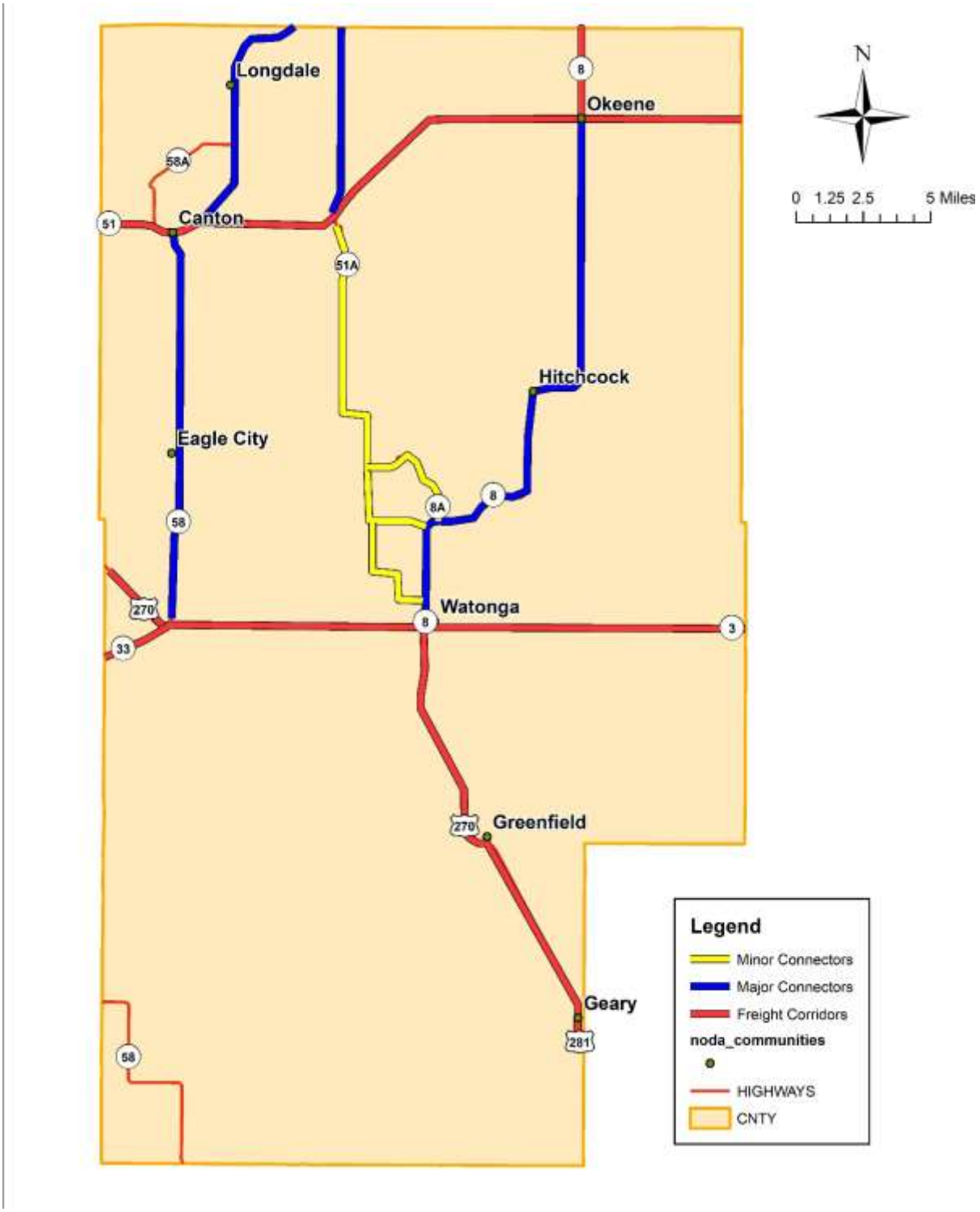
Carries	Crosses	Location	Material	Design	Rating %	Status
E0840	CREEK	5N 8.6E OF GREEN FIELD	Concrete	Culvert	100	
0664C	SALT CREEK	4E 4.4S OF OKEENE	Concrete	Tee beam	100	
U.S. 270	CREEK	10.0 MI S JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
U.S. 270	CREEK	7.8 MI S JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	99.9	
U.S. 270	CREEK	7.4 MI S JCT S.H. 33	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2650	SPRING CREEK	2E OF OKEEN .75S OF OK 51	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2690	COOPER CREEK	8E OF HITCHOCK .5S OF OK8	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2450	CREEK	2.7W 1.7S OF CANTON	Concrete	Culvert	100	
E0590	ELM CREEK	3N 1.6W OF OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0650	SALT CREEK	3S 5.6E OF JCT SH 8/SH 51	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2600	HORSE CREEK	2.5S .5E OF GREEN FIELD	Steel continuous	Stringer / Multi-beam or Girder	97.0	
N2470	CREEK	12.5N OF GRANFIELD	Steel continuous	Stringer / Multi-beam or Girder	97.0	
N2620	CREEK	3.5S 1W OKEENE	Steel	Stringer / Multi-beam or Girder	95.0	
N2570	RELAY CREEK	5.0 S OF JCT. SH-3 / SH-8	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2470	NINE MILE CREEK	1W & 5.3S OF S.H. 51	Prestressed concrete	Stringer / Multi-beam or Girder	100	
N2580	SPRING CREEK	5W, 2.8S S.H. 58 & S.H. 8	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0670	MINNEHAHA CREEK	1S, 1.2W S.H. 51 & S.H 58	Concrete	Stringer / Multi-beam or Girder	100	
E0880	CREEK, AT&L R.R.	7S, 3.8E OF SH8/US270	Concrete	Culvert	100	

Carries	Crosses	Location	Material	Design	Rating %	Status
E0940	AMERICAN HORSE CREEK	.5N, 9W OF JCT 281&270	Concrete	Culvert	99.9	
N2500	CREEK	2.5E, 9.8S OF SH58/270	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0890	TRIB OF RELAY CREEK	5.2W OF GREENFIELD	Concrete	Culvert	100	
N2650	SALT CREEK TRIB.	2E, 4.5S OF OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	100	
S.H. 58	CREEK	9.2 N OF JCT U.S. 270	Prestressed concrete	Stringer / Multi-beam or Girder	97.5	
S.H. 58	NINE MILE CREEK	8.6 N OF JCT U.S. 270	Prestressed concrete	Stringer / Multi-beam or Girder	97.5	
U.S. 270	RELAY CREEK	5.2 S S.H. 33 WATONGA	Prestressed concrete	Stringer / Multi-beam or Girder	99.0	
U.S. 270	N. CANADIAN RIVER	10.3 E OF DEWEY C/L	Prestressed concrete	Stringer / Multi-beam or Girder	99.0	
N2620	SALT CREEK	1W 7.2S OF OKEENE	Prestressed concrete	Stringer / Multi-beam or Girder	100	
IRR E0910	CREEK	4.5N 13.5W OF GEARY	Steel	Stringer / Multi-beam or Girder	97.0	
E0695	BITTER CREEK	2.5N 1.5W OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	97.0	
E0710	CREEK	2.4W 5S OF SOUTHARD	Steel	Stringer / Multi-beam or Girder	51.0	Structurally deficient
IRR E0720	NINE MILE CREEK	6S .4E OF CANTON	Prestressed concrete	Stringer / Multi-beam or Girder	100	
E0700	SALT CREEK	2.2N 1.6E OF HITCHCOCK	Steel	Stringer / Multi-beam or Girder	97.0	
E0670	SALT CREEK	5S 3.3E OF OKEENE	Steel	Stringer / Multi-beam or Girder	85.7	
State Highway 58A	Canton L on Aux Channel	2.6 mi N/O Canton, OK	Prestressed concrete	Stringer / Multi-beam or Girder	99.6	
STATE HIGHWAY 58A	CANTON LAKE SPILLWAY	2 MI N. CANTON, OKLAHOMA	Concrete	Girder and Floorbeam system	72.0	

Source: http://geography.brucemyers.com/bridges/county/40-11

Map G2.7 NHFN Map

Map G2.8 Blaine County Freight Corridors and Connectors



Source: NORTPO

Map G2.9 Blaine County Railroads

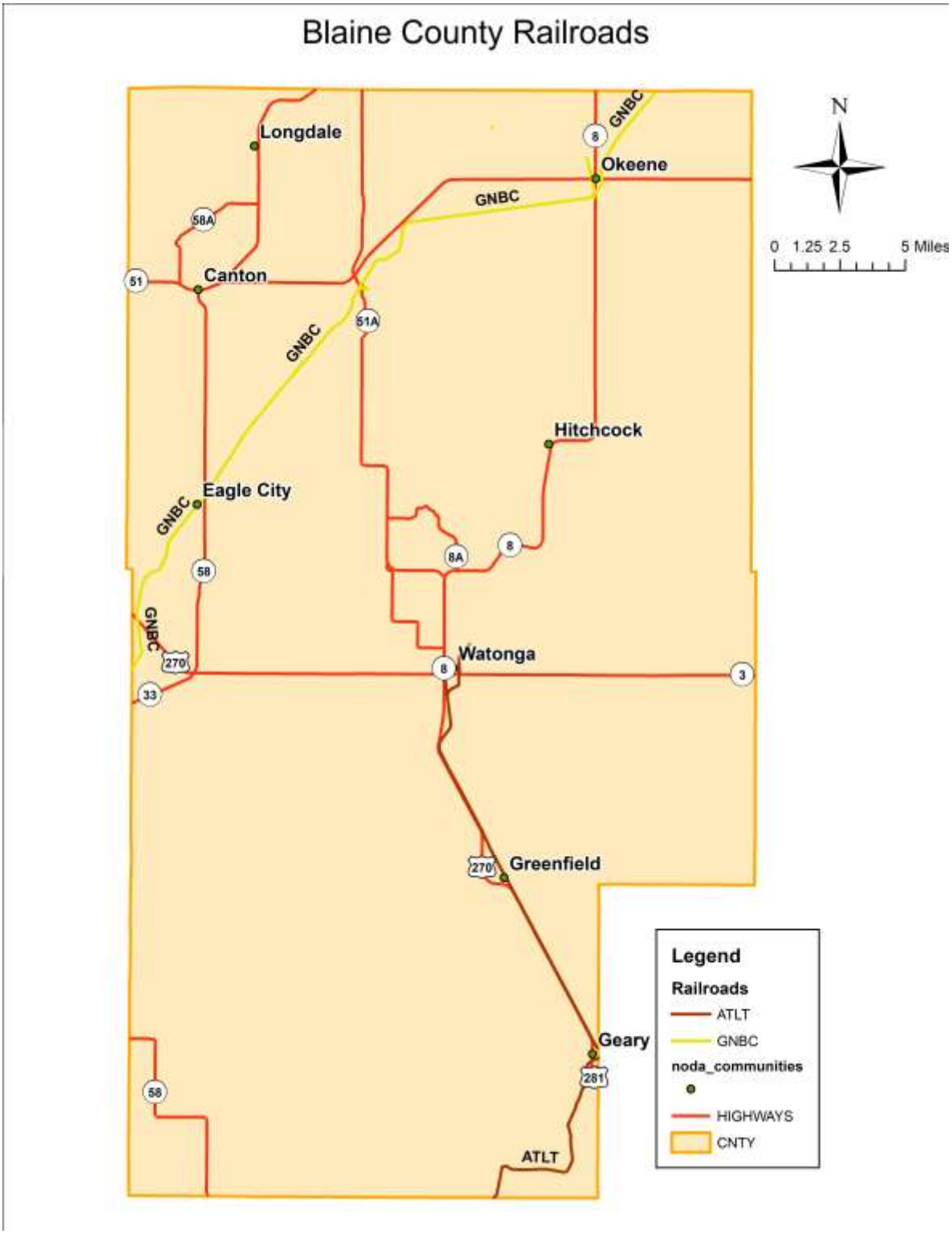


Table G2.7 MAGB Ridership and Revenue Data

MAGB Ridership January 1, 2017 - December 31, 2017					
County	**Route Miles**	**Passenger Count**	**Elderly Count**	**Disabled Count**	**Elderly and Disabled Count**
Major	97,302	2,660	1,419	104	41
Alfalfa	19,370	241	24	18	9
Blaine	**52,308**	**1,110**	**367**	**160**	**233**
Garfield	50,097	2,979	189	487	1,741
Grant	10,809	200	10	15	67
Kay	4,010	36	2	0	0
Kingfisher	13,648	155	136	0	0
Noble	0	0	0	0	0

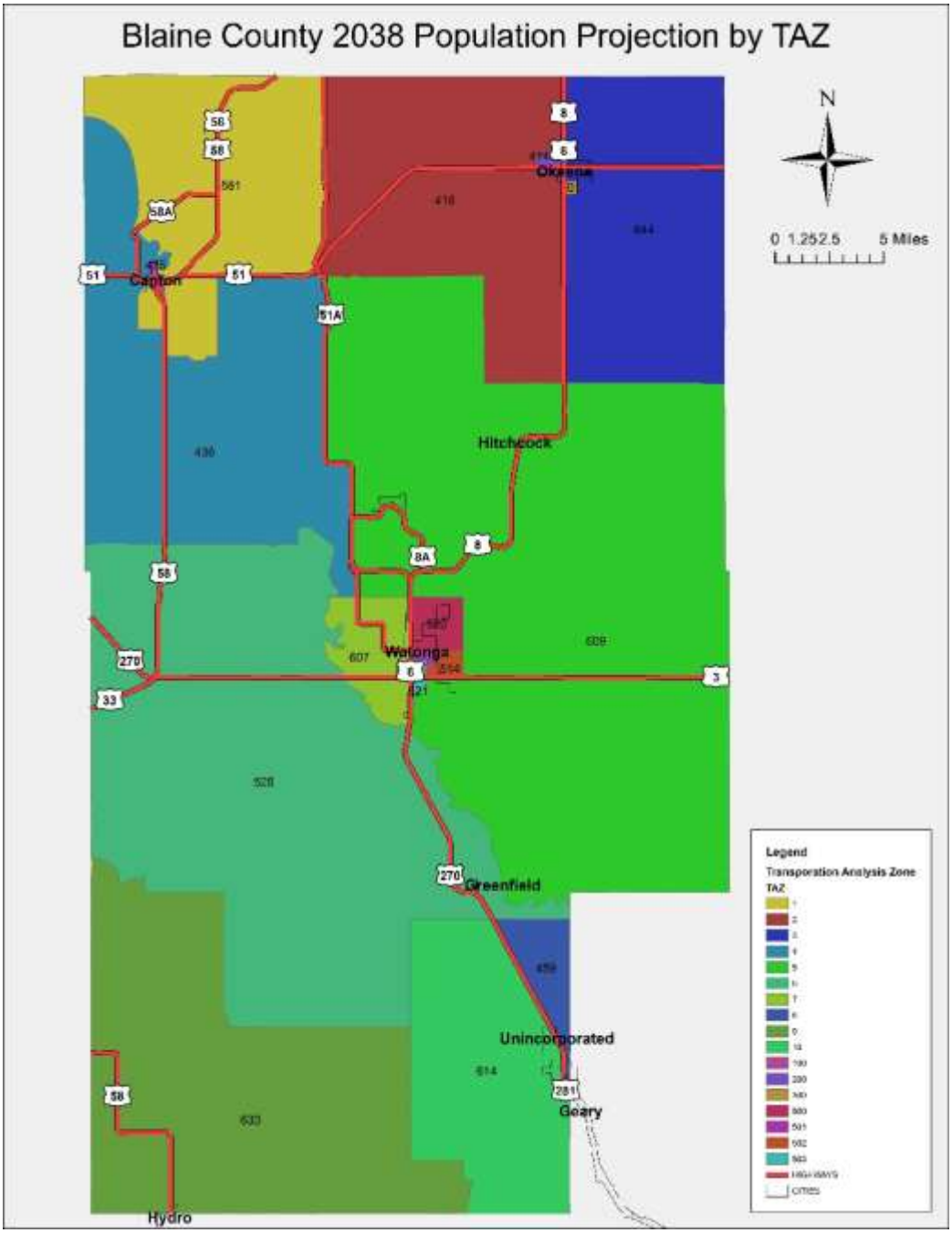
Table G2.8 Cherokee Strip Transit (CST) Ridership and Revenue Data

	October 2015 – September 2016	**October 2016 – September 2017**
Trips	4700	3312
Passenger Miles	219,818.9	155,046
Revenue Miles	170,255.2	131,763.5

Appendix G-3

Chapter 3

Map G3.1 – Projected Population Data



Map G3.2 Projected Employment Data

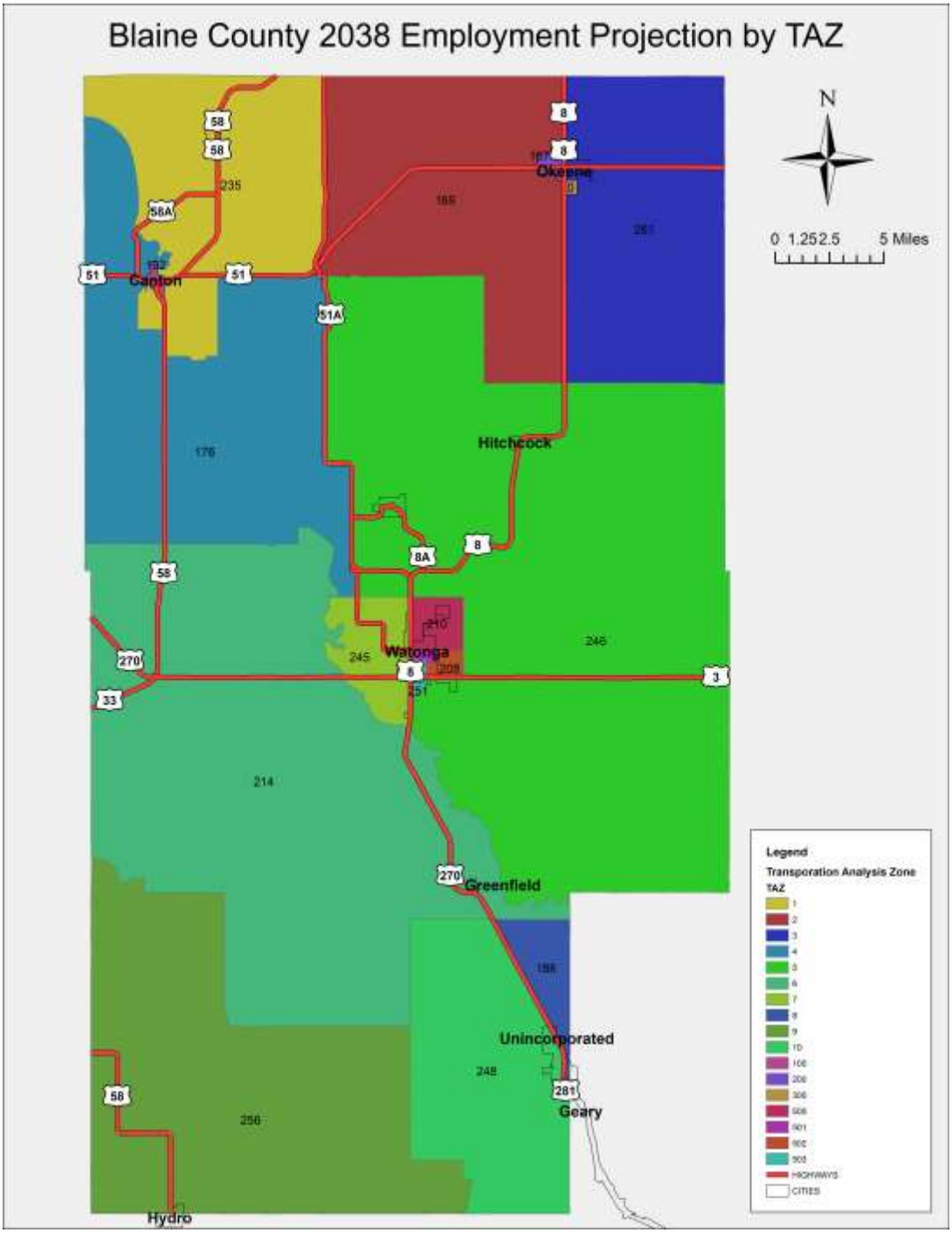
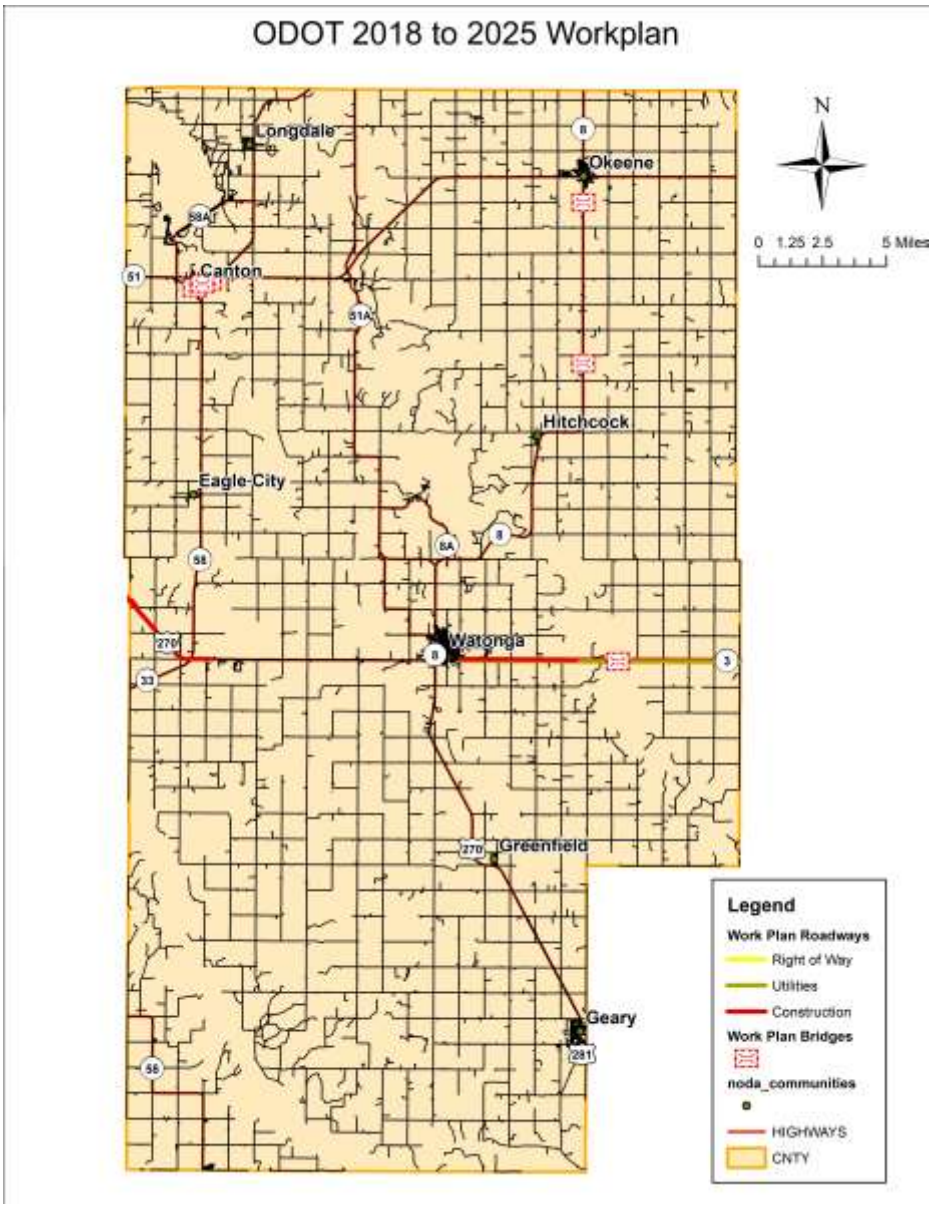


Table G3.1 – Supporting data for projected population and employment

Year	Population	Employment
2016	8,513	3,442
2026	8,598	3,476
2038	8,683	3,511

Map G3.3 – Location of Projects on the ODOT 8-year Construction Program 2018-2025



Source: NORTPO

Table G3.2 – Funded projects from ODOT 8-year Construction Program 2018-2025

LOCATION	PROJECT TYPE	PROJECT YEAR	PROJECT COST
SH-8: Bridge & Approaches over Spring Creek located 1.2 miles south of the SH-51 Jct. .350miles	Bridge & Approaches	FFY2018	$1,688,832.00
SH-3: From 1 mile east of the US-270 Jct in Watonga, east 4.5 miles	Utilities	FFY2018	$245,665.30
SH-3: Begin 5.5 miles east of the US-270 Jct in Watonga & extend east 6.41 miles to the Kingfisher C/L. 6.41 miles	Utilities	FFY2018	$478,928.37
SH-51, over N. Canadian River & Overflow 3.1 & 3.3 miles east of the Dewey C/L. 0.440 miles	Bridge & Approaches	FFY2018	$4,154,420.00
SH-3: Begin 1 mile east of the US-270 Jct in Watonga & extend east 4.5 miles	Widen & Resurface	FFY2019	$6,963,830.00
SH-3: Begin 5 miles east of the US-270 Jct in Watonga & extend east 6.41 miles to the Kingfisher c/l.	Widen & Resurface	FFY2020	$8,298,649.00
SH-8 over Salt Creek, .2 mile south SH-51	Bridge & Approaches	FFY2020	$2,751,240.60
SH-58: Over Minnehaha Creek approx. 7.3 miles south of SH-51	Bridge & Approaches	FFY2020	$1,572,319.20

Table G3.3 – CIRB 5-Year Construction Program 2018-2022

		Fiscal Year	Type	Description	AdvCon$ Federal$ State$	Other$ CIRB$ Tribe$	TOTAL$
BLAINE Div. 5 28706(07)	CO RD 5.50 MI.	FY 2018	UTILITIES	MC 06-52C - FROM SH51 EXTENDING N 3.3 MI THEN WEST 2.0 MILES ON MC 06-60C UT FOR 2870604	$0 $0 $0	$0 $200,000 $0	$200,000
BLAINE Div. 5 30040(04)	COBRGE 0.03 MI.	FY 2018	BRIDGE & APPROACHES	BRIDGE AND APPROACHES CROSSTOWN BEAM BRIDGE OVER TRIB OF SPRING CREEK (N257E064.9) 9.0 MI E & 1.1 MI N OF JCT SH-58/SH-51 IN CANTON	$0 $0 $0	$0 $550,000 $0	$550,000
BLAINE Div. 5 30040(07)	COBRGE 0.03 MI.	FY 2018	UTILITIES	CROSSTOWN BEAM BRIDGE OVER TRIB OF SPRING CREEK (N257E064.9) 9.0 MI E & 1.1 MI N OF JCT SH-58/SH-51 IN CANTON (UT FOR 3004004)	$0 $0 $0	$0 $10,000 $0	$10,000
BLAINE Div. 5 30044(04)	COBRGE 0.23 MI.	FY 2018	BRIDGE & APPROACHES	BRIDGE AND APPROACHES OVER WEAVER CREEK CROSSTOWN BEAMS (N251&E082.8) 6 MI W & 1.8 MI S OF JCT US-270/SH-8 IN WATONGA	$0 $0 $0	$0 $550,000 $0	$550,000

BLAINE Div. 5 30057(04)	CO RD 4.00 MI.	FY 2018	GRADE, DRAIN & SURFACE	EW-72 (0616C) BEG @ KINGFISHER C/L, EXT WEST APPROX 4.0 MILE TO NS-265 (0662C)	$0 $0 $0	$0 $4,000,000 $0	$4,000,000
BLAINE Div. 5 32902(04)	COBRGE 0.50 MI.	FY 2018	BRIDGE & APPROACHES	BRIDGE AND APPROACHES CO BR ON EW-065 OVER SPRING CREEK APPROX. 3.0 MI SOUTH AND 3.5 MI WEST OF SH-51/SH-8 JCT. IN OKEENE	$0 $350,000 $0	$0 $87,500 $0	$437,500
BLAINE Div. 5 28704(07)	CO RD 5.00 MI.	FY 2019	RESURFACE	CO RD. MAJOR COLLECTOR 06-30C AND 06-40C GRADE SURFACE FROM AMERICAN HORSE LAKE RD E. 5 MILES.	$0 $0 $0	$0 $200,000 $0	$200,000
BLAINE Div. 5 31144(05)	COBRGE 0.25 MI.	FY 2019	BRIDGES & APPROACHES CONTRACT P.E. (AS OF 10/1/2013)	BRIDGE AND APPROACHES OVER CHICKEN CREEK LOCATED 6.0 MILES SOUTH OF WATONGA (ENGINEERING)	$0 $0 $0	$0 $45,000 $0	$45,000
BLAINE Div. 5 28706(04)	CO RD 5.50 MI	FY 2020	WIDEN & RESURFACE	MC 06-52C - FROM SH51 EXTENDING N 3.3 MI THEN WEST 2.0 MILES ON MC 06-60C GRADE-DRAIN-SURFACE	$0 $0 $0	$0 $6,000,000 $0	$6,000,000

BLAINE Div. 5 31144(04)	COBRGE 0.25 MI.	FY 2020	BRIDGE & APPROACHES	BRIDGE AND APPROACHES OVER CHICKEN CREEK LOCATED 6.0 MILES SOUTH OF WATONGA	$0 $350,000 $0	$0 $87,500 $0	$437,500
BLAINE Div. 5 32914(05)	COBRGE 0.50 MI.	FY 2020	CONTRACT P.E. (AS OF 10/1/2013)	CO BR ON EW-068 OVER SALT CREEK, APPROX. 6.0 MI SOUTH AND 1.75 MI EAST OF OKEENE (PE FOR 32914(04)	$0 $0 $0	$0 $45,000 $0	$45,000
BLAINE Div. 5 28704(04)	CO RD 5.00 MI.	FY 2021	WIDEN & RESURFACE	CO RD. MAJOR COLLECTOR 06-30C AND 06-40C GRADE SURFACE FROM AMERICAN HORSE LAKE RD E. 5 MILES.	$0 $0 $0	$0 $5,000,000 $0	$5,000,000
BLAINE Div. 5 32914(04)	COBRGE 0.50 MI.	FY 2021	BRIDGE & APPROACHES	CO BR ON EW-068 OVER SALT CREEK, APPROX. 6.0 MI SOUTH AND 1.75 MI EAST OF OKEENE (E068&N264.8)	$0 $350,000 $0	$0 $87,500 $0	$437,500
BLAINE Div. 5 33511(05)	COBRGE 0.00 MI.	FY 2021	CONTRACT P.E. (AS OF 10/1/2013)	CO BR (N268& E080) OVER UNNAMED CR 9.8 MI E OF WATONGA ON EW-80 PRELIMINARY ENGINEERING	$0 $0 $0	$0 $45,000 $0	$45,000
BLAINE Div. 5 33511(04)	COBRGE 0.25 MI.	FY 2022	BRIDGE & APPROACHES	CO BR (N268& E080) OVER UNNAMED CR 9.8 MI E OF WATONGA ON EW-80	$0 $350,000 $0	$0 $350,000 $0	$437,500