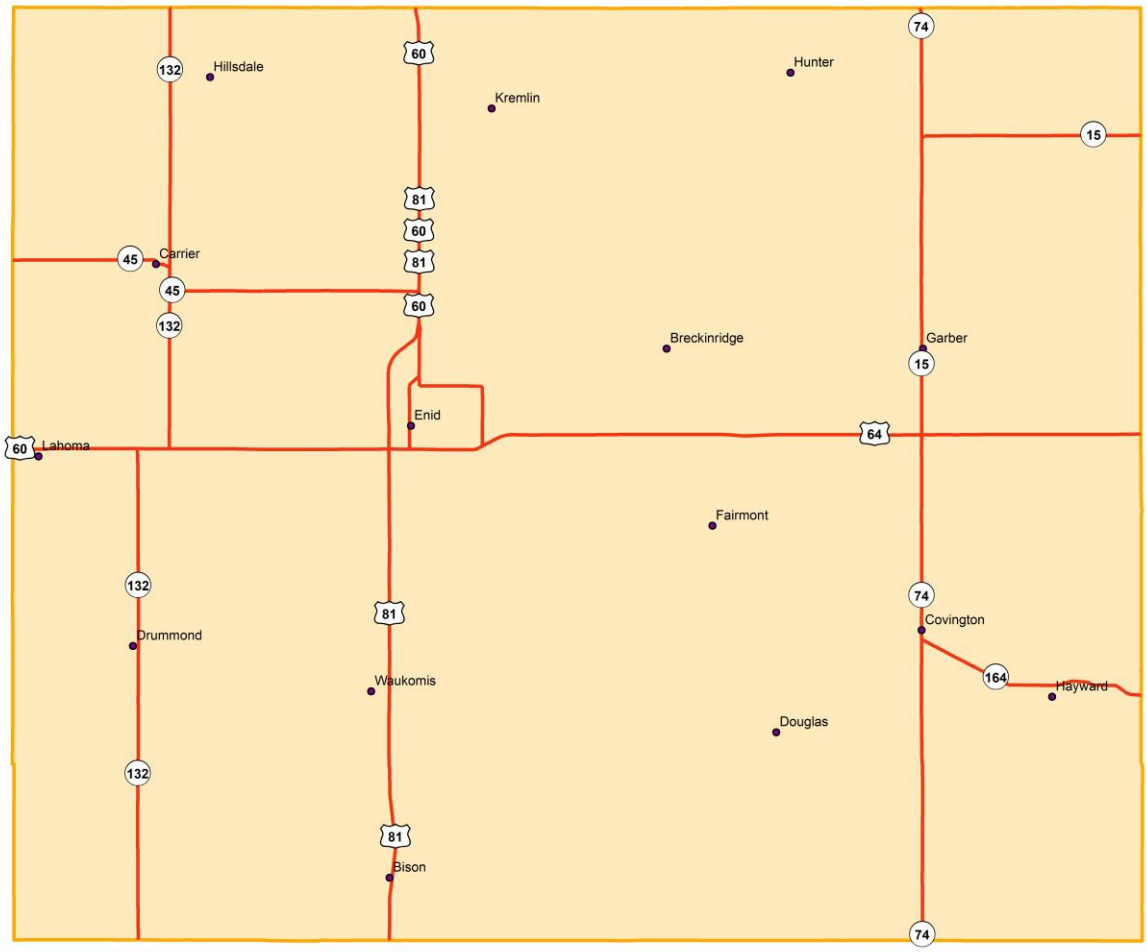
Northern Oklahoma Regional
Transportation Planning Organization

Garfield County Oklahoma
2039 Long Range Transportation Plan

Northern Oklahoma Regional Transportation Planning Organization (NORTPO)



Northern Oklahoma Development Authority

NODA

Northern Oklahoma Regional
Transportation Planning Organization

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In cooperation with:

The County of Garfield

The Cities of Enid & Garber

The Towns of Breckenridge, Carrier, Covington, Douglas, Drummond, Fairmont, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, & Waukomis

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

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Northern Oklahoma Regional
Transportation Planning Organization

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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 Garfield County 2039 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 Garfield County 2039 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 NODA 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 Garfield County 2039 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 26th day of September, 2019.

NORTPO Policy Board Chairman

ATTEST:

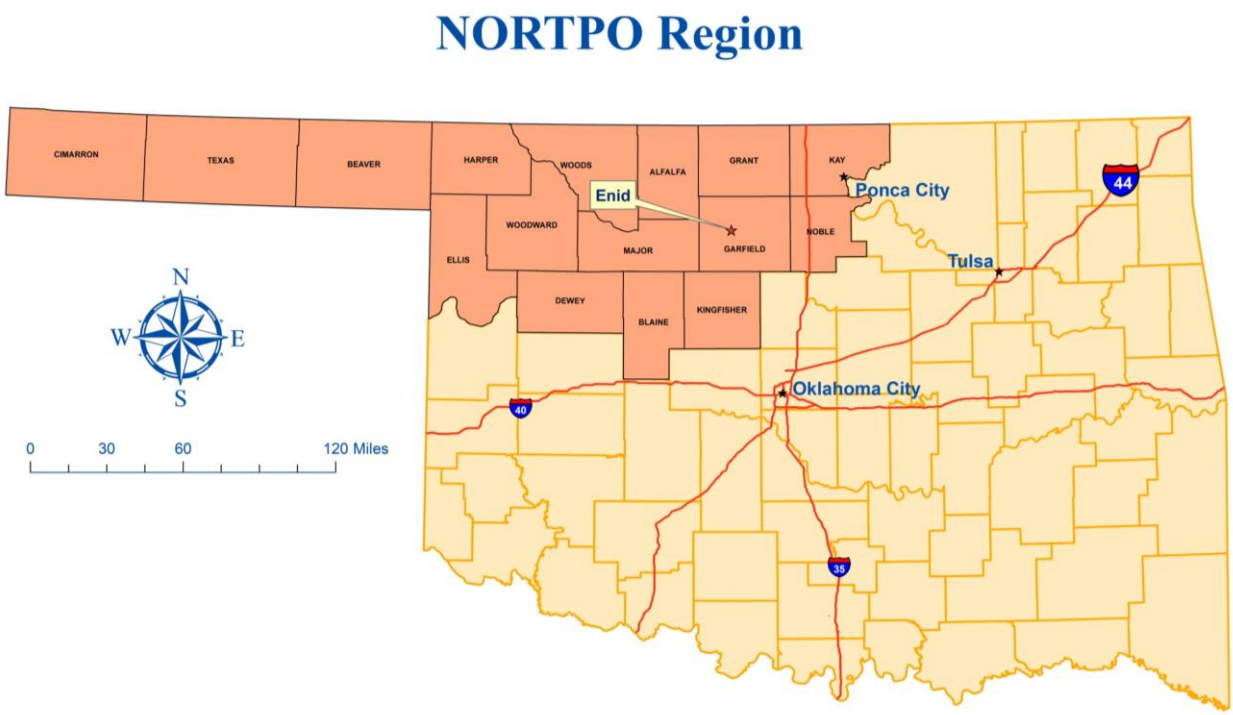
Marci Hyde NORTPO Secretary

EXECUTIVE SUMMARY

The Northern Oklahoma Regional Transportation Planning Organization (NORTPO) developed the Garfield County 2039 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.

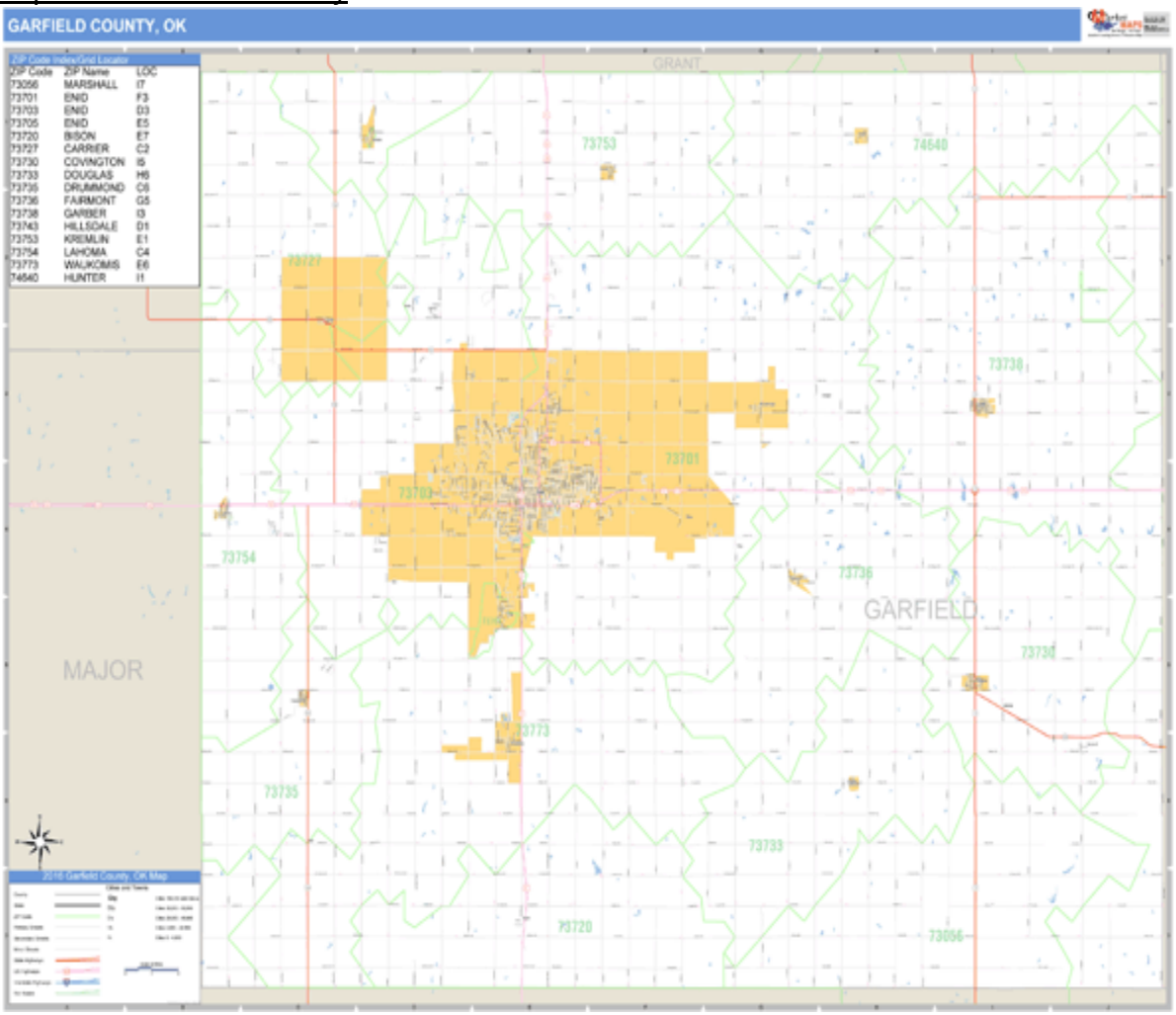
The Garfield County LRTP is part of a pilot project to help determine feasibility and organizational structure of an eventual statewide regional transportation improvement plan. This plan will be a part of the region-wide effort of NORTPO in their continuation of a regional approach to identify and examine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



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 - Garfield County



Garfield County is located in north-central Oklahoma. It is surrounded by Kingfisher and Logan Counties to the South, Major and Alfalfa Counties to the West, Grant County to the North, and Noble County to the East. Garfield County has a total of 1,060 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 developed Regional Transportation Planning Organizations (RTPOs): Northern Oklahoma Regional Transportation Planning Organization (NORTPO), Southwestern Oklahoma Regional Transportation Planning Organization (SORTPO), and Central Oklahoma Regional Transportation Planning Organization (CORTPO). In October 2015 ODOT selected Association of South-Central Oklahoma Governments (ASCOG) and Grand Gateway Economic Development Association (GGEDA) to participate in the transportation planning process. ASCOG joined in with their neighbor SORTPO and GGEDA created GGRTPO. These four RTPOs are working together as part of a state-wide pilot regional transportation planning process.

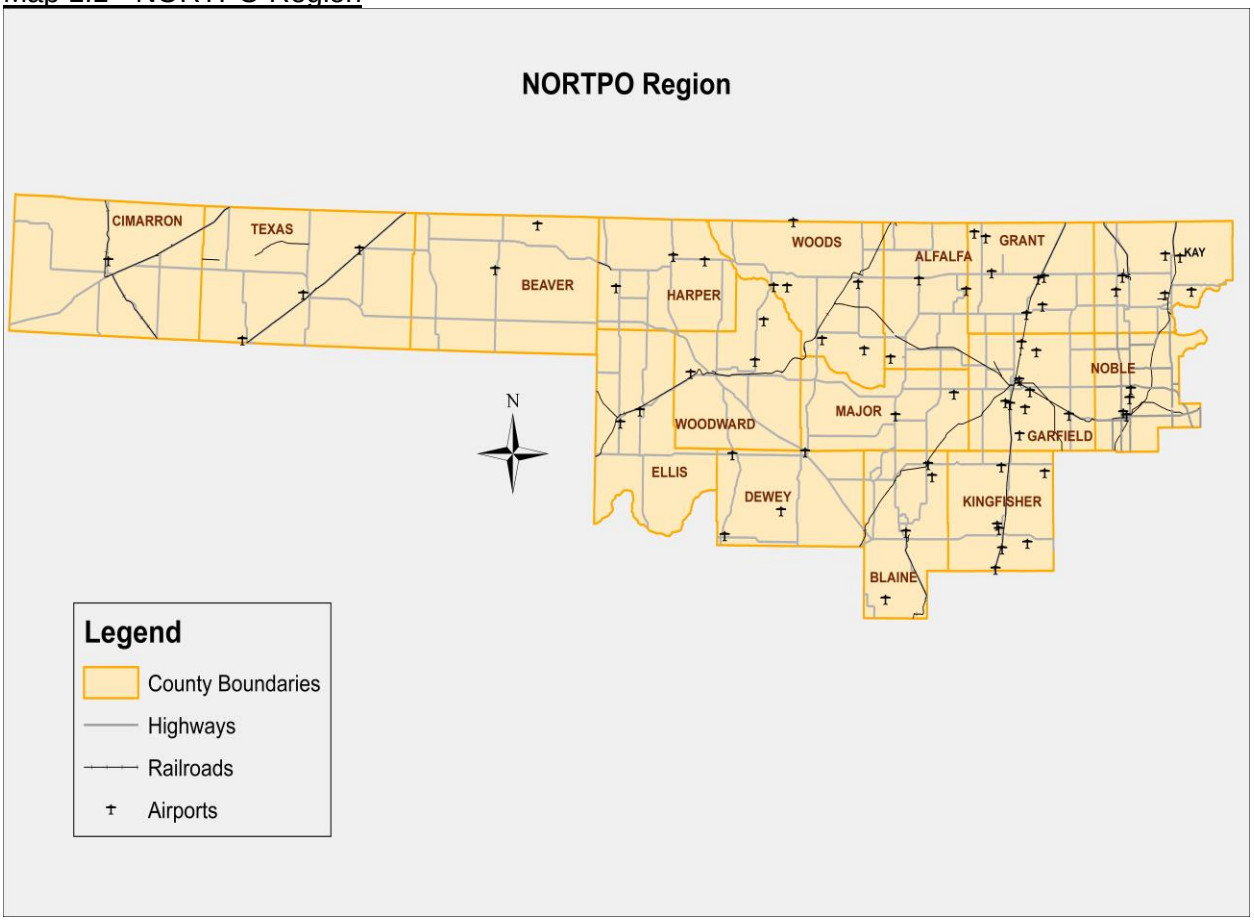
The Northern Oklahoma Development Authority (NODA) on June 16, 2010 created Northern Oklahoma Regional Transportation Planning Organization (NORTPO). In 2017, Oklahoma Economic Development Authority (OEDA) joined NORTPO to grow the region to sixteen counties total, as illustrated in Map 1.1.

NORTPO is tasked with developing a Long-Range Transportation Plan (LRTP) for Garfield 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 is an issue. It became evident in the early stages of development that the region would need to be assessed, various data collected, and long-range plans created for several counties with the culmination of a regional planning document encompassing the original eight counties within five years, and all 16 counties within eight 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 and from work and to conduct their personal lives.

Transportation systems must also provide for the efficient movement of goods to markets to support the county's economic vitality. Additionally, transportation decisions should carefully consider and reflect environmental and community concerns.

Map 1.1 - NORTPO 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, bicycle and pedestrian facilities, and priority sets. The process allows the community to focus their attention on transportation in the context of Garfield 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 NORTPO Technical Committee. This committee reviews transportation planning work efforts and provides a recommendation to the 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 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 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 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 *Garfield County 2039 Long Range Transportation Plan (LRTP)* is a document that can be utilized by Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Garfield County, and residents as a guide to maintain and improve the county's transportation system through 2039. 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 2039 was chosen as the planning horizon year for the LRTP for the following reasons:

- The year 2039 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 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 Garfield County.

Residents and elected officials representing Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, and Garfield County Commissioners as well as regional stakeholders, were contacted to compile and prioritize a county-wide list of transportation projects. Projects were also taken from County Improvements for Roads and Bridges (CIRB) program and ODOT (Table 6.1, Chapter 6).

Relationships and Requirements with State and Federal Agencies

The LRTP was developed in cooperation and collaboration with local (cities, towns, county) 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, the LRTP provides for consideration and implementation of projects, strategies, and services that address the eight planning factors identified in 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's 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 LRTP 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 communities 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. 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 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).

Table 1.1 identifies and describes goals for the 2039 Garfield County Transportation Plan.

Table 1.1: Garfield 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 concentration centers.
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 serving 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, bike and pedestrian facilities, 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 regional 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 meetings, public surveys, technical committee meetings and policy board meetings. The following information is intended to identify issues, trends and challenges in Garfield County.

Key issues

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

- Maintenance and preservation of the existing transportation system
- Road flooding/drainage
- Safety/Lack of proper signage 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 Garfield County include:

- Lack of significant financial resources necessary to maintain the existing transportation 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 Garfield 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.

Covering northwest and north central Oklahoma, NORTPO region is predominately rural with the majority of the population located within the incorporated cities of Enid population of 50,809), Ponca City, (24,579), Woodward (12,687) and Guymon (11,859) from the 2013-2017 American Community Survey (ACS) estimates. Table 2.1 provides population data for NORTPO counties.

Population fluctuation through economic changes, in or out migration, or shifting within the region include but are not limited to loss or gain of major employer, movement of younger sectors of population to larger urban areas, and tribal land development. With population fluctuation rural areas also experience impacts to education, health care, social services, employment, and transportation.

Each county in the region, although a separate entity as far as governmental services, is 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. Garfield County's deviations in population and employment pattern are attributed to the 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 2.2 illustrates Garfield County's growth from 1980 to 2017. Historically, Garfield County's economy was agriculture and livestock. Additional prominent industries include oil and gas, manufacturing and Vance Air Force Base.

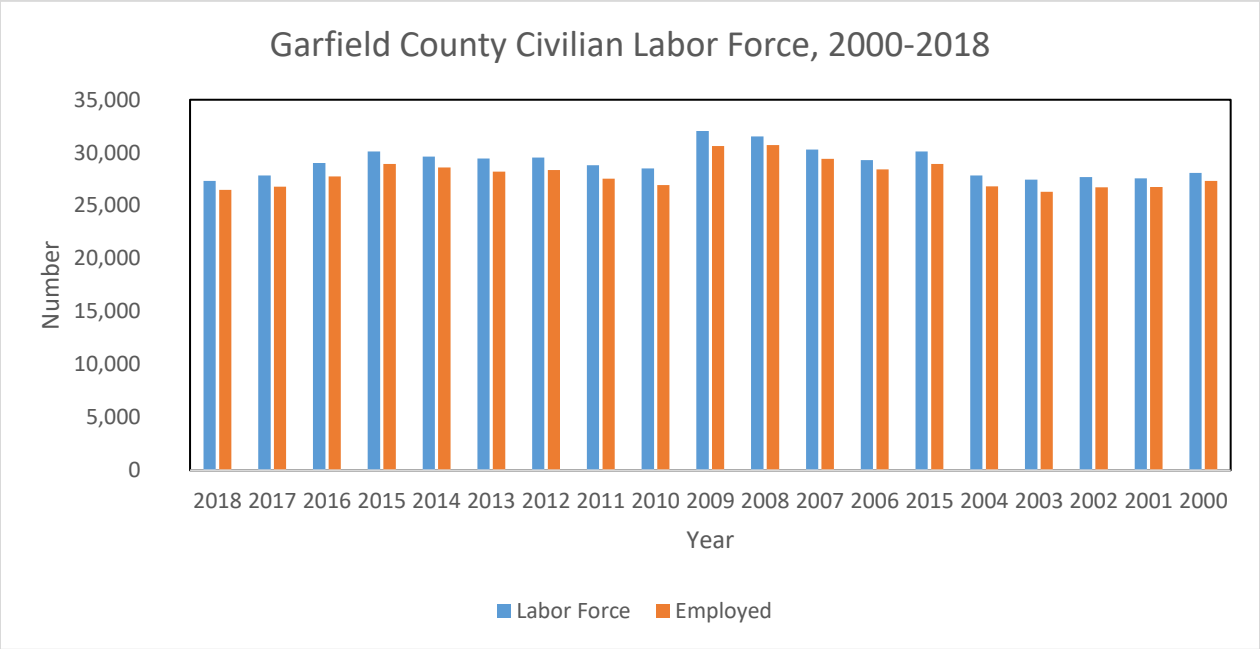
According to 2013-17 ACS population census estimates, Garfield County has an estimated total population of 62,421. The County encompasses 1,060 square miles and include fourteen (14) cities and towns. Enid is the county seat, home to Vance Air Force Base, and is the largest city in Garfield County with a population of 50,809 (2013-17 ACS). Waukomis is the second largest with a population of 1,526 and North Enid comes in third with a population estimate of 920 (2013-17). The remaining towns have a population ranging from 123 to 819.

The County population is distributed 49.5% male and 50.5% female with a median age of 35.7 (2013-17 ACS). Garfield County's 65 years and older population represents 15.2% (2013-17 ACS) of the total population. Transportation is crucial to keeping older adults independent, healthy and connected to friends, family, and health providers. However, older residents' transportation

needs differ based on their health, income, marital status, age, race, and whether they live in a city, town, or rural 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 (OESC) the Local Area Unemployment Statistic (LAUS) data indicates the number of people employed ranged from 27,326 in 2000 to 26,498 in 2018 a decline of 828; while total labor force during the same time period ranged from 28,105 to 26,498.

Figure 2.1 Civilian labor force from 2000-2018.



Source: Bureau of Labor Statistics, LAUS

Table 2.3 summarizes vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Automobile and farm truck registration continues to show a decline between 2014 and 2018. The data in this table confirms that the primary vehicle is the automobile. Data obtained from the 2013-17 ACS reveals that 45.6% of workers 16 years on over in households had access to two or more vehicles; while 1.3% of the workers 16 years and over in households did not have access to a vehicle. Commute patterns to work for workers 16 years and older according the 2013-17 ACS identify that 84.5% of them drove alone, 9.3% carpooled, and 2.8% work from home. Mean travel time was estimated 16.6 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 (https://www.urban.org/urban-wire/what-defines-city).

As rural transportation planning continues to mature the delineation of TAZ will allow acquisition of data that supports the transportation planning process. NORTPO developed TAZ maps and data for the areas of Garfield County. NORTPO staff developed TAZ boundaries based on county population as identified below:

- Small populated counties (population < 6,000)
  Population thresholds of 200 to 400 and employment thresholds of 200-300
- Medium populated counties (population 6,001-34,999)
  Population thresholds of 400 to 600 and employment thresholds of 300-400
- Large populated counties (population > 35,000)
  Population thresholds of 600-800 and employment thresholds of 400-500

Geographically, Garfield County is subdivided into 71 traffic analysis zones. Maps 2.1-2.5 illustrate the TAZs for Garfield County and cities meeting the population and employment threshold listed above. Maps 2.6-2.10 illustrate the population by TAZ and maps 2.12-2.16 illustrate employment by TAZ. Table 2.4 shows the population by TAZ and major employer data is shown in Table 2.5. Major employers by TAZ can be found in Map 2.11. While the population has not changed significantly over the past twenty years, it has continued to increase.

Physical Development Constraints, Development Conditions and Patterns

There are several factors that constrain development in Garfield County. These include but are not limited to, land ownership of large tracts of land, military installation, wind generator fields, existing development, and environmental features that affect the growth of Garfield 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 Garfield County.

Figure 2.2 depicts the location of the highways, waterbodies, rivers, airports and railroad. The primary east/west corridor is US Highway 412 and the primary north/south highway is US Highway 81. Two Class I rail companies (Burlington Northern Santa Fe [BNSF] and Union Pacific, [UP]) provide service in the county. One Class III rail line, Grainbelt (GNBC), provides service in the county. There is one public airport located in Garfield County, Enid Woodring Regional Airport. Figure 2.13 identifies public owned airports in Garfield County.

Garfield 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 2039 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
- Historical/cultural resources

- Right-of-way/property impacts, including impacts to parks, farmland and neighborhoods
- Traffic and train noise

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

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

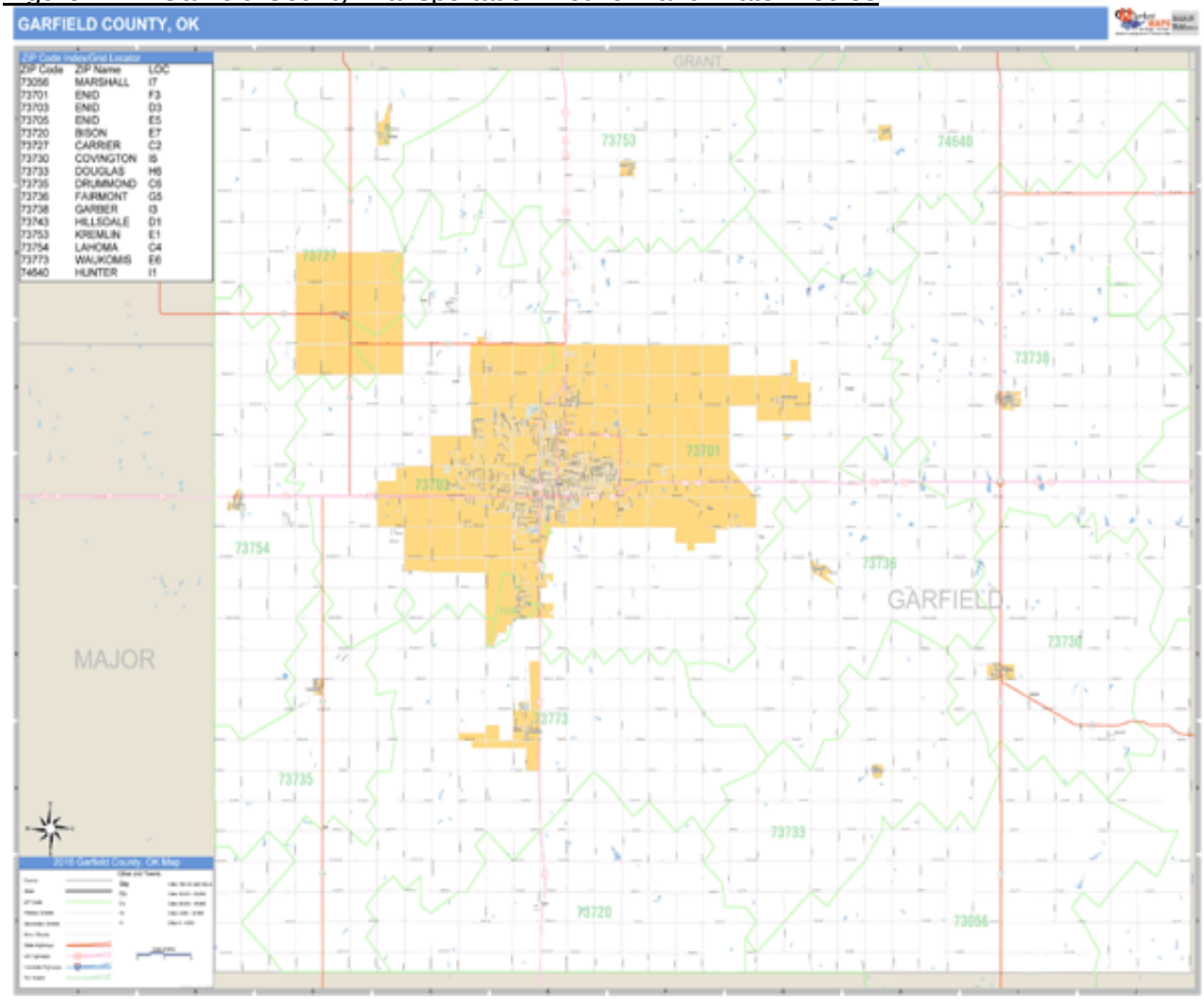
The environmental features and constraints in this section were identified and mapped using secondary source information that included mapping, publications, and correspondence from the following: United States Environmental Protection Agency (USEPA), Oklahoma Geological Survey, Oklahoma Department of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

Bodies of water in Garfield County, including creeks and 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. Figure 2.2 illustrates the location of Garfield County Waterbodies.

Garfield County Floodplains

Floodplains have been mapped for Garfield County and were last updated in 2012. 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.

Figure 2.2 – Garfield County Transportation Network and Water Bodies



Earthquakes

Earthquakes have become a reoccurring issue in Garfield County. Due to this issue, ODOT in 2014 changed the protocol to require bridge inspections after every 4.4 to 4.7 magnitude event within a 5-mile radius of the epicenter. A computer software analytical and mapping modeling program “ShakeCast” created by the USGS was adopted by ODOT in 2017. This program generates information after an earthquake on the bridges that should be inspected (https://news.transportation.org/Pages/081115quakin.aspx).

Historic Places

The National Register of Historic Places (NRHP) is a list of properties determined significant in American history, architecture, archeology, 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 archeological resources, to ensure their protection, either preservation, or minimization and mitigation of impact. Such Garfield

County properties are listed in Table 2.5. For additional information visit the website noted here: https://nationalregisterofhistoricplaces.com/OK/garfield/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 Garfield 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. A monitoring site installed by The Oklahoma Department of Environmental Quality (ODEQ) for - sulfur dioxide (SO_2) is located in the town of Kremlin.

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. Located in Garfield County is the Chisholm View Wind Project (140 turbines), Breckinridge Wind Project (58 turbines) and the Skeleton Creek Farm to be operational by the end of 2019.

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 Garfield County is agricultural, manufacturing, military installation, commercial and residential uses.

Historical trends show fluctuations in the population between 1980 and 2017 (Table 2.1). The population growth is stable in the cities/towns of Enid, Covington, Drummond, Garber, Lahoma, North Enid and Waukomis. The trend of population declining in rural areas is evident with the data available. Government leadership (local, county, state, and tribal) must consider the impact of declining population and its long-term impact on 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. Changes that impact the transportation system in Garfield 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. A map depicting major employers by TAZ is found in Map 2.11.

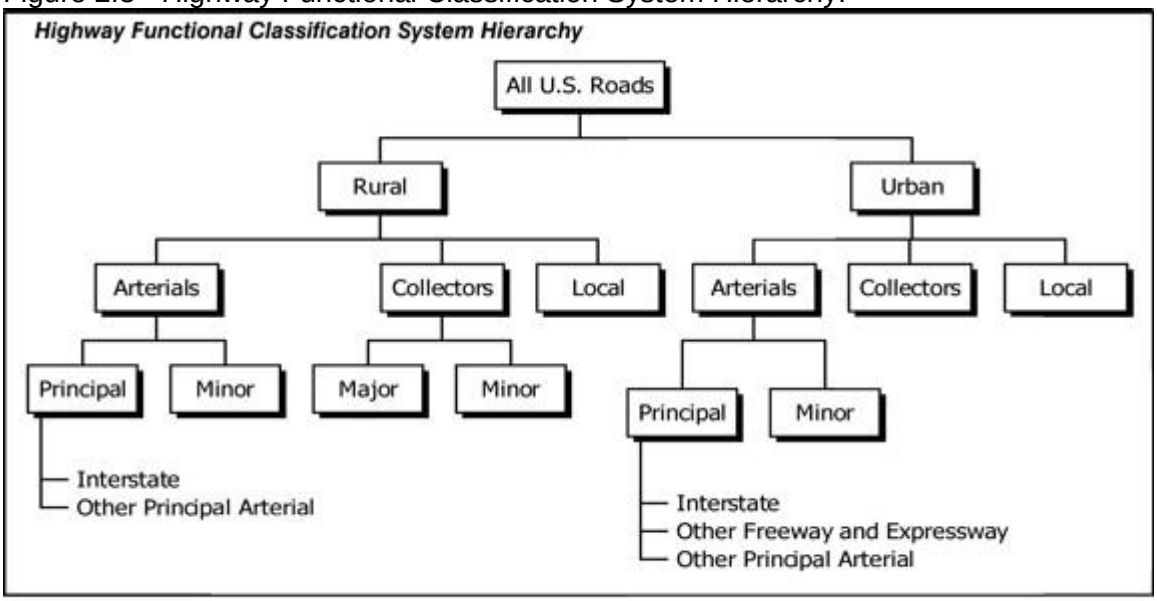
Streets and roads considered to be most important in the development of a LRTP are shown in Figure 2.2. This includes the US and state highways and those county roads considered to be critical to overall mobility in Garfield County. The majority of the roads in the county are two-lane undivided roads.

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 2.17 illustrates Garfield County's Functional Classification system.

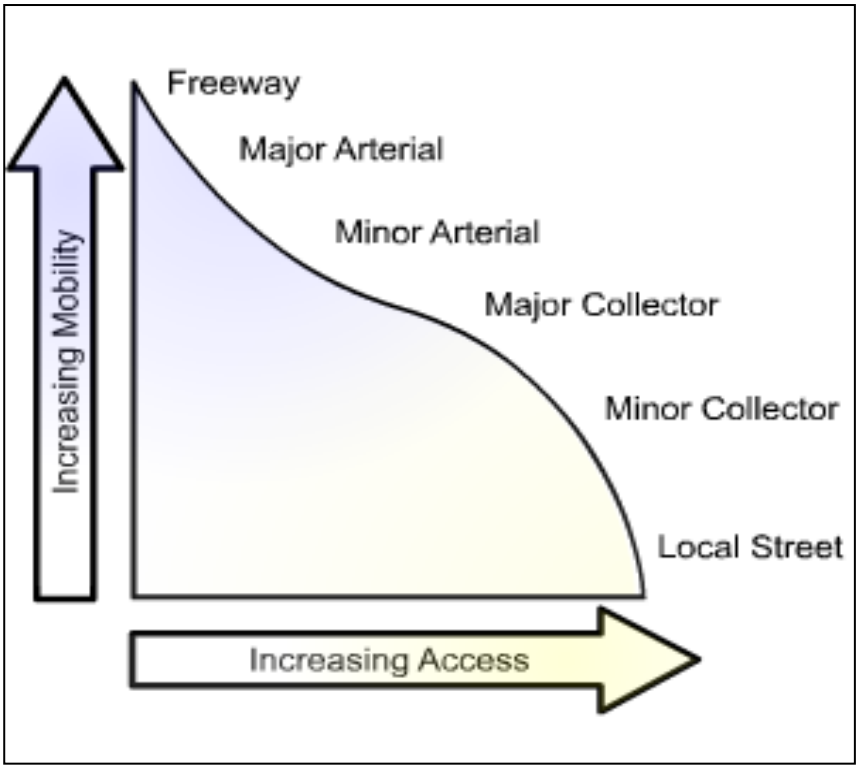
An efficient transportation system includes a proper balance between movement of traffic and access to abutting land. The majority of the roads in Garfield County are designated as rural. The Functional Classification Hierarchy Charts in Figure 2.3, Figure 2.4, and Figure 2.5 illustrates the relationship between functional classification and travel characteristics.

Figure 2.3 - Highway Functional Classification System Hierarchy.



Source: FHWA Functional Classification Guidelines.

Figure 2.4 - Conceptual Roadway Functional Hierarchy



Source: FHWA

Figure 2.5 - 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

Source: FHWA

Traffic counts collected by ODOT for 2018 year are illustrated in Map 2.18. Data collected can be as specific as type of vehicle and direction traveled, or just how many vehicles traveled the roadway. Also called annual average daily traffic (AADT) counts, this data reveals that the largest volume of traffic is concentrated within the Enid limits. This concentration is near the intersection of SH 64 and US 81.

- SH 64 – east of the intersection of SH 64 and US 81 (22,000 – 23,500 AADT)
- SH 64 – west of the intersection of US 81 (21,700 – 23,300 AADT)
- US 81 – north of SH 64 (17,800 – 19,100 AADT)
- US 81 – south of SH 64 (15,800 – 16,600)

A counter for truck traffic was located approximately 5 miles north of Enid on US 81, and 2018 data reveals 4,151 trucks. Garfield County does not have designated high-volume truck corridors. However, regionally significant truck corridors in the county include: US 81, US 412, and SH 74 as illustrated on Map 2.25.

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's member jurisdictions in transportation and emergency services are regular participants in security planning and preparation activities, including the update of the Garfield County Multi-Jurisdiction Hazard Mitigation Plan. Ongoing participation in these planning activities helps prepare for and better manage transportation security situations.

The FAST Act requires all states to prepare and annually evaluate their Strategic Highway Safety Plan (SHSP), 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 2013-2018 which is the most completed and up-to-date data.

There were 8,703 collisions between 2013-2018 involving 2,904 people and 34 fatality collisions resulting in 37 fatalities in Garfield County. This averages to 1,740.6 collisions per year during this timeframe. Map 2.19 illustrates the collision locations between the years of 2013-2018 and corresponding data. The majority of collisions (26.5%) were rear-end, other (16.1%), angle turning (16.1%) and right angle (13.6%).

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. Figure 2.6 identifies the top 15 collision locations with the highest severity index for the Enid area and Figure 2.7 identifies the top 10 collision locations for the rural areas of Garfield County.

Figure 2.6 – Garfield County Collison Severity Index, 2013-2018

CITY	HWY	INTERSECTION RELATED/TERM-LOCATION	CITY STREET NAME	CITY STREET NAME	SEVERITY INDEX	NUM COLLS.	RANK
ENID	US-60	INTER	OWEN K. GARRIOTT	OAKWOOD RD.	193	154	1
ENID	US-60	INTER	OWEN K. GARRIOTT	VAN BUREN ST./US-81	183	151	2
ENID	US-60	INTER	OWEN K. GARRIOTT	CLEVELAND ST.	125	96	3
ENID	US-60	INTER	VAN BUREN ST.	WILLOW AVE.	120	85	4
ENID	US-60	INTER	OWEN K. GARRIOTT	GARLAND RD.	105	82	5
ENID	US-60	INTER	VAN BUREN ST.	BROADWAY	83	58	6
ENID		INTER			76	74	7
ENID	US-60	INTER	OWEN K. GARRIOTT	OVERLAND TRAIL	75	48	8
ENID	US-60	INTER	VAN BUREN ST.	RANDOLPH-JAMES	71	51	9
ENID	US-412	INTER	OWEN K. GARRIOTT	GRAND ST.	67	45	10
ENID		INTER	10 ST.	BROADWAY	67	42	11
ENID		INTER	CLEVELAND ST.	CHESTNUT AVE.	66	51	12
ENID	US-60	INTER	OWEN K. GARRIOTT	JOHNSON ST.	60	44	13
ENID		INTER	CLEVELAND ST.	OKLAHOMA AVE.	60	37	14
ENID	US-60	INTER	OWEN K. GARRIOTT	HOOVER ST.	59	45	15

(Source: ODOT)

Figure 2.7 - Garfield County (excluding Enid) Collison Severity Index, 2013-2018

HWY	CITY STREET NAME	HWY	SEVERITY INDEX	NUM COLLS	RANK
			21	8	66
			21	8	66
US-64	ATSF RR #11717R		18	7	79
SH-15	US-64 OP*3*	US-64	16	8	95
US-60	KEOWEE/EW 32(54)		15	8	104
US-60	SH-132 SOUTH	SH-132	11	9	136
US-60	N. MICHAEL RD.	SH-132	11	6	144
			9	3	182
			8	5	207
US-64			8	3	218

(Source: ODOT)

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:

- RR crossing at US 412 and Grand Ave and N. 30th
- US 412/US 81 the only 2 main thoroughfares for a community to grow transportation must accommodate it
- Garriott during rush hour times. Willow during a.m. traffic.
- South side of Covington flooding
- Congestion on W. Randolph
- Van Buren needs pedestrian access for DHS, health department, medical and business services
- Railroads, Southgate, Van Buren by Walgreens
- Walgreens & Integris Hospital ER and no left Turn from Van Buren to go to Walgreens and had to jog in ER entrance to go to Walgreens
- Hayward/US 81 very dangerous due to Dollar General traffic merging onto US 81 in Waukomis
- County dirt roads
- Hwy 81 and Chestnut
- Terrible roads and bridges
- Highway 81 multiple safety concerns that need immediate attention
- North Hwy 81 from hwy 45 north to Grant County holds water, uneven, poor patch work, congestion at 81 and Koonce

- Southgate from 114th west to Van Buren
- Roads blocked by trains stopped on railroad tracks at intersections
- Van Buren and Garriott Intersection

- Rural roads outside city limits
- 30th St. needs improved for heavy truck traffic. Randolph St needs houses removed between different traffic directions
- US 81 through Enid
- Railroad crossing on Willow
- Potholes on roads
- Separated right turn lanes
- E. Oak from 2nd to 3rd; 3rd St north to Wabash and E. Randolph from downtown to Johnson
- 100 N. 8th bad roads; 9th & Pine intersection

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 12,254 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 4,390 miles of Oklahoma highways are two-lane facilities without paved shoulders Map 2.20 illustrates the location of two-lane highways with no paved shoulders.

Map 2.21 illustrates the Steep Hill/Sharp Curves areas of concern (statewide). Garfield County transportation system has approximately 1,433 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 2018 reveals about 30% or approximately 3,646 of the state's 12,254 miles of highway rate as poor which includes 3,126 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 no toll interstate account for only 5.5% on the centerline miles of our state system, it carries 33.6% of daily miles travelled.

Garfield County is served by five state highways and four US highways, as well as municipally owned streets and county roads. Highways in Garfield County include:

- US Highway 60
- US Highway 64
- US Highway 81
- US Highway 412
- SH 15
- SH 45
- SH 74
- SH 132
- SH 164

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 their corporate limits excluding the Interstate system, US and state highways which are maintained by ODOT. The county maintains the other 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 a range of Poor, Fair, Good, and Excellent. Bridges can also be 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.

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.

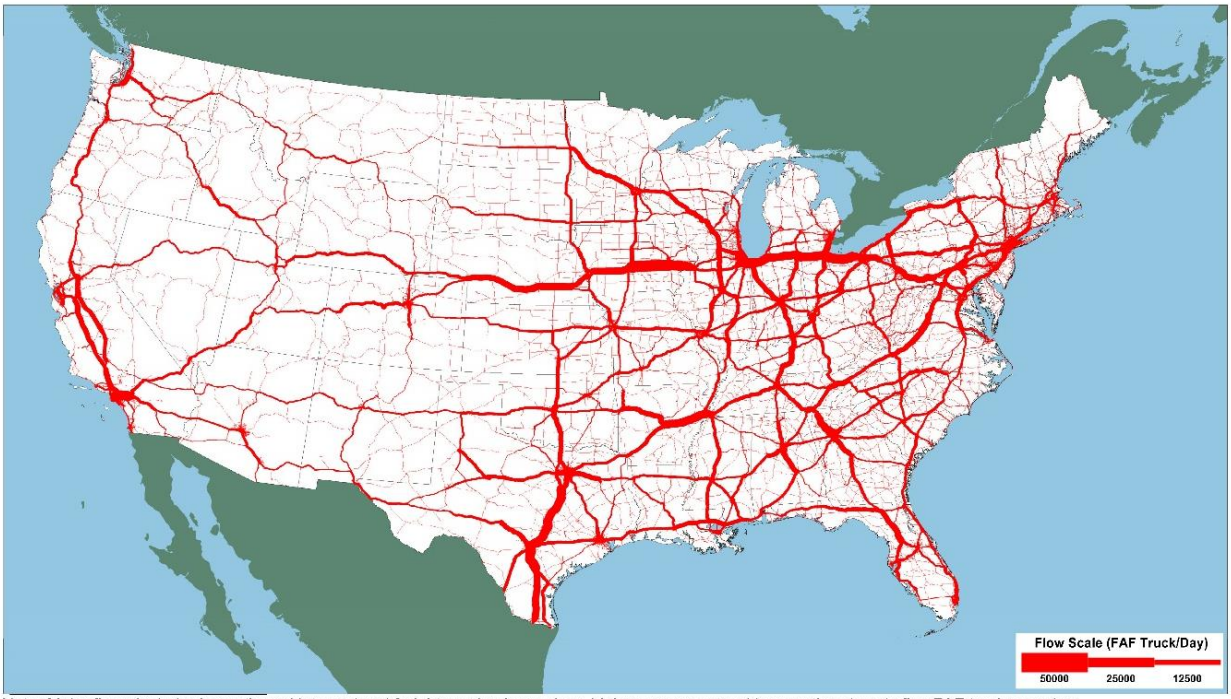
There are 539 bridges in Garfield County. Map 2.22 illustrates the bridges located in the City of Enid and Map 2.23 illustrates the location of on system and off system bridges. Tables 2.7 and 2.8 lists the on system and off system bridges by location and identifies structurally deficient and functionally obsolete. According to data received from ODOT, there are numerous deficient

bridges, not only in Oklahoma but Garfield County, as well. In the last few years repair and/or replacement of deficient bridges has been a priority of ODOT.

Freight

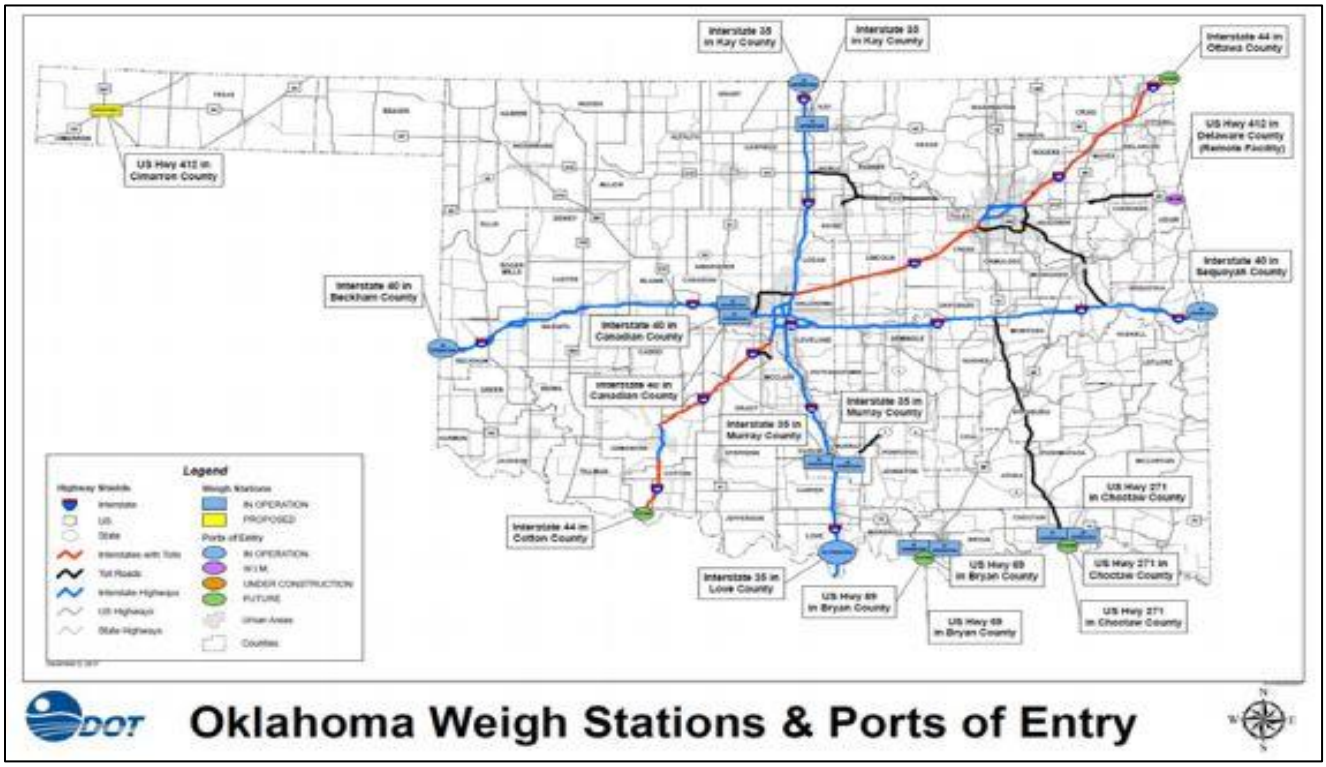
The FAST Act repealed both the Primary Freight Network (PFN) and Nation Freight Network and directed the FHWA Administrator to establish a National Highway Freight Network (NHFN). The FAST Act included the Interstate System – including Interstate facilities not located on the Primary Highway Freight System (PHFS) in the NHFN (Map 2.24). While Garfield County does not include roads identified in the NHFN, the NORTPO Policy Board recognizes that US 81, US 412 and SH 74 are major highways. Connectors are SH 15, SH 45, SH 152, SH 164, Carrier Rd., Oakwood Rd., Keowee Rd., Breckinridge Rd., 114th St., Wood Rd., Flynn Rd., and 66th St. Significant statewide and regional highway freight corridors include: US 81, US 412 and SH 132 are Garfield County Freight Corridors that were recommended by the NORTPO Technical Committee are located on Map 2.25. The majority of freight movement in the region is by truck and rail. Figure 2.8 shows the average daily long-haul traffic on the National Highway System (NHS) for 2015. 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 allows better enforcement of vehicle and freight laws. Figure 2.9 illustrates existing and proposed ports of entry.

Figure 2.8 - Average Daily Long-Haul Traffic, 2015



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.

Figure 2.9 Existing and Proposed Ports of Entry



Rail

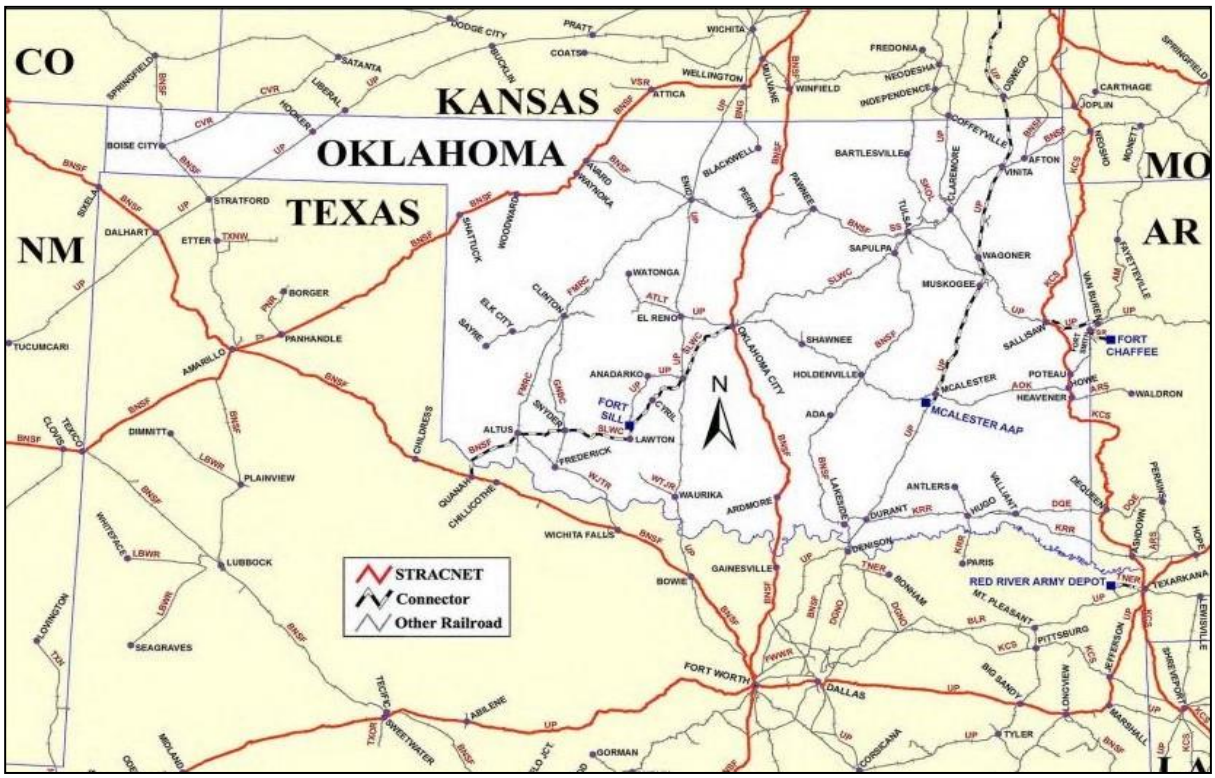
Freight traffic continues to be the main source of railroad activity in the state. An estimated 287.5 million tons of freight flows through the state on rail lines each year with many rail lines carrying 50 to 100 trains a day. Rail freight traffic will experience significant growth over the next few 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)*

The State of Oklahoma owns approximately 213 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.

There are three Class I railroads and 19 Class III railroads in Oklahoma. Grainbelt Corporation (GNBC) is a Class III railroad operating in Garfield 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 NORTPO 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 2.10), a function of the Railroads for National Defense Program. STRACNET consists of 38,800 miles of rail lines that connects all major Army installations, depots and ports of embarkation. Both Fort Sill and the McAlester Army Ammunition Depot are actively connected to STRACNET, while Vance Air Force Base, Altus Air Force Base (Jackson County), and Tinker Air Force Base (Oklahoma County) have the capability to reconnect to STRACNET "connector lines" through other railroad lines.

Figure 2.10 - STRACNET

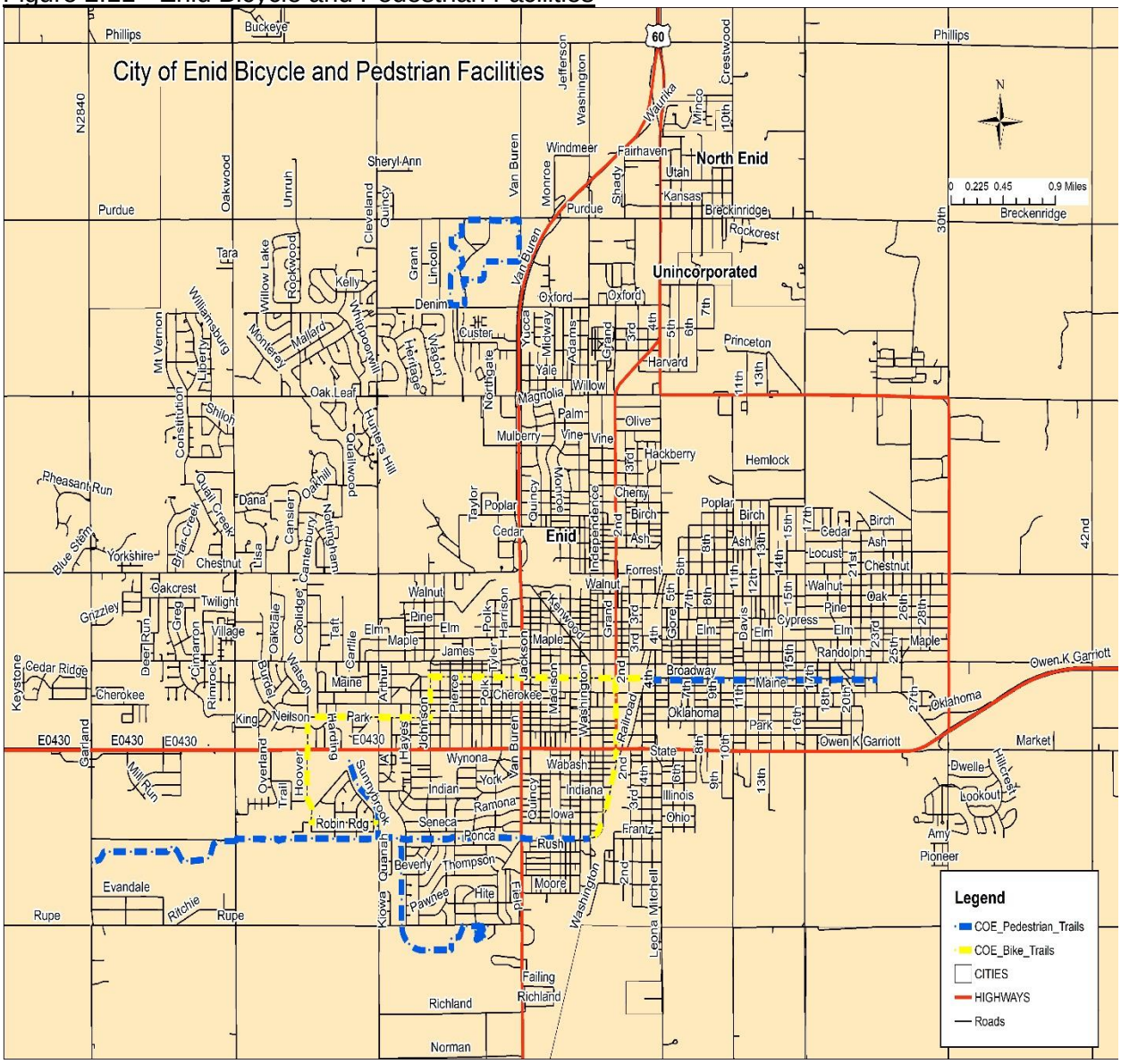


Source:https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistant/RND%20Publications/STRACNET%202018_Reduced.pdf

Bicycle and Pedestrian Network

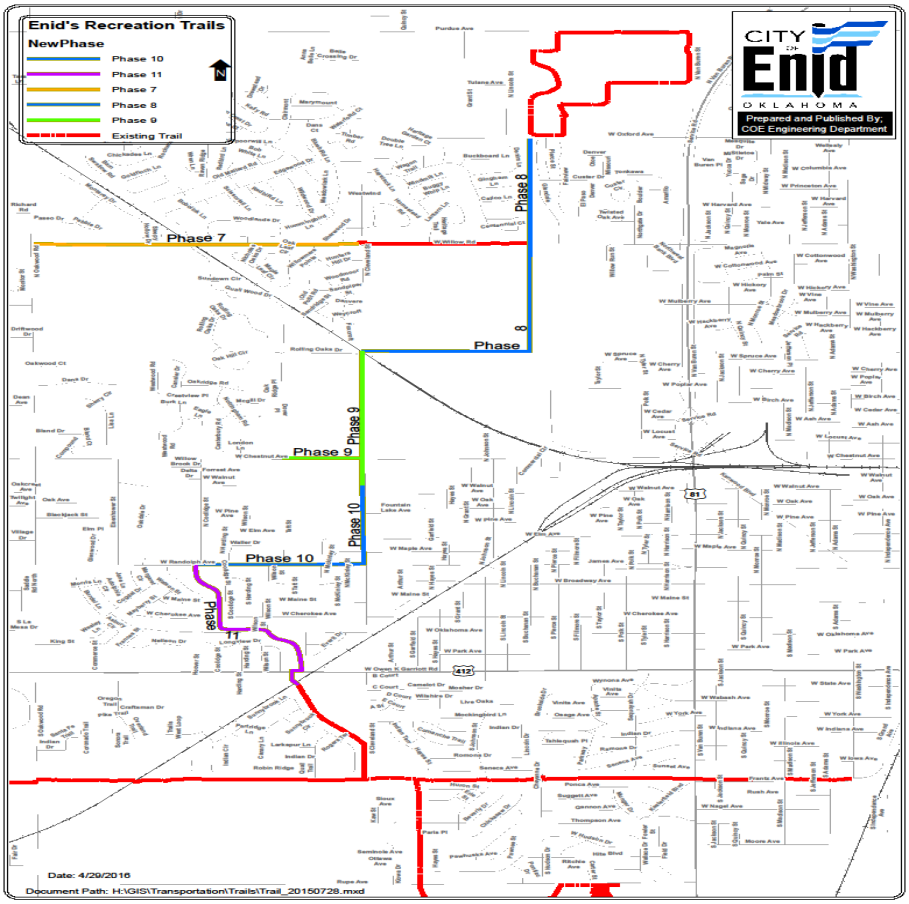
Pedestrian travel requires a network of sidewalks without gaps and with accommodations for people with disabilities as defined by the Americans with Disabilities Act (ADA). There are instances, particularly in rural areas, where a wide shoulder on a highway is an acceptable substitute for a sidewalk. Safe pedestrian travel also requires protected crossings of busy streets with marked crosswalks and pedestrian signals and appropriate pedestrian phases at signalized intersections. Garfield County's rural nature has limited the available investment in a bicycle and pedestrian network outside of the City of Enid. Figure 2.11 illustrates the City of Enid's bicycle and pedestrian facilities.

Figure 2.11 - Enid Bicycle and Pedestrian Facilities



One opportunity to develop and implement bicycle and pedestrian facilities is the Transportation Alternative Programs (TAP), administered by ODOT. In FFY 2019, projects awarded in NORTPO region included Kaw City was awarded TAP funding to install new sidewalks and walking trails connecting the Kaw City Community Center, the Kaw City Museum, the Senior Citizens Building, the city park and the post office. Potential future TAP projects include the City of Enid's recreational trails identified in Figure 2.12.

Figure 2.12 – Potential TAP Projects



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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.

Transit services available in the county are limited to on demand van service provided by:

- Enid Public Transit– curb to curb system providing service to Enid and surrounding areas.
- MAGB Transportation Inc. – call-on-demand response system serving all of northwest Oklahoma through demand van service. Table 2.9 shows ridership and revenue data.
- Cherokee Strip Transit (CTS) – originally known as Garber Elderly Transportation Systems (GETS), merged and expanded to include most of north central Oklahoma. Their main office remains in Garber, (Garfield County), but also has offices in Perry (Noble County), Tonkawa (Kay County), Watonga (Blaine County), and Kingfisher (Kingfisher County). Services are call-on-demand van or car services. Table 2.10 shows ridership and revenue data.

Aviation

NORTPO area consists of more than 25 general aviation airports (Figure 2.13) 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.

Figure 2.13 - 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 Garfield County for the year 2039. It is assumed that only those projects included in the current ODOT eight-year construction plan, CIRB, Asset Preservation and projects funded by local governments will be constructed by the year 2039. Tables and maps referred to in this plan are included in Appendix G-3.

Future Conditions

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. The population and employment projections for Garfield County were produced at the TAZ level for 2039. The projected population and employment data are illustrated in Maps 3.1-3.10. Table 3.1 contains supporting data for the maps. Compared to 2010, population and employment is projected to remain consistent with the 2013 - 2017 ACS estimated population of 61,581 and Oklahoma Employment Security Commission's LAUS employment data of 28,395 through 2039. *(Source: NORTPO)*

The need for safety and intersection improvements in Garfield 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. 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.

2039 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 Appendices Tables 3.2-3.4 were obtained from the ODOT 8-Year Construction Program 2018-2025, County Improvements for Roads & Bridges Program (CIRB) Plan FFY2019-FFY2023, and Asset Preservation Program FFY2019-FFY2022. Map 3.11 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. After contacting the individual towns and cities in Garfield County, the following are a list of projects that are planned, only the City of Enid's Comprehensive Plan identified potential projects.

CHAPTER 4

FINANCIAL SUMMARY

Financial Assessment

The assessment is intended to summarize federal, state, and local transportation sources.

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. Oklahoma's state budget shortfalls since 2010 continues to have a negative impact on the transportation system. In FY 2017 there was a $367 million reduction in transportation funding. During FY 2018 $156.6 million was transferred from the State Transportation fund which led to a reduction and removal of projects under the 8 Year Construction Work Program. Funding ($50 million) was also reduced from the county road and bridge improvement fund administered by ODOT.

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. CIRB funding was depleted by $230 million over 3 years. In 2019, $30 million was paid back to the CIRB program by the legislators. Table F3.4 summarizes the CIRB for Garfield County. The County uses a small percentage of tax revenues for maintenance and minor improvements, relying on outside funding sources for major improvements.

Local

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

Funding for rural transportation projects may also be available through federal sources such as Community Development Block Grant (CDBG) through Oklahoma Department of Commerce, Economic Development Administration (EDA), and US Department of Agriculture Rural Development (USDA RD) programs. Oklahoma has limited funding available for projects through 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 2013-17 ACS population estimates, Garfield County's racial and ethnic composition is 82% White, followed by 3.2% African American, 2.8% Native Hawaiian and Other Pacific Islander; 2.1%, American Indian and Alaska Native, 0.8% Asian, and Hispanic or Latino 11.6%. In comparison, Oklahoma's racial ethnic composition for 2013-2017 ACS was 72.6% White, 7.3% African American, 7.4% American Indian and Alaska Native, 2.1% Asian and 10.1% Hispanic or Latino. 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
- ODOT report on earthquakes
- 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 2019 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 5 public meetings in Garfield County, 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 three stakeholders meeting held at NODA's office in Enid, Fairmont Fire Department Annual Fundraiser presentation, Garfield County Public Safety Association (GCPSA) presentation, and were available on NORTPO's website (www.nortpo.org). The survey and summary are shown in Appendix E.

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 Garfield County projects included in the ODOT eight-year FFY2019-2026 construction program and CIRB will be constructed by the year 2039.

The projects included in the LRTP are primarily funded by ODOT, with some having 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.

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 3.2), CIRB (Table 3.3), Asset Preservation (Table 3.4) and county lists identified in are described in Chapter 3 and illustrated in Figure 6.1.

Table 6.1 – Garfield County Prioritized List of Transportation Projects

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL
GARFIELD DIV 4 24868(09)	CO RD 11.00 MI	FY 2019 RESURFACE	CO. RD. EW-40 (2416C) FROM SH-15 TO NS-305 PHASE III	$0 $0 $0	$0 $1,000,000 $0	$0 $1,000,000 $0
GARFIELD DIV 4 29876(04)	COBRGE 0.20 MI.	FY 2019 BRIDGE & APPROACHES	BR AND APP ON EW-46 OVER TURKEY CREEK, 0.3 MILES EAST, 3.3 MILES NORTH AND 1.3 MILES EAST OF DRUMMOND CT BEAMS	$0 $0 $0	$0 $657200 $0	$0 $657200 $0
GARFIELD DIV 4 31808(05)	COBRGE 0.25 MI.	FY 2019 CONTRACT P.E. (AS OF 10/1/2019)	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON PE FOR 31808(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 32843(06)	CO RD 2.90 MI.	FY 2019 RIGHT OF WAY	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES RW FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$0 $100,000 $0
GARFIELD DIV 4 32843(07)	CO RD 2.90 MI.	FY 2019 UTILITIES	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES UT FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$0 $100,000 $0
GARFIELD DIV 4 28679(06)	CO RD 5.00 MI.	FY 2020 RIGHT OF WAY	CO RD NS-282, FROM US-412, EXTEND SOUTH 8.0 MILES TO EW-51 RW FOR 28679(04)	$0 $0 $0	$0 $100,000 $0	
GARFIELD DIV 4 28679(07)	UTILITIES 5.00 MI.	FY 2020 UTILITIES	CO RD NS-282, FROM US-412, EXTEND SOUTH 8.0 MILES TO EW-51 UT FOR 28679(04	$0 $0 $0	$0 $0 $0	$100,000
GARFIELD DIV 4 29874(04)	COBRGE 0.20 MI	FY 2020 BRIDGE AND APPROACHES	BR AND APP ON EW-47 OVER SPRING CREEK, 5.0 MILES EAST, 4.0 MILES SOUTH AND 0.2 MILES EAST OF LAHOMA CT BEAMS	$0 $0 $0	$0 $700,000 $0	$700,000
GARFIELD DIV 4 31808(05)	COBRGE 0.25 MI.	FY 2019 CONTRACT P.E. (AS OF 10/1/2013)	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON PE FOR 31808(04)	$0 $0 $0	$0 $75,000 $0	$75,000
GARFIELD DIV 4 32843(06)	CO RD 2.90 MI	FY 2019 RIGHT OF WAY	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES RW FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$100,000

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL
GARFIELD DIV 4 32843(07)	CO RD 2.90 MI	FY 2019 UTILITIES	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES UT FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$100,000
GARFIELD DIV 4 30437(04)	COBRGE 0.25 MI	FY 2020 BRIDGE & APPROACHES	BRIDGE & APPROACHES N NS-296 OVER RED ROCK CREEK, 6.0 MILES EAST & 3.9 MILES SOUTH OF KREMLIN	$0 $560,000 $0	$0 $140,000 $0	$0 $700,000 $0
GARFIELD DIV 4 31210(04)	COBRGE 0.25 MI	FY 2020 BRIDGE & APPROACHES	ON EW-48 OVER TURKEY CREEK, 6.4 MILES WEST OF US-81	$0 $560,000 $0	$0 $140,000 $0	$0 $700,000 $0
GARFIELD DIV 4 31968(05)	COBRGE 0.25 MI	FY 2020 CONTRACT PE (10/1/2013) BRIDGE AND APPROACHES	ON NS-298 OVER RED ROCK CREEK, 1.9 MILES WEST AND 4.3 MILES SOUTH OF HUNTER PE FOR 31968(045)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 32843(04)	CO RD 2.90 MI	FY 2020 GRADE, DRAIN & SURFACE	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES	$0 $1,000,000 $0	$0 $1,000,000 $0	$0 $1,000,000 $0
GARFIELD DIV 4 32843(09)	CO RD 1.00 MI	FY 2020 RIGHT OF WAY	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH ST. RW FOR 32843(08)	$0 $0 $0	$0 $25,000 $0	$0 $25,000 $0
GARFIELD DIV 4 32843(10)	CO RD 1.00 MI	FY 2020 UTILITIES	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH ST. RW FOR 32843(08)	$0 $0 $0	$0 $25,000 $0	$0 $25,000 $0
GARFIELD DIV 4 33508(05)	CO RD	FY 2020 CONTRACT P.E. (AS OF 10/1/2013)	CHIP SEAL STP PROJECT: 6.0 MI ON EW-51 FROM US-81 TO NS-293 & 7.0 MI. ON NS-293 FROM EW-52.25 TO EW-45. (MULTI COUNTIES DIV) (DESIGN FOR 33508(04))	$0 $0 $0	$0 $50,000 $0	$0 $50,000 $0
GARFIELD DIV 4 29872(04)	COBRGE 0.20 MI	FY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-307 OVER BLACK BEAR CREEK, 3. 0 MILES EAST AND 2.0 MILES SOUTH OF JCT US-64/SH-74 CT BEAMS	$0 $0 $0	$0 $800,000 $0	$0 $800,000 $0
GARFIELD DIV 4 29873(04)	COBRGE 0.20 MI	FY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-295 OVER SKELETON CREEK, 8.0 MILES EAST AND 0.6 MILES SOUTH OF BISON CT BEAMS	$0 $0 $0	$0 $600,000 $0	$0 $600,000 $0

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL
GARFIELD DIV 4 29875(04)	COBRGE 0.20 MI	FY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-286 OVER WILD HORSE CREEK, 4.0 MILES WEST AND 0.3 MILES NORTH OF KREMLIN CT BEAMS	$0 $0 $0	$0 $700,000 $0	$0 $700,000 $0
GARFIELD DIV 4 32843(08)	CO RD 1.00 MI	FY 2021 GRADE, DRAIN & SURFACE	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH	$0 $1,168,831 $0	$0 $200,000 $0	$0 $1,368,831 $0
GARFIELD DIV 4 32870(05))	COBRGE 0.25 MI	FY 2021 CONTRACT P.E. (AS OF 10/1/2013)	BRIDGE & APPROACHES ON EW-57 OVER SKELETON CREEK, 0.5 MILES SOUTH & 7.3 MILES EAST OF BISON PE FOR 32870(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 33049(04)	COBRGE 0.25 MI	FY 2021 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON EW-49 OVER TURKEY CREEK, 0.3 MILES NORTH AND 2.4 MILES EAST OF DRUMMOND CIRCLE #175	$0 $800,000 $0	$0 $200,000 $0	$0 $1,000,000 $0
GARFIELD DIV 4 28679(04)	CO RD 5.00 MI	FY 2022 GRADE, DRAINING, BRIDGE & SURFACE	CO RD NS-282, FROM US-412, EXTEND SOUTH 6.0 MILES TO EW-49	$0 $0 $0	$0 $3,000,000 $0	$0 $3,000,000 $0
GARFIELD DIV 4 31808(04)	COBRGE 0.25 MI	FY 2022 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON	$0 $640,000 $0	$0 $160,000 $0	$0 $800,000 $0
GARFIELD DIV 4 33495(05)	COBRGE	FY 2022 CONTRACT P.E. (AS OF 10/1/2013)	CO BR ON E0290 2.0 MI. N. & 7.0 MI. E. OF HILLSDALE (DESIGN FOR 33495(04))	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 33508(04)	CO RD 13.00 MI	FY 2022 CHIP SEAL	CHIP SEAL STP PROJECT: 6.0 MI. ON EW-51 FROM US-81 TO NS-293 & 7.0 MI. NS-293 FROM EW-52.25 TO EW-45. (MULTI COUNTIES IN DIV 4	$0 $366,667 $0	$0 $100,000 $0	$0 $466,667 $0
GARFIELD DIV 4 31968(04)	COBRGE 0.25 MI	FY 2023 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON NS-298 OVER RED ROCK CREEK, 1.9 MILES WEST AND 4.3 MILES SOUTH OF HUNTER	$0 $640,000 $0	$0 $160,000 $0	$0 $800,000 $0
GARFIELD DIV 4 33927(05)	CO RD	FY 2023 CONTRACT P.E. (AS OF 10/1/2013)	COUNTY ROAD CN 156 D1 PE FOR 33927(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0

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
CDBG	Community Development Block Grant
CIRB	County Improvements for Roads and Bridges
COG	Council of Government
CST	Cherokee Strip Transit
C/L	County Line
EDA	Economic Development Administration
EJ	Environmental Justice
FAST	Fixing America's Surface Transportation Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information System
GNBC	Grainbelt Corporation
HTF	Federal Highway Trust Fund
LAUS	Local Area Unemployment Statistic
LOS	Level of Service
LRTP	Long Range Transportation Plan
MAGB	Major, Alfalfa, Grant, Blaine (county transit system)
MI	Miles
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
ODEQ	Oklahoma Department of Environmental Quality
ODOT	Oklahoma Department of Transportation
ODWC	Oklahoma Department of Wildlife Conservation
OESC	Oklahoma Employment Security Commission
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
USEPA	United States Environmental Programs Agency
USGS	United States Geological Survey
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

Performance Measures – FAST Act

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

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

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

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

Appendix D

Functional Classification and Level of Service

Functional Classification

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

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

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

The functional classification of streets is shown in Map 2.7 and includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector. Rural roads consist of those facilities that are outside of small urban and urbanized areas. The functional classification of streets is shown on Map 2.7 and includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector.

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

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

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

- Traffic movements with trip length and density suitable for integrated interstate or intercountry service
- Traffic movements between urban areas or other traffic generators with populations less than 25,000
- Traffic movements at high speeds
- Undivided four-land roads
- Striped for one or two lanes in each direction with auxiliary lanes at intersections as required by traffic volumes
- Desired LOS C

Rural Major Collector - A rural major collector road includes the following service characteristics:

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

Rural Minor Collector - A rural minor collector road includes the following service characteristics:

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

Rural Local Road - A rural local road includes the following service characteristics:

- Two-lane undivided roads with intersections at grade
- Traffic movements between collectors and adjacent lands
- Traffic movements involving relatively short distances
- Desired LOS A

Other classifications of roadways include:

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

transit facilities, interstate bus terminals and rail and intermodal transportation facilities.

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

3. The National and Scenic Byways recognizes highways that are outstanding examples of our nation's beauty, culture, and recreational experience in exemplifying the diverse regional characteristics of our nation.

Level of Service

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

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

- LOS A describes a condition with low traffic volumes with little or no delays. There is little or no restriction in maneuverability due to the presence of other vehicles. Drivers can maintain their desired speeds and can proceed through signals without having to wait unnecessarily. Operating capacity can be measured as less than 30% of capacity.
- LOS B describes a condition with stable traffic flow with a high degree of choice to select speed and operating conditions, but with some influence from other drivers. Operating capacity can be measured as less than 50% of capacity.
- LOS C describes the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. LOS C is normally utilized as a measure of "average conditions" for design of facilities in suburban and urban locations. Operating capacity can be measured as less than 69% of capacity.
- LOS D describes high density flow in which speed and freedom to maneuver is severely restricted even though flow remains stable. LOS D is considered acceptable during short periods of time and is often used in large urban areas. Operating capacity can be measured as less than 70% to 90% of capacity.
- LOS E describes operating conditions at or near capacity. Operations at this level are usually unstable, because small increases in flow or minor disturbances within the traffic stream will cause breakdowns. Operating capacity can be measured as between 90% to 99% of capacity.
- LOS F is used to define forced or breakdown flow. This condition exists whenever the amount of traffic approaching a point exceeds the amount that can be served. LOS F is characterized by demand volumes greater than the roadway capacity. Under these conditions, motorists seek other routes in order to bypass congestion, thus impacting adjacent streets. Operating capacity can be measured above 100% of capacity.

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

Appendix E - Stakeholder Survey Summary

Disclaimer – All comments on stakeholder surveys are included as written and do not reflect the beliefs of the NORTPO technical committee, NORTPO policy board, NODA board of trustees, nor NODA staff.

Garfield County Stakeholder Survey

1. In which City/County do you reside? **Breckinridge, Covington, Douglas (1); Enid (22); Fairmont (3); Garber, Hunter, Kremlin, Lahoma (1); Waukomis (2) / Canadian (1); Garfield (31)**

2. In which City/County do you work? **Enid (24); Fairmont, Garber, Hillsdale, Hunter (1) / Alfalfa, Blaine, Canadian, Grant, Kay, Logan, Noble, Woods (1); Garfield (21); Statewide (3); AR, LA, TX (1)** or attend school? **Stillwater (1) / Garfield (1)**

3. How many days per week do you travel to work? **7 (4) 6 (9) 5 (32) 4 (2) 3 ( ) 2 ( )** to school? **5 (2)**

4. What type of transportation do you use most often to go to work/school? (Circle one)
   Drive (alone) **(41)** Carpool **(1)** Bus **(2)** 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 **(1)** 2-5 miles **(11)** 6-10 miles **(10)** 11-20 miles **(10)**
   21-30 miles **(2)** 31-50 miles (4) 50 miles + **(5)** Other 500 – 800+ **(1)**

6. How much time does it usually take to travel to and from work? (Circle one)
   Less than 10 minutes **(8)** 11-15 minutes **(16)** 16-30 minutes **(12)**
   31-45 minutes **(2)** 46-60 minutes **(1)** 61 minutes + **(5)**

7. How much time does it usually take to travel to and from school? (Circle one)
   Less than 10 minutes **(3)** 11-15 minutes **(5)** 16-30 minutes **()**
   31-45 minutes **()** 46-60 minutes **()** 61 minutes + **()**

8. How many total miles do you travel for other trips per day? (Circle your response)
   Less than 1 mile **(2)** 2-5 miles **(7)** 6-10 miles **(9)**
   11-20 miles **(3)** 21-30 miles **(8)** 31-50 miles **(1)** 50 miles + **(8)**

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)	24	3	5		
Carpool with others		4	4	4	6
Bus/Public Transportation					12
Motorcycle			5	4	10
Bicycle/Walk		1	4		7
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 **(3)** 25-34 **(4)** 35-44 **(13)** 45-54 **(9)** 55-65 **(8)** 66-74 **(5)** 75+ ()

Gender: Male **(27)** Female **(13)**

Household Income: Under $35,000 **(2)** $35,000 to $50,000 **(5)** $50,001 - $75,000 **(7)** $75,001+ **(21)**

American Indian/Alaska Native () Asian **(1)** Black or African American () Hispanic () Native Hawaiian or other Pacific Islander **(1)** White **(34)** Other _____

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

	Not Important	Somewhat Important	Important	Very Important
Improve Technology of Signals	**2**	**9**	**14**	**11**
Intersection Improvements	**2**	**2**	**15**	**19**
Pedestrian Facilities/Sidewalks	**5**	**8**	**9**	**16**
Maintenance Improvements		**2**	**10**	**27**
Bicycle Lanes	**10**	**12**	**8**	**7**
Public Transportation	**6**	**13**	**11**	**6**
Availability of Passenger Rail Service	**23**	**8**	**1**	**4**
Connection to State or US Highways	**3**	**9**	**11**	**14**
Maintenance of Bridges		**4**	**9**	**25**
Protecting the environment	**1**	**11**	**14**	**11**
Improving access to freight rail service	**12**	**13**	**6**	**5**
Providing a smooth driving surface		**1**	**7**	**29**
Improve existing roadways		**1**	**9**	**31**
Add shoulders on State or US Highways		**3**	**16**	**18**
Improve signs along existing roadways	**1**	**13**	**11**	**12**

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

	Not Important	Somewhat Important	Important	Very Important
Supports Economic Development		**7**	**16**	**16**
Improves Safety			**10**	**28**
Reduces Congestion	**1**	**2**	**13**	**21**
Bicycle Lanes or Facilities	**9**	**11**	**11**	**6**
Improve Pedestrian walkways	**4**	**12**	**10**	**11**
Improves Travel Choices	**3**	**12**	**17**	**5**
Reduces Energy Consumption/Pollution	**3**	**24**	**13**	**5**
Improves freight movement	**1**	**13**	**16**	**8**
Other (specify)	**2**	**1**		

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

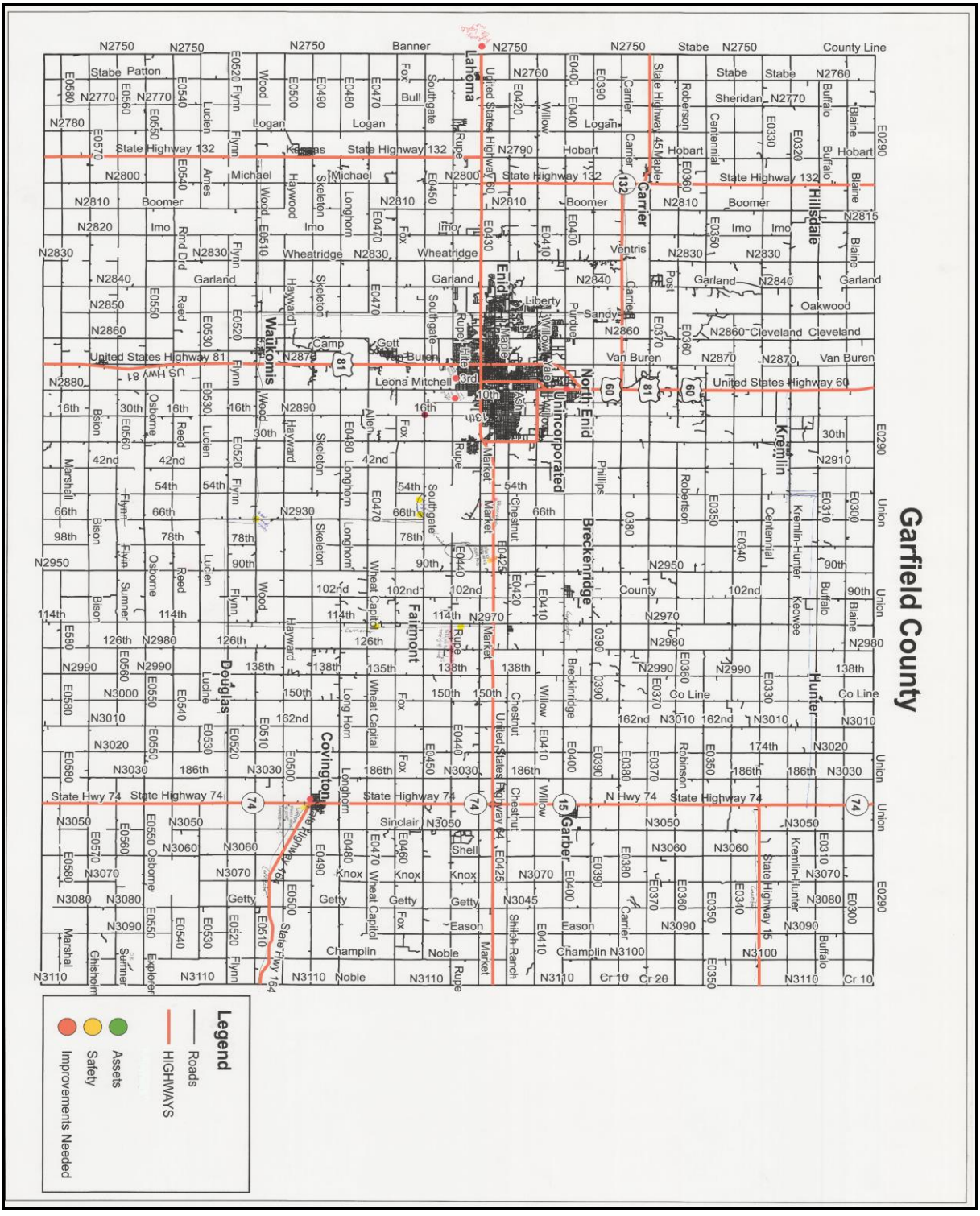
Yes **(18)** No **(9)**

Please describe access limitations: *not enough of the public transportation; Safe pedestrian access to community services; Larger need than access. Financial struggles; Lack of resources to improve commute. Lack of emphasis on pedestrian traffic; We need more options for hospital discharged patients. Non-emergent w/c vans; Our roadways haven't grown at the same rate as our community; Walkways; Bridges underrated, Construction in multiple places throughout state; Numerous road construction projects on main roads/highways @ same time; No public transportation, Horrible sidewalks; Very few crosswalks + bike lanes at major roadways; availability, ease of access, funds; Limited opportunities for pedestrian bicycle commuting; Rail road crossing at 114th + Southgate is in bad need of repair; into city transport; too many improvements at one time;*

14. **What are some specific locations with traffic problems that you encounter through the day**?
100 N 8th, 9th & Pine intersection bad roads; E. Oak from 2nd to 3rd, 3rd St. North to Walnut & Randolph from downtown to Johnson; dedicated right turn lanes; main thorough way; pot holes on roads; pot holes!!; RR crossing on willow; US 81 through Enid; 30th St. needs improved for heavy truck traffic, Randolph St. needs houses removed between different traffic directions; Rural roads outside city limits; Van Buren & Garriott Intersection; Railroad tracks blocked by trains; Southgate from 114th to Van Buren; N Hwy 81 from Hwy 45 North to Grant County line Holds water, uneven, poor patch work, Congestion at 81 and Keowee; terrible roads & bridges; Hwy 81, Chestnut; County dirt roads; Hayward/US 81 – very dangerous due to Dollar General traffic merging onto US 81; Walgreens & Integris Hospital Emergency Entrance > No left turn from Van Buren to go to Walgreens and had to jog in emergency entrance to go to Walgreens; Railroads, Southgate, Van Buren by Walgreens; Van Buren needs pedestrian access for important DHS, Health Dept., Medical & Business services; Congestion on West Randolph; W. Owen K Garriott becomes very congested between Van Buren and Garland, Southgate at Van Buren does not seem a fit for large trucks, Often cars need to back up; South side of Covington, flooding; Garriott during rush hour times, Willow during am traffic; RR crossing @ 412 and Grand Ave. and 30th St., 412/81 the only 2 main thoroughfares – for a community to grow – transportation must accommodate it;

15. **Please provide additional comments regarding transportation improvement needs**:
We also need a sidewalk on 81 north from Walgreen to public health; Obesity rate of 46%, We must have more pedestrian access for those w/out cars; potholes throughout Enid, on neighborhood roads, several throughout the city they cause damage to cars; there should NEVER EVER be railroad crossings on a state HW, they should be diverted over/under the highway! Ie east of Enid; Many Rural Roads are not Paved or graveled which makes all weather travel Difficult; Wet conditions are extremely bad on N Hwy 81; Put Shale on dirt Roads and Keep Rock Roads in Better Shape By Adding Rock; Paved county roads are horrible, county commissioner sucks, Waukomis city streets need improved, would be nice to have sidewalk or walking trail; Much better improvements to road surfaces, That means the pencil pushing inspectors need to ride in a semi/vehicle pulling a trailer & see how terrible our roads are; safety, ride, economic development; Turn lanes and Sidewalks and crosswalks are needed near Chisholm High School, Willow St. near Prairie View School needs widened or center turn lane added; Congestion West Garriott – To many signals!!!; more lanes, less potholes!, public transportation, sidewalks, more lanes, less pot holes!!;

Map D.1 - Garfield County, City and Towns Stakeholder Meeting Maps with Comments

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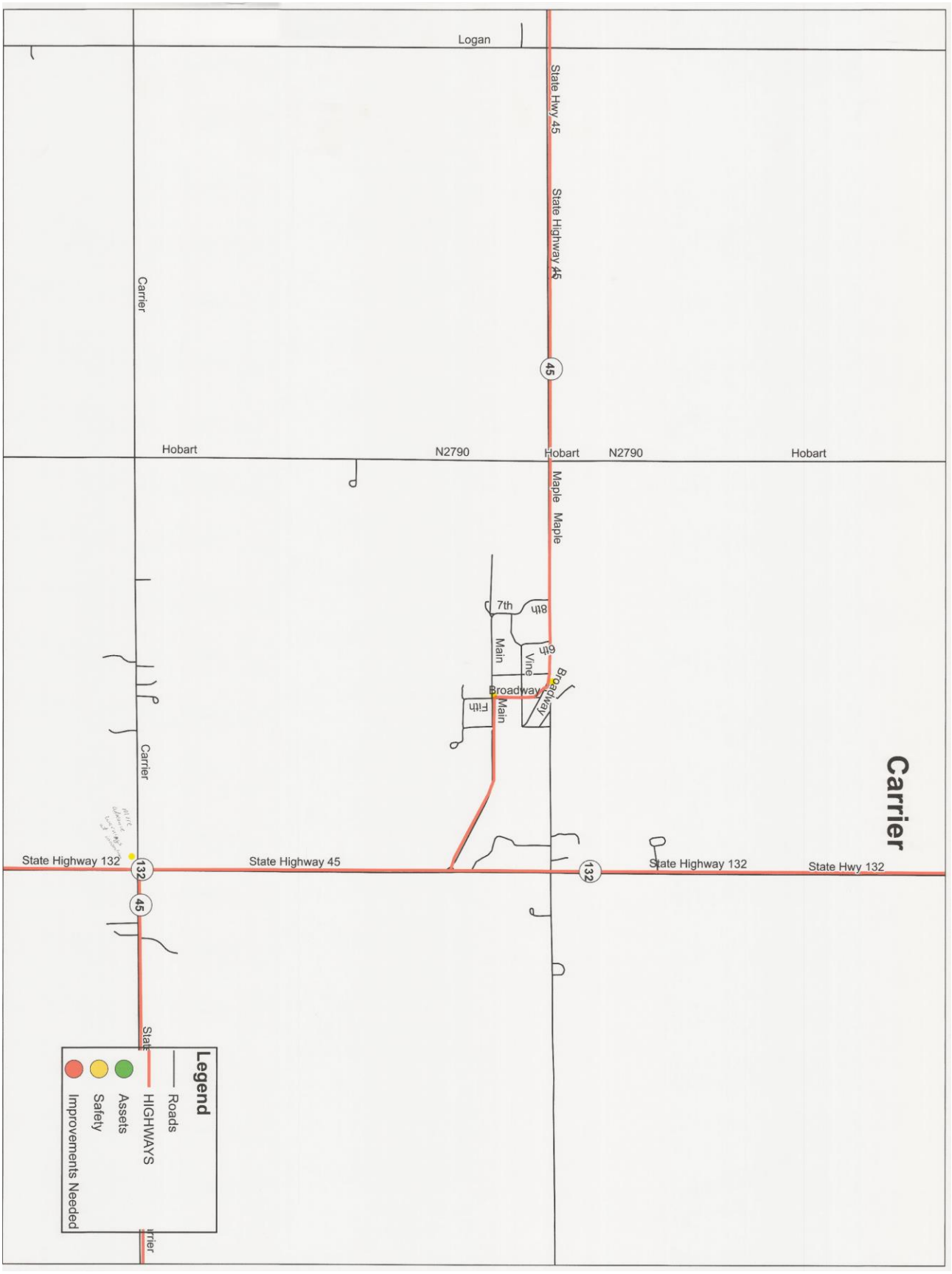
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Broadway
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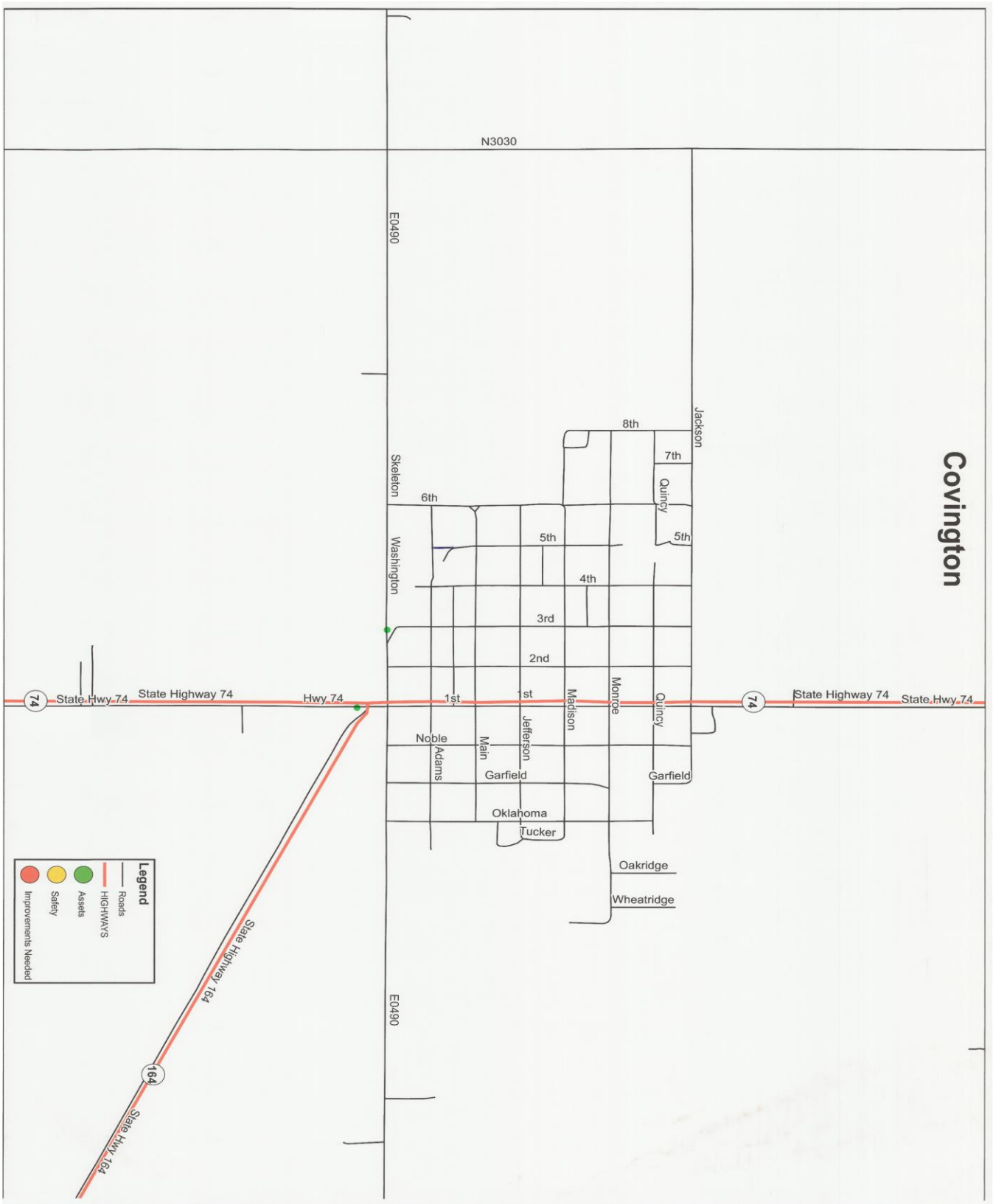
Improvements Needed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Jefferson
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Noble
Garfield
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Wheatridge
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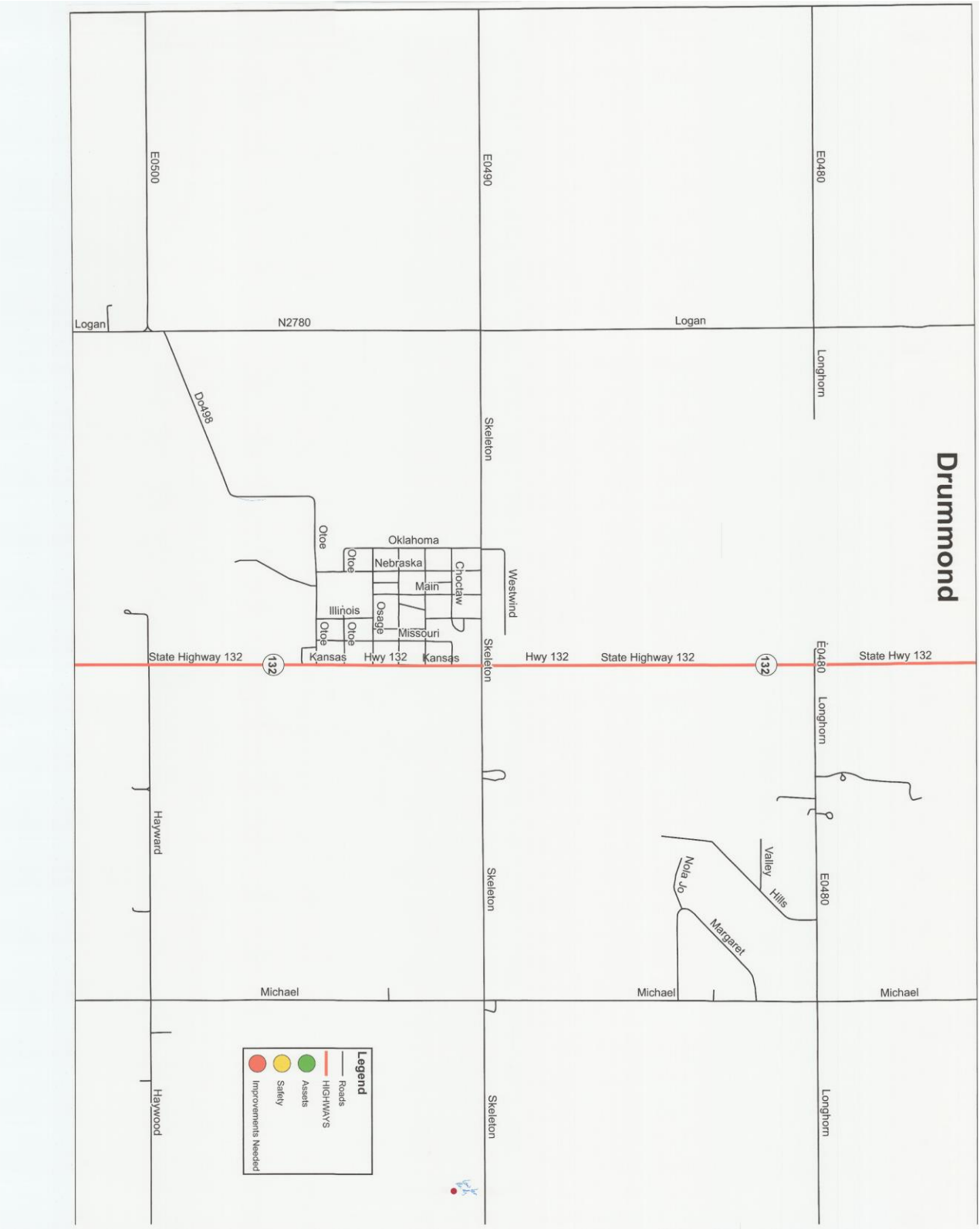
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Longhorn
Hayward
Skeleton
Valley
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Nola Jo
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Roads
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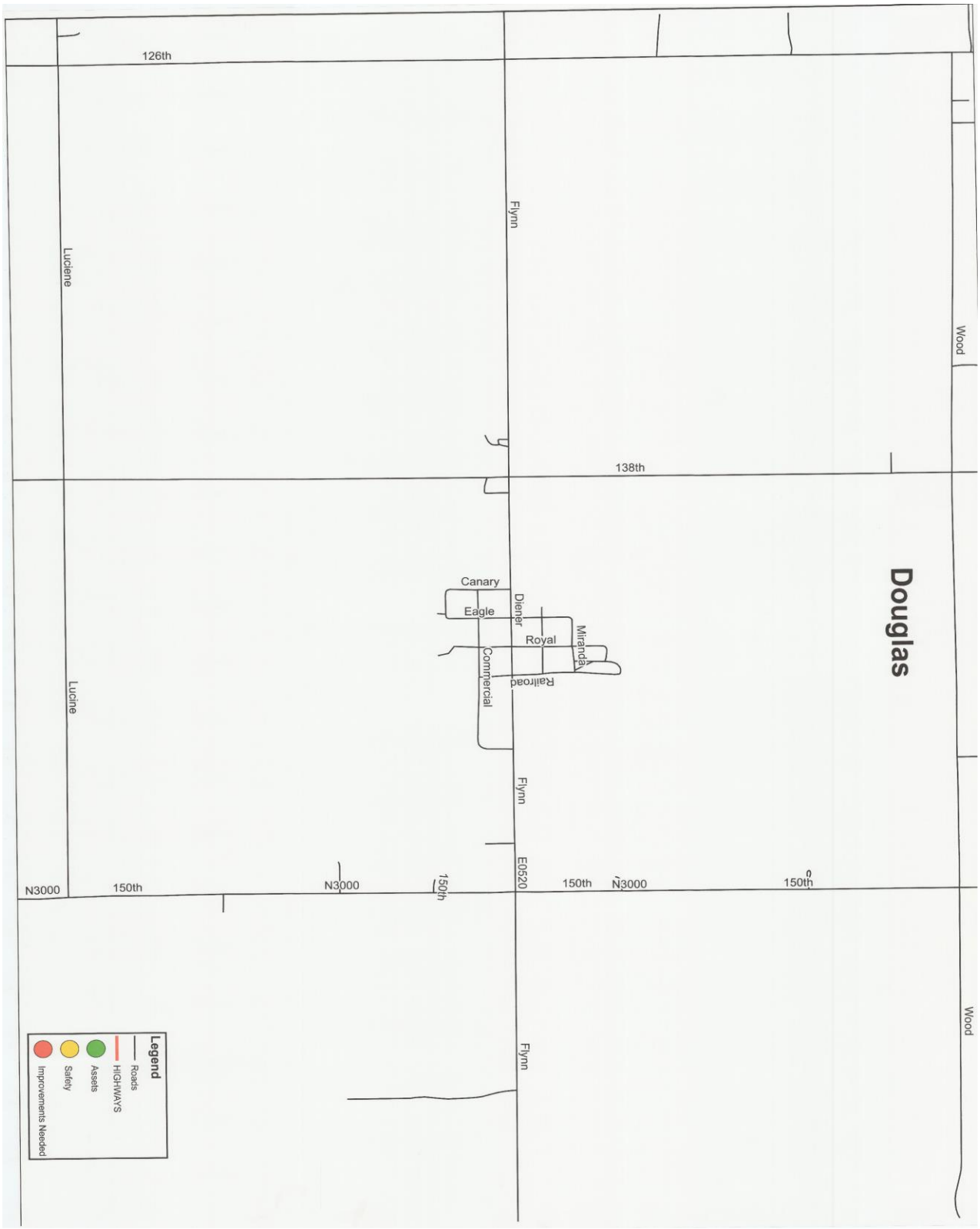
Improvements Needed
Haywood
Skeleton
Longhorn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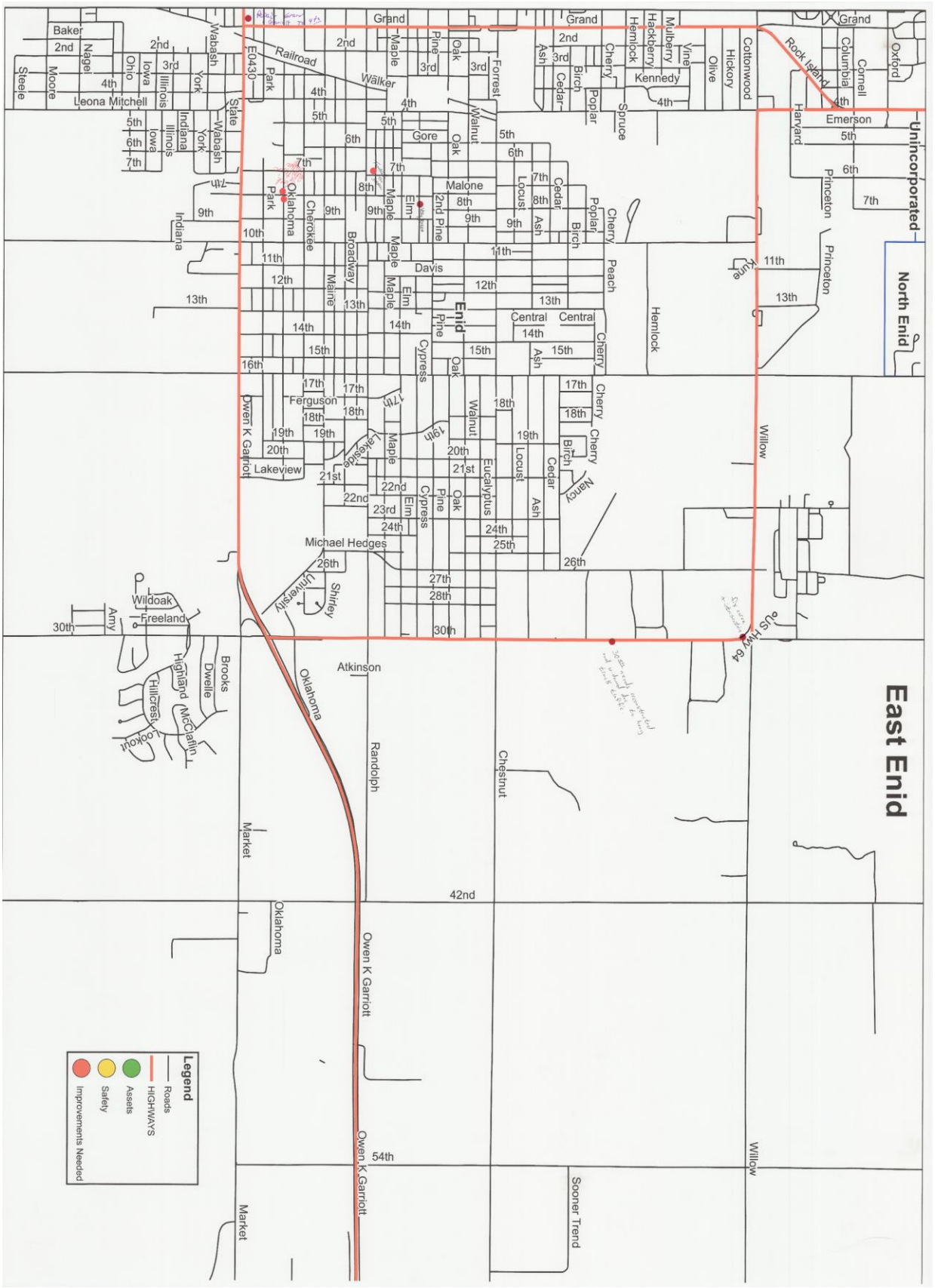
Improvements Needed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Unincorporated
Enid
Grand
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Maple
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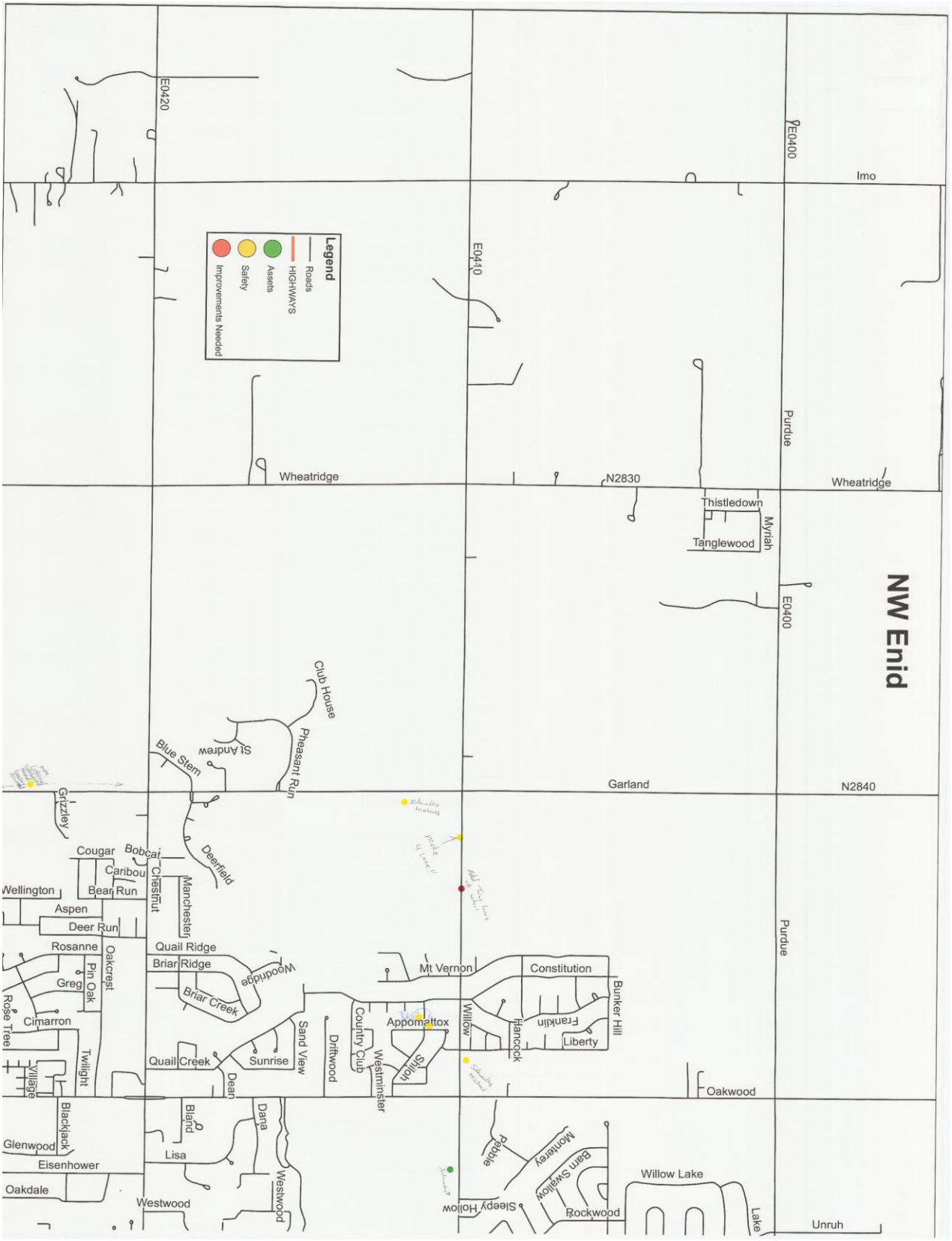
Olive
Hickory
Cottonwood
Kennedy
Rock Island
Harvard
Emerson
Princeton
Cornell
Columbia
Oxford
Baker
Nagel
Moore
Steele
Leona Mitchell
Wabash
Ohio
Iowa
Illinois
York
State
Indiana
Park
E0430
Gore
Walnut
Malone
Locust
Cedar
Ash
Birch
Poplar
Spruce
Peach
Kline
Davis
Elm
Broadway
Cherokee
Oklahoma
Maine
Ferguson
Lakeside
Lakeview
Owen K Garriott
Central
Cypress
Eucalyptus
Nancy
Willow
Michael Hedges
University
Shirley
Wildoak
Freeland
Amy
Highland
Hillcrest
Lookout
McClellan
Brooks
Dwelle
Atkinson
Randolph
Market
Chestnut
42nd
54th
Sooner Trend
US Hwy 64
Legend
Roads
HIGHWAYS
Assets
Safety
Improvements Needed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Myriah
Tanglewood
NW Enid
Club House
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Blue Stem
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Grizzley
Cougar
Bobcat
Caribou
Deerfield
Chestnut
Manchester
Wellington
Bear Run
Aspen
Deer Run
Rosanne
Oakcrest
Pin Oak
Greg
Rose Tree
Cimarron
Twilight
Village
Quail Ridge
Briar Ridge
Woodridge
Briar Creek
Quail Creek
Sunrise
Sand View
Dean
Driftwood
Country Club
Westminster
Shiloh
Mt Vernon
Constitution
Appomattox
Willow
Hancock
Franklin
Liberty
Bunker Hill
Oakwood
Blackjack
Glenwood
Eisenhower
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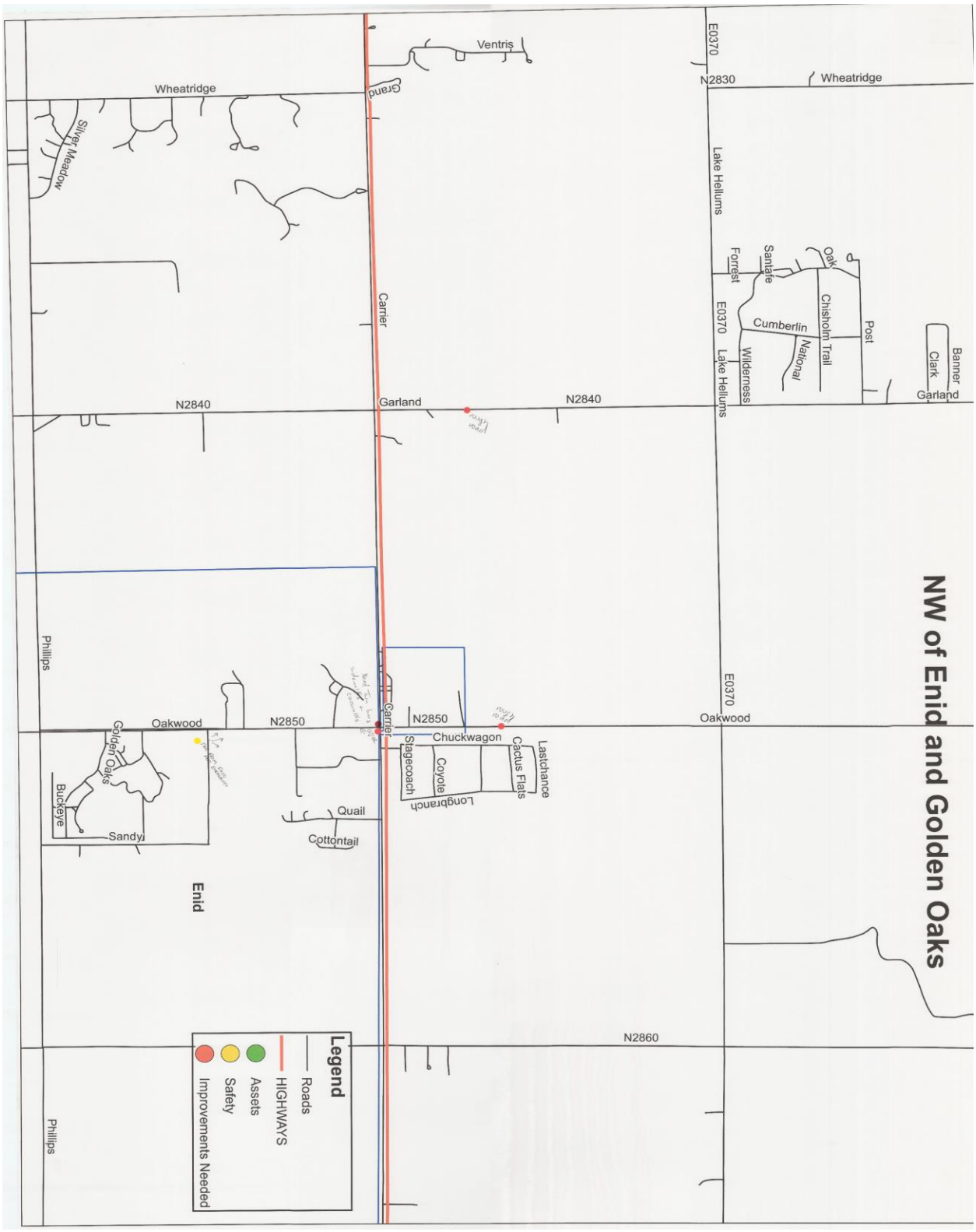
Sleepy Hollow
Rockwood
Willow Lake
Lake
Unruh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Wheatridge
Silver Meadow
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Garland
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Wheatridge
Lake Hellums
Forrest
Santafe
Oak
Chisholm Trail
Post
Cumberlin
National
Wilderness
E0370
Lake Hellums
Banner
Clark
Garland
Phillips
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Carrier
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Oakwood
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Chuckwagon
Stagecoach
Coyote
Longbranch
Cactus Flats
Lastchance
Golden Oaks
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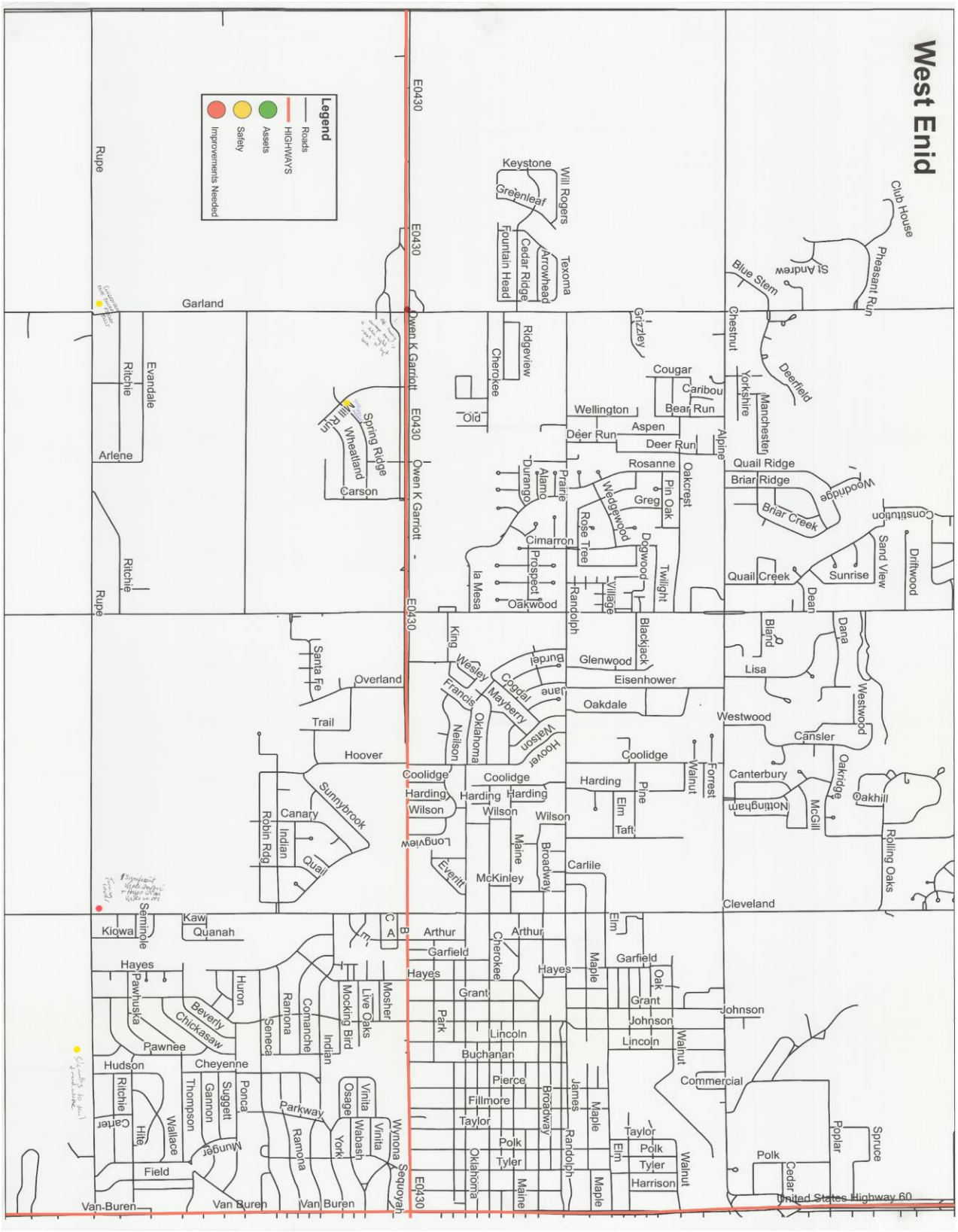
Assets
Safety
Improvements Needed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E0430
Keystone
Greenleaf
Will Rogers
Fountain Head
Cedar Ridge
Arrowhead
Texoma
Club House
Pheasant Run
St Andrew
Blue Stem
Ridgeview
Cherokee
Old
Spring Ridge
Wheatland
Carson
Grizzley
Chestnut
Deerfield
Cougar
Caribou
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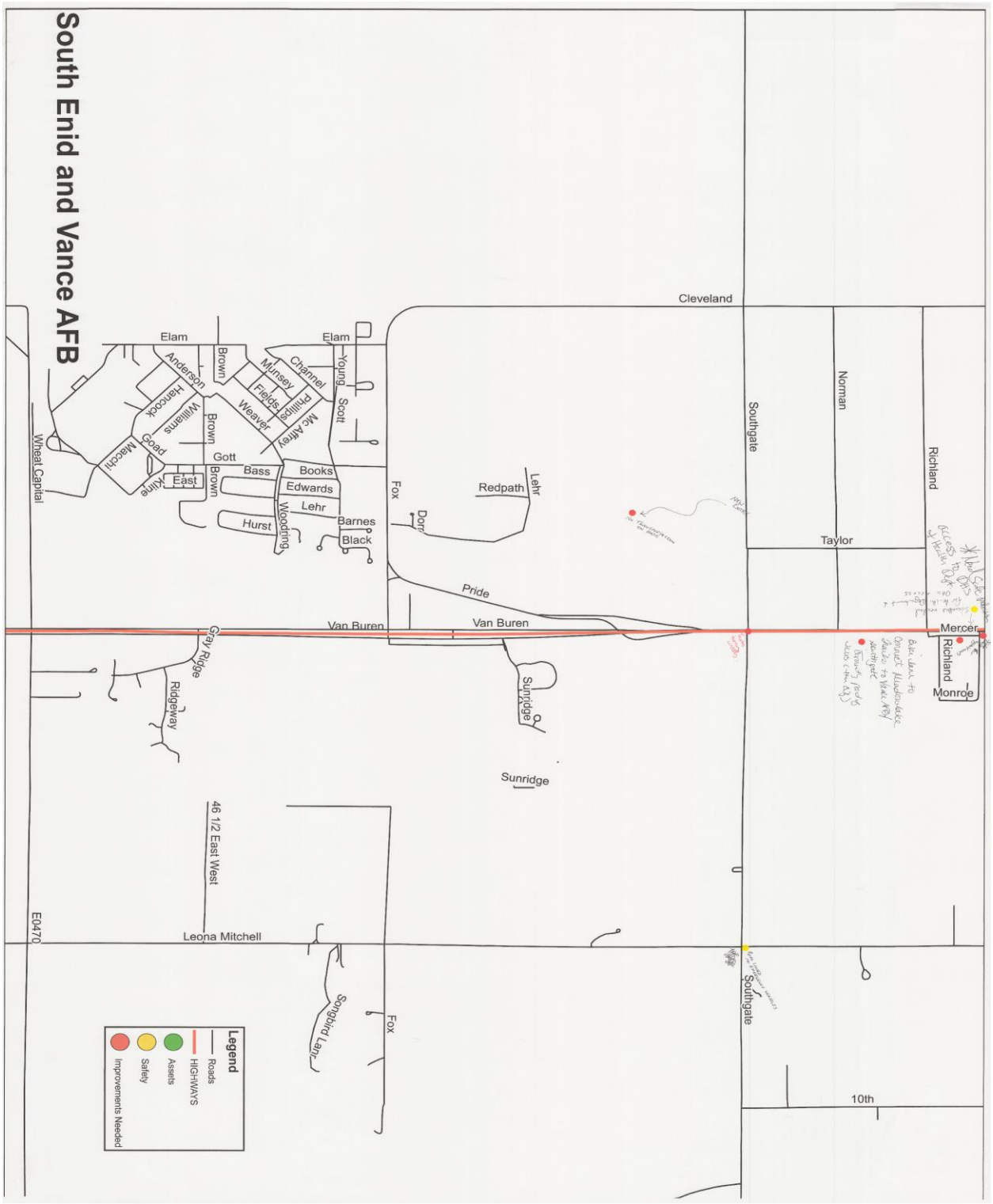
Deer Run
Alpine
Rosanne
Durango
Alamo
Prairie
Wedgewood
Pin Oak
Oakcrest
Greg
Quail Ridge
Briar Ridge
Woodridge
Briar Creek
Constitution
Cimarron
Rose Tree
Dogwood
Twilight
Sand View
Driftwood
Sunrise
Quail Creek
Dean
Prospect
Oakwood
Ia Mesa
Randolph
Village
Blackjack
Glenwood
Eisenhower
Oakdale
King
Wesley
Burdel
Coggdal
Jane
Mayberry
Francis
Oklahoma
Nelson
Watson
Hoover
Santa Fe
Overland
Trail
Bland
Dana
Lisa
Westwood
Cansler
Canterbury
Nottingham
McGill
Oakridge
Oakhill
Rolling Oaks
Coolidge
Harding
Wilson
Pine
Elm
Taft
Walnut
Forrest
Sunnybrook
Canary
Robin Rdg
Indian
Quail
Longview
Everitt
Maine
Broadway
McKinley
Carlile
Cleveland
Kiowa
Seminole
Kaw
Quanah
Arthur
Garfield
Hayes
Cherokee
Maple
Oak
Grant
Johnson
Park
Lincoln
Buchanan
Pawnee
Pawhuska
Beverly
Chickasaw
Huron
Ramona
Comanche
Seneca
Indian
Mocking Bird
Live Oaks
Mosher
Hudson
Cheyenne
Commercial
Pierce
Fillmore
Taylor
James
Polk
Tyler
Harrison
Ritchie
Thompson
Gannon
Suggett
Ponca
Parkway
Osage
Vinita
Wabash
York
Wynona
Sequoyah
Carter
Hite
Wallace
Munger
Field
Van-Buren
Poplar
Spruce
Cedar
United States Highway 60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Macchi
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Bass
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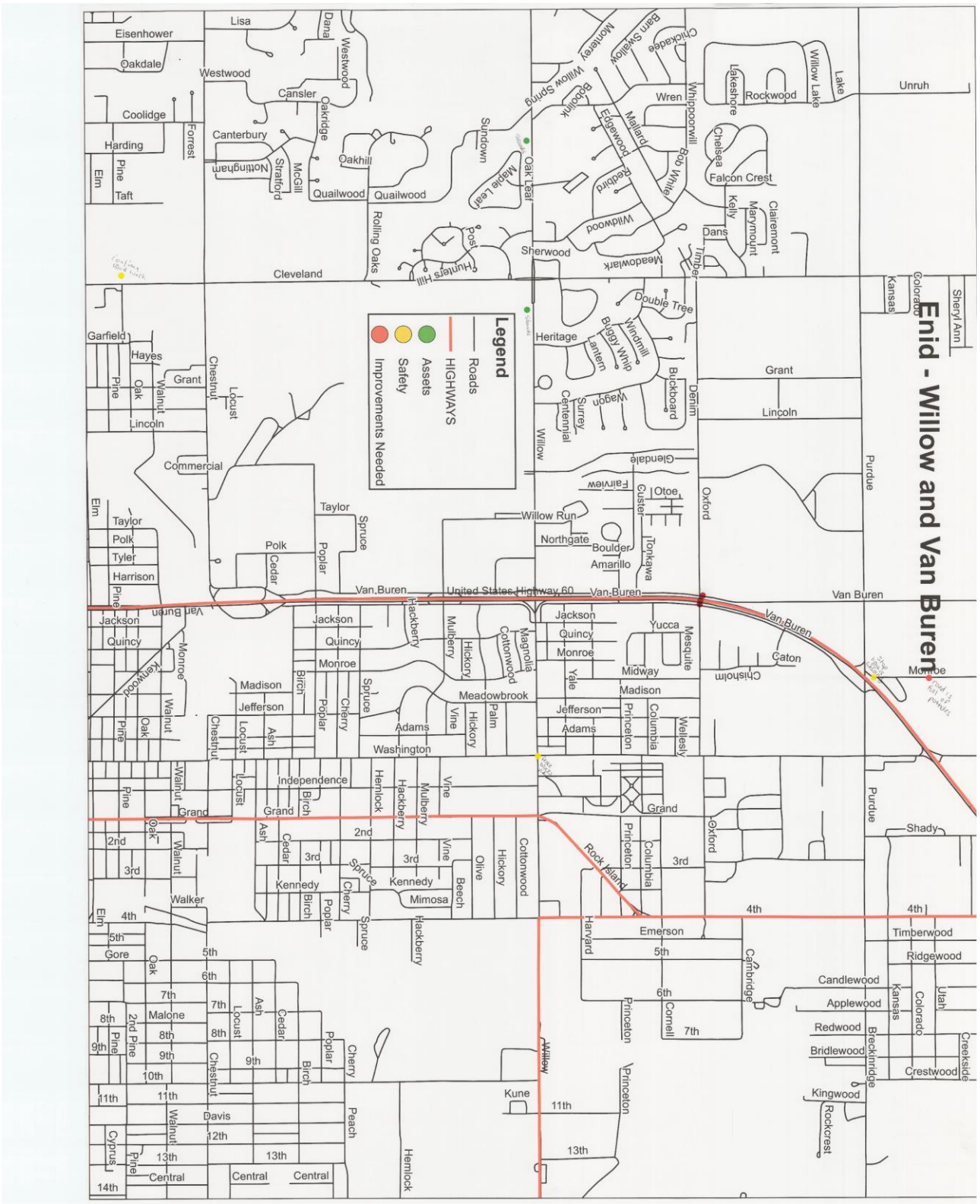
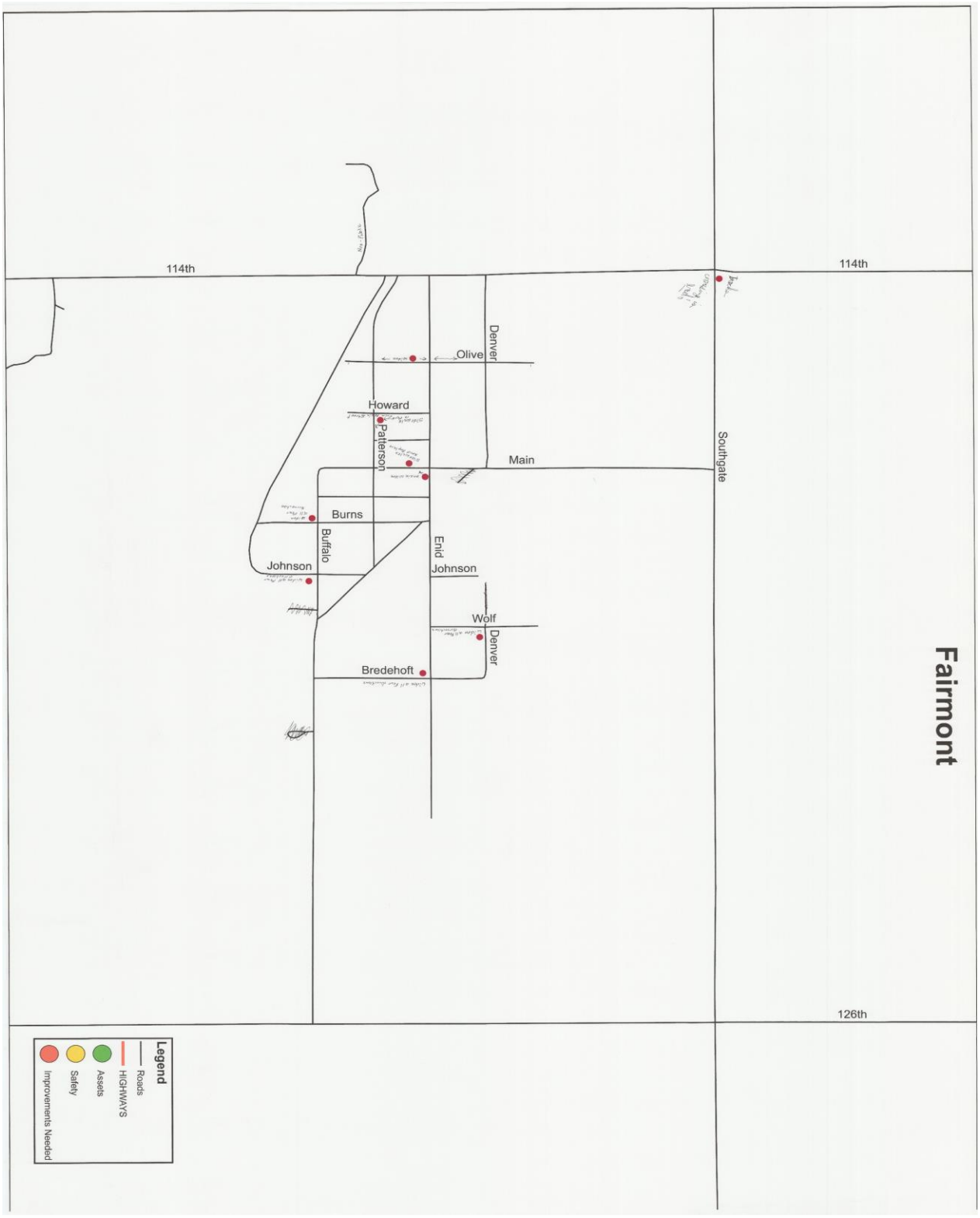
Edwards
Lehr
Hurst
Woodring
Barnes
Black
Channel
Mynsey
Fields
Phillips
Mc Affrey
Weaver
Young
Scott
Fox
Redpath
Lehr
Dorr
Wheat Capital
Southgate
Norman
Richland
Taylor
Pride
Van Buren
Van Buren
Mercer
Richland
Monroe
Gay Ridge
Ridgeway
Sunridge
Sunridge
46 1/2 East West
E0470
Leona Mitchell
Southgate
Springfield Lane
Fox
10th
Legend
Improvements Needed
Safety
Assets
HIGHWAYS
Roads


Enid - Willow and Van Buren
Legend
Roads
HIGHWAYS
Assets
Safety
Improvements Needed
Van Buren
United States Highway 60
Cleveland
Garfield
Grant
Lincoln
Commercial
Taylor
Polk
Jackson
Quincy
Monroe
Madison
Jefferson
Adams
Washington
Independence
Grand
2nd
3rd
4th
5th
6th
7th
8th
9th
10th
11th
12th
13th
14th
Central
Davis
Malone
Walker
Gore
Kennedy
Mimosa
Meadowbrook
Willow Run
Northgate
Boulder
Amarillo
Midway
Emerson
Shady
Timberwood
Ridgewood
Candlewood
Applewood
Redwood
Bridlewood
Crestwood
Kingwood
Rockcrest
Creekside
Brieckinridge
Kune
Rock Island
Harvard
Cambridge
Princeton
Cornell
Willow
Oxford
Purdue
Caton
Chisholm
Monroe
Yucca
Mesquite
Columbia
Wellesly
Hackberry
Mulberry
Hickory
Cottonwood
Magnolia
Palm
Vine
Olive
Beech
Peach
Hemlock
Cherry
Spruce
Poplar
Birch
Cedar
Ash
Locust
Chestnut
Walnut
Oak
Pine
Elm
Harrison
Tyler
Fairview
Glendale
Otoe
Custer
Tonkawa
Double Tree
Heritage
Buggy Whip
Windmill
Lantern
Buckboard
Denim
Surrey
Wagon
Centennial
Sherwood
Meadowlark
Wildwood
Falcon Crest
Chelsea
Rockwood
Willow Lake
Lakeshore
Whippoorwill
Bob White
Meglard
Edgewood
Redbird
Bobolink
Willow Spring
Barn Swallow
Chickadee
Monterey
Sundown
Maple Leaf
Oak Leaf
Hunters Hill
Rolling Oaks
Quailwood
Oakhill
Oakridge
Nottingham
Stratford
McGill
Canterbury
Cansler
Westwood
Dana
Lisa
Eisenhower
Oakdale
Coolidge
Harding
Taft
Forrest
Unruh
Lake
Kansas
Colorado
Utah
Sheryl Ann
Dans
Kelly
Marymount
Clairemont
Timber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Olive
Denver
Howard
Patterson
Main
Southgate
Burns
Buffalo
Enid
Johnson
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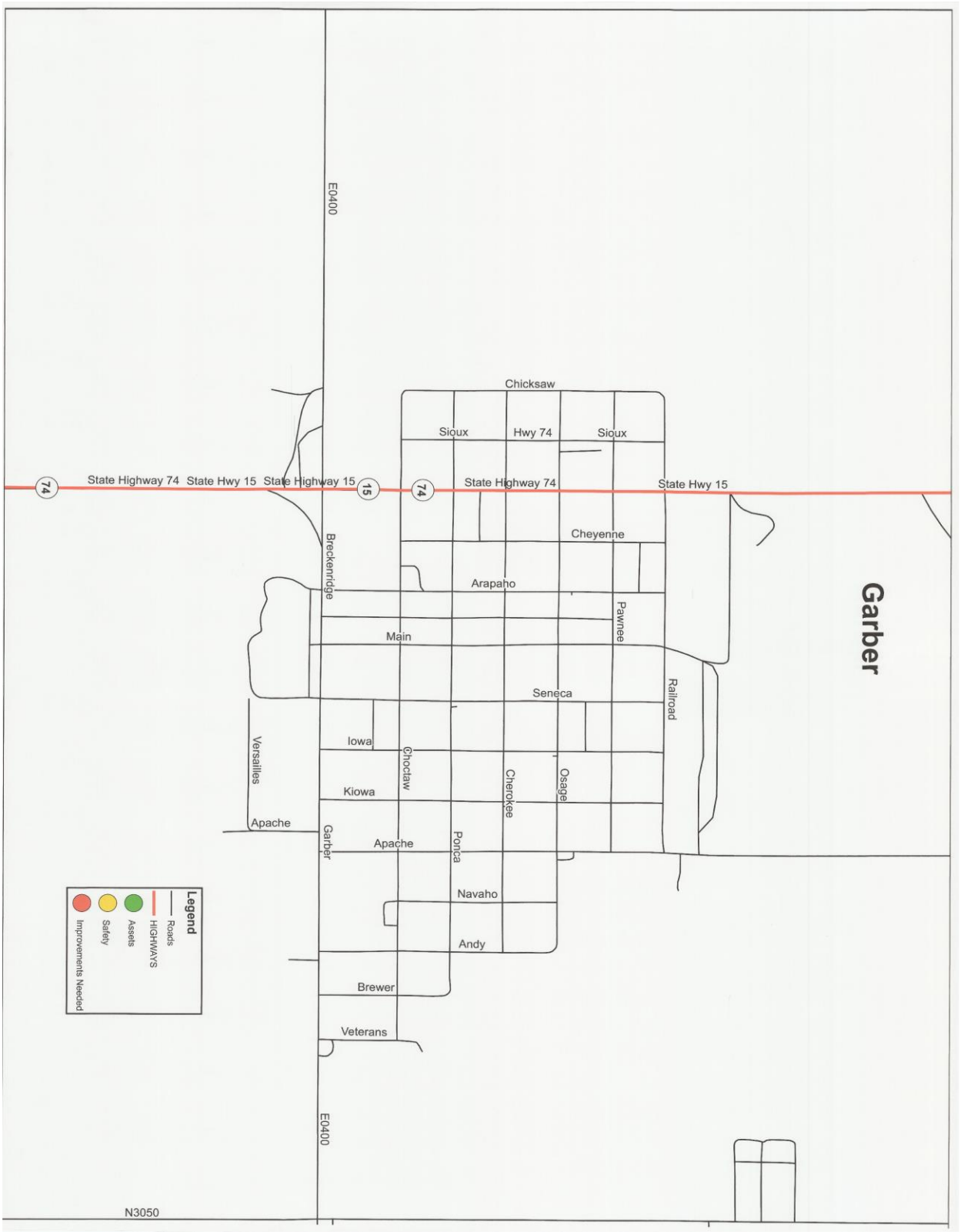
Wolf
Denver
Bredehoft
Fairmont
126th
Legend
Roads
HIGHWAYS
Assets
Safety
Improvements Needed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Cheyenne
Breckenridge
Arapaho
Pawnee
Main
Seneca
Railroad
Garber
Versailles
Iowa
Choctaw
Cherokee
Osage
Kiowa
Apache
Garber
Apache
Ponca
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Andy
Brewer
Veterans
E0400
N3050
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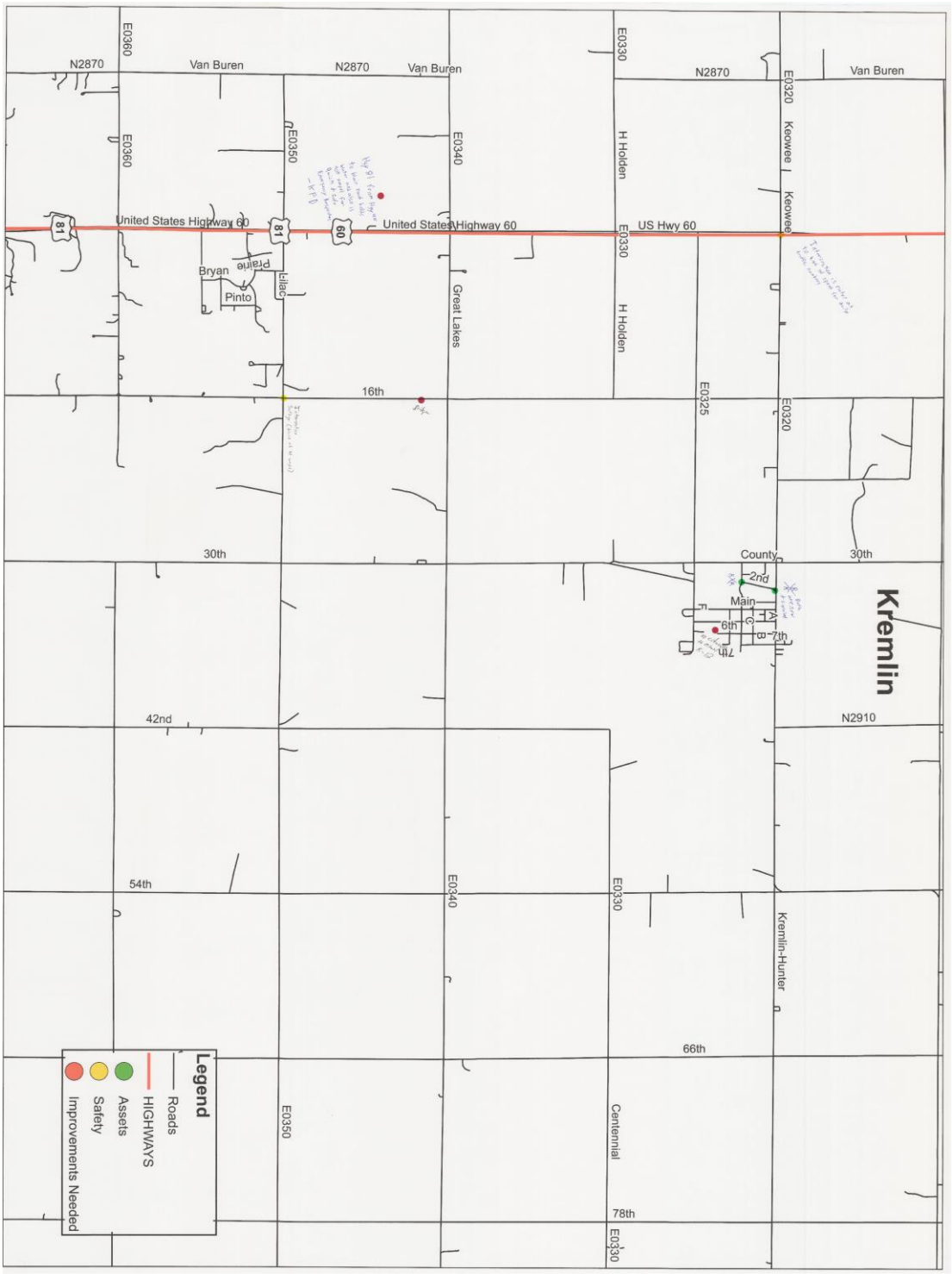
HIGHWAYS
Assets
Safety
Improvements Needed


N2870
Van Buren
E0360
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E0340
E0330
E0325
E0320
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US Hwy 60
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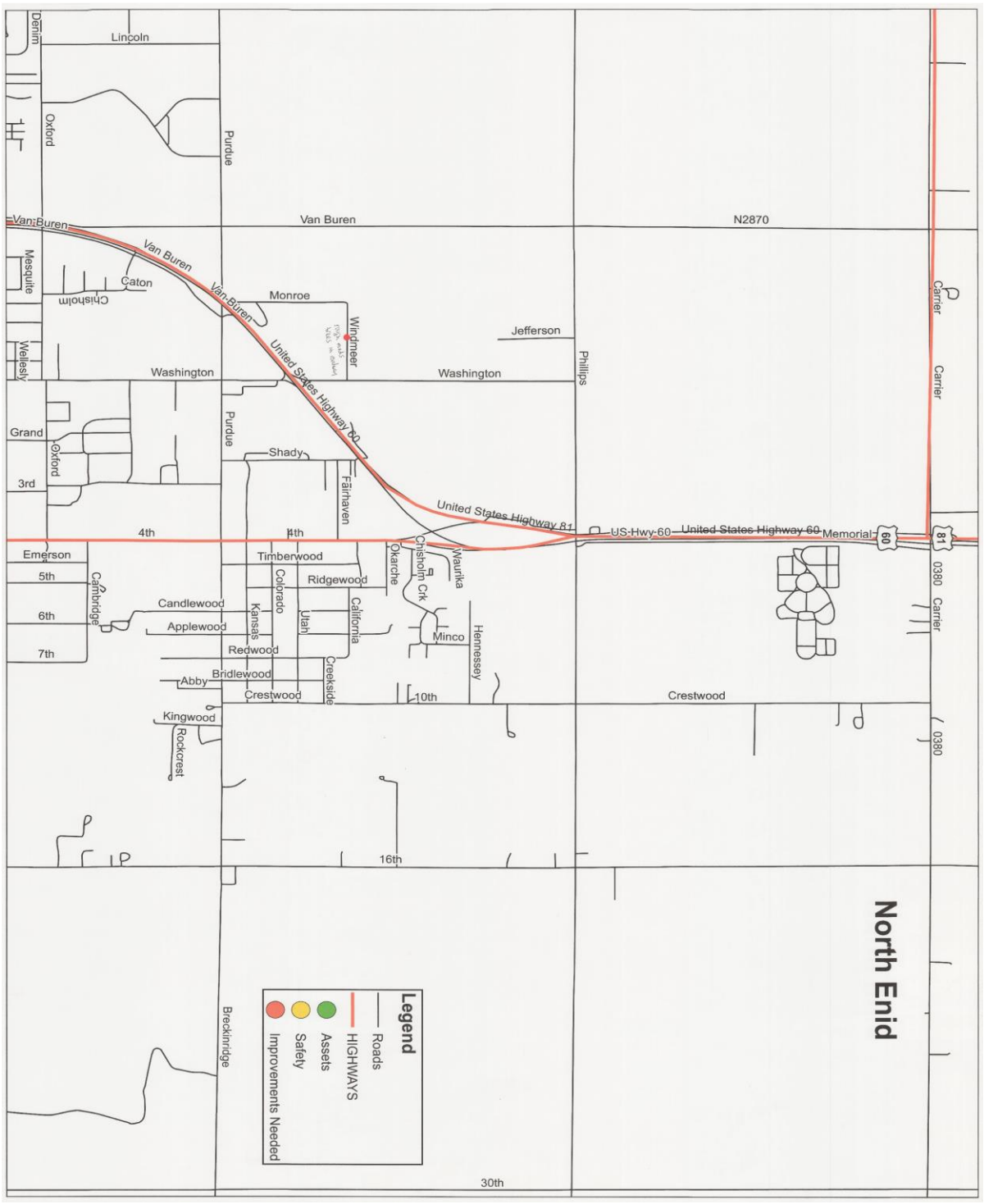
Bryan
Prairie
Lilac
Pinto
Great Lakes
H Holden
Keowee
16th
30th
42nd
54th
66th
78th
County
2nd
Main
6th
7th
Kremlin
N2910
Kremlin-Hunter
Centennial
Legend
Roads
HIGHWAYS
Assets
Safety
Improvements Needed


Denim
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Purdue
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Caton
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Jefferson
Wellesly
Washington
Washington
Phillips
Carrier
Carrier
Grand
Oxford
Purdue
Shady
United States Highway 60
3rd
Fairhaven
United States Highway 81
US-Hwy-60
United States Highway 60
Memorial
60
81
4th
4th
Emerson
Timberwood
Okarche
Chisholm Crk
Waurika
5th
Cambridge
Colorado
Ridgewood
0380
Carrier
Candlewood
Kansas
Utah
California
6th
Applewood
Minco
Hennessey
7th
Redwood
Creekside
Bridlewood
Abby
Crestwood
10th
Crestwood
Kingwood
Rockcrest
0380
16th
North Enid
Legend
Roads
HIGHWAYS
Assets
Safety
Improvements Needed
Breckinridge
30th

Table D.1 - Stakeholder Maps Safety Comments

Covington	
Location	*Description*
E0490/SH64	Why does northbound traffic have to stop
Drummond	
Location	*Description*
Skelton (east of Michael)	Low ton bridge
Enid	
Location	*Description*
66th/Wood	School needs signals
US 60(Banner)	Highway lights out
16th/Southgate	
412 & Van Buren	
Van Buren/3rd St.	Need access
Purdue/US 60	
Rupe (114th - 138th)	Oil field trucks
Cypress (8th - 9th)	Very rough
7th (Maple - Randolph)	Ton to small
Grand (Owen K. Garriott - 4th)	Repair
Oklahoma/8th	Lack of pedestrian traffic
30th (Chestnut/Willow)	Reconstruct and widen
US 64/Willow	Fix curve at intersection
Jonson/Randolph	Stope sign hard to see. Traffic backup
Randolph (Fillmore-Main)	Remove houses from middle of street
Randolph (Jackson - Adam)	Not wide enough
Johnson (Owen K. Garriott - Oklahoma)	Very rough
Cleveland (Oklahoma - Owen K. Garriott)	Railroad congestion
Kenwood/Maple	Signal not safe
Jefferson (Park-Cherokee)	Rough road
Independence (Park - Cherokee)	Lack of sidewalks. Bike lanes not well maintained.
Madison/Wabash/Monroe	Not pedestrian friendly
Van Buren/York	Flooding
Illinois/Monroe	Sidewalk!
Van Buren - High School	Need pedestrian access
E0410 (Garland - Mount Vernon)	Add turn lane at school
Mercer/Richland	
Mercer (Norman - north)	Need bike lanes to Meadowlake trails, Vance AFB, Southgate. This is currently part of JLUS
Southgate/Mercer	Truck turning width
Southgate (Cleveland - Mercer)	No transportation. Need ne entry to base

Oakwood (Carrier-E0370)	Rough road
Garland (Carrier E0370)	Rough road
Carrier/N2850	Need turn lanes, sidewalks and crossings
Oklahoma/Garret	At turn there is a ditch right next to left lane
Cleveland/Rupe	Need turn lane on Cleveland. Significant traffic to Vance in AM/PM
Fairmont	
Location	*Description*
Southgate/114	Truck crossing bad
Olive (Denver-Patterson)	Widen
Howard (Enid - Patterson)	Sidewalk in park to Main St.
Main (Patterson - Enid)	Sidewalks need repair
Main (Patterson - Enid)	Widen all directions
Wolf (Enid-Denver)	Widen all directions
Bredehoft/Enid	Widen all directions
Johnson/Buffalo	Widen all directions
Barns/Buffalo	Widen all directions
Hunter	
Location	*Description*
150th (Cherokee - north)	Need reconstruction and wide to wind farm offices and warehouse
Kremlin	
Location	*Description*
7th	No sidewalks to school k-12
16th (south of Great Lakes)	Bridge
US 81 (SH 45 to Blair)	holds water and not ample for quick and safe emergency response
Lahoma	
Location	*Description*
US 60/Main	Flashing lights needed for crossing 412
North Enid	
Location	*Description*
Windmere (Monroe-Washington)	Rough road, trees in roadway.
Waukomis	
Location	*Description*
Van Buren/Hayward	Dangerous intersection
US 81/Euclid	Traffic Congestion
Main/Wood	Intersection improvement, fire station needs flashing lights
US 81 (south of Wood)	Flooding
Wood (Cleveland-Main)	Flashing school light

Table D.2 - Stakeholder Maps Improvement Comments

Breckinridge	Correct street names on map
Carrier	
Location	*Description*
Maple/Broadway	
Broadway/Maine	
SH132/45th	Need more advance warning before intersection
Enid	
Location	*Description*
Southgate (54-66)	
E0425 (78th - 90th)	Railroad crossing overpass
E0425 (54th - 60th)	Railroad crossing overpass
Wheat Capital/114th	
Broadway (Hayes-Arthur)	Cars blocking road, 1-way traffic congestion.
Hays/Broadway	Tree blocking railroad crossing sign.
Cleveland (Oklahoma - Owen K. Garriott)	Sidewalks needed
E0410 (Garland - Mount Vernon)	Make 4 lanes
Garland (south to E0410)	Need sidewalks
Garland (Willow-Oakwood)	Need sidewalks to school
Appomattox/Shiloh	Stop sign
Between Randolph & Chestnut on Garland Rd.	More lighting
Mercer (Norman - north)	Need safe access to DHS & Health Dept. Need sidewalks for pedestrians.
Southgate/Leonna Mitchell	Road closed for emergency vehicles
Golden Oaks	Far from Enid for emergency response
Mill Run/Spring Ridge	Need stop sign
Rupe/Cleveland/Van Buren	Sidewalks
Monroe (north of Purdue)	Stop light confusing
Willow/Washington	Fence blocking view
Cleveland (south of Chestnut)	Significant Vance traffic + Hayes (school) in AM, Vance in PM
Hillsdale	
Location	*Description*
Taylor (Jett/Main)	
Kremlin	
Location	*Description*
Keowee/US 60	Intersection rated to high of speed for traffic numbers
16th/E03500	Intersection safety. Blind 4 way
Lahoma	
Location	*Description*

	School zone lights don't work
	Alleyways have large potholes.
Rupe/Logan	Rough
Logan (Rupe - US 60)	Road beat up, pot holes, down to 1 lane
Waukomis	
Location	*Description*
US 81/Wood	Needs improvement
Wood (US 81/Main)	Railroad crossing improvement
Hayward (Cleveland- Van Buren)	Bad road
Lisa/Cleveland	Street improvement
Cherokee (Cleveland-Main)	Widen
Cowboy	Street flooding
E0520	Railroad crossing improvement

Appendix F - Corresponding Websites and Plans

Garfield County Multi-Jurisdictional Hazard Mitigation Plan https://gcem.org/wp-content/uploads/2017/07/2016-03-07-Garfield-County-HMP.pdf
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/2018/08-Garfield.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/garfield.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://nationalregisterofhistoricplaces.com/ok/Garfield/state.html
https://www.wildlifedepartment.com/wildlifemgmt/endangered/State_Listed_by_County.pdf
https://www.okwindpower.com/oklahoma-wind/wind-farms/

APPENDIX G

Maps and Tables by Chapters

Appendix G-2 Chapter 2

Appendix G-3 Chapter 3

Table 2.1 NORTPO Counties Population Data

NORTPO Counties	2013-2017 Estimate	2012-2016 Estimate	2011-2015 Estimate	2010-2014 Estimate	2009-2013 Estimate	2008-2012 Estimate	2010 Census
Alfalfa County	5,877	5,784	5,868	5,793	5,847	5,666	5,642
Blaine County	9,680	9,777	9,833	9,896	9,720	9,785	11,943
Beaver County	5,445	5,400	5,435	5,519	5,558	5,583	5,636
Cimarron County	2,221	2,170	2,202	2,271	2,307	2,383	2,475
Dewey County	4,904	4,886	4,961	4,949	4,844	4,805	4,810
Ellis County	4,102	4,083	4,215	4,116	4,132	4,077	4,151
Garfield County	**62,421**	**62,481**	**63,569**	**62,977**	**62,267**	**61,189**	**60,580**
Grant County	4,458	4,497	4,523	4,496	4,528	4,516	4,527
Harper County	3,843	3,794	3,842	3,894	3,873	3,706	3,685
Kay County	45,173	45,398	45,366	45,510	45,633	45,779	46,562
Kingfisher County	15,510	15,392	15,584	15,509	15,276	14,994	15,029
Major County	7,730	7,721	7,771	7,758	7,683	7,667	7,527
Noble County	11,421	11,470	11,554	11,519	11,446	11,546	11,561
Texas County	21,409	21,131	21,379	21,677	21,959	21,497	20,640
Woods County	9,132	9,134	9,283	9,231	8,981	8,834	8,878
Woodward County	21,140	20,924	21,575	21,518	21,224	20,656	20,081
NORTPO Region	234,466	234,042	236,960	236,633	235,278	232,683	233,727
Oklahoma	3,896,251	3,875,589	3,911,338	3,879,610	3,850,568	3,815,780	3,751,351

(Source: US Census Bureau)

Table 2.2 Garfield County Growth Chart 1980-2017 ACS Estimate

	1980 Census	1990 Census	2000 Census	2010 Census	2012-2016 ACS	2013-2017 ACS
Oklahoma	3,025,290	,145,585	3,450,654	3,751,351	3,875,589	3,896,251
Garfield County	**62,820**	**56,735**	**57,813**	**60,580**	**62,481**	**62,421**
Breckinridge	261	251	239	245	216	137
Carrier	259	171	77	85	58	49
Covington	715	590	553	527	545	512
Douglas	89	55	32	32	13	29
Drummond	482	408	405	455	436	432
Enid	50,363	45,417	47,045	49,379	50,891	50,809
Fairmont	419	129	147	134	239	255
Garber	992	959	845	822	843	865
Hillsdale	110	96	101	121	150	141
Hunter	276	218	173	165	177	190
Kremlin	301	243	240	255	215	207
Lahoma	537	645	577	611	614	539
North Enid	992	874	796	860	1,091	1,110
Waukomis	1,551	122	1,261	1,286	1,368	1,526

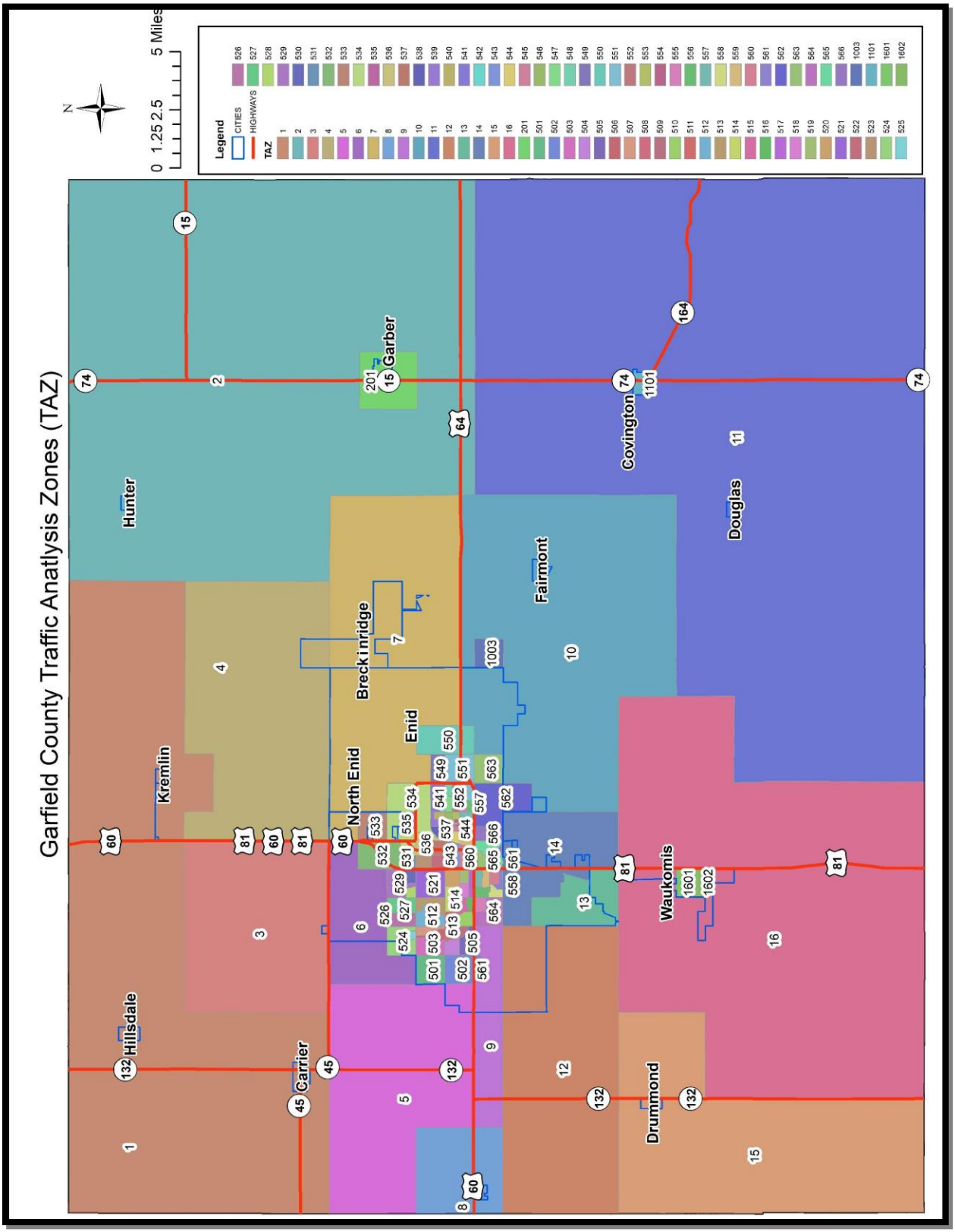
(Source: http://worldpopulationreview.com/us-counties/ok/garfield-county-population/ & https://population.us/settlement/ok/
Source: US Census; Factfinder)

Table 2.3 Vehicle Registration Chart

	2014	2015	2016	2017	2018
Automobile	54,978	53,352	53,342	53,223	51,557
Farm Truck	4,086	3,901	3,688	3,429	3,376
Commercial Truck	3,719	3,420	2,927	2,733	2,643
Commercial Truck Tractor	589	474	555	459	452
Commercial Trailer	6,194	2,390	2,009	1,879	3,970
Motorcycles	3,273	3,292	3,163	3,096	2,918

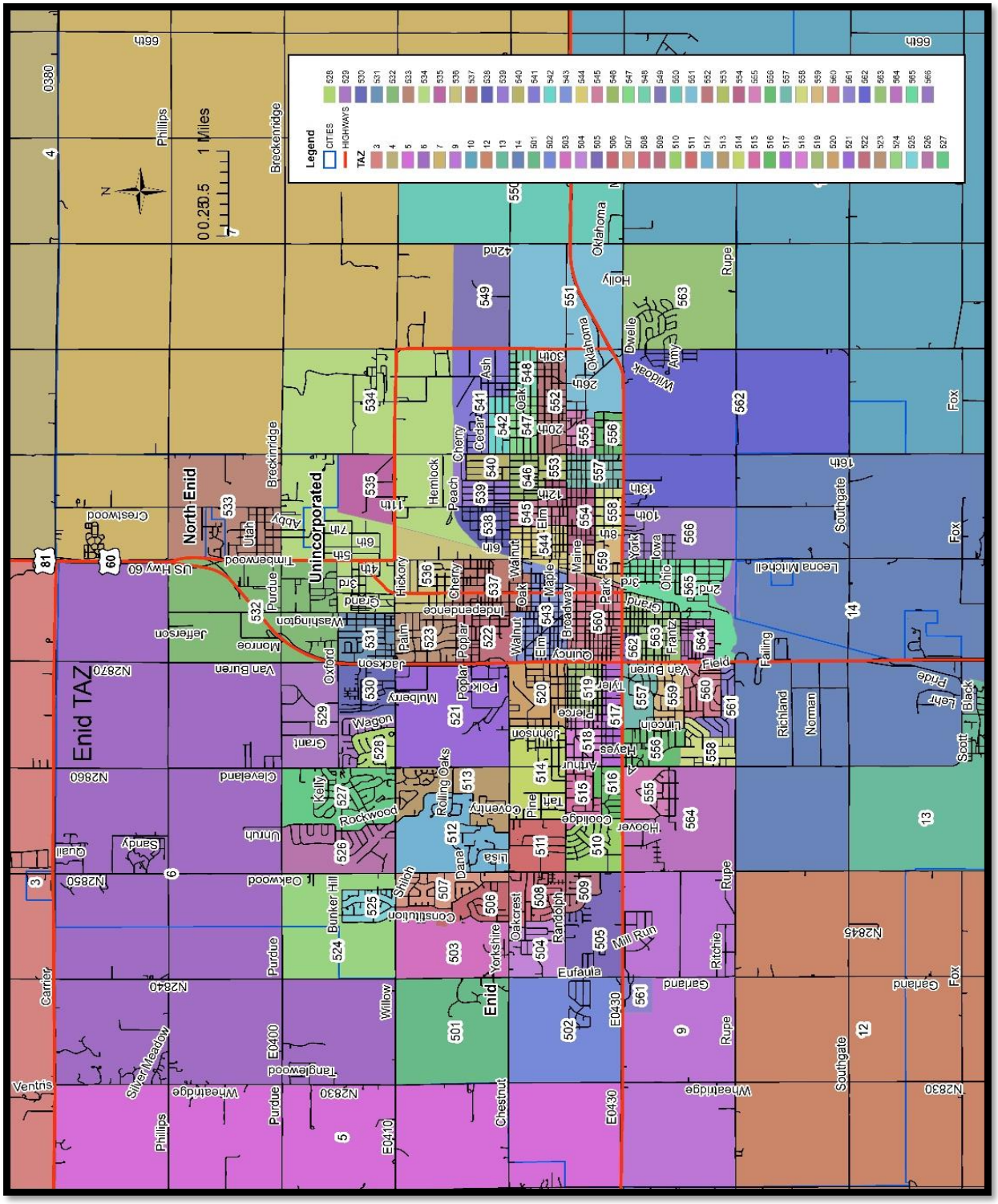
(Source: Oklahoma Tax Commission)

Map 2.1 Garfield County TAZ



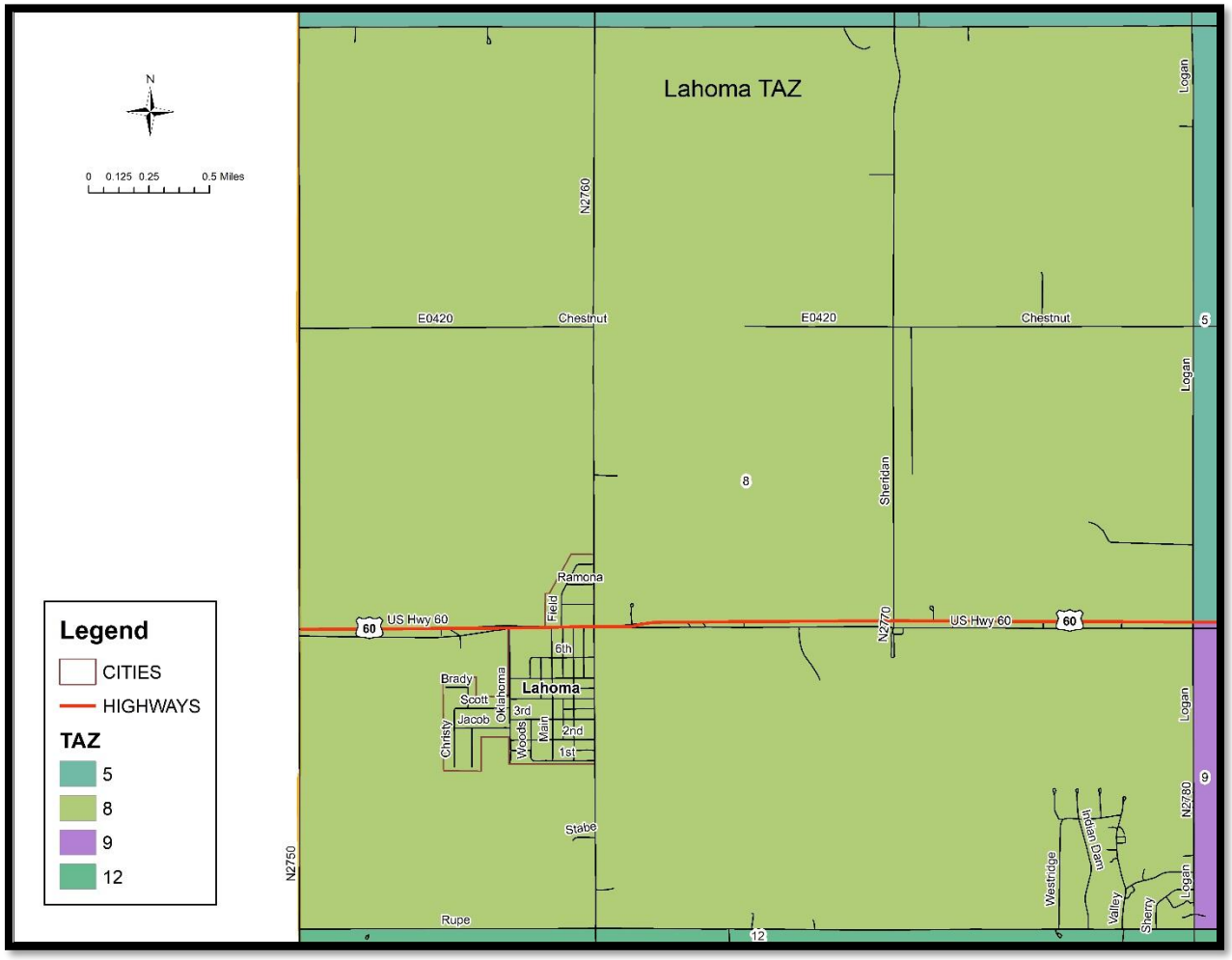
(Source: NORTPO)

Map 2.2 City of Enid TAZ



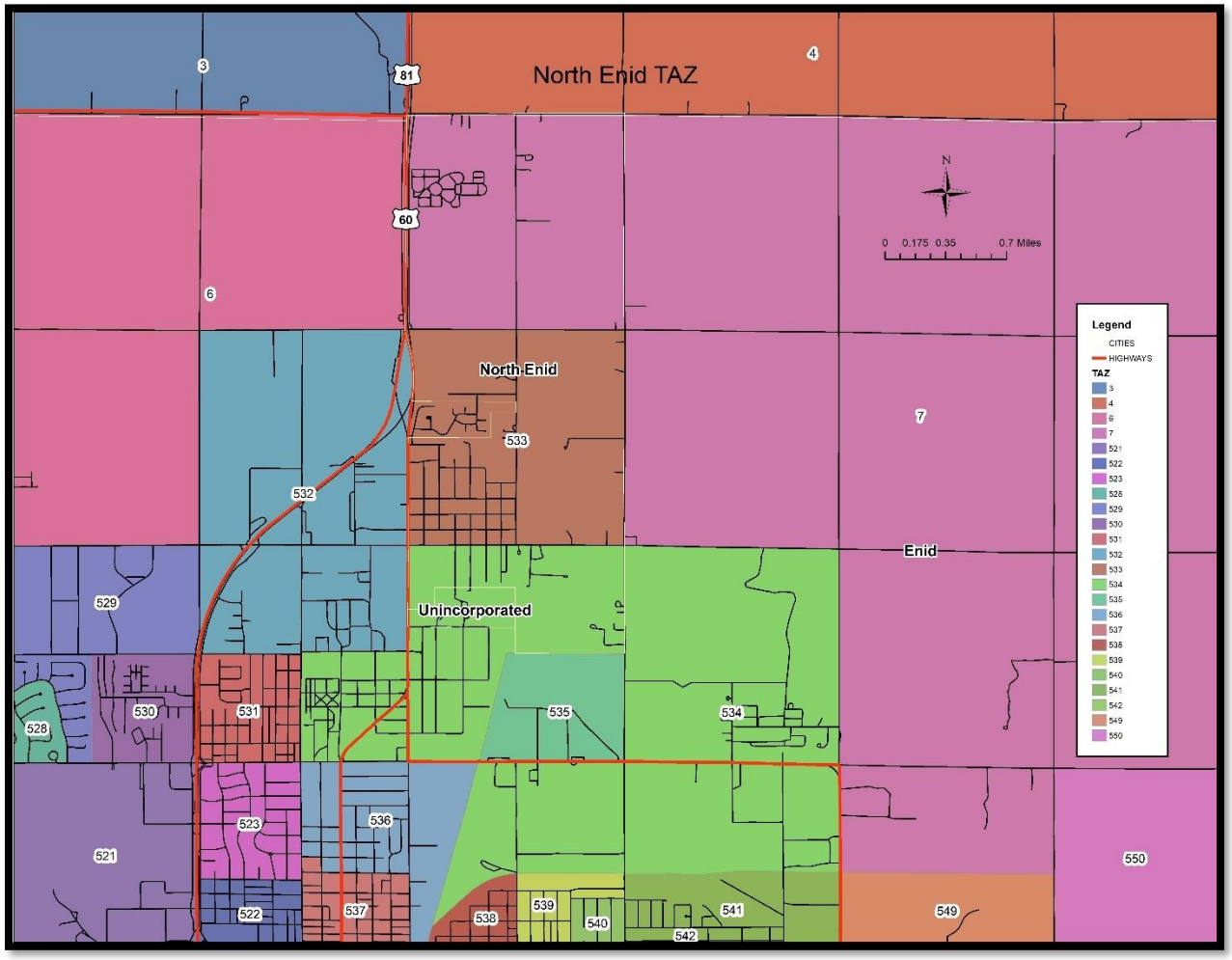
(Source: NORTPO)

Map 2.3 Town of Lahoma TAZ



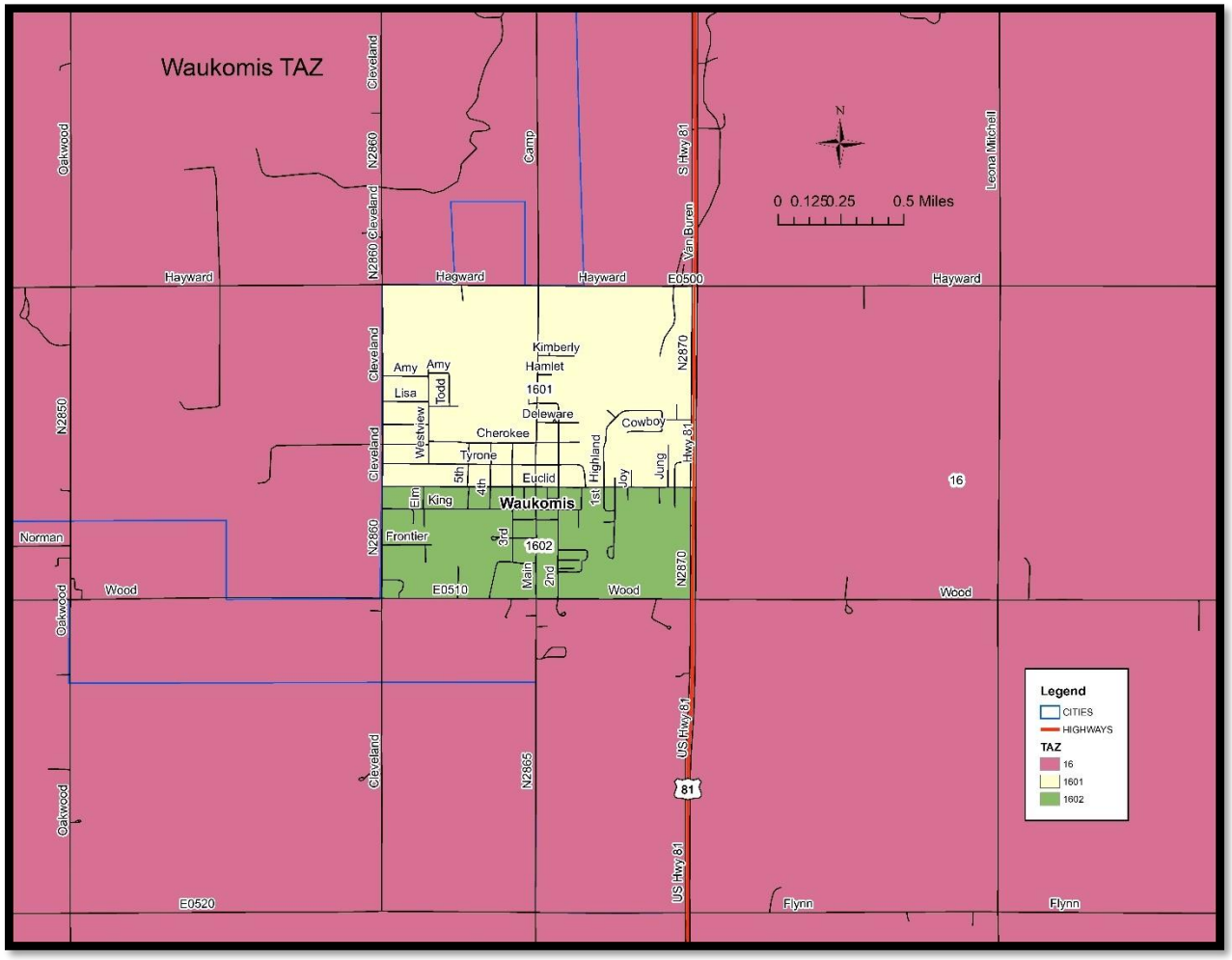
(Source: NORTPO)

Map 2.4 Town of North Enid TAZ



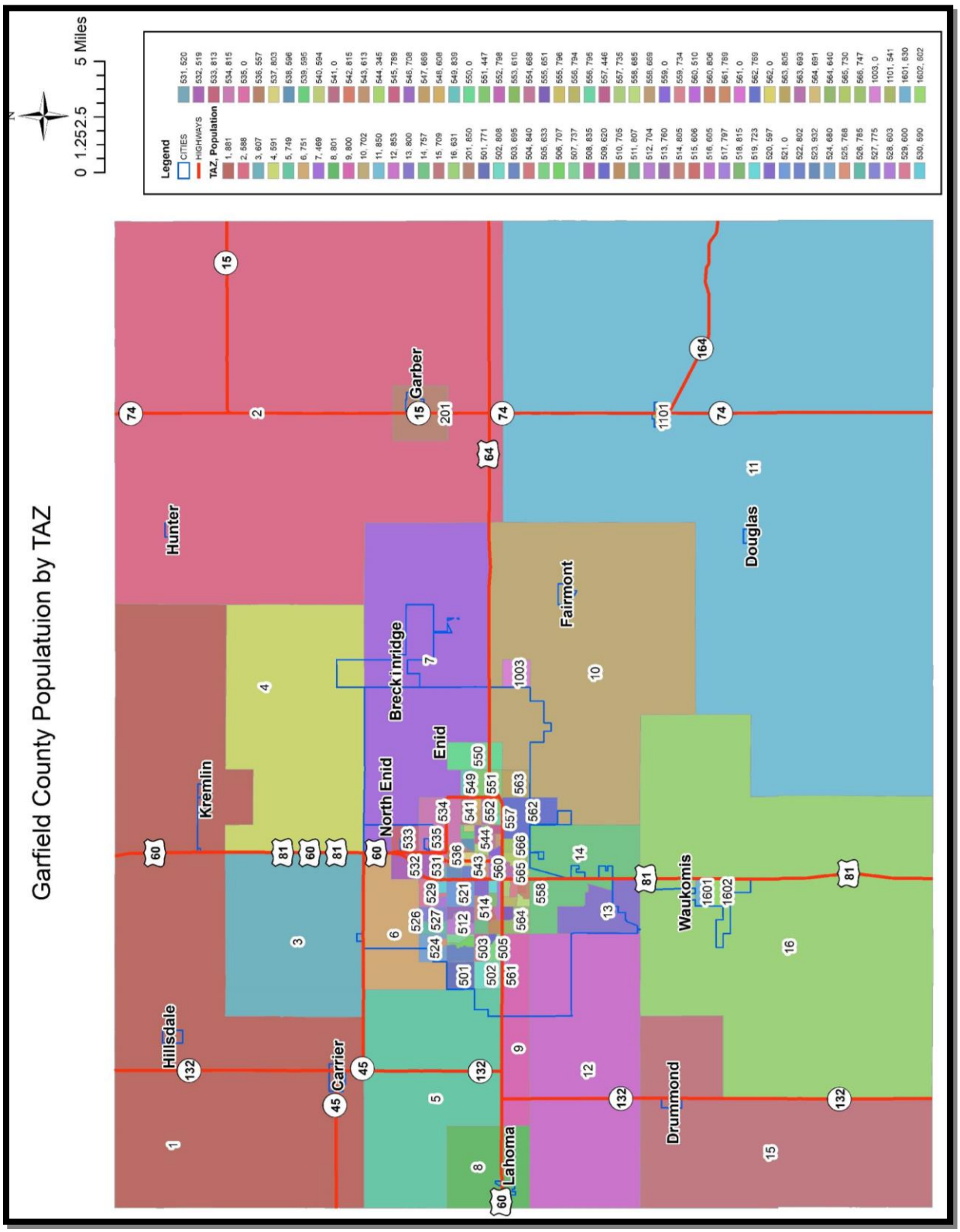
(Source: NORTPO)

Map 2.5 Town of Waukomis TAZ



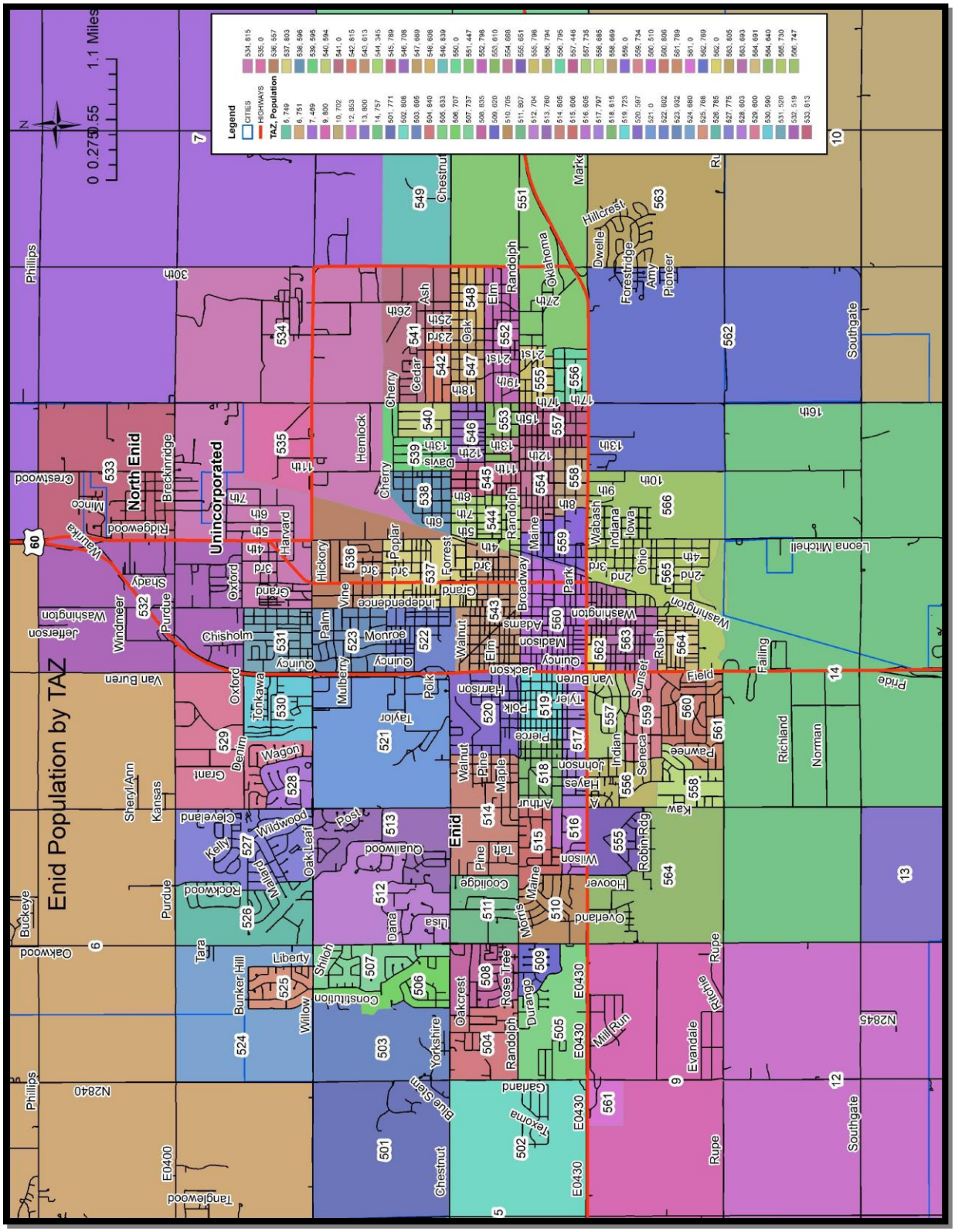
(Source: NORTPO)

Map 2.6 Garfield County Population by TAZ



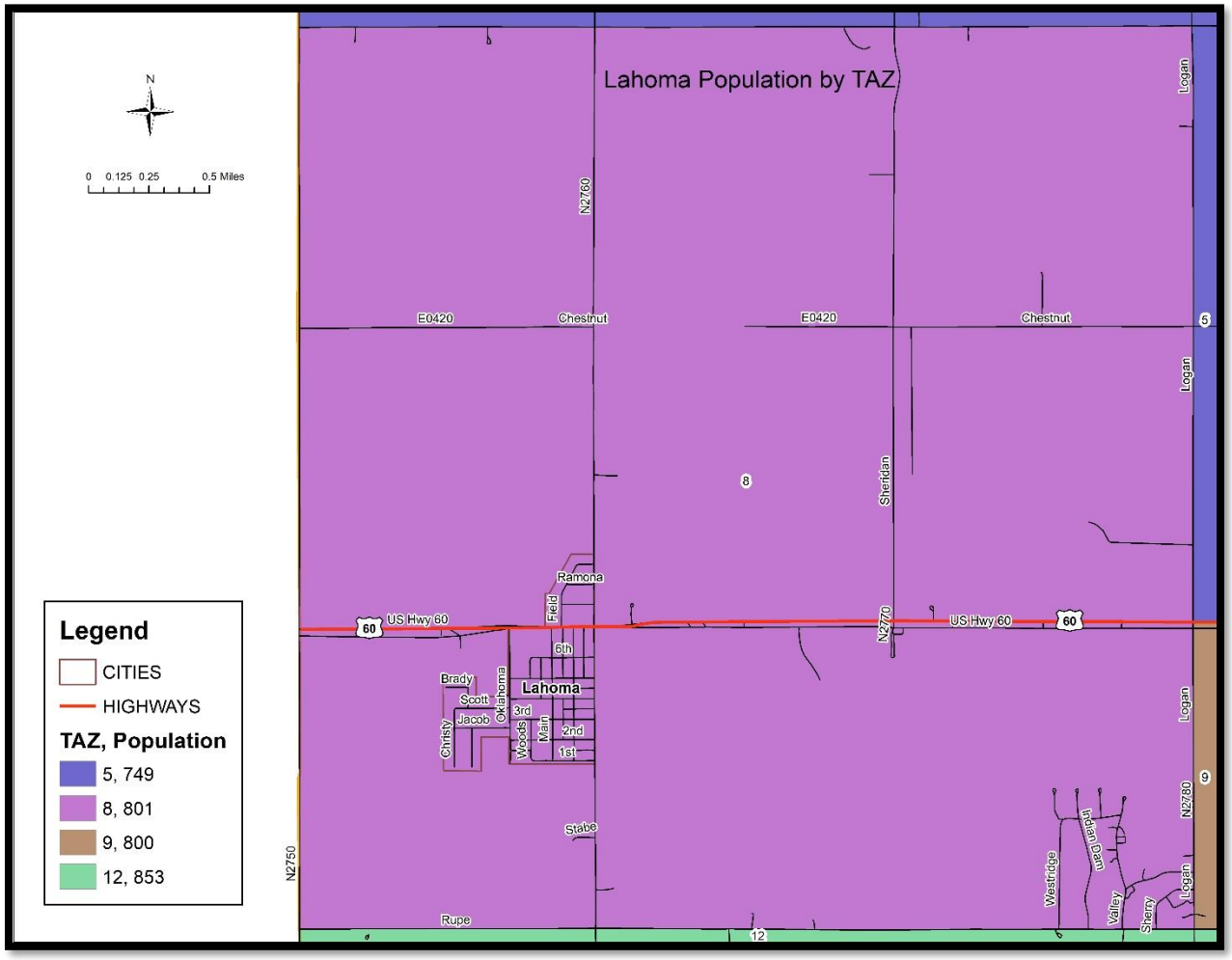
(Source: NORTPO)

Map 2.7 City of Enid Population by TAZ



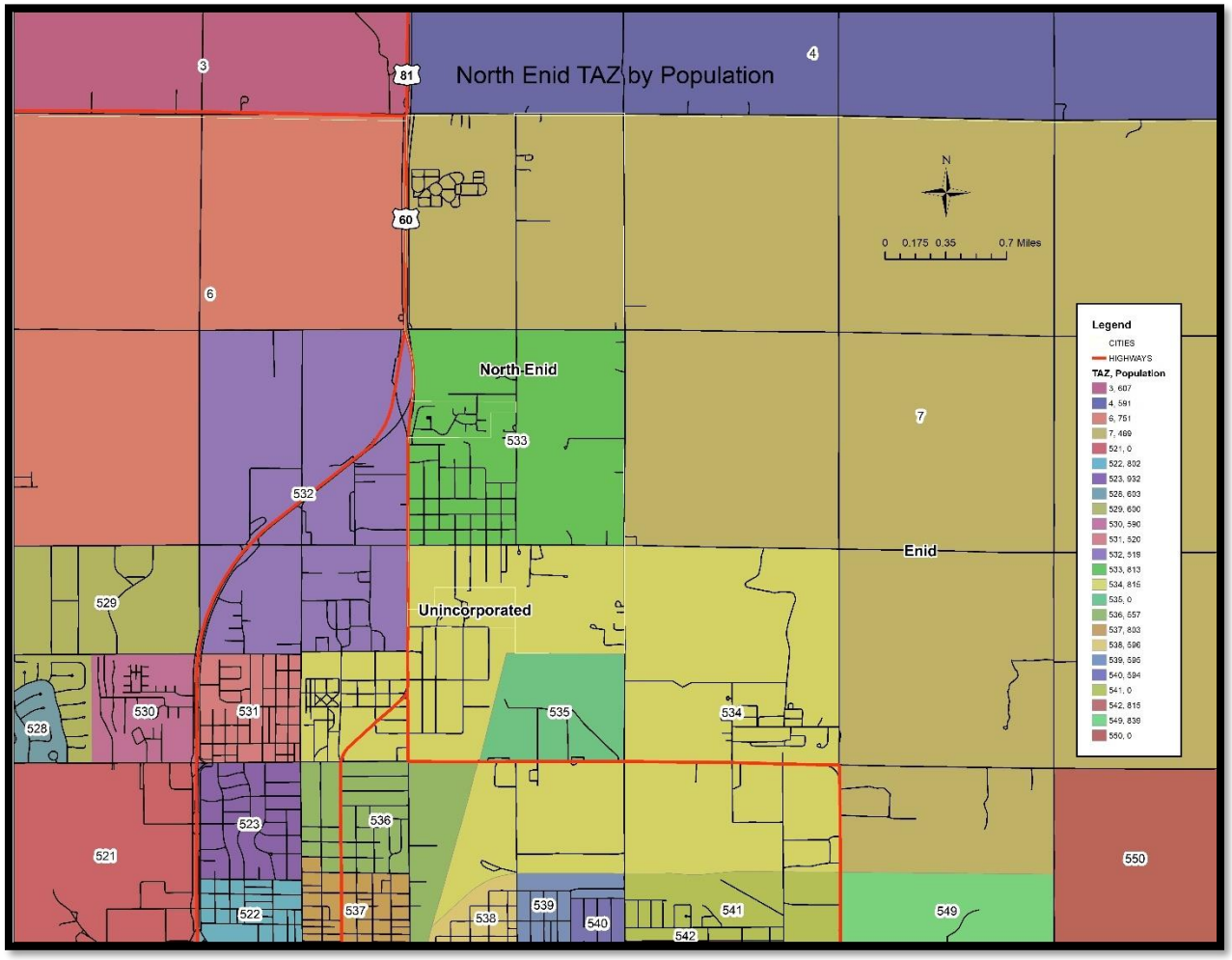
(Source: NORTPO)

Map 2.8 Town of Lahoma Population by TAZ



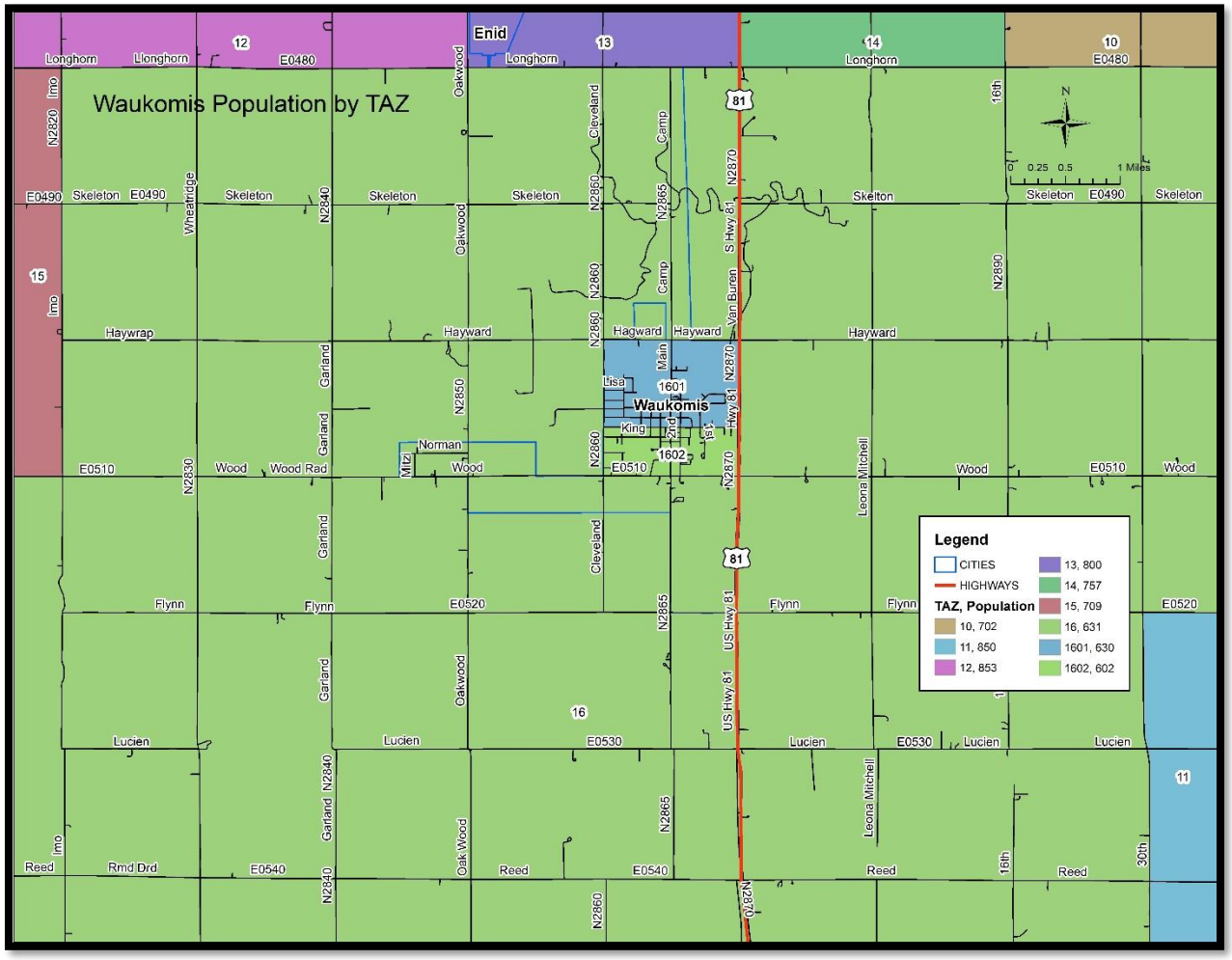
(Source: NORTPO)

Map 2.9 Town of North Enid Population by TAZ



(Source: NORTPO)

Map 2.10 Town of Waukomis Population by TAZ



(Source: NORTPO)

Table 2.4 Garfield County Population by TAZ

TAZ NO.	POPULATION (2017)	EMPLOYEE NO. (2017)
1	881	
2	588	
3	607	
4	591	
5	749	
6	751	
7	469	
8	801	
9	800	
10	702	
11	850	
12	853	
13	800	250-499 Vance Air Force
14	757	
15	709	
16	631	
201	850	
501	771	
502	808	
503	695	
504	840	
505	633	
506	707	
507	737	
508	835	
509	620	
510	705	
511	807	
512	704	
513	760	
514	805	
515	606	
516	605	
517	797	
518	815	
519	723	
520	597	
521	0	250-499
522	802	

TAZ NO.	POPULATION (2017)	EMPLOYEE NO. (2017)
523	932	
524	680	
525	768	
526	785	
527	775	
528	603	
529	600	
530	590	
531	520	
532	519	
533	813	
534	815	
535	0	250-499
536	557	
537	803	
538	596	
539	595	
540	594	
541	0	500-999
542	815	
543	613	
544	345	
545	789	
546	708	
547	669	
548	608	
549	839	
550	0	250-499
551	447	100-249 / Northern Oklahoma College
552	798	
553	610	
554	668	
555	651	
555	796	
556	794	
556	795	
557	446	
557	735	
558	669	

TAZ NO.	POPULATION (2017)	EMPLOYEE NO. (2017)
558	685	
559	0	250-499
559	734	
560	510	
560	806	
561	789	
561	0	250-499
562	769	
562	0	250-499
563	693	
563	805	
564	640	
564	691	
565	730	
566	747	
1003	0	250-499
1101	541	
1601	630	
1602	602	

(Source: NORTPO)

Table 2.5 Garfield County Major Employers by TAZ

Company Name	Address	City	# of Employees
Covington & Douglas Schools	400 E Main St	Covington	[50 - 99]
Covington General Store	102 E Main St	Covington	[10 - 19]
Phillips 66	102 E 1st St	Covington	[10 - 19]
County Shop	311 Commercial St	Douglas	[10 - 19]
R & M Pipeline Svc Inc.	7604 Highway 132	Drummond	[50 - 99]
All terrain Electric LLC	11528 W Skeleton Rd	Drummond	[10 - 19]
Drummond Schools	610 Kansas Ave	Drummond	[20 - 49]
R & M Pipeline Svc Inc.	7604 Highway 132	Drummond	[50 - 99]
Central Machine & Tool (PT Coupling/Parrish Enterprises	1414 E Willow Rd	Enid	300
Attwood's Ranch & Home	500 S Garland Rd	Enid	[100 - 249]
BNSF Railway Co	930 E Cherry Ave	Enid	[100 - 249]
Central National Bank & Trust	324 W Broadway Ave	Enid	[100 - 249]
Clay Hall Senior Resident	311 Lakeview Dr.	Enid	[100 - 249]
Complete Energy Svc Fluid Mgmt.	205 W Maple Ave # 600	Enid	[100 - 249]
Cummins Construction Co Inc.	1420 W Chestnut Ave	Enid	[100 - 249]

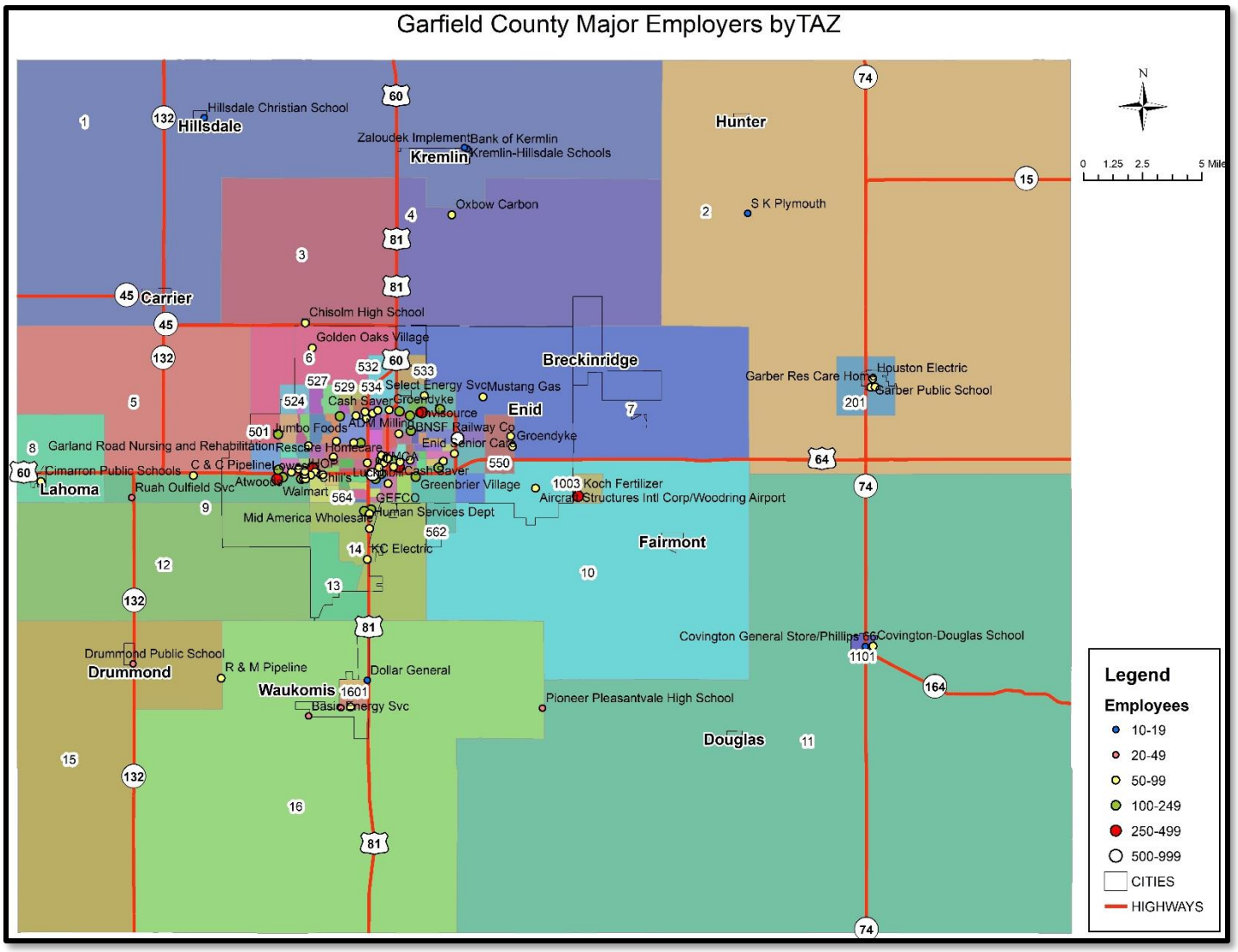
Company Name	Address	City	# of Employees
Dillard's	4125 W Owen K Garriott Rd	Enid	[100 - 249]
Enid Administrative Offices	401 W Owen K Garriott Rd	Enid	[100 - 249]
Enid High School	611 W Wabash Ave	Enid	[100 - 249]
Enid News & Eagle	227 W Broadway Ave	Enid	[100 - 249]
Enid Police Dept.	301 W Owen K Garriott Rd	Enid	[100 - 249]
Garland Road Nurse & Rehab Ctr	N Garland Rd	Enid	[100 - 249]
GEFCO Inc.	2215 S Van Buren St	Enid	[100 - 249]
Greenbrier Village	715 S 10th St	Enid	[100 - 249]
Hackney Ladish	400 E Willow Rd	Enid	[100 - 249]
INTEGRIS Bass Behavioral Health	2216 S Van Buren St	Enid	[100 - 249]
Jumbo Foods	821 Commercial Cir	Enid	[100 - 249]
Lowe's Home Improvement	5201 W Owen K Garriott Rd	Enid	[100 - 249]
Lukenbill	304 E Broadway Ave	Enid	[100 - 249]
Methodist Care Ctr	301 S Oakwood Rd	Enid	[100 - 249]
Methodist Home of Enid Inc.	301 S Oakwood Rd	Enid	[100 - 249]
Onvisource Inc.	2300 N 10th St	Enid	[100 - 249]
Robert M Greer Ctr	2501 Delaware	Enid	[100 - 249]
Steco Trailers	2215 S Van Buren St	Enid	[100 - 249]
Trinity Assisted Living		Enid	[100 - 249]
Trinity Assisted Living	3706 King St	Enid	[100 - 249]
Trinity Industries Inc.	400 E Willow Rd	Enid	[100 - 249]
United Methodist Retirement	3706 King St	Enid	[100 - 249]
US Post Office	115 W Broadway Ave # 1	Enid	[100 - 249]
Commons	3706 King St	Enid	[250 - 499]
Koch Fertilizer LLC	1619 S 78th St	Enid	[250 - 499]
St Mary’s Regional Medical Ctr	305 S 5th St	Enid	[250 - 499]
Walmart Supercenter	5505 W Owen K Garriott Rd	Enid	[250 - 499]
Academy Sports + Outdoors	4406 W Owen K Garriott Rd	Enid	[50 - 99]
ADM Milling Co	1301 N 4th St	Enid	[50 - 99]
Aircraft Structures Intl Corp	1026 S 66th St	Enid	[50 - 99]
AMC Classic Oakwood Mall 8	4125 W Owen K Garriott Rd	Enid	[50 - 99]
Applebee's	3616 W Owen K Garriott Rd	Enid	[50 - 99]
Atwood’s	5418 W Owen K Garriott Rd	Enid	[50 - 99]
Autry Technology Ctr	1201 W Willow Rd	Enid	[50 - 99]
Buffalo Wild Wings Grill & Bar	2126 N Van Buren St	Enid	[50 - 99]
C & C Pipeline Svc	613 S Boomer Rd	Enid	[50 - 99]
Chili's Grill & Bar	3620 W Owen K Garriott Rd	Enid	[50 - 99]
Chisholm High School	4018 W Carrier Rd	Enid	[50 - 99]
Commons	301 S Oakwood Rd	Enid	[50 - 99]
Enid Fire Dept.	702 W Willow Rd	Enid	[50 - 99]

Company Name	Address	City	# of Employees
Enid Fire Dept.	410 W Owen K Garriott Rd	Enid	[50 - 99]
Enid Senior Care	410 N 30th St	Enid	[50 - 99]
Evergreen Life Svc	705 S Oakwood Rd # B4	Enid	[50 - 99]
Family Center	114 S Independence St	Enid	[50 - 99]
Glenwood Elementary School	824 N Oakwood Rd	Enid	[50 - 99]
Golden Oaks Village Green Golf	5801 N Oakwood Rd # D	Enid	[50 - 99]
Groendyke Transport Inc.	810 N 54th St	Enid	[50 - 99]
Groendyke Transport Inc.	2510 Rock Island Blvd	Enid	[50 - 99]
Human Services Dept.	2405 Mercer Dr	Enid	[50 - 99]
IHOP Restaurant	4125 W Owen K Garriott Rd # E	Enid	[50 - 99]
INTEGRIS Bass Health Pavilion	401 S 3rd St	Enid	[50 - 99]
JC Penney	4125 W Owen K Garriott Rd # 10	Enid	[50 - 99]
Jumbo Foods	221 S 30th St	Enid	[50 - 99]
Kc Electric Co	4300 S Van Buren St	Enid	[50 - 99]
Life Emergency Medical Svc	302 W Maple Ave	Enid	[50 - 99]
Longfellow Middle School	900 E Broadway Ave	Enid	[50 - 99]
Mc Donald's	1010 W Maine Ave	Enid	[50 - 99]
Mc Donald's	4125 W Owen K Garriott Rd	Enid	[50 - 99]
Metals USA	101 E Illinois Ave	Enid	[50 - 99]
Mid America Wholesale	3101 S Van Buren St	Enid	[50 - 99]
Mid-Continent Packaging Inc.	1200 N 54th St	Enid	[50 - 99]
Mustang Gas Products LLC	910 W Park Ave	Enid	[50 - 99]
Northcutt Chevrolet Buick	3201 W Owen K Garriott Rd	Enid	[50 - 99]
Northern Oklahoma College	110 S University Ave	Enid	[50 - 99]
Northwest OK Blood Institute	301 E Cherokee Ave	Enid	[50 - 99]
Pope Distributing Co Inc.	1600 W Chestnut Ave	Enid	[50 - 99]
Putt-Putt Fun Ctr	710 Overland Trail	Enid	[50 - 99]
ResCare Homecare	112 W Randolph Ave	Enid	[50 - 99]
Select Energy Svc	3124 N 16th St	Enid	[50 - 99]
Stevens Ford	3101 W Owen K Garriott Rd	Enid	[50 - 99]
Supported Community Lifestyles	2506 N Jefferson St	Enid	[50 - 99]
Tru Green		Enid	[50 - 99]
United Super Market	531 E Broadway Ave	Enid	[50 - 99]
United Super Market	1010 W Willow Rd	Enid	[50 - 99]
Walmart Neighborhood Market	1018 N Cleveland St	Enid	[50 - 99]
Western Sizzlin	4722 W Owen K Garriott Rd	Enid	[50 - 99]
Wymer Brownlee	201 N Grand St # 100	Enid	[50 - 99]
YMCA of Enid	415 W Cherokee Ave	Enid	[50 - 99]
INTEGRIS Bass Bapt Health Ctr	600 S Monroe St	Enid	[500 - 999]
Marsau Enterprises Inc.	1209 N 30th St	Enid	[500 - 999]

Company Name	Address	City	# of Employees
Garber Public Schools	108 W Garber Rd	Garber	[50 - 99]
Houston Electric	315 Main St	Garber	[50 - 99]
County Warehouse	102 Main St	Garber	[20 - 49]
Garber Public Schools	108 W Garber Rd	Garber	[50 - 99]
Garber Res Care Home LLC	209 E Garber Rd	Garber	[50 - 99]
Hillsdale Christian School	206 E Taylor St	Hillsdale	[10 - 19]
S K Plymouth	16202 N 150th St	Hunter	[10 - 19]
Kremlin Bancshares Inc.	102 6th St	Kremlin	[50 - 99]
Oxbow Carbon & Minerals LLC	11826 N 30th St	Kremlin	[50 - 99]
Zaloudek F W Implement Co	3328 E Keowee Rd	Kremlin	[10 - 19]
Bank of Kremlin	102 6th St	Kremlin	[10 - 19]
Kremlin-Hillsdale Schools	605 5th St	Kremlin	[20 - 49]
Oxbow Carbon & Minerals LLC	11826 N 30th St	Kremlin	[50 - 99]
Cimarron Public School	301 Main St	Lahoma	[50-99]
Rauh Oilfield Svc Co	1622 S Hwy 132	Lahoma	[20 - 49]
Waukomis School Supt	209 W Locust	Waukomis	[50 - 99]
Basic Energy Svc	10830 S Oakwood Rd	Waukomis	[20 - 49]
Dollar General	9410 S Highway 81	Waukomis	[10 - 19]
Maxline Construction LLC	600 W Drummond Rd	Waukomis	[20 - 49]
Pioneer Pleasantvale Sch Dist.	6520 E Wood Rd	Waukomis	[20 - 49]
Waukomis City Fire Dept.	121 S Main St	Waukomis	[20 - 49]
Waukomis Public Schools	1818 W Wood Rd	Waukomis	[50 - 99]
Enid News & Eagle			[100 - 249]
Groendyke Transport Inc.			[50 - 99]

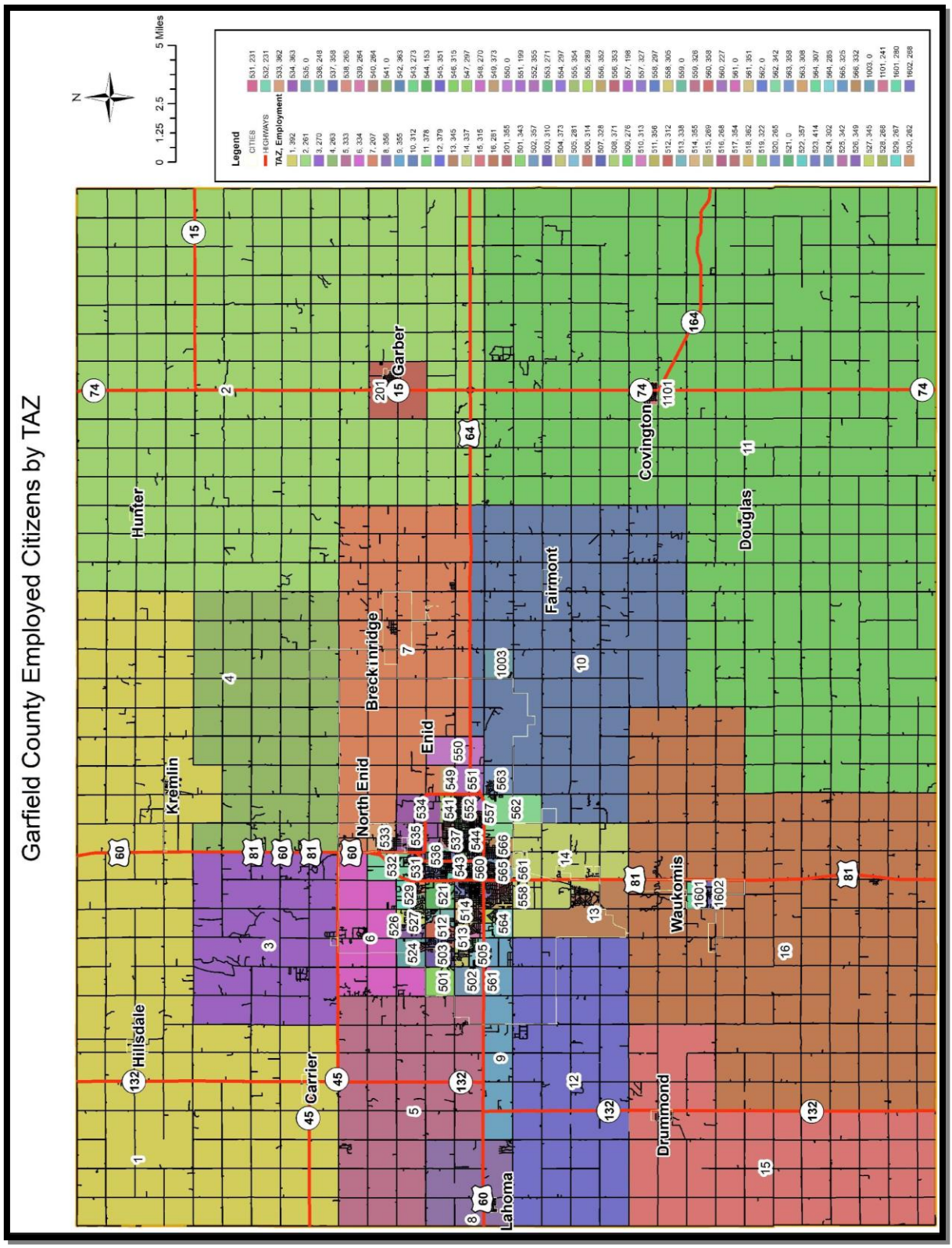
(Source: NORTPO and Oklahoma Employment Security Commission)

Map 2.11 Major Employers by TAZ



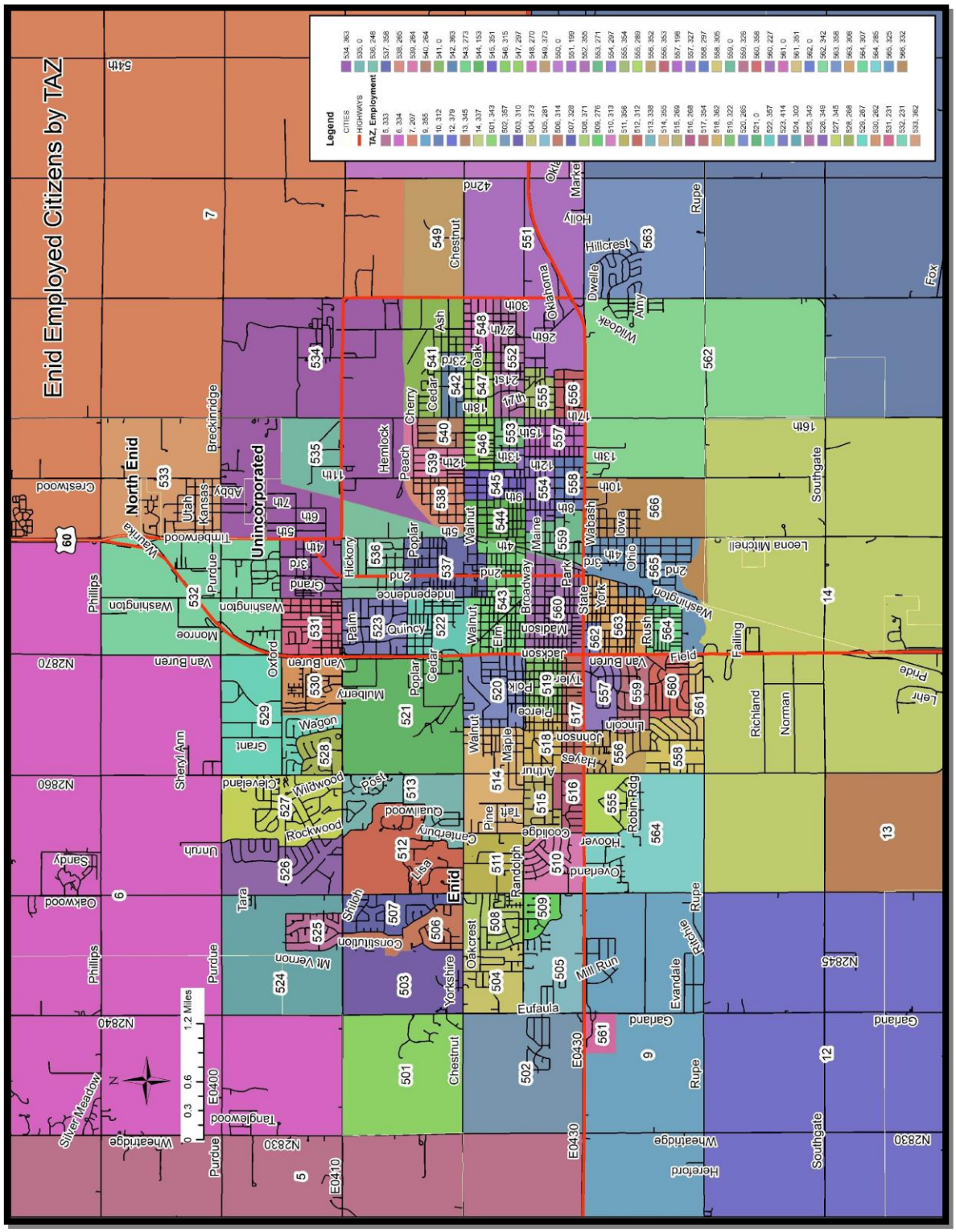
(Source: NORTPO)

Map 2.12 Garfield County Employment by TAZ



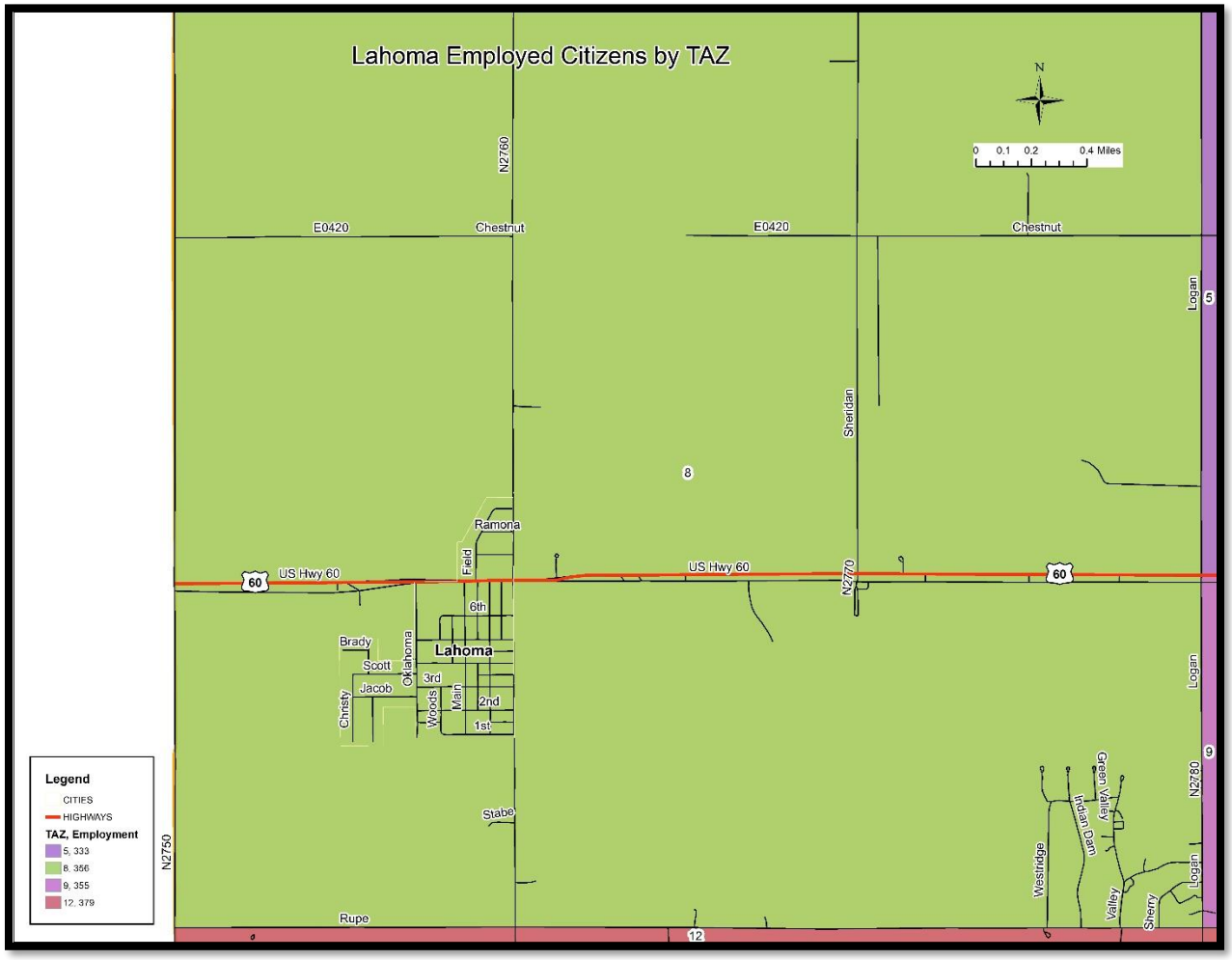
(Source: NORTPO)

Map 2.13 City of Enid Employment by TAZ



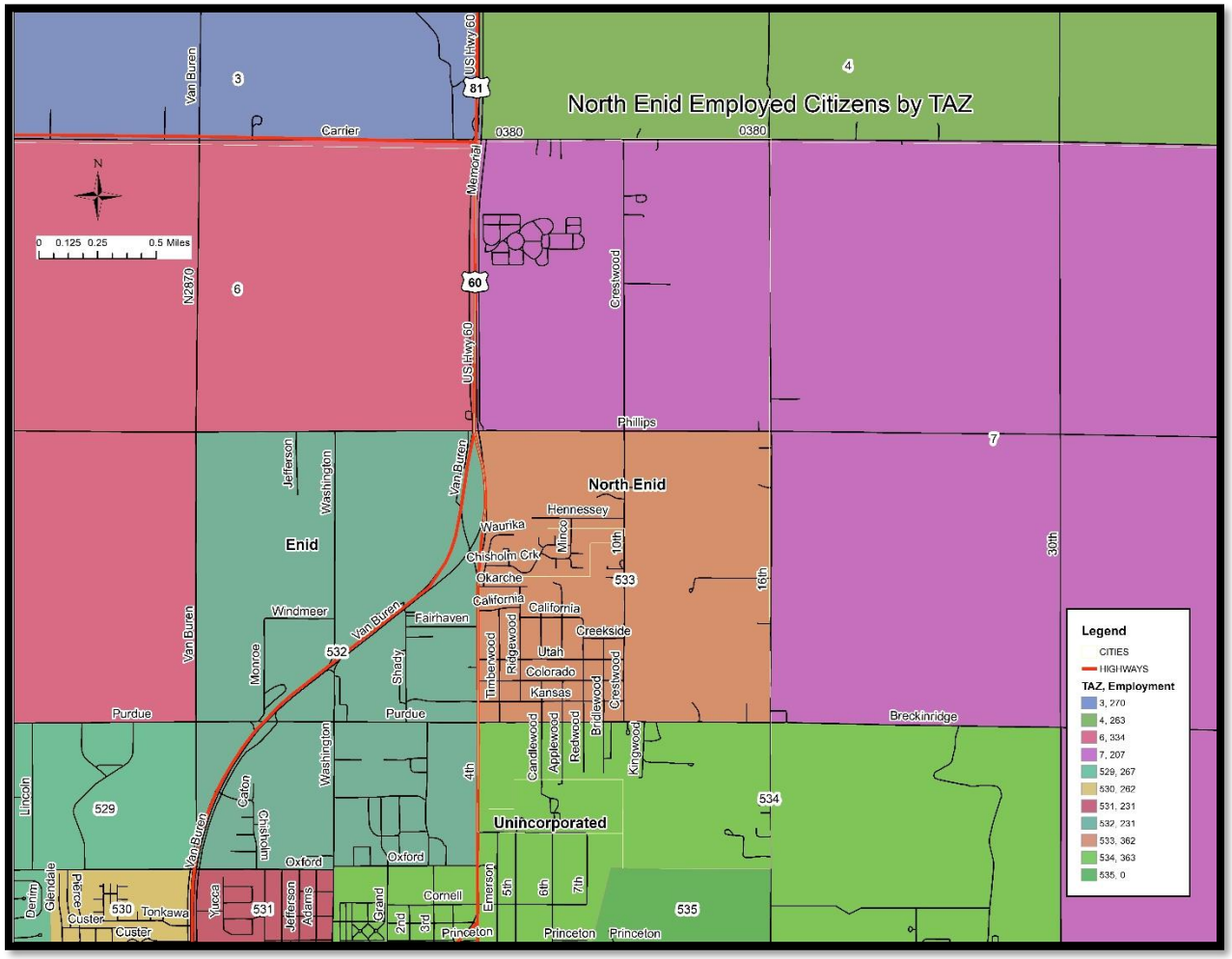
(Source: NORTPO)

Map 2.14 Town of Lahoma Employment by TAZ



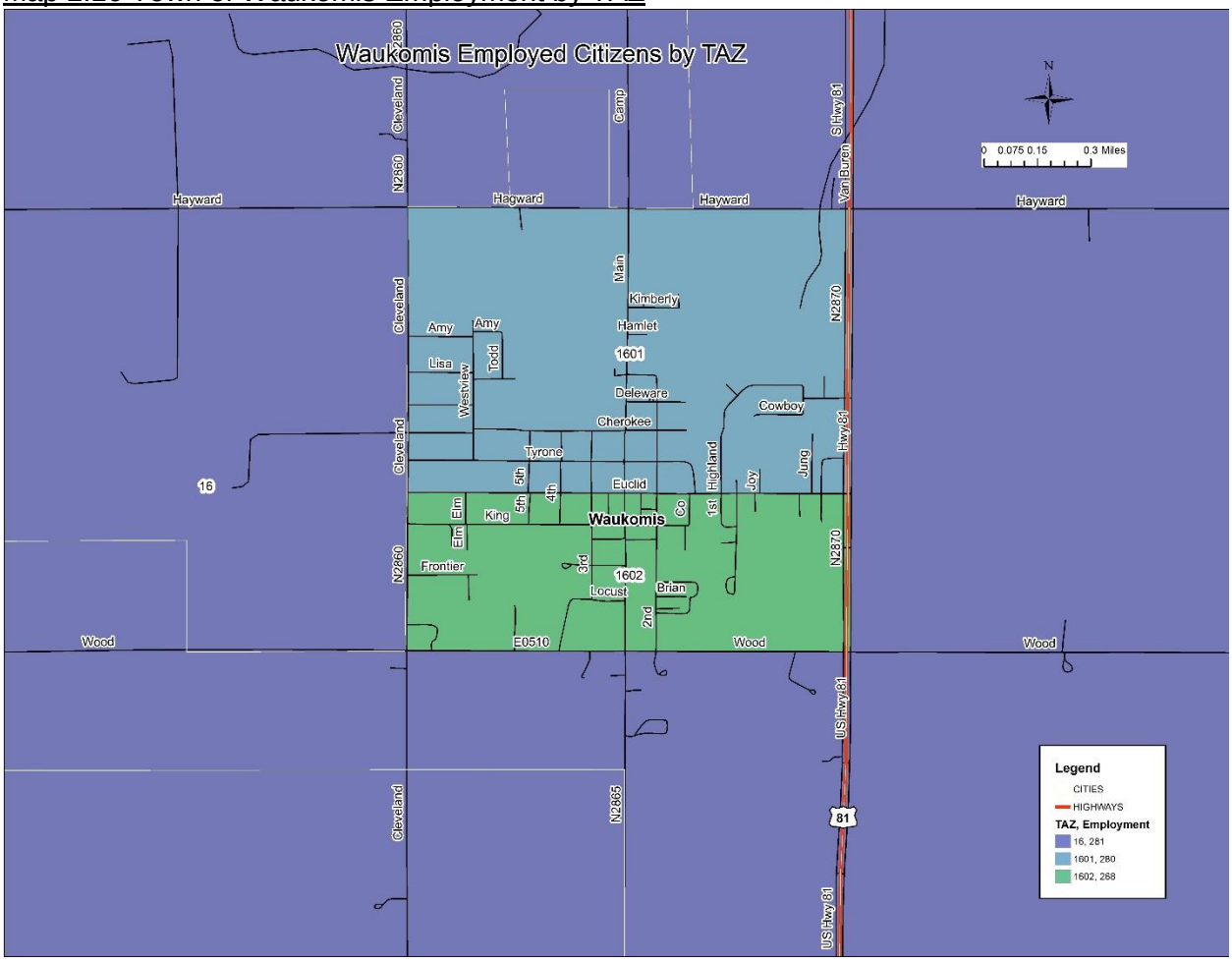
(Source: NORTPO)

Map 2.15 Town of North Enid Employment by TAZ



(Source: NORTPO)

Map 2.16 Town of Waukomis Employment by TAZ



(Source: NORTPO)

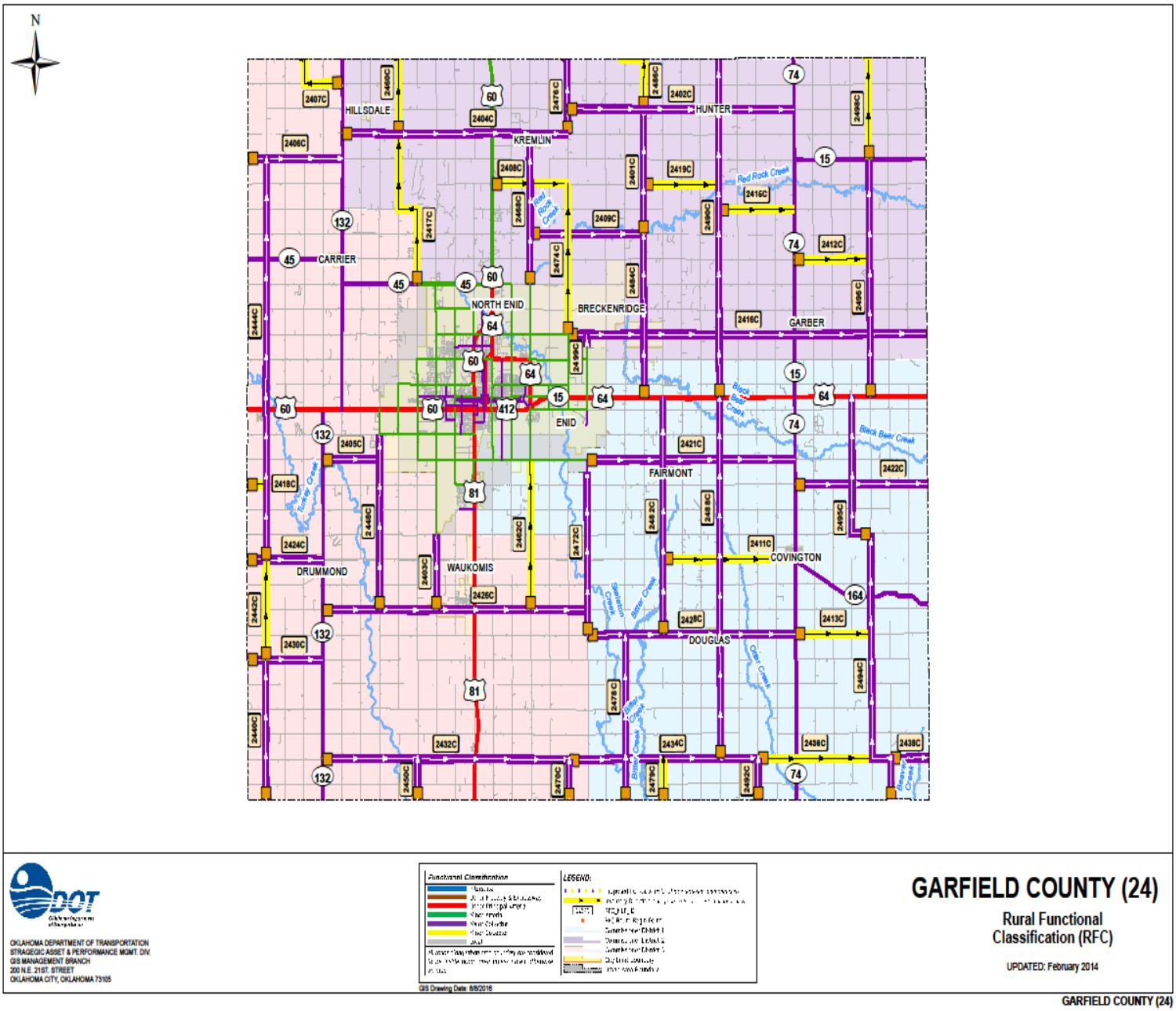
Table 2.6 Garfield County Historical Sites

Historical Site	Added	Located	Historical Function	Current Function	Owner
Bank of Hunter	1984	Cherokee and Main St., Hunter	Commerce/ Trade, Social	Commerce/ Trade	Private
Broadway Tower	1985	114 E Broadway St., Enid	Commerce/ Trade	Commerce/ Trade	Private
H.H. Champlin House	1993	612 S Tyler, Enid	Domestic	Domestic	Private
T.T. Eason Mansion AKA Bob Herlihy Home	1987	1305 W Broadway, Enid	Domestic	Domestic	Private
Enid Armory	1988	Sixth & Elm St., Enid	Defense	Defense	State
Enid Cemetery and Calvary Catholic Cemetery	1996	200 blk of W. Willow, Enid	Cemetery	Cemetery	Private
Enid Downtown Historic District	2007	Roughly bounded by Maple Ave., 2nd St., Cherokee Ave., and Adams St., Enid	Commerce/ Trade, Domestic, Government, Industry/ Processing/ Extraction, Landscape, Recreation & Culture, Social	Commerce/ Trade, Education, Government, Health Care, Industry/ Processing/ Extraction, Landscape, Recreation & Culture	Federal, Local, Private
Enid Masonic Temple AKA Knox Building	1984	W. Broadway and Washington, Enid	Commerce/ Trade, Social	Commerce/ Trade	Private
Enid Terminal Grain Elevators Historic District	2009	Near E. Willow Rd., N. 16th St., N. 10th St., and N. Van Buren St., Enid	Agriculture/ Subsistence	Agriculture/ Subsistence Vacant/Not In Use	Private
Garfield County Courthouse	1984	W. Broadway, Enid	Government	Government	Local
R.E. Hoy, No. 1 Oil Well	1986	Off US 64, Covington	Industry/ Processing/ Extraction	Industry/ Processing/ Extraction	Private
Jackson School AKA Community Care Center, Inc.	1989	415 E. Illinois, Enid	Education	Education	Private
H.L. Kaufman House	1985	1708 W. Maine, Enid	Domestic	Domestic	Private
Kenwood Historic District	1985	Bounded by Oak St., Maple, Washington and Madison, Enid	Domestic, Funerary, Religion	Commerce/ Trade, Domestic, Funerary	Private
Kimmell Barn AKA Freese Barn	1984	NE of Covington, Covington	Agriculture/ Subsistence	Agriculture/ Subsistence	Private

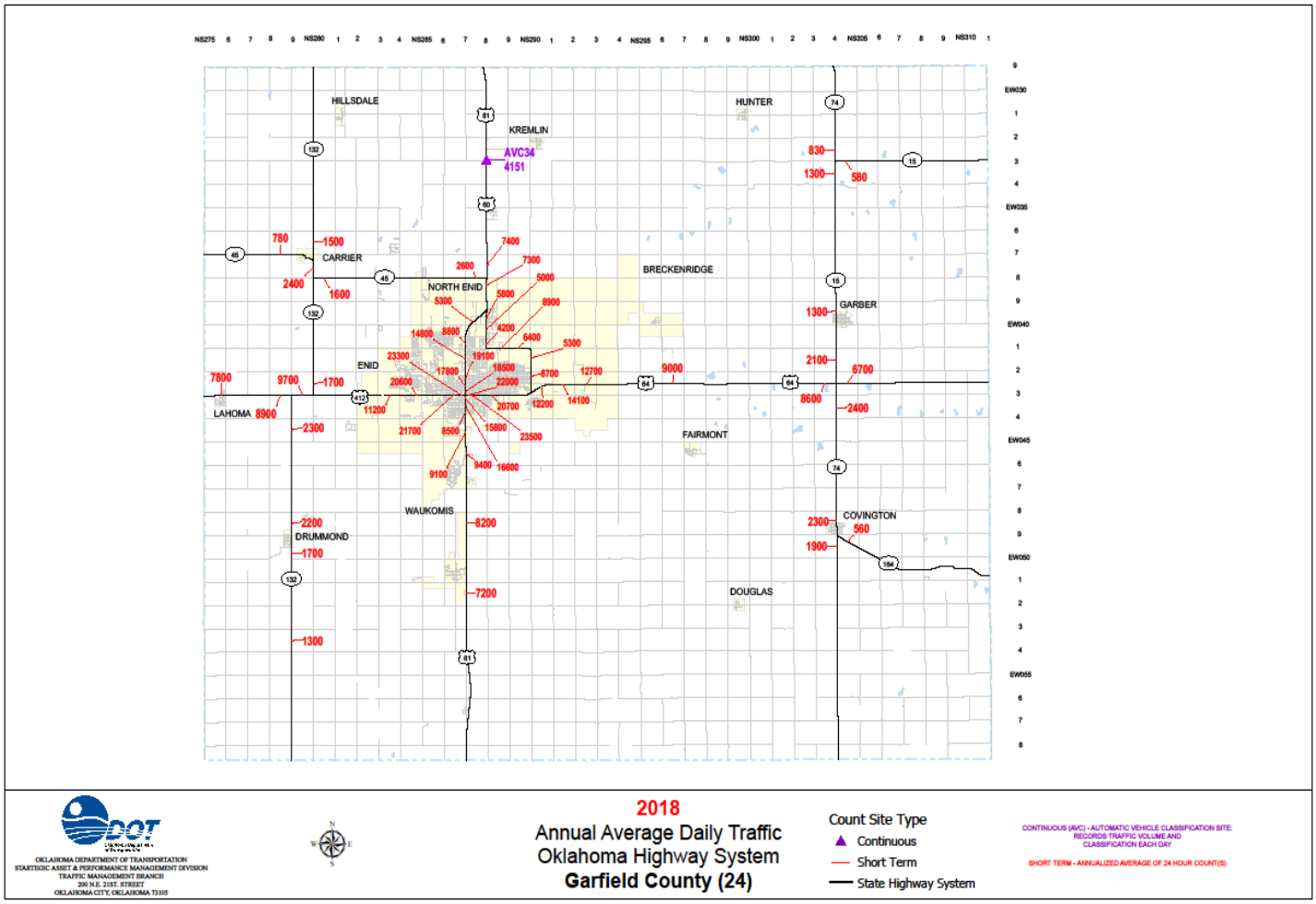
Historical Site	Added	Located	Historical Function	Current Function	Owner
Lamerton House	1997	1520 W. Indian Dr., Enid	Domestic	Domestic	Private
McCristy-Knox Mansion AKA Knox-Hedges Mansion	1987	1323 W. Broadway, Enid	Domestic	Domestic	Private
Rock Island Depot	1979	200 Owen K Garriott Blvd., Enid	Transportation	Vacant/Not In Use	Private
Sinclair Production Camp Machine Shop	1986	N. of Covington, Covington	Industry/ Processing/ Extraction	Industry/ Processing/ Extraction	Private
Waverly Historic District	2006	Roughly bounded by W Broadway Ave., N and S Tyler St., S. Harrison St., W. Oklahoma St. and S Buchanan St., Enid	Domestic, Religion	Domestic, Religion	Private

(Source: https://nationalregisterofhistoricplaces.com/ok/garfield/state.html)

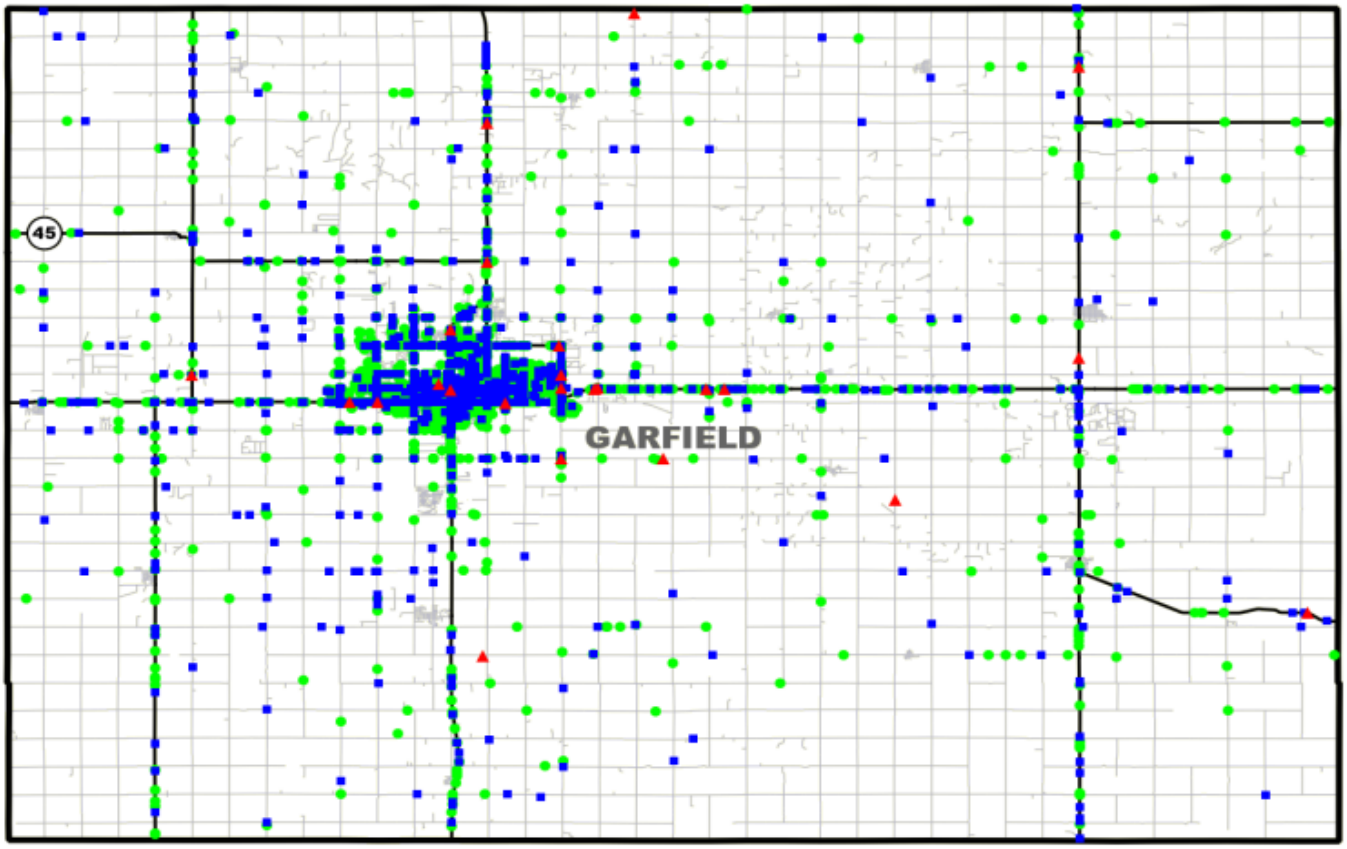
Map 2.17 Garfield County Rural Functional Classification System



Map 2.18 Garfield County Annual Average Daily Traffic, 2018



Map 2.19 Garfield County Locations of Collisions for 2014-2018



Program Provided by:
Traffic Engineering Division
Collision Analysis and Safety Branch
(405) 522-0985
Created: 07/16/2019
by NODA2

Study Map & Totals

Legend

- Fatality
- Injury
- Property Damage

N
W E
S

Table 2.7 Crash Data for 2014-2018

Date Range: 01-01-2014 thru 12-31-2018

	2014						2015						2016					
	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	4	23	161	157	1305	1650	4	17	169	184	1226	1600	9	39	152	191	1170	1561
Persons	4	28	198	247		477	4	18	220	304		546	10	43	192	302		547

	2017						2018*					
	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	Incap Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	5	24	117	221	989	1356	4	17	73	181	877	1152
Persons	5	28	144	317		494	4	23	98	266		391

* DENOTES A YEAR FOR WHICH DATA MAY BE INCOMPLETE.

	Study Total					
	Fatality	Incapacitating Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
Collisions	26	120	672	934	5567	7319
Persons	27	140	852	1436		2455

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

STUDY TOTALS

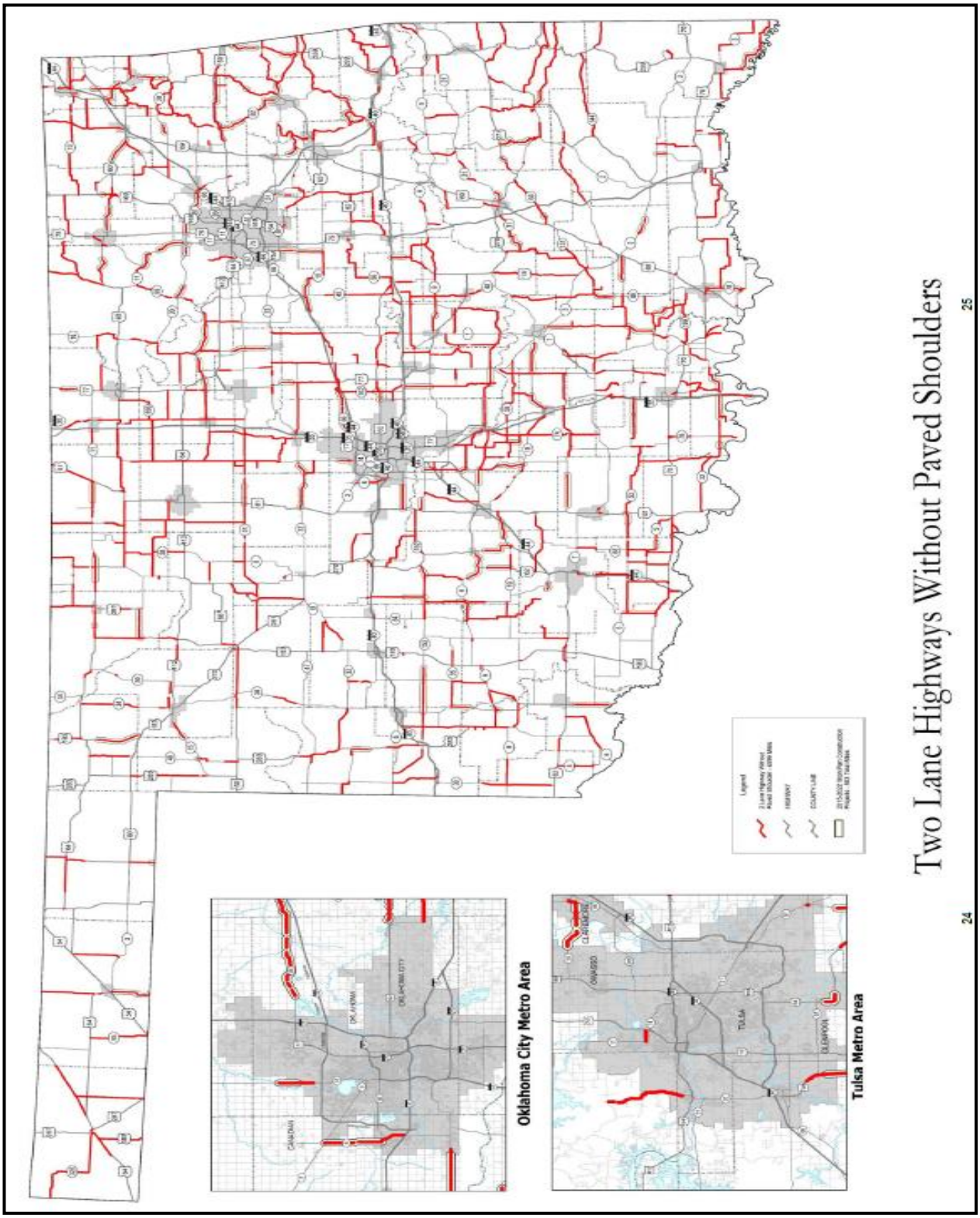
	HIGHWAY COLLISIONS				CITY STREET COLLISIONS				COUNTY ROAD COLLISIONS				TOTAL COLLISIONS			
Year	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
2014	2	145	474	621	1	155	776	932	1	41	55	97	4	341	1305	1650
2015	2	160	467	629	1	183	725	909	1	27	34	62	4	370	1226	1600
2016	6	171	449	626	2	174	680	856	1	37	41	79	9	382	1170	1561
2017	3	180	414	597		160	542	702	2	22	33	57	5	362	989	1356
2018 *	3	123	350	476	1	124	501	626		24	26	50	4	271	877	1152
Total:	16	779	2154	2949	5	796	3224	4025	5	151	189	345	26	1726	5567	7319

* DENOTES A YEAR FOR WHICH DATA MAY BE INCOMPLETE.

County: (24) GARFIELD

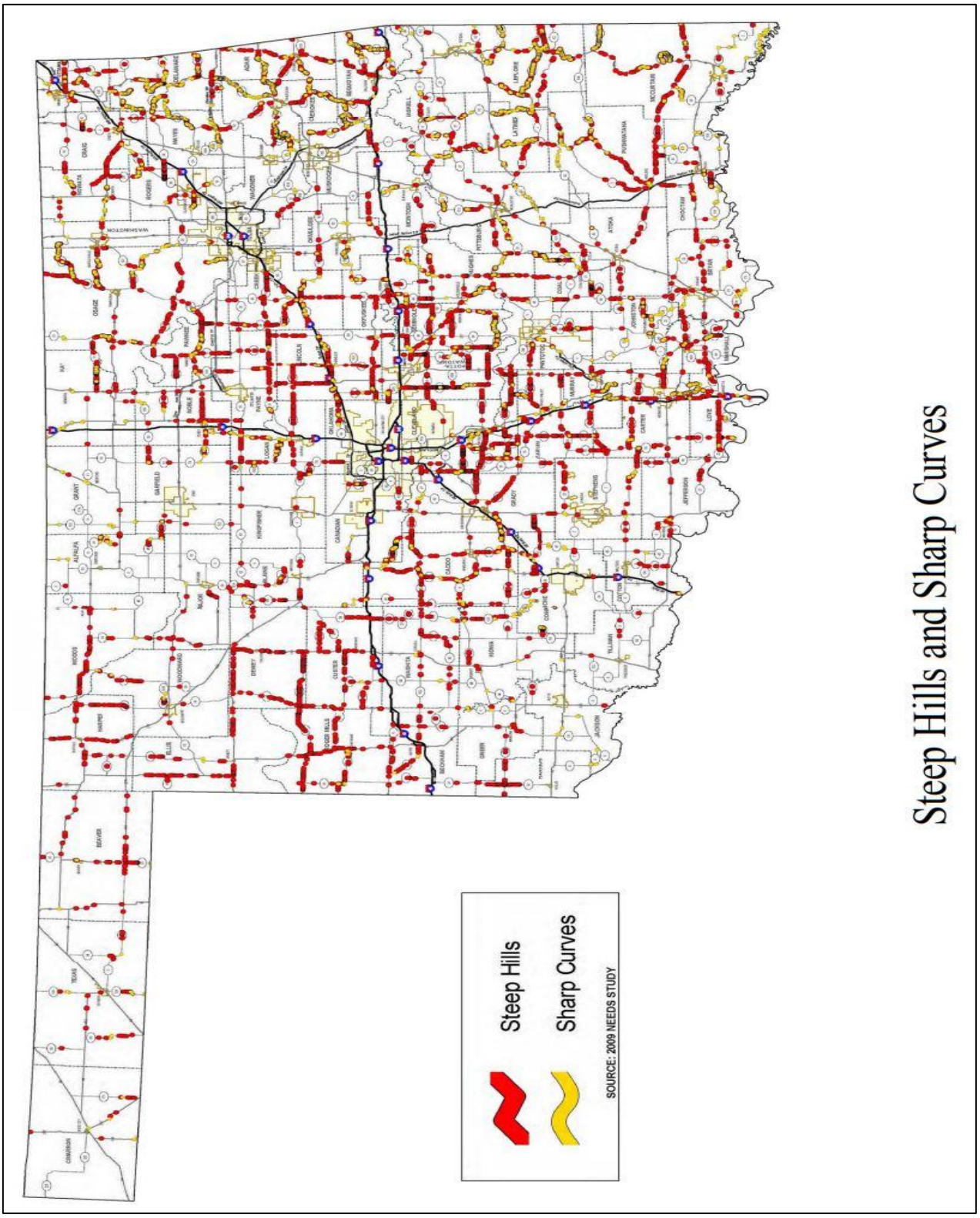
	HIGHWAY COLLISIONS				CITY STREET COLLISIONS				COUNTY ROAD COLLISIONS				TOTAL COLLISIONS			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
(00) - RURAL -	6	127	223	356					5	151	189	345	11	278	412	701
(10) COVINGTON			3	3		1	1	2						1	4	5
(20) DRUMMOND		1	2	3			3	3						1	5	6
(25) ENID	10	645	1914	2569	5	793	3197	3995					15	1438	5111	6564
(30) FAIRMONT							2	2							2	2
(35) GARBER		1		1			3	3						1	3	4
(45) HUNTER							2	2							2	2
(50) KREMLIN						1	2	3						1	2	3
(55) LAHOMA		1	2	3										1	2	3
(60) N. ENID						1	12	13						1	12	13
(65) WAUKOMIS		2	3	5			1	1						2	4	6
(70) CARRIER		2	7	9			1	1						2	8	10
Total:	16	779	2154	2949	5	796	3224	4025	5	151	189	345	26	1726	5567	7319

Map 2.20 Locations of Two-Lane Highways with no Paved Shoulder



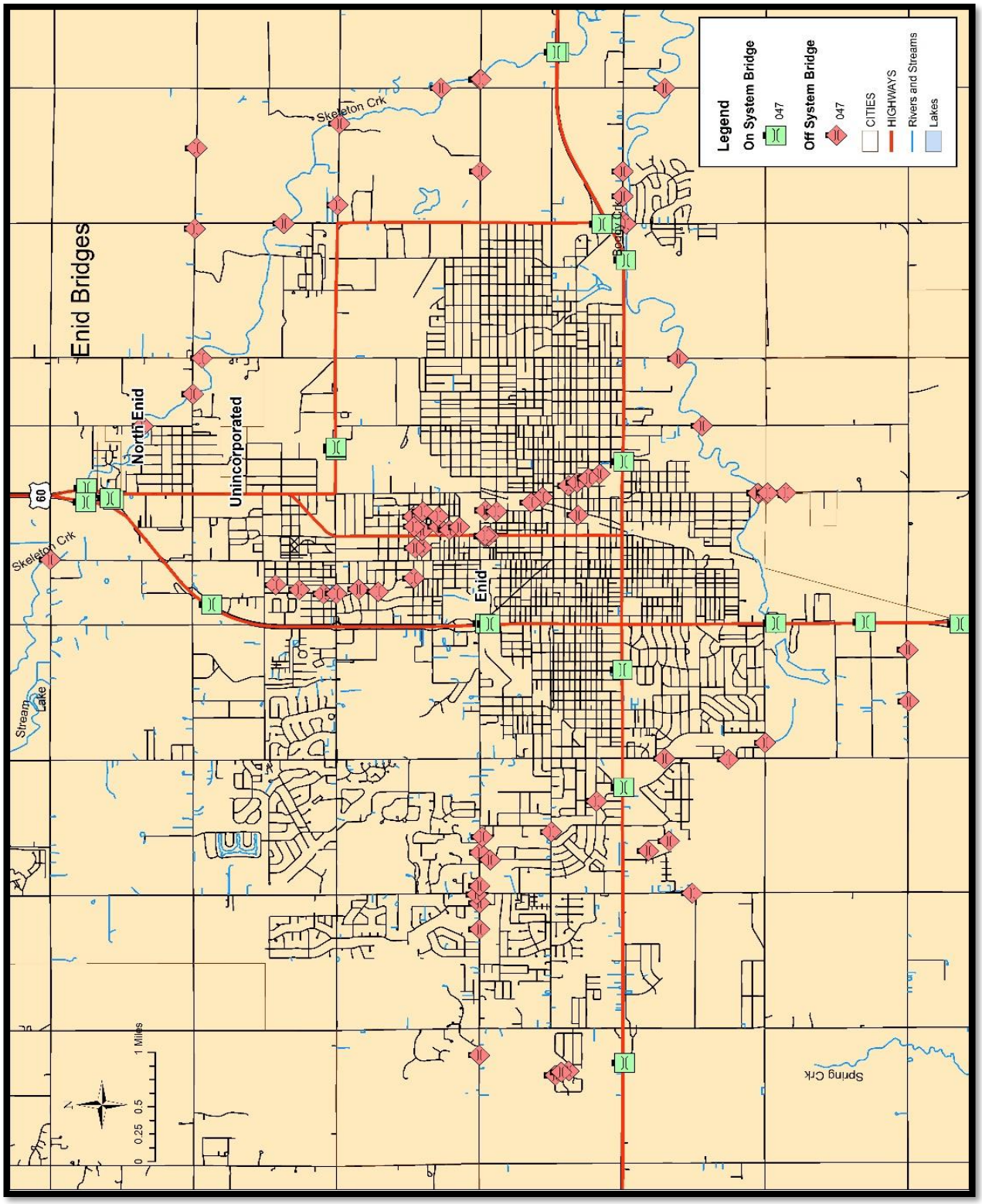
(Source: ODOT)

Map 2.21 Steep Hill and Sharp Curves Areas of Concern (Statewide)



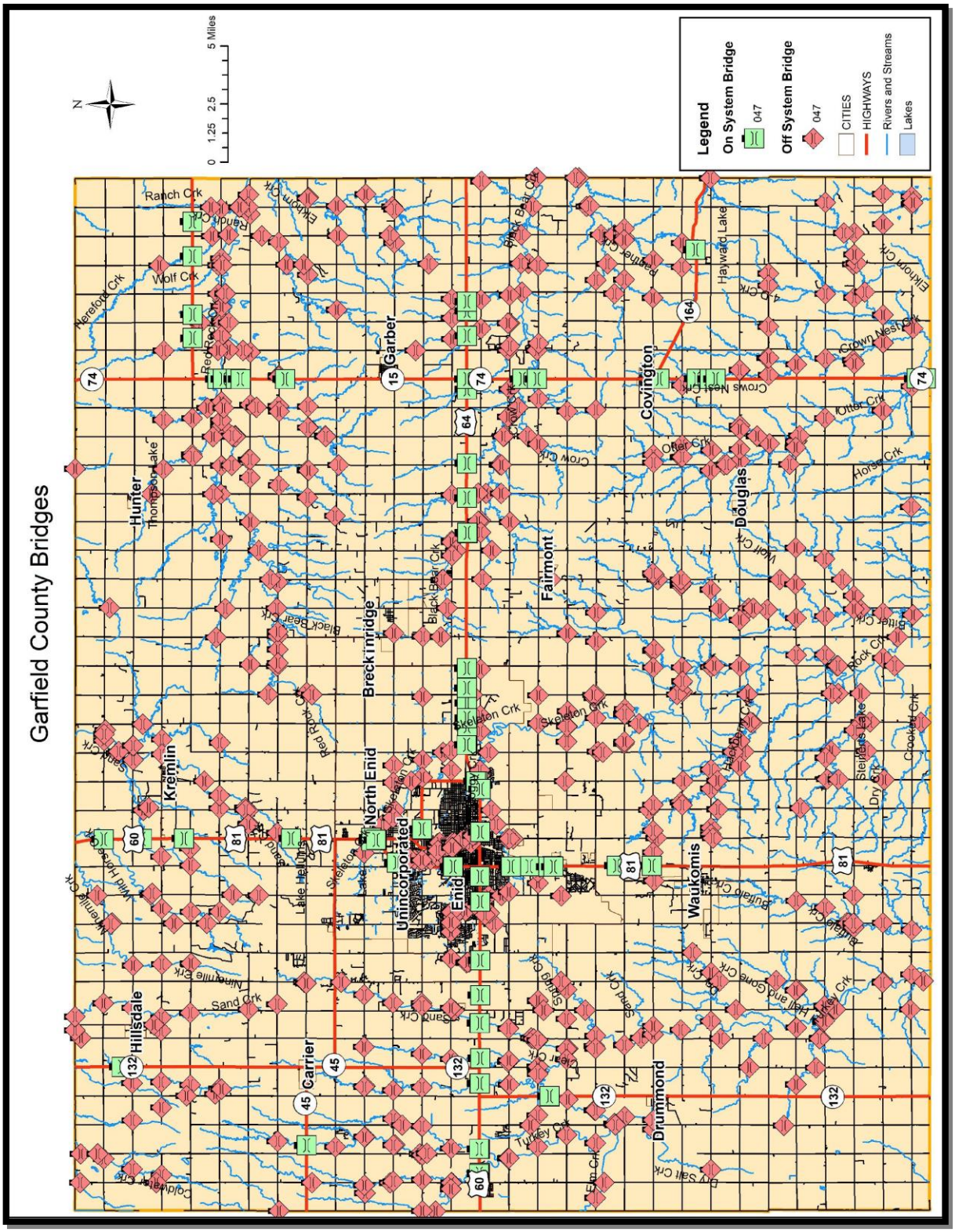
(Source: ODOT)

Map 2.22 City of Enid Bridges



(Source: NORTPO)

Map 2.23 Garfield County Bridges



(Source: NORTPO)

Table 2.8 Garfield County On System Bridges

CROSSES	LOCATION	RATING%	STATUS
CREEK	6.5N 4.7E of US64/SH74	24.7	Structurally deficient
CREEK	3S 2.3E of HUNTER	26.1	Structurally deficient
SKELETON CREEK	8E .6S of BISON	57.2	
BITTER CREEK	3.4W .5S of DOUGLAS	25.2	Structurally deficient
CREEK	2N 1.7 E OF KREMLIN	25.7	Structurally deficient
RED ROCK CREEK	3S 3.3E OF HUNTER	23.2	Structurally deficient
CREEK	5S 1E 2S 1.1E OF HAYWARD	48.5	Functionally obsolete
WOLF CREEK	.7N 9E .2N OF BISON	19.9	Structurally deficient
CREEK	1N 3.6E OF COVINGTON	43.0	Functionally obsolete
CROW'S NEST CREEK	4.6E 4S .7E OF DOUGLAS	23.2	Structurally deficient
CROW'S NEST CREEK	7S .5E OF COVINGTON	17.9	Structurally deficient
SPRING CREEK	5E 4S .2E OF LAHOMA	38.0	Structurally deficient
BLACK BEAR CREEK	3E 2S OF US64/SH74	66.5	Functionally obsolete
CREEK	.4S 2.5E 2.2N OF WAUKOMIS	52.5	Structurally deficient
CREEK	2.5S .7W OF US64/SH74	31.9	Structurally deficient
CREEK	5.5 MI E JCT SH 74	95.3	
BLACK BEAR CREEK	.5N 6.2W OF SH74/US64	30.5	Structurally deficient
CREEK	1.5 MI E JCT SH 74	83.0	
CREEK	1.5S 1.1E OF US64/SH74	52.0	Structurally deficient
CREEK	2.2E 2.7S OF HUNTER	84.0	
CREEK	.1N 1.4W OF HILLSDALE	79.0	
SPRING CREEK	7E 2.8S OF LAHOMA	79.2	
CREEK	7.E 3. S OF HUNTER	38.0	Structurally deficient
CREEK	.5S 2.8E OF US64/SH74	37.0	Structurally deficient
CREEK	4E 2.2S OF SH74/US64	24.5	Structurally deficient
CREEK	2.5S 3.9E OF US64/SH74	28.5	Structurally deficient
CREEK	4.2E 1.6N OF COVINGTON	81.1	
CREEK	1.6E 1.7S OF DOUGLAS	93.0	Functionally obsolete
CREEK	2.4W 1N .3W OF DOUGLAS	96.0	
SAND CREEK	0.6 MI E OF HILLSDALE	68.0	Structurally deficient
CREEK	AT US 64/30 ST	49.6	
CREEK	AT US 64/30 ST OLD US64	49.6	
NINE MILE CREEK	4.0W & 2.1N OF KREMLIN	33.0	Structurally deficient
CREEK	4.8E 4.4N OF GARBER	23.0	Structurally deficient
CREEK	.4S 5W .9S OF BISON	61.7	Functionally obsolete
CREEK	.5S 5.2W OF US64 & SH74	97.0	
HACKBERRY CREEK	.6N 1.5E .9N OF WAUKOMIS	29.5	Structurally deficient
SAND CREEK	7.3 MI N JCT US 412	69.9	
PANTHER CREEK	6E 4.4S OF SH74/US64	42.6	Structurally deficient
CREEK	1.E 1.8N OF US64/SH74	38.0	Structurally deficient
CREEK	.4S 7E .3S OF BISON	22.5	Structurally deficient
CREEK	6.1E 2.3S OF HUNTER	95.0	
RED ROCK CREEK	1.9W 4.3S OF HUNTER	31.9	Structurally deficient
DRY CREEK	.4S 2.5W .6N OF WAUKOMIS	85.8	

CROSSES	LOCATION	RATING%	STATUS
CREEK	5 MI E JCT SH 74	95.5	
CROW CREEK	2.5S 2.3W OF US64/SH74	67.0	Structurally deficient
CREEK	2.5S 1.3E OF US 64/SH74	52.0	Structurally deficient
CREEK	11.2N OF LAHOMA	54.3	Structurally deficient
CREEK	1E 2.1N OF LAHOMA	47.5	Structurally deficient
BITTER CREEK	.4W 2S 3.3W OF DOUGLAS	38.3	Structurally deficient
OTTER CREEK	5S 2.4W OF COVINGTON	23.2	Structurally deficient
CREEK	3N 5.5W OF DOUGLAS	96.0	
CREEK	4W 1.2S OF US64/SH74	78.8	
CREEK	3.2N 2.8E OF DRUMMOND	75.7	
CREEK	1.4S 4.9E OF WAUKOMIS	69.2	
CREEK	1.0 MI E OF KREMLIN	75.2	
CREEK	AT US 64/74 ST	97.0	
CREEK	1S .1W OF COVINGTON	19.4	Structurally deficient
CREEK	1.1 MI E OF US81	64.8	Functionally obsolete
CREEK	.6N.5E1N1.3E OF WAUKOMIS	68.8	Functionally obsolete
OTTER CREEK	1.6E 1N .5E OF DOUGLAS	23.2	Structurally deficient
CREEK	1.6N 7W .2N OF BISON	65.4	
CREEK	1.4S 4W .4S OF BISON	28.5	Structurally deficient
4-D CREEK	2S .7W OF HAYWARD	21.8	Structurally deficient
BUFFALO CREEK	2.5N 1.2W OF BISON	79.2	
CREEK	3S 4.3E US81/US64	52.5	Structurally deficient
CREEK	2.7N 6E OF WAUKOMIS	84.0	
SAND CREEK	0.9 MI E OF KREMLIN	89.1	
SKELETON CREEK TRIB.	.6N 6E .8N OF BISON	97.0	
WOLF CREEK	1.2W 2S OF DOUGLAS	34.9	Structurally deficient
CREEK	2S 2.3E OF LAHOMA	96.0	
CREEK	2.5N 5.9E OF US64/SH74	88.8	
CREEK	6.6 MI N JCT SH 45	77.5	
CREEK	.4S 6.5W 1.3S OF WAUKOMIS	47.4	Structurally deficient
CREEK	4W .4S OF US64/SH74	63.0	Structurally deficient
CREEK	6.3 MI N JCT US 64	91.8	
CREEK	2N .9 E OF LAHOMA	45.7	Structurally deficient
CREEK	11.7 MI E MAJOR C/L	79.9	
BLACK BEAR CREEK	1E 2.4S OF SH74/US64	76.5	
CREEK	1.0E & 8.9N SH132/SH45	24.4	Structurally deficient
CREEK	4.8E 1.9S OF KREMLIN	57.2	Structurally deficient
CREEK	2.4W 1.4S OF DOUGLAS	97.0	
CREEK	5N 1.3E OF LAHOMA	53.2	Functionally obsolete
CREEK	2S .3E OF US412/IMO RD	97.0	
CREEK	.6N 1.1W OF BISON	78.2	
CREEK	AT US 64 & BRECKINRIDGE	85.0	
CREEK	2N 3.4E OF COVINGTON	96.0	
CREEK	5.5N 3.6E OF US64/SH74	96.0	
CREEK	.1N 1.8W OF HILLSDALE	52.0	Structurally deficient

CROSSES	LOCATION	RATING%	STATUS
SAND CREEK	2N 1.5E OF KREMLIN	55.5	Structurally deficient
CREEK	AT US 64/54 ST	84.5	
SKELETON CREEK TRIB.	.6N 6E .6N OF BISON	97.0	
CREEK	8.2 MI N JCT US 64	92.8	
CREEK	8 MI N JCT US 64	94.6	
CREEK	.6W 4.1N OF CARRIER	30.3	Structurally deficient
CREEK	4.8E 1.7N OF GARBER	96.0	
CREEK	1.E 1. S OF HUNTER	89.0	
E0427 UNDER	1E OF US60		
N2970 UNDER	SW CORNER OF FAIRMONT		
CREEK	0.2 MI S OF HILLSDALE	83.3	
CREEK	2E 1.7S OF LAHOMA	96.0	
CREEK	.4S 5.5W .3S OF WAUKOMIS	96.0	
CREEK	1E 1.9N OF LAHOMA	64.5	
BUFFALO CREEK	.6N 2.2W OF BISON	66.6	
CREEK	3.S 1.4W OF HUNTER	75.7	
CREEK	2E .7N OF KREMLIN	57.3	Structurally deficient
CREEK	5E 4.5N OF SH132/SH45	33.2	Structurally deficient
CREEK	.2W 2.3N OF FAIRMONT	86.0	
CREEK	2.1E 4.4S OF BRECKINRIDGE	93.3	
CREEK	.4S 1.5E .1S OF WAUKOMIS	83.3	
CREEK	.4S 4.5E .6S OF WAUKOMIS	96.0	
CREEK	AT US 81 & PHILLIPS RD	84.0	
CREEK	1.E 4. N OF BRECKINRIDGE	96.0	
CREEK	5.S .4E OF HUNTER	96.0	
SKELETON CREEK	.8 N OF US64 ON 42ND	64.7	
CREEK	1E 13.8N OF LAHOMA	83.0	
DRY CREEK	.3E.3N3E2.9S OF DRUMMOND	41.0	Structurally deficient
ELKHORN CREEK	4.5N 6.1E OF US64/SH74	65.4	
CREEK	5W 1.6S OF US64/SH74	96.0	
CREEK	2.4W 2.9N OF DOUGLAS	97.0	
CREEK	2.4W 2N OF DOUGLAS	100	
CREEK	.5 S .2 W OF HILLSDALE	70.4	
BUFFALO CREEK	1.6N 1.5W OF BISON	82.3	
CREEK	2.5N & 4.8E SH74/US64	89.0	
CREEK	4.S .5E OF HUNTER	85.0	
CREEK	2 S 2.6 E OF HUNTER	70.0	Structurally deficient
CREEK	.4S 5.5E 2.6N OF WAUKOMIS	67.0	Structurally deficient
CREEK	5.E 1. S OF HUNTER	96.0	
NINE MILE CREEK	2.6E 1S OF HILLSDALE	40.9	Structurally deficient
SAND CREEK	.5S .2E OF HILLSDALE	77.9	
HACKBERRY CR. O'FLOW	.4S 3.9E OF WAUKOMIS	97.0	
CREEK	2.9E OF DOUGLAS	52.9	Structurally deficient
CREEK	3E OF DOUGLAS	96.9	

CROSSES	LOCATION	RATING%	STATUS
HEREFORD CREEK	8.5N & 5.9E SH74 & US64	49.3	Structurally deficient
SKELETON CREEK	.8S 5.4W OF FAIRMONT	39.0	Structurally deficient
CREEK	3.1N OF LAHOMA	96.9	
CREEK	.1N.3W1S2.4W OF HILLSDALE	67.8	Functionally obsolete
CREEK	2.8W 3. N OF BRECKINRIDGE	38.0	Structurally deficient
CREEK	.5N 1.5E OF SH74/US64	97.0	
CREEK	.9N OF US412 ON IMO RD.	63.0	
WILD HORSE CREEK	4W .3N OF KREMLIN	48.4	Structurally deficient
BLACK BEAR CREEK	.5S 4.9W OF US64/SH74	49.6	
CREEK	1. E 3.9 S OF HILLSDALE	63.0	
SAND CREEK	.4E .3N 2.9E OF CARRIER	52.2	Structurally deficient
CREEK	1.1E 1N .2E OF LAHOMA	96.0	
DRY SALT CREEK	.3E 1.8S 2.6W OF DRUMMOND	91.0	
WOLF CREEK	8.2E & 3.0S OF HUNTER	20.1	Structurally deficient
SAND CREEK	.2 MI N LOGAN C/L	96.1	
CREEK	8 MI N LOGAN C/L	96.1	
CREEK	9.3 MI N LOGAN C/L	95.1	
CREEK	7.3 MI N LOGAN C/L	96.1	
CREEK	7.5 MI N LOGAN C/L	95.1	
RED ROCK CREEK	.1 E 3.1 S OF HUNTER	89.9	
OTTER CREEK	.5 MI N LOGAN C/L	76.8	
BUFFALO CREEK	.4S 1.9E OF WAUKOMIS	68.9	
CREEK	1.7 S JCT US 60 ENID	69.7	
CREEK	1.6W 1N .6W OF CARRIER	53.4	Structurally deficient
CREEK	.5N 4.1W OF SH74/US64	27.0	Structurally deficient
CREEK	1.S 2.6E OF HUNTER	44.3	Structurally deficient
CREEK	4.5N 2.3E OF US64 & SH74	26.2	Structurally deficient
BLACK BEAR CREEK TRIB.	.1E 1.9S OF BRECKINRIDGE	82.0	
BITTER CREEK	.5N 9E OF BISON	28.5	Structurally deficient
CREEK	2. N .7 E OF HILLSDALE	38.9	Structurally deficient
CREEK	1W 6.9N OF LAHOMA	49.2	Structurally deficient
CREEK	3.1E 2.5S OF HUNTER	44.5	Structurally deficient
PANTHER CREEK	1N 4.9E OF COVINGTON	24.2	Structurally deficient
BOGGY CREEK	.5S OF US412	82.2	
WEST BOGGY CREEK	.8S OF US412 IN ENID	71.0	
CREEK	2N 3.3E OF LAHOMA	39.0	Structurally deficient
DRY CREEK	.4S 3.1W OF WAUKOMIS	96.9	
BUFFALO CREEK	.4S 1.6E OF WAUKOMIS	97.0	
CREEK	1.7E OF DOUGLAS	96.9	
CREEK	1.1E 3.4S OF HUNTER	52.5	
OTTER CREEK	2.3E OF DOUGLAS	96.9	
CREEK	.2 MI N OF WILLOW ST	96.8	
GRAND AVE. UNDER	.9 N US 412 ON GRAND AVE.		
BLACK BEAR CREEK	4E 2S OF SH74/US64	60.8	Functionally obsolete

CROSSES	LOCATION	RATING%	STATUS
BLACK BEAR CREEK	7E 2.6S OF SH74/US64	57.0	
BNSF R.R., 2 ROADS UND	.9 MI N JCT US 412	42.6	Structurally deficient
TURKEY CREEK TRIB.	.3E.3N3E3.8N OF DRUMMOND	96.9	
BITTER CREEK	3.4W .7N OF DOUGLAS	54.1	
RED ROCK CREEK	1.8W 4. N OF BRECKINRIDGE	32.0	Structurally deficient
RED ROCK CREEK	1.3W 4. N OF BRECKINRIDGE	34.3	Structurally deficient
CREEK	6.1E OF N ENID	96.9	
CREEK	2. N .8 E OF HUNTER	35.0	Structurally deficient
CROW CREEK	2W 2.1S OF US64/SH74	61.2	
CREEK	2.9 MI N JCT US 412	68.2	
CREEK	.1 E 2.7 S OF HUNTER	52.9	Structurally deficient
SKELETON CREEK	4 MI N JCT US 412	85.0	
SKELETON CREEK	4 MI N JCT US 412	100	
HELL AND GONE CREEK	1.6N 4.9W OF BISON	30.8	Structurally deficient
TURKEY CREEK	.3E 1.7S 2.6E OF DRUMMOND	66.7	
SKELETON CREEK	5.4W OF DOUGLAS	77.8	
CREEK	AT US 60 & BRECKINRIDGE	96.8	
CREEK	AT US 81 & BRECKINRIDGE	68.6	
CREEK	.4S 5.5W 1.8S OF WAUKOMIS	63.6	
CREEK	.6N 3.5E .1S OF WAUKOMIS	96.0	
CREEK	4.8 MI S US 60 IN ENID	69.7	
CREEK	0.3E OF VAN BUREN ON WILL	76.4	Functionally obsolete
CREEK	5S 1W .3S OF HAYWARD	20.0	Structurally deficient
HACKBERRY CREEK	1.4S 4E OF WAUKOMIS	39.9	Structurally deficient
CREEK	10.6 MI E MAJOR C/L	66.9	
BOGGY CREEK	.9S OF US412	85.0	
HACKBERRY CREEK	.6N.5E1N2.1E OF WAUKOMIS	26.5	Structurally deficient
CREEK	.3W 1.7S 1.2W OF FAIRMONT	90.0	
CREEK	AT US 64/66 ST	41.7	Structurally deficient
CREEK	2.4W 2N 3.1W OF DOUGLAS	49.2	
TURKEY CREEK	2S 1.2E OF LAHOMA	50.0	Structurally deficient
TURKEY CREEK	.3N 2.4E OF DRUMMOND	49.5	
CREEK	0.1 MI S OF US64	67.4	
CREEK	2.S 1.1W OF KREMLIN	86.0	
SAND CREEK	2.S .7 W OF KREMLIN	70.0	Structurally deficient
CREEK	2.3 MI E JCT SH 74	95.3	
4-D CREEK	7S 2.8E OF COVINGTON	34.2	Structurally deficient
U.S. 64 UNDER	2.5 MI SE JCT 64 N		
CREEK	.1E .5S OF HUNTER	70.0	Structurally deficient
CREEK	.4E 2.7S .7W OF CARRIER	55.5	
CREEK	2S & 3E US 64/30TH ST	99.9	
SKELETON CREEK	6.4W 2.2N OF DOUGLAS	74.2	
CREEK	.3N .7W 4.6S OF DRUMMOND	64.7	
CREEK	5.9 MI E JCT US 81	69.5	

CROSSES	LOCATION	RATING%	STATUS
CREEK	5.2 MI E JCT US 81	69.5	
CREEK	6.9 MI E JCT US 81	69.5	
CREEK	10.5 MI N JCT US 412	69.9	
CREEK	5.7 MI E JCT US 81	69.5	
CREEK	12.8 MI E JCT US 81	69.5	
CREEK	14.1 MI E JCT US 81	69.5	
CREEK	16.6 MI E JCT US 81	69.5	
CREEK	12 MI N JCT US 412	86.5	
BLACK BEAR CREEK	4W .7S OF US64/SH74	48.5	
CREEK	6.2 MI E JCT US 81	69.5	
WILD HORSE CREEK	13.3 MI N JCT US 412	90.1	
SKELETON CREEK	4.3 MI E JCT US 81	87.0	
BLACK BEAR CREEK	11.6 MI E JCT US 81	54.0	Structurally deficient
CREEK	0.6 MI S OF WILLOW	94.5	
SKELETON CREEK TRIB.	6.4W 5.1N OF DOUGLAS	96.9	
WOLF CREEK	.4W 3S 1.2W OF DOUGLAS	54.6	Functionally obsolete
CREEK	0.1 MI E OF CLEVELAND	63.6	Structurally deficient
SAND CREEK	1.9S .7E OF HILLSDALE	62.6	Structurally deficient
BUFFALO CREEK	.4S 2.W OF BISON	82.0	
CREEK	5.5N 4.2W OF US64/SH74	69.3	
CREEK	7.2 MI E MAJOR C/L	69.9	
CREEK	19.4 MI E JCT US 81	71.3	
CREEK	19.7 MI E JCT US 81	71.3	
CREEK	8.6 MI E MAJOR C/L	66.9	
CREEK	18.4 MI E JCT US 81	71.3	
CREEK	3 MI E .1 S US64	98.0	
WILD HORSE CREEK	4.6 MI W OF KREMLIN	100	
SAND CREEK	3.S 1.1W OF KREMLIN	38.0	Structurally deficient
CREEK	5.2 MI E MAJOR C/L	69.9	
SKELETON CREEK	6.9E OF WAUKOMIS	38.0	Structurally deficient
CREEK	4.5 MI E MAJOR C/L	89.0	
CLEAR CREEK	6.4 MI E MAJOR C/L	89.0	
CREEK	1.6N 2E .8N OF BISON	43.5	Structurally deficient
WILD HORSE CREEK	5.W 2. S OF KREMLIN	45.5	Structurally deficient
CREEK	1.5N & 8.9W SH74 & US64	97.0	
SPRING CREEK	.3E.3N3E2.3N OF DRUMMOND	69.9	Structurally deficient
SAND CREEK	.4E 2.7S 2.3E OF CARRIER	61.2	
HACKBERRY CREEK	.4S 3.2E OF WAUKOMIS	85.9	
ROCK CREEK	.6N 6E .2S OF BISON	67.4	
HEREFORD CREEK	4.3 MI E JCT SH 74	94.3	
SKELETON CREEK	2S 2E JCT64/30TH ST.	88.4	
CREEK	3.1 MI E JCT 81 ENID	69.3	
NINE MILE CREEK	1.9S 2.4E OF HILLSDALE	81.8	
WILD HORSE CREEK	1.9S 4.2E OF HILLSDALE	46.2	Structurally deficient
SAND CREEK	2W 4S .2E OF KREMLIN	78.2	

CROSSES	LOCATION	RATING%	STATUS
CREEK	2.7 E JCT US81 ENID	69.5	
CREEK	4.1E 1. N .3E OF LAHOMA	50.5	
U.S. 64 UNDER	3.1 MI E JCT 81 ENID	87.0	
U.S. 64 UNDER	3.1 MI E JCT US 81	87.0	
CREEK	3.N 2.2E OF LAHOMA	70.8	
CREEK	2.3W 1. S OF KREMLIN	97.0	
ROCK CREEK	.6N 4E .9N OF BISON	77.8	
OTTER CREEK	.6E 3S 2.6E OF DOUGLAS	47.7	Structurally deficient
TURKEY CREEK	.3E 3.3N 1.3E OF DRUMMOND	39.0	Structurally deficient
TURKEY CREEK	2.6N 5.6W OF BISON	51.6	
CREEK	5.9N OF LAHOMA	70.0	Structurally deficient
CREEK	.1N.3W2S1.6W OF HILLDALE	97.0	
CREEK	2.4W OF COVINGTON	81.0	
SKELETON CREEK	.5S 7.3E OF BISON	64.7	
BLACK BEAR CREEK	1.9 MI S SH64 & US64	92.6	
CREEK	.9W 1.6S OF BRECKINRIDGE	80.1	
CREEK	2N .9 W OF LAHOMA	43.5	Structurally deficient
SPRING CREEK	.3E 3.3N 3.8E OF DRUMMOND	59.3	
SAND CREEK	3E .2S OF SH132/SH45E	45.4	Structurally deficient
DRY CREEK	.4S 3.5W .3S OF WAUKOMIS	55.5	
CREEK	2. N .3 E OF HILLSDALE	49.3	Structurally deficient
BITTER CREEK	.5S 8.8E OF BISON	67.8	
SKELETON CREEK	4.3 MI E JCT US 81	96.1	
BITTER CREEK	3.7W OF DOUGLAS	100	
WOLF CREEK	3.8E 5.9N OF GARBER	97.0	
DRY SALT CREEK	.3N .5W OF DRUMMOND	75.5	
CREEK	1.3 MI E JCT US81	66.5	
CROWS NEST CREEK	6S .8E OF COVINGTON	64.7	
BOGGY CREEK	1.0 MI E OF US 64	71.8	
TURKEY CREEK	1N 1.7E OF DRUMMOND	37.0	Structurally deficient
CREEK	4.5 MI E MAJOR C/L	89.0	
CLEAR CREEK	6.4 MI E MAJOR C/L	88.0	
RED ROCK CREEK	4 MI E 5.7 MI N GARBER	100	
RED ROCK CREEK	8.8 MI N JCT US 64	81.2	

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

Table 2.9 Garfield County Off System Bridges

CROSSES	LOCATION	RATING %	STATUS
CREEK	6E 2.2S OF KREMLIN	53.0	Structurally deficient
CREEK	.6N 3E .9N OF BISON	45.4	Structurally deficient
SKELETON CREEK	.3W 1.7S 4.9W OF FAIRMONT	94.8	
CREEK	1.1 S JCT US 412	80.7	
CREEK	2.2 MI E MAJOR C/L	94.9	
TURKEY CREEK	1.3 MI E MAJOR C/L	89.0	
CREEK	.6N 3E .5N OF BISON	77.8	
ROCK CREEK	.6N 4.7E OF BISON	48.5	
SAND CREEK	.2W 1.5S OF KREMLIN	95.0	
CREEK	1.5S .3W OF US64/SH74	69.2	
ELM CREEK	4S .5W OF LAHOMA	64.7	
HACKBERRY CREEK	.4S 3.5E .3S OF WAUKOMIS	72.2	
CREEK	6N&0.5W JCT US81 AND SH45	53.0	Structurally deficient
BLACK BEAR CREEK	11.6 MI E JCT US 81	85.1	
U.S. 64 / U.S. 412 UNDER	JCT OF US 64 & SH 74	98.0	
CREEK	.4S 2W .1N OF BISON	71.3	
TURKEY CREEK	4S 1.4E OF LAHOMA	46.8	Structurally deficient
RED ROCK CREEK	6E 3.9S OF KREMLIN	64.3	
CREEK	4.7N 5.6E OF GARBER	40.1	Structurally deficient
CREEK	9.8 N KINGFISHER C/L	69.7	
CREEK	.2WOF GARLAND ON CHESTNUT	85.8	
UP R.R. & VANCE RD. UND	2.6 MI S US60 IN ENID	85.0	Functionally obsolete
CREEK	.3N .9W OF DRUMMOND	97.0	
CREEK	2.S 1.3E OF KREMLIN	57.5	
ELM CREEK	4.3S OF LAHOMA	49.0	Structurally deficient
HELL AND GONE CREEK	.4S 3.5W 2.3SOF WAUKOMIS	87.2	
WOLF CREEK	2.4W 3.6S OF DOUGLAS	96.0	
NINE MILE CREEK	2.1 MI E OF HILLSDALE	97.0	
CREEK	1S 2.4W OF COVINGTON	85.0	
4-D CREEK	6S 2.9E OF COVINGTON	86.0	
BLACK BEAR CREEK	2.1E 2.2S OF BRECKINRIDGE	44.2	Structurally deficient
CREEK	.6N .5E 1N .5EOF WAUKOMIS	67.4	
TURKEY CREEK	1.4S 3.8W OF BISON	98.0	
SKELETON CREEK	1.5N 7.4E OF BISON	71.8	
BITTER CREEK	.4W 3S 3.2W OF DOUGLAS	97.0	
CREEK	.4S OF US412	95.8	
CREEK	0.1 MI W OF OAKWOOD	76.8	Functionally obsolete
CREEK	0.1 MI E OF OAKWOOD	35.3	Structurally deficient
RED ROCK CREEK	3S 4.E OF KREMLIN	71.0	Structurally deficient
CREEK	3.8E 3.2N OF GARBER	97.0	
CREEK	2N 4.4 E OF LAHOMA	87.5	

CROSSES	LOCATION	RATING %	STATUS
SAND CREEK	.4E.7S2E1S.5EOF CARRIER	70.0	Structurally deficient
BUFFALO CREEK	1.4S 2.2W OF BISON	86.0	
SAND CREEK	.3N 1.7E OF DRUMMOND	85.0	
SKELETON CREEK	4S 7.4E OF WAUKOMIS	88.0	
CREEK	2.1 MI E MAJOR C/L	100	
TURKEY CREEK	1.3 MI E MAJOR C/L	100	
CREEK	2.7E 3.7S OF KREMLIN	86.0	
CREEK	2.6N3.5E2.1N OF WAUKOMIS	96.0	
CREEK	.3W 1.7S 2.1W OF FAIRMONT	97.0	
CREEK	.3W .7S 1.9W OF FAIRMONT	97.0	
CREEK	.2 MI E OF VAN BUREN	97.0	
CREEK	.2E OF VAN BUREN	97.0	
CREEK	AT 30 ST & MARKET ST	96.9	
RED ROCK CREEK	4S 5.2E OF KREMLIN	92.1	
CREEK	.3 MI W OF VAN BUREN	97.0	
CREEK	0.3 MI E OF VAN BUREN	97.0	
CREEK	0.4 MI E OF VAN BUREN	97.0	
CREEK	.6E OF VAN BUREN	97.0	
OTTER CREEK	2.6E 2.2S OF DOUGLAS	55.5	
OTTER CREEK	9S .3W OF COVINGTON	82.0	
SKELETON CREEK	.4S 7.5E .1S OF WAUKOMIS	53.0	Structurally deficient
TURKEY CREEK	.9W 1.5N OF LAHOMA	97.0	
OTTER CREEK	8S 1.2W OF COVINGTON	99.0	
QUAIL CREEK	1.1N OF US412 ON OAKWOOD	95.7	
CREEK	0.3 MI W OF OAKWOOD	98.5	
TURKEY CREEK	3S 1.7 E OF LAHOMA	99.0	
4-D CREEK	8S 2.2E OF COVINGTON	100	
VANCE ROAD UNDER	2.4 S JCT US60 ENID	98.0	
UP R.R. UNDER	2.6 MI S US 60 IN ENID	100	
CREEK	3.0N 1.2W OF GARBER	84.0	
RED ROCK CREEK	2.1E 3.4S OF HUNTER	100	
CREEK	2.1E 3.5S OF HUNTER	97.0	
SKELETON CREEK	.6N 7E .6N OF BISON	75.5	
ELKHORN CREEK	5.5N 6.3E OF US64 & SH74	100	
SAND CREEK	4.8W OF US81 & WILLOW ST	100	
CREEK	.5N 2.8E OF SH74/US64	57.5	
OTTER CREEK	2.9W OF COVINGTON	86.0	
CREEK	SPRUCE AND MEADOWBROOK	97.0	
CREEK	.3E OF OAKWOOD	84.5	
CREEK	0.3 MI W OF GARLAND	97.0	
CREEK	0.3 MI W OF GARLAND RD.	97.0	
QUAIL CREEK	OKLA. AT WILSON ST.	97.0	
CREEK	.8 E OF VAN BUREN	52.0	Structurally deficient
CREEK	.6 MI E OF VAN BUREN	61.8	Structurally deficient

CROSSES	LOCATION	RATING %	STATUS
CREEK	.7 MI E OF VAN BUREN	88.7	
CREEK	AT FORREST & 3 RD	88.7	
CREEK	AT WALNUT & 3 RD	88.7	
E0423 (ELM) UNDER	0.9 MI E OF VAN BUREN		
CREEK	CHEROKEE & 5TH	82.1	
CREEK	0.2 MI E OF 4TH ST	85.0	
QUAIL CREEK	.1S OF CHESTNUT	95.0	
CREEK	GREENLEAF N OF CEDAR RIDGE	97.0	
CREEK	1BLK N OF CHERRY ON 3 RD	85.0	
CREEK	0.8 MI S OF WILLOW& 3 RD	97.0	
CREEK	2ND & BIRCH	85.0	
CREEK	0.6 MI S OF GARRIOTT	85.0	
CREEK	5S OF HAYWARD	100	
CREEK	3.9W .7N OF HUNTER	90.0	
CREEK	2S 1.4 E OF HUNTER	92.1	
CREEK	.7S. OF WILLOW	96.0	
CREEK	3N 1.3E OF LAHOMA	50.0	Structurally deficient
CREEK	4S 1.2 E OF HUNTER	96.3	
BLACK BEAR CREEK	2W 1.3S OF US64/SH74	100	
CREEK	4E 3.3S OF SH75/H15E	97.0	
CREEK	7.7N 6. E OF SH15/US64	67.4	
CREEK	4.7N .8E OF GARBER	67.4	
NINE MILE CREEK	3.9E 1.1 N OF HILLSDALE	100	
TURKEY CREEK	1S .8E OF LAHOMA	100	
CREEK	1S 4.2E OF LAHOMA	97.0	
CREEK	.3E4.7S2E.8S OF DRUMMOND	97.0	
CROOKED CREEK	.4S 5E 1.3S OF BISON	89.8	
CREEK	.4S 3E .1S OF BISON	64.4	
CREEK	2S .4W OF HAYWARD	23.5	Structurally deficient
OTTER CREEK	1S 2.7W OF COVINGTON	71.3	
TURKEY CREEK	1N OF LAHOMA	94.4	
CREEK	4N .1W OF LAHOMA	80.2	
CREEK	4N 1.6E OF LAHOMA	95.7	
CREEK	4N 3.3E OF LAHOMA	77.4	
BLACK BEAR CREEK	.2W 3.6N OF FAIRMONT	100	
CREEK	.9E 4.S OF COVINGTON	51.0	Structurally deficient
CREEK	2.9W 2.8N OF BRECKINRIDGE	49.5	
CREEK	1.6E .5N OF DOUGLAS	71.3	
CREEK	2.9W 1S 1W OF KREMLIN	94.0	
CREEK	5.2W .4S OF KREMLIN	30.0	Structurally deficient
CREEK	5E 2.6N OF US64/SH74	39.5	Structurally deficient
CREEK	2S 3.8 E OF LAHOMA	95.7	
CREEK	2E 1.7N OF LAHOMA	46.7	Structurally deficient
CREEK	1.5N OF WAUKOMIS	90.0	

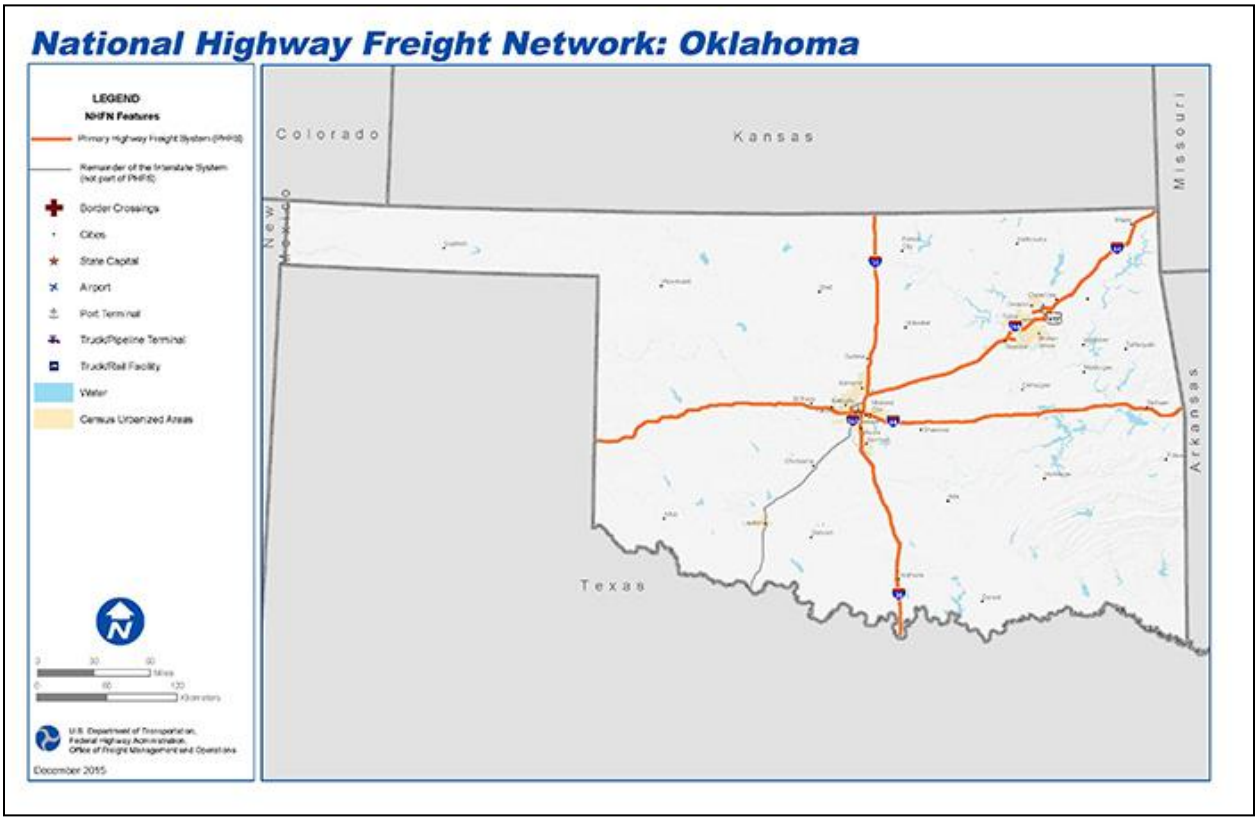
CROSSES	LOCATION	RATING %	STATUS
CREEK	1.3 W .5 N OF KREMLIN	99.0	
SAND CREEK	1.3W 2.9S OF KREMLIN	76.7	
CREEK	3.5S 1.1W SH74/US412	70.8	
CREEK	1.6N 3.8E OF BISON	47.0	Structurally deficient
TURKEY CREEK	4S 4.7E OF LAHOMA	100	
CREEK	8E .8S OF HUNTER	39.9	Structurally deficient
CREEK	5S .4E OF COVINGTON	96.0	
RED ROCK CREEK	6.1E 3.1S OF HUNTER	100	
CLEAR CREEK	3E 3S 1.6E OF LAHOMA	100	
CREEK	4S 2.1E OF HAYWARD	74.2	
CREEK	1N 5W .1N OF US81/SH45	34.0	Structurally deficient
HACKBERRY CREEK	.6N 2.7E OF WAUKOMIS	94.1	
CREEK	7.3E OF WAUKOMIS	97.0	
CREEK	4E 2S .9E OF LAHOMA	93.1	
CREEK	1S 2.5E OF SH74/SH15	40.1	Functionally obsolete
CREEK	1.5S 2.9E OF US 412/SH 74	86.0	
CREEK	2W 4.9N OF US64/SH74	97.0	
CREEK	5.5N 1.7W OF US64/SH74	97.0	
CREEK	1N 5.3E OF COVINGTON	80.1	
SAND CREEK	5.1E 1.8S OF LAHOMA	94.1	
SKELETON CREEK TRIB.	3.5N 4.5E OF WAUKOMIS	100	
SKELETON CREEK	2.6 N. 5.8 E. WAUKOMIS	100	
CREEK	3N 4.9W OF DOUGLAS	100	
TURKEY CREEK	_	100	
TURKEY CREEK	.4 S & 4. W OF BISON	100	
SKELETON CREEK	.1S OF BRECKINRIDGE RD.	68.8	Structurally deficient
E0430 UNDER	.3E OF 54TH ON OLD US64		
CREEK	.2E OF 30TH ON CHESTNUT	97.0	
CREEK	.1W OF GRAND ON CHERRY ST	97.0	
CREEK	TRAILS WEST S OF SANTA FE	95.8	
CREEK	.2S .1E OF US412/TRAIL END	96.0	
CREEK	ON MAPLE ST. W OF 4TH ST.	71.0	Structurally deficient
CREEK	.4N OF BRECKINRIDGE RD.	88.0	
CREEK	4 BLK E OF GRAND	84.7	
CREEK	W OF 5TH ON RANDOLPH	69.0	Structurally deficient
BITTER CREEK	2.4W 2N .2W OF DOUGLAS	66.4	
CREEK	2S 3.3W OF HAYWARD	85.2	
CREEK	2.5W 3N .2E OF DOUGLAS	97.0	
CREEK	3E 7.5N OF JCT US81/SH45	100	
CREEK	3S 1.7W OF KREMLIN	97.0	
TURKEY CREEK	2E 4.7S OF LAHOMA	97.0	
U.S. 64 UNDER	2.5 MI SE JCT 64 N		
U.S. 64 UNDER	2.5 MI SE JCT 64 N		
GRAND AVE. UNDER	.9 N US 412 ON GRAND AVE.	74.1	Functionally obsolete

CROSSES	LOCATION	RATING %	STATUS
GRAND AVE. UNDER	.8 N US 412 ON GRAND AVE.		
GRAND AVE. UNDER	.8 N US 412 ON GRAND AVE.	83.6	Functionally obsolete
HACKBERRY CREEK	.5S 5.5E 1.4S OF WAUKOMIS	100	
CREEK	5S 1E 2S 1.3E OF HAYWARD	96.0	
CREEK	5.5 N 3.2 W OF US 64/SH74	93.1	
ROCK CREEK	.3S 5.E .5N OF BISON	97.0	
HELL AND GONE CREEK	26N 4.3W OF BISON	88.8	
CREEK	3.N .1E OF LAHOMA	97.0	
CREEK	2N .1E OF LAHOMA	97.0	
BLACK BEAR CREEK	1.5S,1.3W OF U.64/S.H.74	100	
RED ROCK CREEK TRIB.	7.8MI N OF JCT. U.S. 64	95.6	
CREEK	1.5S 1.9E OF U.S. 64/S.H.	97.0	
COLDWATER CREEK	2N 1.7E OF KREMLIN	97.0	
CREEK	.1N 1.3W 3S .8W HILLSDALE	97.0	
CREEK	1S .7E S.H. 45/S.H. 132	88.5	
CREEK	6.5N .1E S.H. 74/U.S. 64	97.0	
BOGGY CREEK	.5 W OF VAN BUREN	97.0	
UNNAMED CREEK	.3W, 1.7S, 4.1W FAIRMONT	84.3	
SKELETON CREEK	.6N, 6.6E OF WAUKOMIS	100	
TURKEY CREEK	0.6N, 6.6E OF WAUKOMIS	100	
CREEK	.6W OF CLEVELAND STREET	82.5	
BOGGY CREEK TRIB.	.2W OF VAN BUREN (U.S.81)	88.3	
BLACK BEAR CREEK	5W .4S OF U.S./S.H.74	97.0	
CREEK	6S, 2.4E OF HAYWARD	97.0	
CREEK	2N, 1.9 E OF LAHOMA	96.9	
CREEK	1N OF E SOUTHGATE RD.	99.0	
CREEK	1N OF E SOUTHGATE RD.	99.0	
SKELETON CREEK	.75E OF S. 30TH	99.9	
SKELETON CREEK	.75 E OF S. 42ND	88.8	
CREEK	5S, .4E OF HAYWARD	97.0	
RED ROCK CREEK	4S, 1W OF HUNTER	97.0	
N. BOGGY CREEK/ WALKWAY	1.3E OF U.S.81 JCT.	66.5	
CROWS NEST CREEK	3S 0.3E OF COVINGTON	97.0	
CREEK	4S, 5E OF KREMLIN	97.0	
CREEK	2.5S, 3.7W OF HAYWARD	97.0	
RED ROCK CREEK	7.7N 6E OF SH51/US64	98.0	
TURKEY CREEK	.3E 5.7S 2.6E OF DRUMMOND	100	
CREEK	2S 5E 1S .4E OF US81/US60	89.8	
CREEK	1. N 1.3 E OF HILLSDALE	95.0	
CREEK	2.6E, .6S OF DOUGLAS	95.7	
HACKBERRY CREEK	6.4W, .2S OF DOUGLAS	94.4	
COLDWATER CREEK	.1N4.3W1.2N OF HILLSDALE	95.0	
SKELETON CREEK	.1E OF SOUTH 42ND	100	

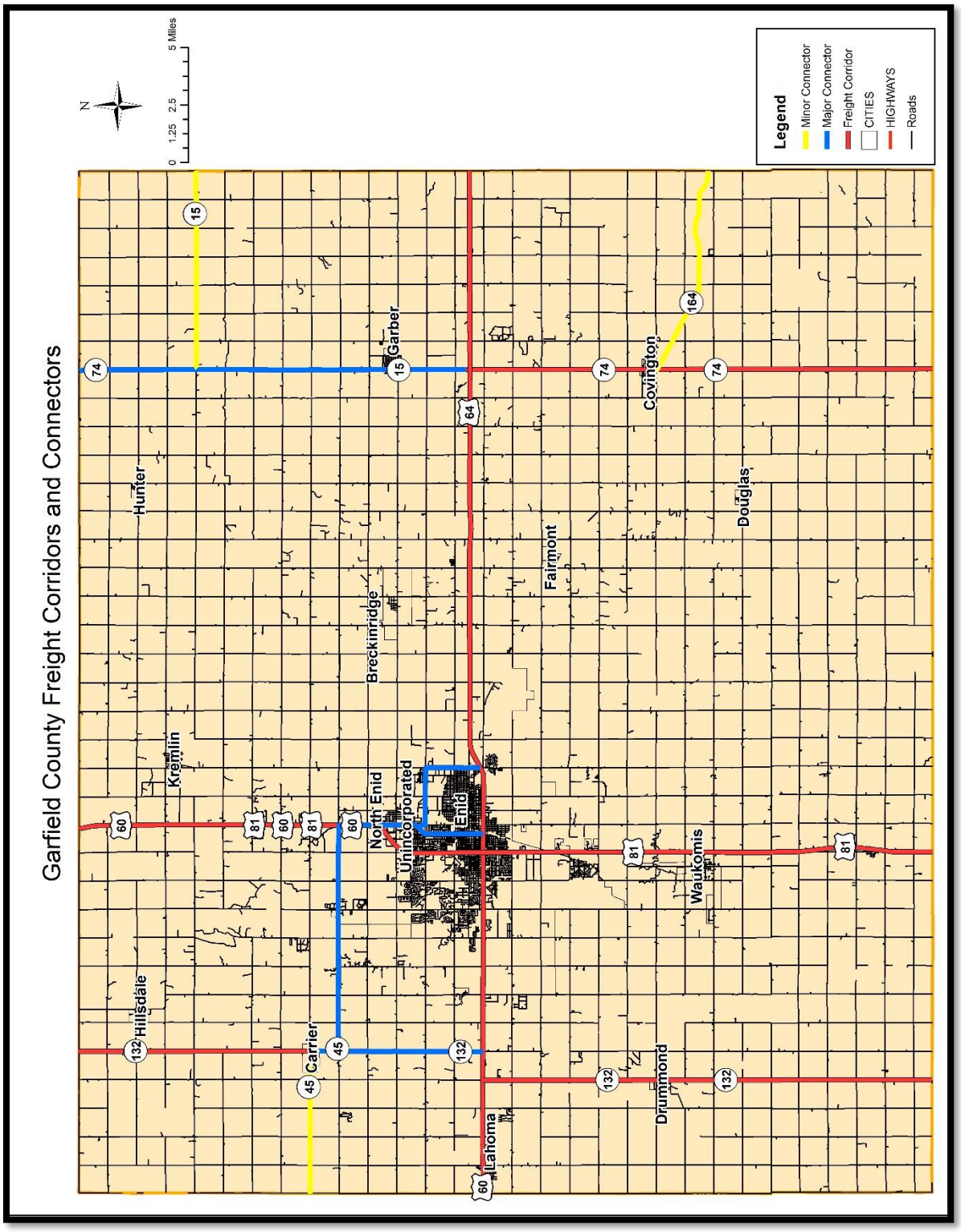
CROSSES	LOCATION	RATING %	STATUS
CLEAR CREEK	1S, 5.6W JCT US81/US412	98.0	
PANTHER CREEK	7E 4S OF SH74/US64 JCT	95.0	
BUFFALO CREEK	.6N 2W .2N OF BISON	95.0	
U.S. 64 SB UNDER	3.8 N JCT U.S. 81	93.5	
CREEK	1.2E 1N OF KREMLIN	95.0	
CREEK	2.3 E ALFALFA C/L	98.9	
TURKEY CREEK	13.3 N. KINGFISHER C/L	96.1	
BLACK BEAR CREEK	3W 1.2S OF US64/SH74	95.0	
RED ROCK	1E 8.7N US64/SH74	97.0	
WEST WARREN CREEK	3E .1N OF HAYWARD	96.0	
CREEK	1S 3.4E OF LAHOMA	97.0	
CREEK	.6N 6.9E OF WAUKOMIS	97.0	
CROWS NEST CREEK	8S 1.2E OF COVINGTON	98.0	
CREEK	1N OF US60/IMO RD .4E	97.0	
ELKHORN CREEK	.7N 6.2E OF GARBER	97.0	
WOLF CREEK	.5W 4S 2.5W OF DOUGLAS	97.0	
CREEK	.4S 2.5E .3S of WAUKOMIS	95.0	
CREEK	4E 2S .1E of LAHOMA	93.0	
BLACK BEAR CREEK	1W 1.8S of SH74/US64	95.0	
RED ROCK CREEK	3E 8.4N of SH74/US64	95.0	
CREEK	1.2W 4.5N OF GARBER	95.0	

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

Map 2.24 National Highway Freight Network



Map 2.25 Garfield County Freight Corridors and Connectors



(Source: NORTPO)

Table 2.10 MAGB Ridership and Revenue Data

MAGB Ridership January 1, 2018 - December 31, 2018										
County	**Revenue Miles**	**Vehicle Miles**	**Seat Miles**	**Passenger Miles**	**Empty Miles**	**Passenger Trips**	**Elderly Trips**	**Disabled Trips**	**Eld/Dis Trips**	**Hours of Service**
Garfield	88,581	100,090	410,958	79,370	49,167	5,419	591	987	2,739	5,646

(Source: MAGB)

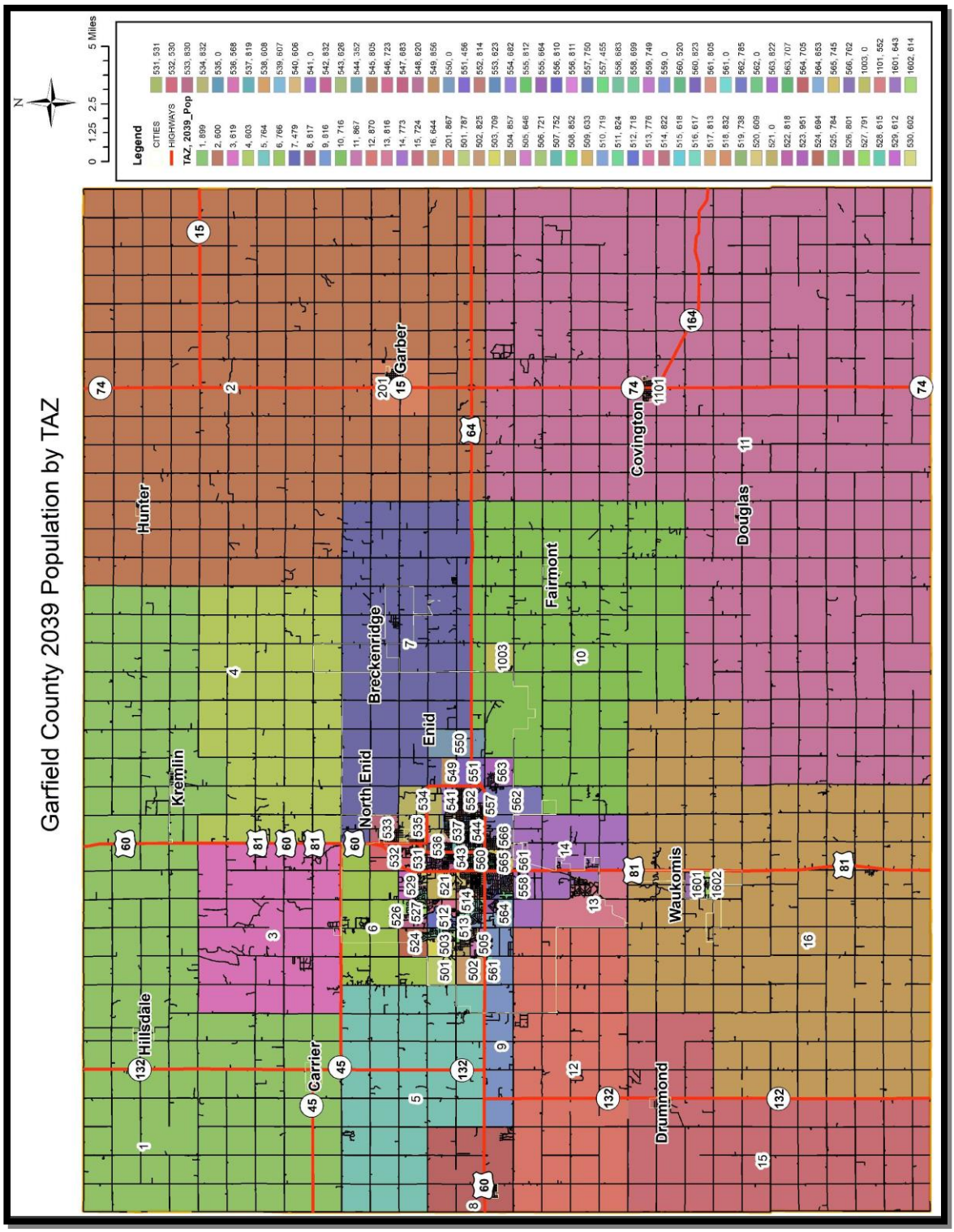
Table 2.11 Cherokee Strip Transit (CST) Ridership and Revenue Data

	October 2015 – September 2016	**October 2016 – September 2017**	**October 2017 – September 2018**
Trips	4,700	3,312	5,532
Passenger Miles	219,818.9	155,046	128,310.9
Revenue Miles	170,255.2	131,763.5	155,025.4

(Source: CST)

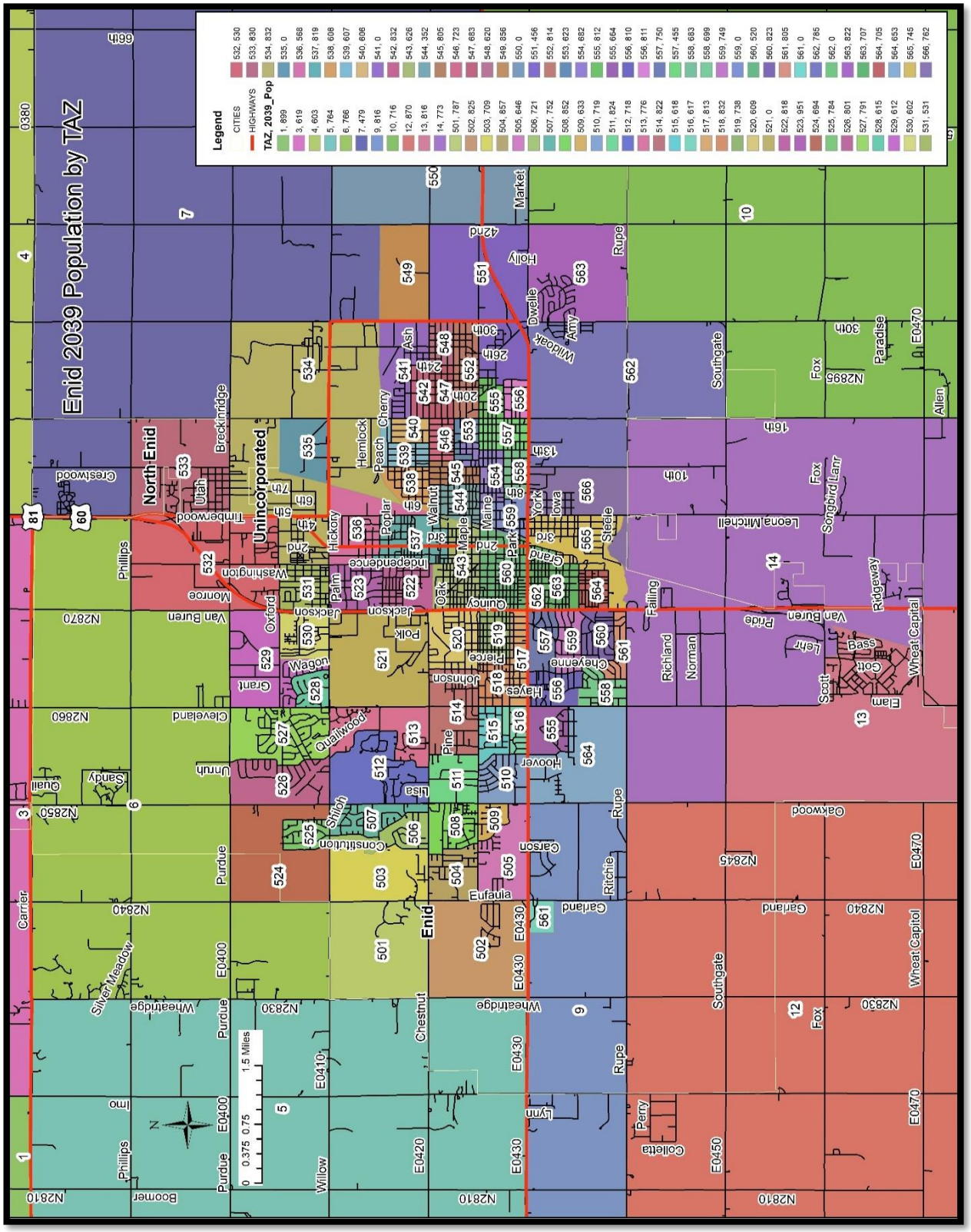
Appendix G-3 Chapter 3

Map 3.1 Garfield County 2039 Projected Population



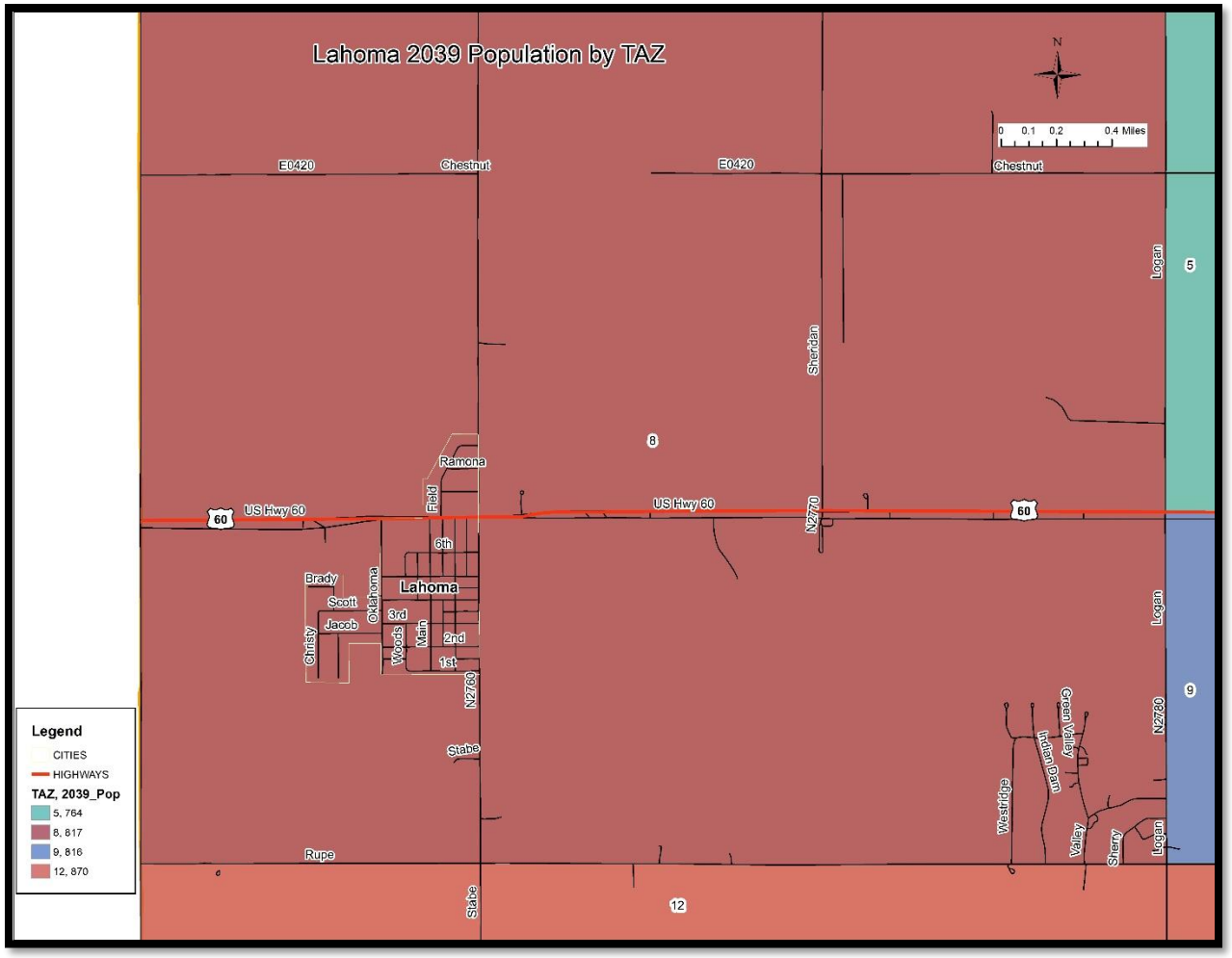
(Source: NORTPO)

Map 3.2 City of Enid 2039 Projected Population



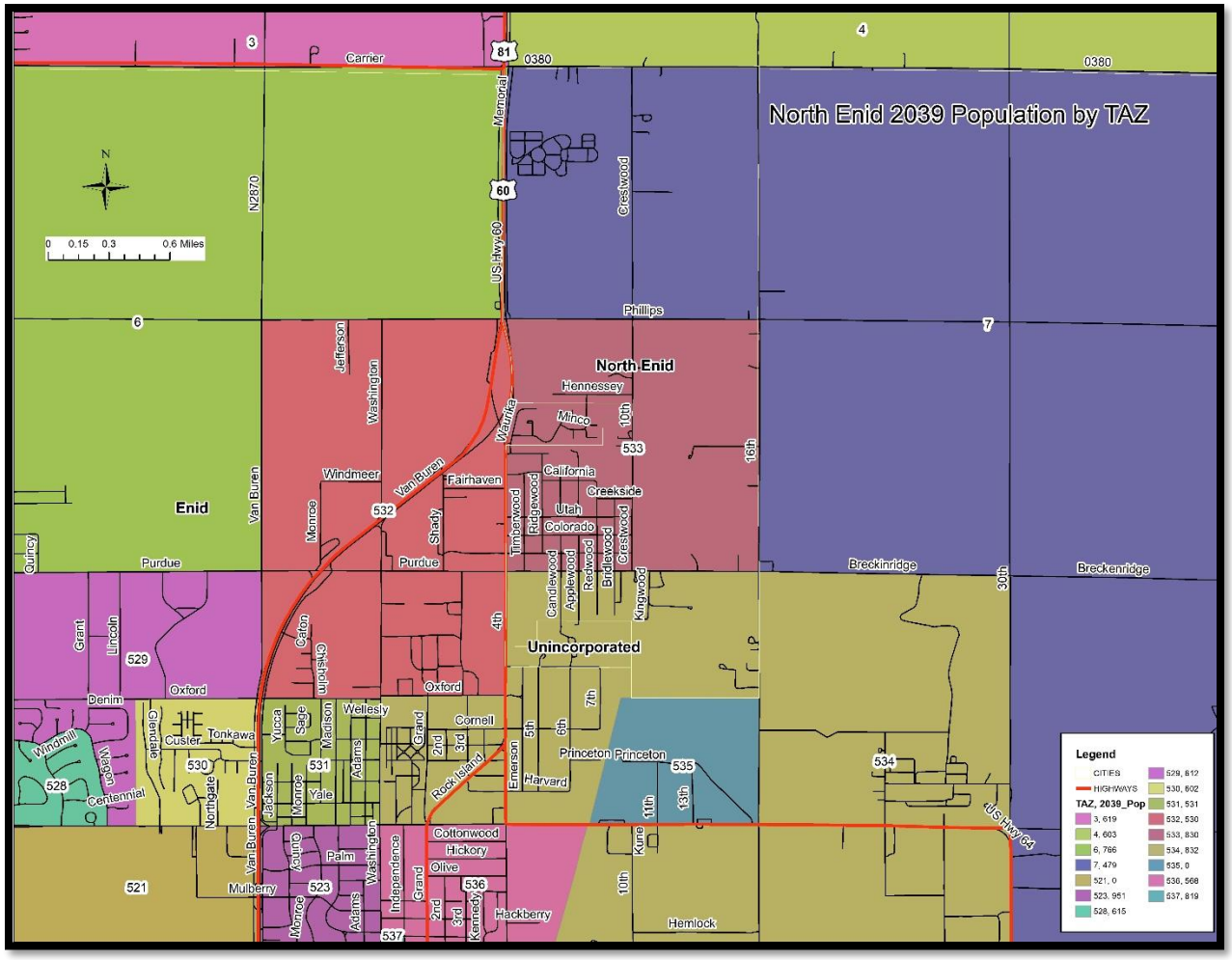
(Source: NORTPO)

Map 3.3 Town of Lahoma 2039 Projected Population



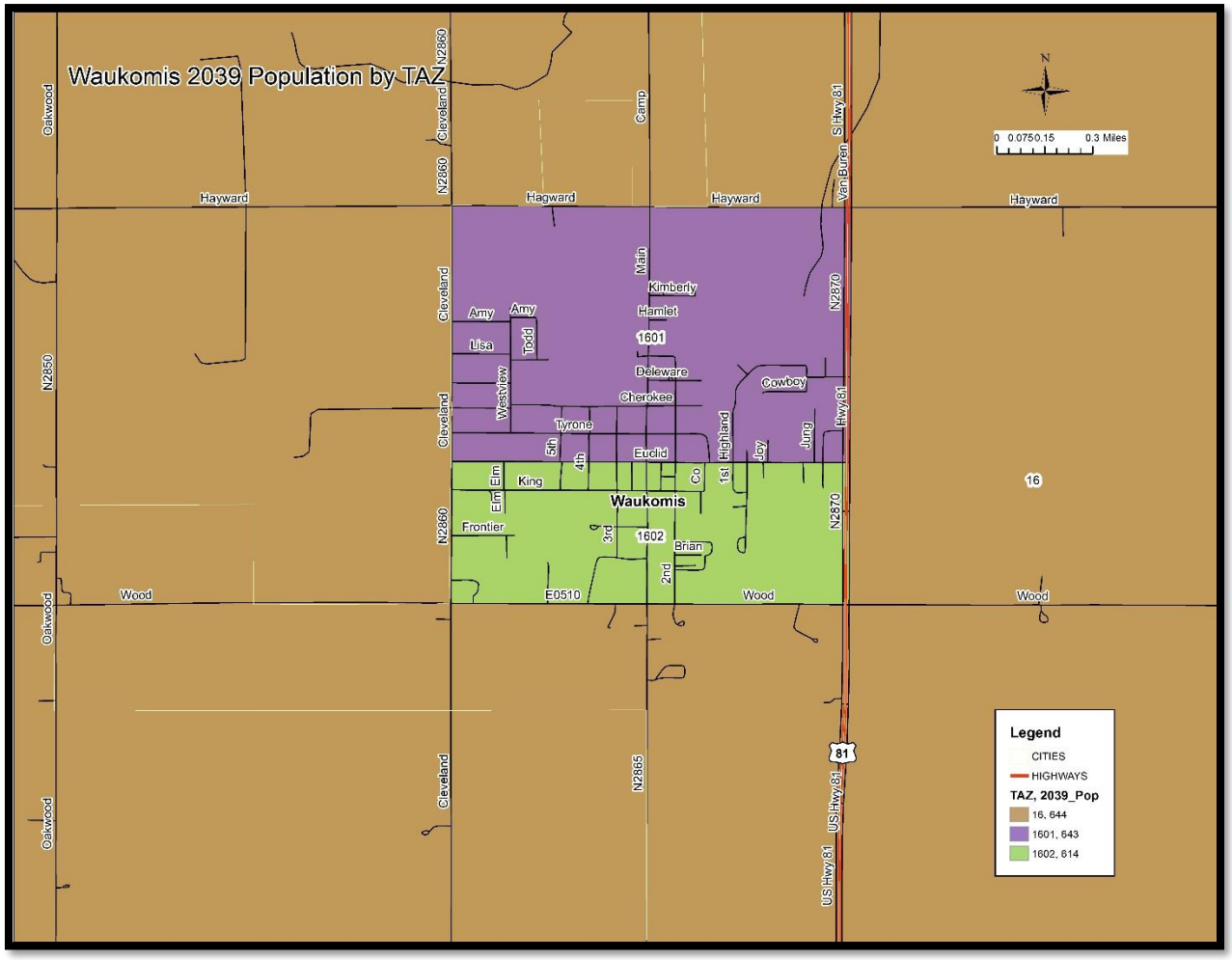
(Source: NORTPO)

Map 3.4 Town of North Enid 2039 Projected Population



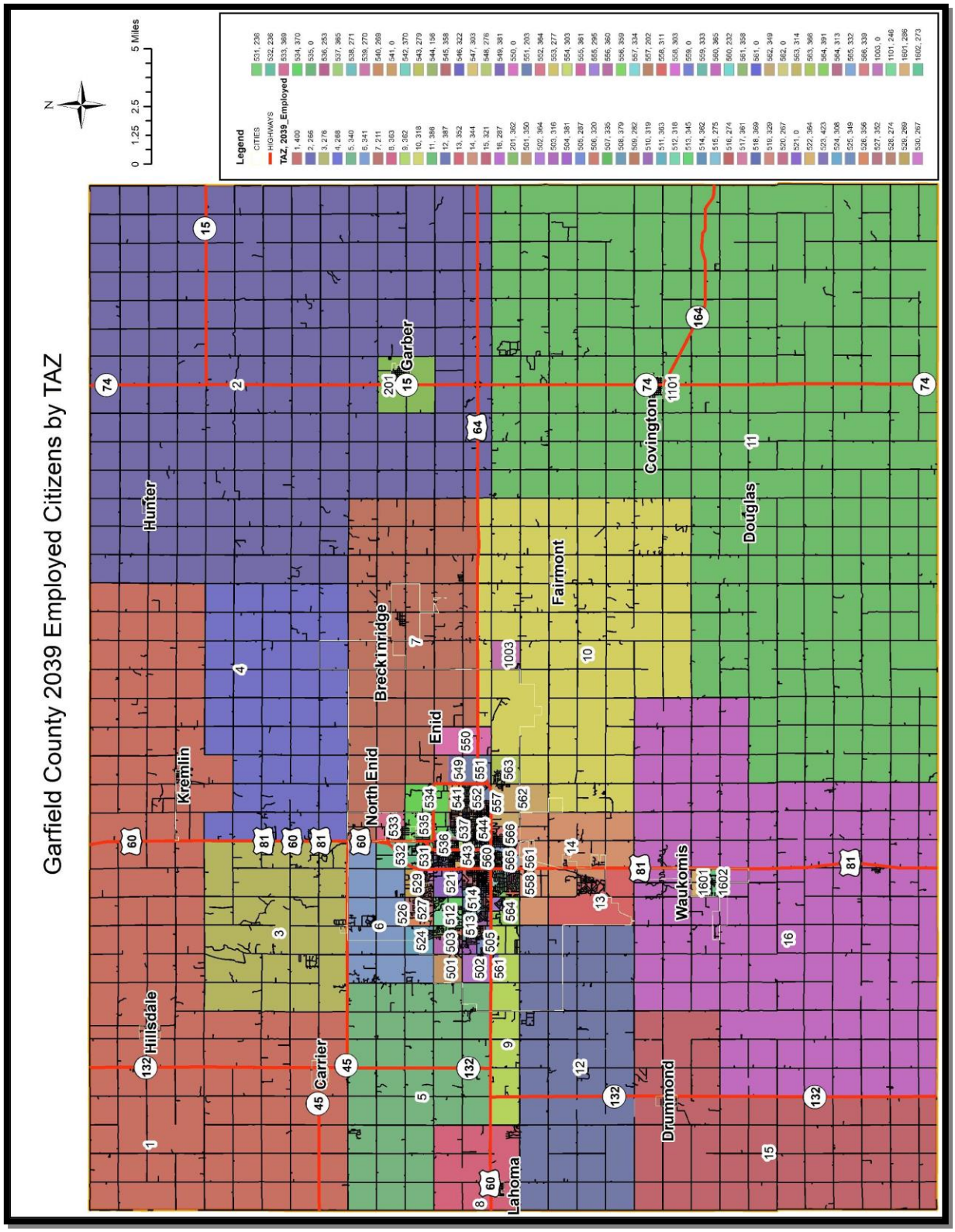
(Source: NORTPO)

Map 3.5 Town of Waukomis 2039 Projected Population



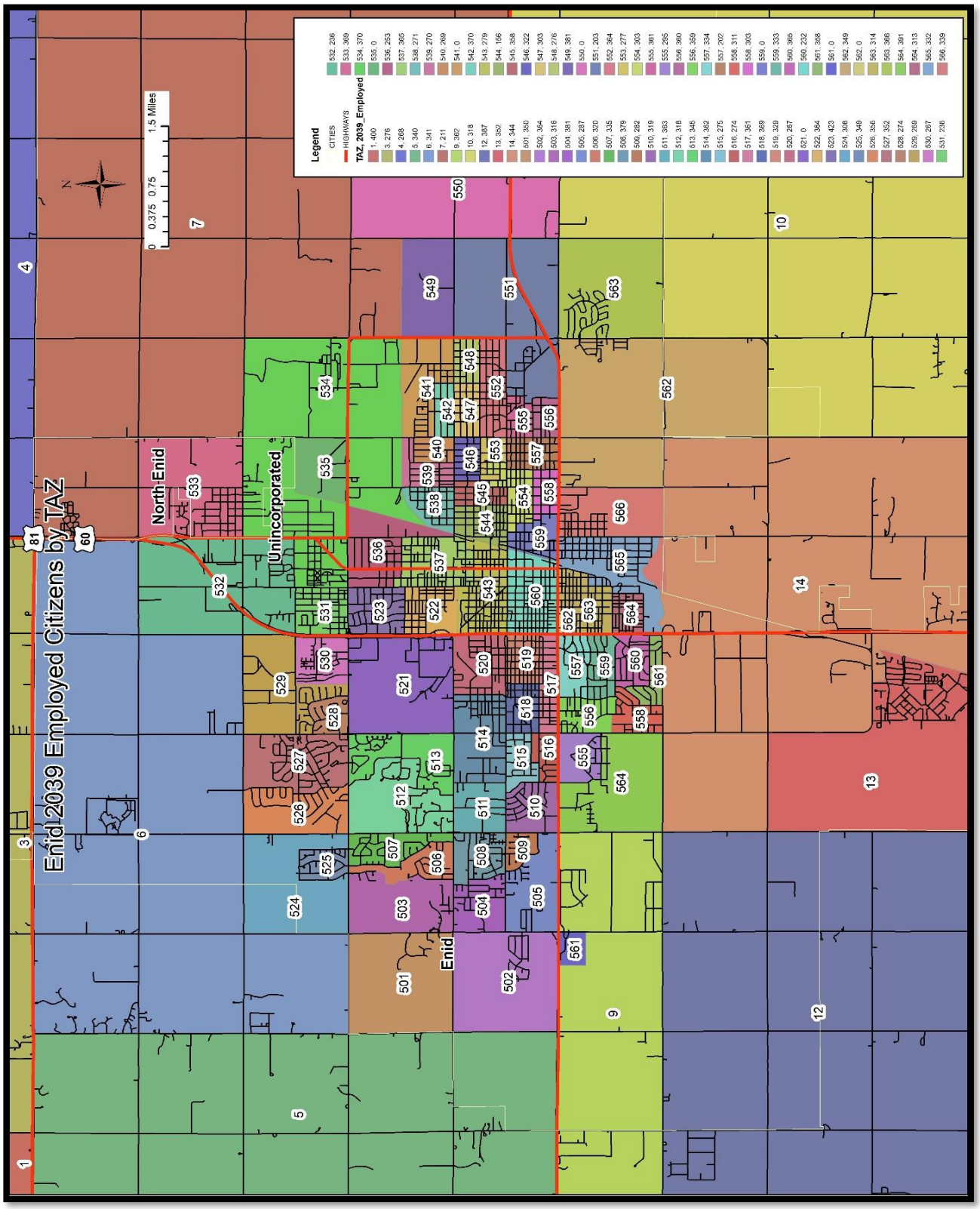
(Source: NORTPO)

Map 3.6 Garfield County 2039 Projected Employment



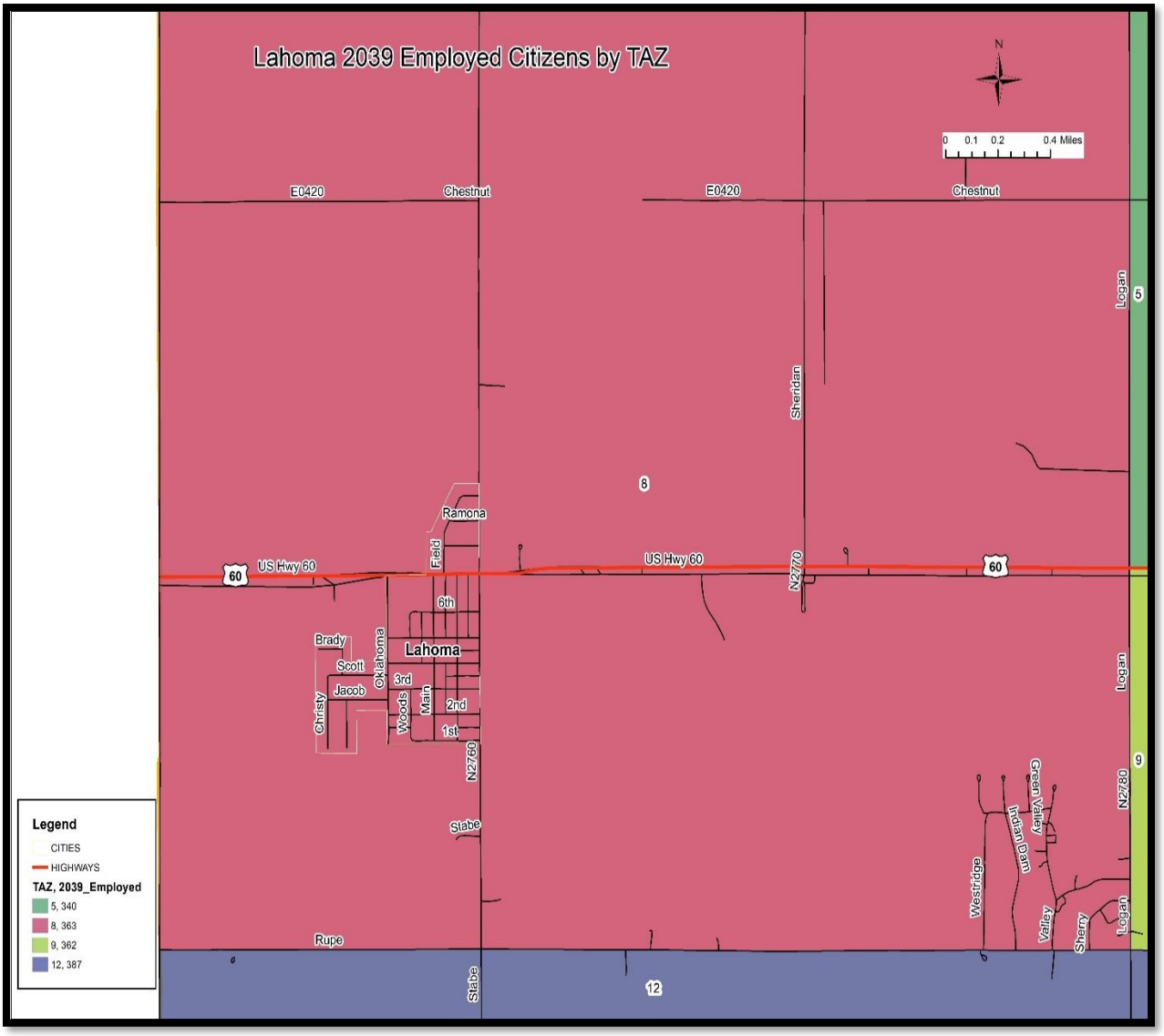
(Source: NORTPO)

Map 3.7 City of Enid 2039 Projected Employment



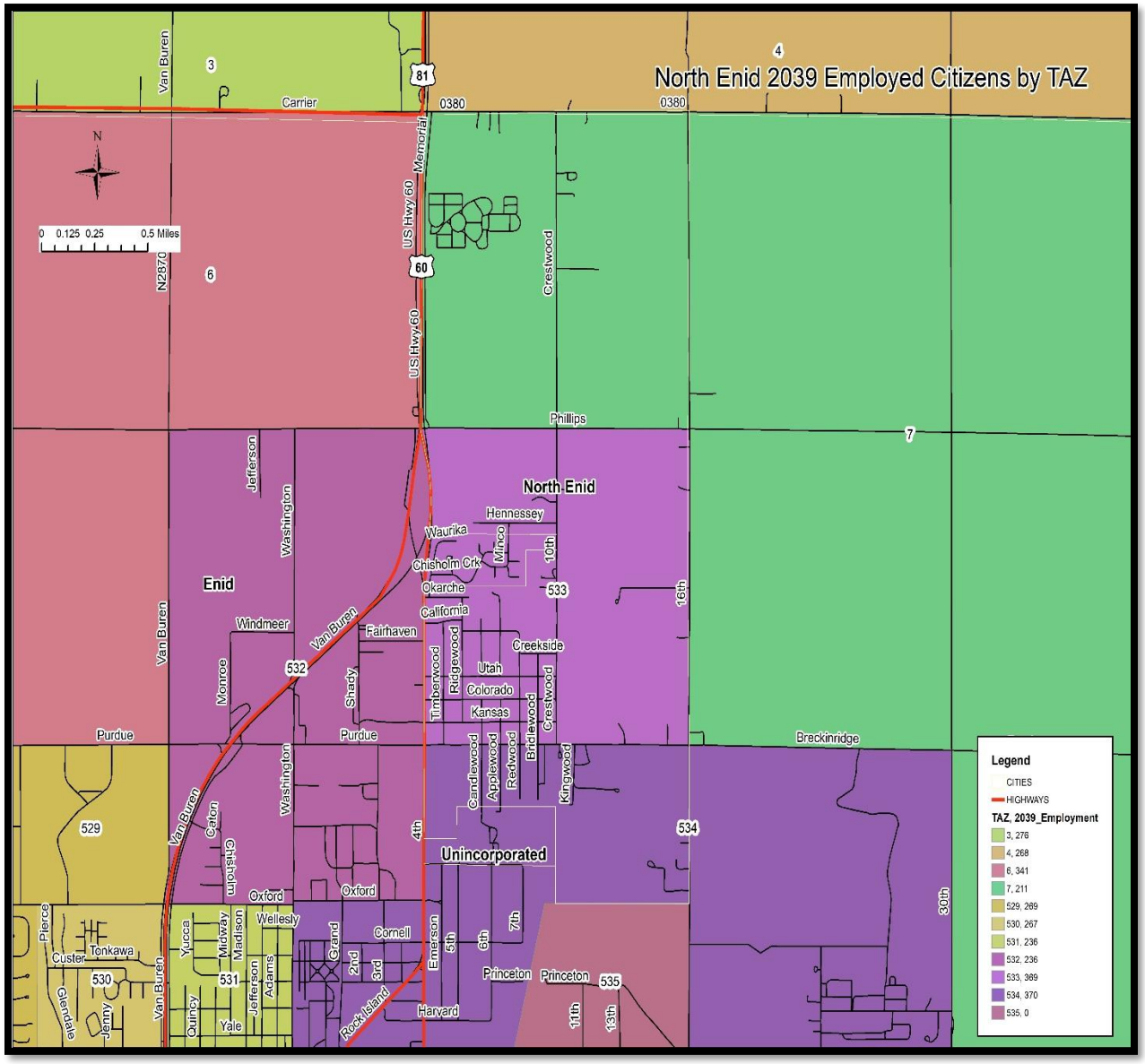
(Source: NORTPO)

Map 3.8 Town of Lahoma 2039 Projected Employment



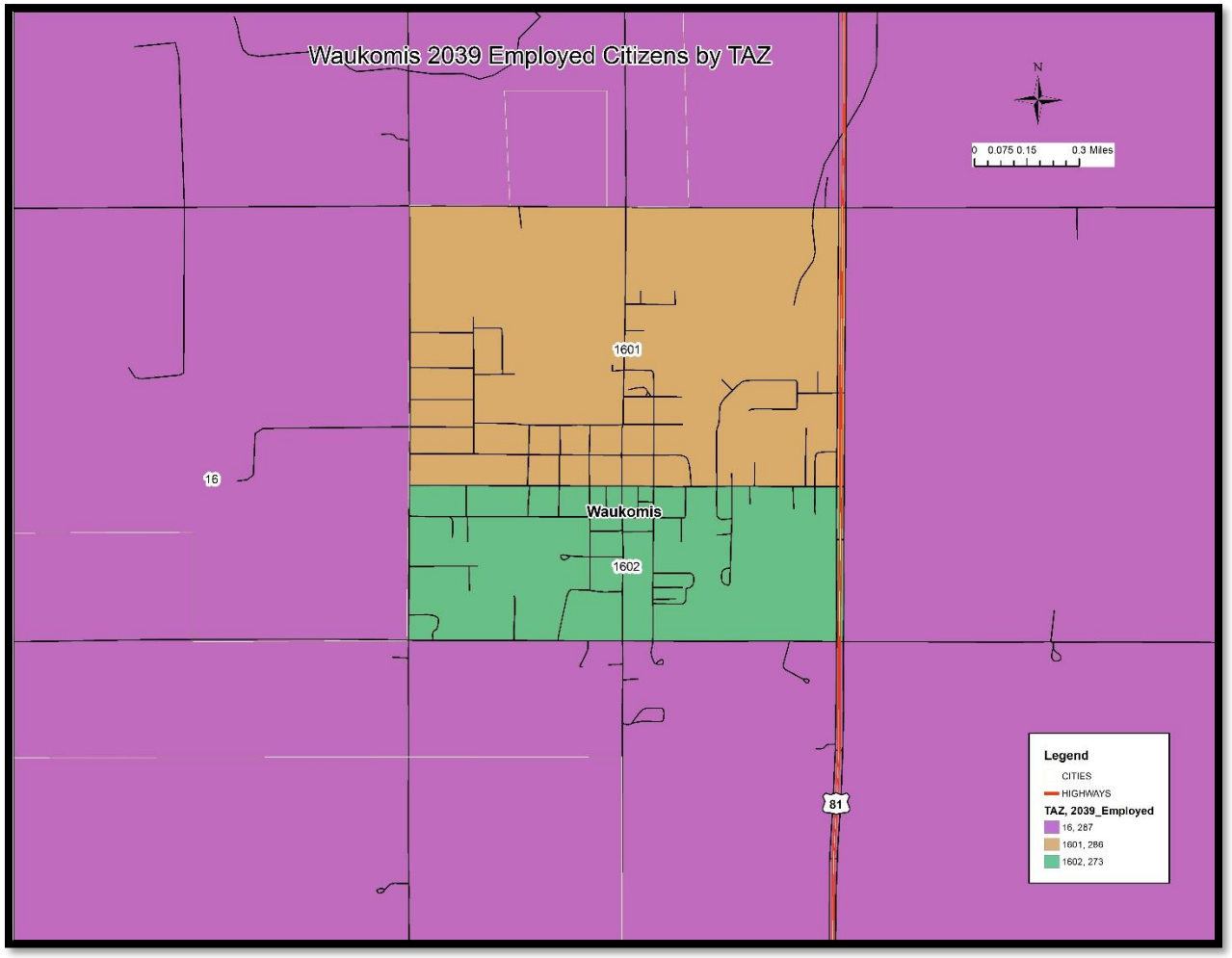
(Source: NORTPO)

Map 3.9 Town of North Enid 2039 Projected Employment



(Source: NORTPO)

Map 3.10 Town of Waukomis 2039 Projected Employment



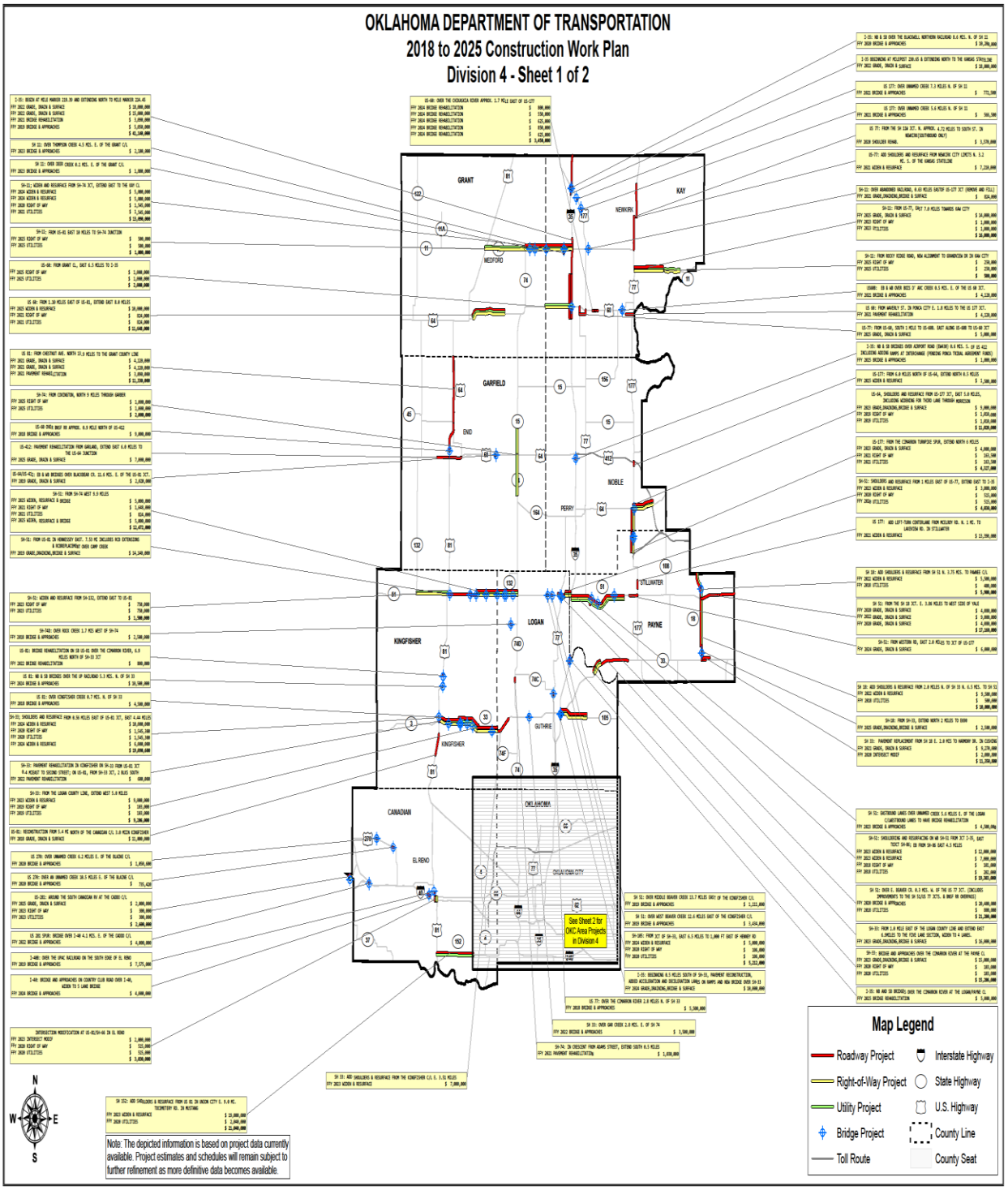
(Source: NORTPO)

Table 3.1 Supporting Data for Projected Population and Employment

Year	Population	Employment
2016	62,481	27,784
2029	63,106	28,062
2039	63,737	28,343

(Source: NORTPO)

Map 3.11 Location of Projects on the ODOT 8-year Construction Program 2018-2025



(Source: ODOT)

Table 3.2 ODOT 8-year Construction Program 2018-2025

YEAR	COUNTY	DIVISION / LOCATION	LENGTH	SCHEDULE	DESCRIPTION	COST
FFY 2019						
	GARFIELD 2637(04) PAVEMENT REHABILITATION	Div. 4 US060	4.380 Mi.	Let 01/2019 FFY 2019	US 60: FROM CHESTNUT AVE. IN ENID N. APPROX. 4.4 MILES TO THE SH-45 JCT	$3,090,000.00
	GARFIELD 27965(04) BRIDGE & APPROACHES	Div. 4 US064	0.200 Mi.	Let 11/2018 FFY 2019	US-64/US-412: EB & WB BRIDGES OVER BLACKBEAR CR. 11.6 MIS. E. OF THE US-81 JCT.	$1,800,000.00
	GARFIELD 27981(04) GRADE, DRAIN & SURFACE	Div. 4 US060	4.500 Mi.	Let 01/2019 FFY 2019	US 81: FROM SH-45, EXTEND NORTH 4.5 MILES TO 4.5 MILES SOUTH OF THE GRANT COUNTY LINE	$4,120,000.00
	GARFIELD 27981(04) GRADE, DRAIN & SURFACE	Div. 4 US060	4.500 Mi.	Let 01/2019 FFY 2019	US 81: FROM 4.5 MILES NORTH OF SH-45, EXTEND NORTH 4.5 MILES TO THE GRANT COUNTY LINE	$4,944,000.00
FFY 2025						
	GARFIELD 32688(04) GRADE. DRAIN & SURFACE	Div. 4 US060	3.0 Mi.	FFY 2025	US-412: FRE8:F15OM GARLAND, EXTEND EAST 6.0 MILES TO THE US-64 JCT.	$7,000,000
	GARFIELD 33409(05) RIGHT OF WAY	Div. 4 SH074	9.0 Mi.	FFY 2025	SH-74: FROM COVINGTON, NORTH 9 MILES THROUGH GARBER(ROW) FOR JP 33409(04))	$1,000,000
	GARFIELD 33409(06) UTILITIES	Div. 4 SH074	9.0 Mi.	FFY 2025	SH-74: FROM COVINGTON, NORTH 9 MILES THROUGH GARBER(UT) FOR JP 33409(04))	$1,000,000
FFY 2026						
	GARFIELD 33409(04) WIDEN, RESURFACE & BRIDGE	Div. 4 SH015	3.50 Mi.	FFY2026	SH-74: FROM US-412, NORTH 3.5 MILES THROUGH GARBER	$3,000,000

(Source: ODOT)

Table 3.3 CIRB Projects FFY2019 – FFY 2023

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL$
GARFIELD DIV 4 24868(09)	CO RD 11.00 MI	FFY 2019 RESURFACE	CO. RD. EW-40 (2416C) FROM SH-15 TO NS-305 PHASE III	$0 $0 $0	$0 $1,000,000 $0	$0 $1,000,000 $0
GARFIELD DIV 4 29876(04)	COBRGE 0.20 MI.	FFY 2019 BRIDGE & APPROACHES	BR AND APP ON EW-46 OVER TURKEY CREEK, 0.3 MILES EAST, 3.3 MILES NORTH AND 1.3 MILES EAST OF DRUMMOND CT BEAMS	$0 $0 $0	$0 $657200 $0	$0 $657200 $0
GARFIELD DIV 4 31808(05)	COBRGE 0.25 MI.	FFY 2019 CONTRACT P.E. (AS OF 10/1/2019)	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON PE FOR 31808(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 32843(06)	CO RD 2.90 MI.	FFY 2019 RIGHT OF WAY	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES RW FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$0 $100,000 $0
GARFIELD DIV 4 32843(07)	CO RD 2.90 MI.	FFY 2019 UTILITIES	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES UT FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$0 $100,000 $0
GARFIELD DIV 4 28679(06)	CO RD 5.00 MI.	FFY 2020 RIGHT OF WAY	CO RD NS-282, FROM US-412, EXTEND SOUTH 8.0 MILES TO EW-51 RW FOR 28679(04)	$0 $0 $0	$0 $100,000 $0	
GARFIELD DIV 4 28679(07)	UTILITIES 5.00 MI.	FFY 2020 UTILITIES	CO RD NS-282, FROM US-412, EXTEND SOUTH 8.0 MILES TO EW-51 UT FOR 28679(04	$0 $0 $0	$0 $0 $0	$100,000
GARFIELD DIV 4 29874(04)	COBRGE 0.20 MI	FFY 2020 BRIDGE AND APPROACHES	BR AND APP ON EW-47 OVER SPRING CREEK, 5.0 MILES EAST, 4.0 MILES SOUTH AND 0.2 MILES EAST OF LAHOMA CT BEAMS	$0 $0 $0	$0 $700,000 $0	$700,000
GARFIELD DIV 4 31808(05)	COBRGE 0.25 MI.	FFY 2019 CONTRACT P.E. (AS OF 10/1/2013)	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON PE FOR 31808(04)	$0 $0 $0	$0 $75,000 $0	$75,000
GARFIELD DIV 4 32843(06)	CO RD 2.90 MI	FFY 2019 RIGHT OF WAY	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES RW FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$100,000
GARFIELD DIV 4 32843(07)	CO RD 2.90 MI	FFY 2019 UTILITIES	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES UT FOR 32843(04)	$0 $0 $0	$0 $100,000 $0	$100,000
GARFIELD DIV 4 30437(04)	COBRGE 0.25 MI	FFY 2020 BRIDGE & APPROACHES	BRIDGE & APPROACHES N NS-296 OVER RED ROCK CREEK, 6.0 MILES EAST & 3.9 MILES SOUTH OF KREMLIN	$0 $560,000 $0	$0 $140,000 $0	$0 $700,000 $0
GARFIELD DIV 4 31210(04)	COBRGE 0.25 MI	FFY 2020 BRIDGE & APPROACHES	ON EW-48 OVER TURKEY CREEK, 6.4 MILES WEST OF US-81	$0 $560,000 $0	$0 $140,000 $0	$0 $700,000 $0

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL$
GARFIELD DIV 4 31968(05)	COBRGE 0.25 MI	FFY 2020 CONTRACT PE (10/1/2013) BRIDGE AND APPROACHES	ON NS-298 OVER RED ROCK CREEK, 1.9 MILES WEST AND 4.3 MILES SOUTH OF HUNTER PE FOR 31968(045)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 32843(04)	CO RD 2.90 MI	FFY 2020 GRADE, DRAIN & SURFACE	SOUTHGATE RD. FROM 0.1 MILES EAST OF US-81, EXTEND EAST 2.9 MILES	$0 $1,000,000 $0	$0 $1,000,000 $0	$0 $1,000,000 $0
GARFIELD DIV 4 32843(09)	CO RD 1.00 MI	FFY 2020 RIGHT OF WAY	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH ST. RW FOR 32843(08)	$0 $0 $0	$0 $25,000 $0	$0 $25,000 $0
GARFIELD DIV 4 32843(10)	CO RD 1.00 MI	FFY 2020 UTILITIES	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH ST. RW FOR 32843(08)	$0 $0 $0	$0 $25,000 $0	$0 $25,000 $0
GARFIELD DIV 4 33508(05)	CO RD	FFY 2020 CONTRACT P.E. (AS OF 10/1/2013)	CHIP SEAL STP PROJECT: 6.0 MI ON EW-51 FROM US-81 TO NS-293 & 7.0 MI. ON NS-293 FROM EW-52.25 TO EW-45. (MULTI COUNTIES DIV) (DESIGN FOR 33508(04))	$0 $0 $0	$0 $50,000 $0	$0 $50,000 $0
GARFIELD DIV 4 29872(04)	COBRGE 0.20 MI	FFY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-307 OVER BLACK BEAR CREEK, 3. 0 MILES EAST AND 2.0 MILES SOUTH OF JCT US-64/SH-74 CT BEAMS	$0 $0 $0	$0 $800,000 $0	$0 $800,000 $0
GARFIELD DIV 4 29873(04)	COBRGE 0.20 MI	FFY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-295 OVER SKELETON CREEK, 8.0 MILES EAST AND 0.6 MILES SOUTH OF BISON CT BEAMS	$0 $0 $0	$0 $600,000 $0	$0 $600,000 $0
GARFIELD DIV 4 29875(04)	COBRGE 0.20 MI	FFY 2021 BRIDGE & APPROACHES	BR AND APP ON NS-286 OVER WILD HORSE CREEK, 4.0 MILES WEST AND 0.3 MILES NORTH OF KREMLIN CT BEAMS	$0 $0 $0	$0 $700,000 $0	$0 $700,000 $0
GARFIELD DIV 4 32843(08)	CO RD 1.00 MI	FFY 2021 GRADE, DRAIN & SURFACE	GRADE, DRAIN, & SURFACE ON SOUTHGATE START 16TH ST. EXTEND 1.0 MILE TO 30TH	$0 $1,168,831 $0	$0 $200,000 $0	$0 $1,368,831 $0
GARFIELD DIV 4 32870(05))	COBRGE 0.25 MI	FFY 2021 CONTRACT P.E. (AS OF 10/1/2013)	BRIDGE & APPROACHES ON EW-57 OVER SKELETON CREEK, 0.5 MILES SOUTH & 7.3 MILES EAST OF BISON PE FOR 32870(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 33049(04)	COBRGE 0.25 MI	FFY 2021 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON EW-49 OVER TURKEY CREEK, 0.3 MILES NORTH AND 2.4 MILES EAST OF DRUMMOND CIRCLE #175	$0 $800,000 $0	$0 $200,000 $0	$0 $1,000,000 $0

COUNTY	TYPE	YEAR	DESCRIPTION	ADVCON$ Federal$ STATE$	OTHERS$ CIRB$ TRIBES$	TOTAL$
GARFIELD DIV 4 28679(04)	CO RD 5.00 MI	FFY 2022 GRADE, DRAINING, BRIDGE & SURFACE	CO RD NS-282, FROM US-412, EXTEND SOUTH 6.0 MILES TO EW-49	$0 $0 $0	$0 $3,000,000 $0	$0 $3,000,000 $0
GARFIELD DIV 4 31808(04)	COBRGE 0.25 MI	FFY 2022 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON EW-56 OVER BITTER CREEK, 0.5 MILES NORTH AND 9.0 MILES EAST OF BISON	$0 $640,000 $0	$0 $160,000 $0	$0 $800,000 $0
GARFIELD DIV 4 33495(05)	COBRGE	FFY 2022 CONTRACT P.E. (AS OF 10/1/2013)	CO BR ON E0290 2.0 MI. N. & 7.0 MI. E. OF HILLSDALE (DESIGN FOR 33495(04))	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0
GARFIELD DIV 4 33508(04)	CO RD 13.00 MI	FFY 2022 CHIP SEAL	CHIP SEAL STP PROJECT: 6.0 MI. ON EW-51 FROM US-81 TO NS-293 & 7.0 MI. NS-293 FROM EW-52.25 TO EW-45. (MULTI COUNTIES IN DIV 4	$0 $366,667 $0	$0 $100,000 $0	$0 $466,667 $0
GARFIELD DIV 4 31968(04)	COBRGE 0.25 MI	FFY 2023 BRIDGE & APPROACHES	BRIDGE AND APPROACHES ON NS-298 OVER RED ROCK CREEK, 1.9 MILES WEST AND 4.3 MILES SOUTH OF HUNTER	$0 $640,000 $0	$0 $160,000 $0	$0 $800,000 $0
GARFIELD DIV 4 33927(05)	CO RD	FFY 2023 CONTRACT P.E. (AS OF 10/1/2013)	COUNTY ROAD CN 156 D1 PE FOR 33927(04)	$0 $0 $0	$0 $75,000 $0	$0 $75,000 $0

(Source: ODOT)