

# **2040 COTTON COUNTY OKLAHOMA LONG RANGE TRANSPORTATION PLAN**



**Prepared by:  
Southwest Oklahoma Regional Transportation Planning Organization**

Bldg. 420 Sooner Drive  
Burns Flat, OK 73624  
580-562-4882

800 W. Main St.  
Duncan, OK 73533  
580-252-0595  
[www.sortpo.org](http://www.sortpo.org)

In cooperation with:  
Cities and Towns of Cotton County  
Red River Transportation  
Oklahoma Department of Transportation  
Federal Highways Administration  
Association of South Central Oklahoma Governments  
South Western Oklahoma Development Authority

Publication of this document was financed in part by funds provided by the United States Department of Transportation, Federal Highway Administration. The provision of federal financial assistance should not be construed as denoting U.S. Government approval of plans, policies, programs or projects contained herein.

The Southwest Oklahoma Regional Transportation Planning Organization (SORTPO) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, SORTPO does not discriminate on the basis of race, sex, color, national origin, religion or disability, in the admission, access to and treatment in SORTPO programs and activities.

**Resolution No. 2017-7  
Adopting the Cotton County 2040  
Long Range Transportation Plan**

Whereas, the South Western Oklahoma Development Authority by Resolution 09-04 created the Southwest Oklahoma Regional Transportation Planning Organization (SORTPO); and

Whereas, through a Resolution 16-06 the South Western Oklahoma Development Authority expanded the regional transportation planning area to include the Association of South Central Oklahoma Governments (ASCOG), and

Whereas, SORTPO is tasked with developing a regional long range transportation plan; and

Whereas, the long range transportation plan establishes goal and transportation strategies addressing the region's needs; and


Whereas, the Cotton County 2040 Long Range Transportation Plan (LRTP) was prepared by SORPTO consultation with member local and state governments and local, state and federal transportation agencies; and

Whereas, the Plan has been presented to the general public for review and comment in accordance with the SORTPO Public Participation Plan in addition to the series of public meetings between October 2016 and November 2017 and the Plan was posted on the SORTPO website for public review and comment; and

Whereas, the Plan has been prepared in accordance with all relative state and federal rules and regulations.

NOW, THEREFORE BE IT RESOLVED, that the SORPTO Policy Board hereby approves and adopts the Cotton County 2040 Long Range Transportation Plan.

Approved and Adopted by SORTPO Policy Board and signed this 30<sup>th</sup> day of November, 2017.

  
\_\_\_\_\_  
Lyle Miller, Chairman SORTPO Policy Board

ATTEST:  
  
\_\_\_\_\_  
Anita Archer, Secretary SORTPO Policy Board

## Contents

<b>Chapter 1: Goal, Strategies and Issues .....</b>	<b>1</b>
SORTPO History .....	1
Map 1.1: SORTPO Region .....	2
Regional Transportation Planning .....	2
Purpose of Plan .....	3
Relationship and Requirements with State and Federal Agencies .....	4
Table 1.1: Planning Factors .....	4
Goals and Strategies .....	5
Table 1.2: Cotton County Goal Categories .....	6
Goal 1: Accessibility and Mobility .....	7
Goal 2: Awareness, Education and Cooperative Process .....	7
Goal 3: Freight & Economic Vitality .....	7
Goal 4: Environment .....	8
Goal 5: Finance and Funding .....	8
Goal 6: Maintenance and Preservation .....	8
Goal 7: Safety and Security .....	9
Goal 8: Community & Health .....	9
Goal 9: Tourism & Travel .....	9
Key Issues, Challenges and Trends .....	10
 <b>Chapter 2: Current Conditions .....</b>	 <b>12</b>
History .....	12
Map 2.1: Cotton County, Oklahoma .....	13
Table 2.1 Cotton County Population 1980-2015 Estimate .....	14
Data obtained from the 2011-2015 ACS further reveals: .....	14
Figure 2.1: Cotton County Civilian Labor Force, 2006-2015 .....	15
Figure 2.2: Cotton County, Civilian Labor Force 1990 – 2015 .....	16
Figure 2.3: Cotton County Business Patterns, 2014 .....	16
Figure 2.4: Cotton County Motor Vehicle Registration, 2012-2016 .....	17
Traffic Analysis Zones .....	17
Map 2.2: Cotton County Traffic Analysis Zones .....	18
Map 2.3: Walters Doyle Traffic Analysis Zones .....	19
Map 2.4: Temple Traffic Analysis Zones .....	20
Map 2.5: Devol Traffic Analysis Zones .....	20
Map 2.6: Randlett Traffic Analysis Zones .....	21
Physical Development Constraints and Conditions .....	21
Map 2.7: Tribal Jurisdictions in Oklahoma .....	22
Historic, Natural or Man Made Significant Features .....	22
Public Safety Issues .....	23
Collisions .....	23
Table 2.2: Cotton County Collision Total, 2011-2016 .....	24
Table 2.3: Cotton County Collision Concentration, 2011-2016 .....	24
Existing Road System .....	24
Map 2.8: Cotton County 2011-2016 Collision Map .....	25
Traffic Count .....	26
Functional Classification and Road Systems .....	26
Bridges .....	26
Traffic Control .....	27

Freight System .....	27
Table 2.4: Cotton County Significant Freight Corridors .....	28
Map 2.9: National Highway Freight Network .....	28
Map 2.10: Regionally Significant Freight Routes .....	29
Figure 2.5: Average Daily Long-Haul Traffic on NHS 2011 .....	30
Map 2.11: Oklahoma High Volume Truck Corridors .....	31
Map 2.12: Port of Entry .....	32
Railroads .....	32
Bicycle & Pedestrian System .....	33
Public Transit .....	34
Airports.....	34
Table 2.5: SORPTO Public Airports.....	35
Areas of Concern.....	36
Table 2.6: Cotton County Transportation Areas of Concern.....	36
 Chapter 3: Future Conditions and Improvements.....	 37
Future Conditions .....	37
Figure 3.1: Projected Average Daily Long-Haul Traffic on NHS 2040 .....	38
2040 Transportation Improvements.....	38
Federal .....	39
State.....	40
Table 3.1: State Funding Categories .....	40
County.....	41
Local .....	42
Table 3.2: Cotton County Future Transportation Projects.....	42
 Chapter 4: Public Participation .....	 43
Environmental Justice .....	43
Coordination with Other Plans.....	43
 Chapter 5: Transportation Recommendations .....	 45
Committed Improvements.....	45
Table 5.1: Cotton County Transportation Projects .....	46
 Acronyms .....	 53
Definitions .....	56
 APPENDIX.....	 59
Appendix A: Resolution 09-04 .....	60
Appendix B: Resolution 16-06.....	61
Appendix C: Performance Measures .....	62
 Appendix 2: Current Conditions.....	 64
Appendix 2.1: Cotton County, Socio Economic Information, 2011-2015 ACS.....	64
Appendix 2.2: Cotton County Housing Units 2011-2015 ACS .....	64
Appendix 2.3: Cotton County Educational Attainment 2011-2015 ACS .....	65
Appendix 2.4: Cotton County, Employment Status and Commute to Work, 2011-2015 ACS .....	66
 Appendix 2.5: Cotton County Commuting Characteristics 2011-2015 ACS.....	 67
Appendix 2.6: Cotton County Population and Employment by TAZ.....	68

Appendix 2.7: Cotton County Major Employers by TAZ.....	70
Appendix 2.8: Environmental and Development Concerns.....	72
Appendix 2.9: Cotton County Environmental Features .....	72
Appendix 2.10: Cotton County Type of Collision Total, 2011-2016 .....	73
Appendix 2.11: Cotton County Collision Vehicles by Vehicle Type, Total, 2011-2016 .....	73
Appendix 2.12: Two Lane Highways Without Paved Shoulders.....	75
Appendix 2.13: Steep Hills and Sharp Curve .....	76
Appendix 2.14: Cotton County 2015 Annual Average Daily Traffic Count .....	77
Appendix 2.15: Functional Classification and Road Systems .....	78
Appendix 2.16: Cotton County Functional Classification.....	81
Appendix 2.17: Oklahoma Structurally Deficient and Functionally Obsolete Bridges.....	82
Appendix 2.18: Cotton County On System Bridges with Sufficiency Rate.....	83
Appendix 2.19: National Highway Freight Network – Oklahoma .....	96
Appendix 3: Future Conditions.....	98
Appendix 3.1: Cotton County 2040 Population and Employment Projection by TAZ.....	98
Appendix 3.2 ODOT 8 Year Construction Work Program FFY 2017-2024 Map.....	99
Appendix 4: Survey .....	100
Appendix 4.1: Public Survey.....	100
Appendix 4.2: Public Outreach.....	109
Stakeholder Invitation Letter .....	110
Press Release .....	111
Public Review and Comments.....	112

## **Chapter 1: Goal, Strategies and Issues**

### **SORTPO History**

In 1970, Oklahoma's governor established eleven (11) sub-state planning districts. Subsequently, the local governments served by the planning districts created the eleven (11) Councils of Governments (COGs) using the sub-state planning district boundaries. These districts make up the Oklahoma Association of Regional Councils (OARC). South Western Oklahoma Development Authority (SWODA) and the Association of South Central Oklahoma Governments are two of the eleven (11) COGs.

In April 2012, the Oklahoma Department of Transportation (ODOT) entered an agreement with OARC to oversee development of the regional transportation planning process and the regional public participation process in the non-metropolitan areas of the state. Three councils of governments were selected as pilot projects: SWODA, Northern Oklahoma Development Authority (NODA) and Central Oklahoma Economic Development District (COEDD). SWODA on October 13<sup>th</sup>, 2009 by Resolution 09-04 (Appendix A) created the Southwest Oklahoma Regional Transportation Planning Organization (SORTPO) and was tasked with the responsibility of developing a regional plan that included preparation of eight (8) county plans. In Federal Fiscal Year (FFY) 2016, through a collaborative effort involving SORTPO, the Association of South Central Oklahoma Governments (ASCOG) and ODOT a transportation planning pilot project comprising sixteen counties was initiated representing two Councils of Governments SWODA and ASCOG. The SWODA Board of Trustees adopted Resolution 16-06 (Appendix B) amending the SORTPO region.

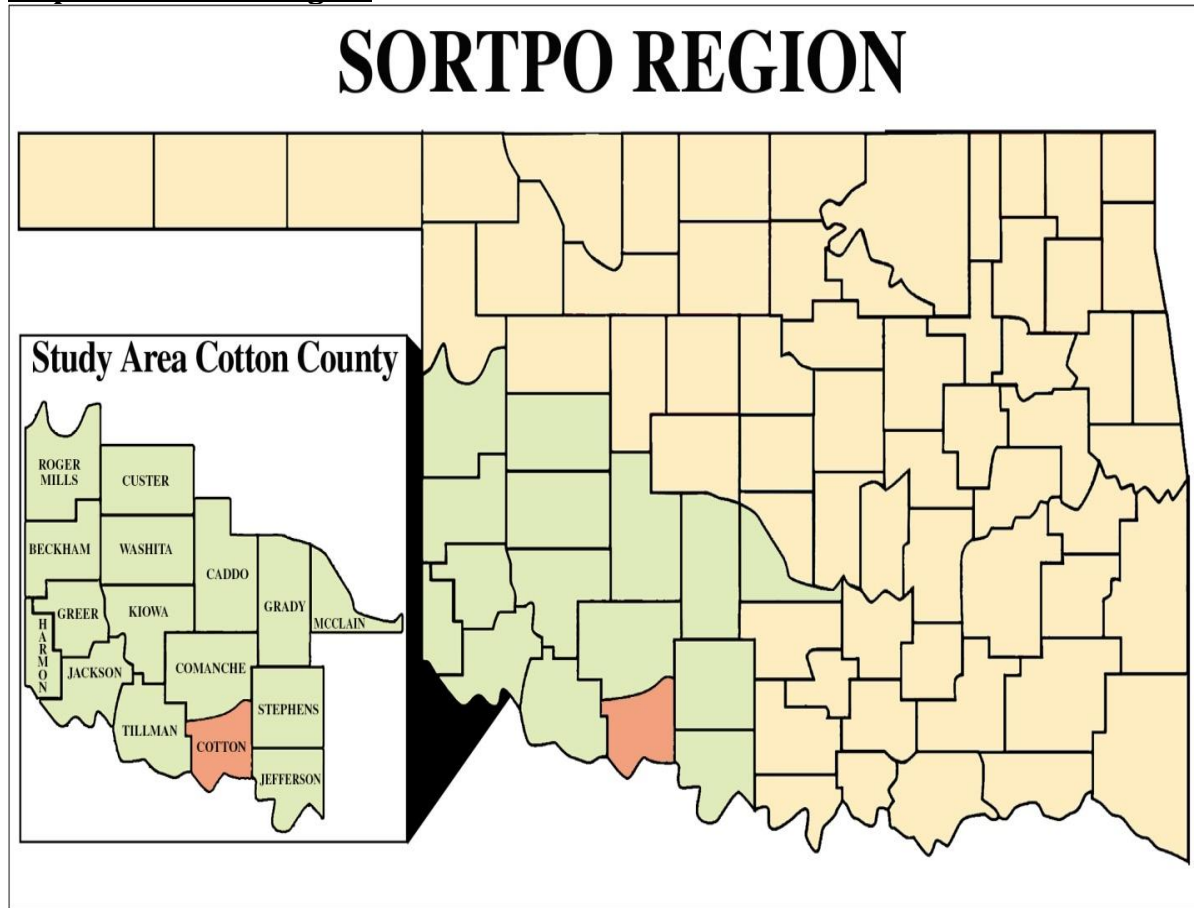
Located in southwest Oklahoma, the SORTPO region is comprised of 14,180 square miles. (Map 1.1). The SORTPO region is comprised of sixteen (16) counties, one hundred-twenty (120) cities and towns and nineteen (19) conservation districts. Total population for the SORTPO region according to the 2010 U.S. Census Bureau was 416,257. Population data obtained from the 2011- 2015 American Community Survey (ACS) estimates the population has increased to 422,165. Although much of the region is comprised of large tracts of farming and agriculture lands there are multiple areas that contain urbanized areas that feature regional medical facilities, universities, military installations and governmental offices. Population growth and shifts for the SORTPO region are dependent on many factors depending on a county. Each County in the region although a separate entity is interconnected through commerce, employment, health services, education and transportation.

All aspects of the planning process are overseen by the SORTPO Policy Board. The SORTPO Technical Committee serves as the advisory group for transportation planning and policy initiatives. This committee reviews transportation planning work efforts and provides a recommendation to the SORTPO Policy Board for their consideration and action. The day-to-day activities of SORTPO are supported by staff located in the SWODA (Burns Flat) and ASCOG (Duncan) offices. Staff, equipment, supplies, rent, consulting studies, and other expenses used to support staffing operations are reimbursable to SORTPO by the Federal Highway Administration (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 SWODA.

**Map 1.1: SORTPO 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 FHWA and the Federal Transit Administration (FTA) is placed on extending public participation to include people who have been traditionally underserved by the transportation system and services in the region.

The purpose of the transportation system is to move people and goods in the safest and most efficient manner possible. SORTPO envisions the transportation system as a critical element of the quality of life for the citizens. A regional approach to long range transportation planning is necessary because of the rural nature and diverse characteristics of the population in Oklahoma. Transportation systems must safely, efficiently and effectively allow citizens to travel to work and to conduct their personal lives as well as provide for the efficient movement of goods to markets to support the county's economic vitality. Additionally, transportation decisions should carefully consider and reflect environmental and community concerns.



Transportation planning is a process that develops information to help make decisions on the future development and management of transportation systems. It involves the determination of the need for new or expanded roads, transit systems, freight facilities and bicycle/pedestrian facilities along with their location, their capacity and the future needs. The process of developing the long-range transportation plan (LRTP) provides an opportunity for participating in the planning of the future transportation system. The process allows the community to focus their attention on transportation in the context of Cotton County as well as the SORTPO region. The LRTP was developed within the regulatory framework of The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act). The LRTP establishes the goals, objectives and transportation strategies for addressing the region's transportation needs. The LRTP establishes the goals, objectives and transportation strategies for addressing the region's transportation needs. This planning process follows the three "c's" identified by federal transportation regulations: continuing, cooperation and comprehensive.

### **Purpose of Plan**

The 2040 Cotton County LRTP is a document used by the county, cities, towns, agencies, businesses and residents as a guide to maintain and improve the region's transportation system through 2040. The year 2040 was chosen as the planning horizon year for the LRTP allows the local governments and participating agencies to plan for long range solutions to anticipated needs.

The Plan is an important tool and assists communities in focusing their limited funds on projects that give them the best value and benefit for funding. The purpose of the long-range transportation plan is to direct investment of available resources toward meeting the region's highest priority needs. The needs are determined by comparing the Plan's goals, "What do we want to accomplish over the life of the plan?" with current conditions and forecasts, "Where are we starting, and how are demographics and economics expected to change?" The projects and strategies included in the LRTP arise from the needs and span the twenty-year planning period. A key concept that underlies the discussion of needs is affordability. With limited fiscal resources, every jurisdiction that owns and operates part of the countywide transportation system must consider what they can afford to operate and how to maintain into the future.

People of all ages are making different decisions about where they choose to live, and what constitutes a positive quality of life. SORTPO's transportation planning process includes opportunities for the community's transportation stakeholders to participate in development of the LRTP. This process includes soliciting comments from the public on current and future transportation needs. Appendix 4.1 illustrates survey results obtained during the planning process. Survey Question 10 includes information on the importance of selected transportation components in Cotton County. Three components received the highest rating: maintenance and bridge improvements, smooth driving surface, and adding shoulders



and improving steep hills and sharp curves. When selecting projects survey respondents indicated in Question 11 a higher preference for projects that improve safety, supports economic development, and reduces congestion.

As a means of achieving the successful implementation of the LRTP, the projects are developed in five-year increments. The five-year increment format will offer realistic goals in Chapter 5 relative to the LRTP's short range implementation activities. The incremental approach also provides a reasonable opportunity in scheduling state and /or federally funded transportation improvements within the county.

### **Relationship and Requirements with State and Federal Agencies**

The plan was developed in cooperation and in collaboration with municipal, county governments, transit providers, ODOT and the Federal Highway Administration (FHWA). The plan is the culmination of a continuing, cooperative, coordinated and comprehensive planning effort among the federal, state and local governments directed by SORTPO that provides for consideration and implementation of projects, strategies and services that should address the planning factors identified in MAP-21 and the FAST Act, signed into law December 2015. The FAST Act added two additional factors for a total of ten (Table 1.1), which SORTPO should strive to address through their LRTP planning process.

**Table 1.1: Planning Factors**

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

9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
---

10. Enhance travel and tourism
--------------------------------

Source: 23 USC Section 23 U.S.C 135 (d)(1)

In addition, The FAST Act continues MAP-21 requirement to State Departments of Transportation and Metropolitan Planning Organizations to use a performance-based approach to support seven (7) 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, SORTPO recognizes the significance of such measures and will begin the collection of data needed to establish standards in future (Appendix C).

### **Goals and Strategies**

The planning process follows a hierarchy that includes goals and strategies to assist Cotton County in planning and prioritization of transportation projects and programs. Goals are general statements of what we want the future to be like. The goals are used as guiding principles to choose among various options for transportation improvements. Therefore, they should be attainable and realistic. In addition, the goals should relate to present conditions and expected changes in those conditions. Strategies are specific, quantifiable steps towards the realization of those goals. Table 1.2 identifies the goal categories for the Cotton County.

Goals were developed from meetings held with stakeholders, technical committee and policy board meetings. It is important to recognize that many factors influence transportation system performance and transportation is only one component of a community. Economic development, housing, the economy and natural resources also can play a role. Implementing goals is the responsibility of local, county and state governments and SORTPO. Strategies were developed in coordination with partner agencies. The strategies developed do not fall solely under the responsibility of SORTPO. Local and community agencies should consider their roles in affecting outcomes. It will be necessary to prioritize the strategies and build the data collection and analysis, for those deemed most important, into annual programs, such as the Planning Work Program (PWP).

**Table 1.2: Cotton County Goal Categories**

Goal	Description
1. Accessibility and Mobility (pg. 7)	Improve accessibility and mobility for people and freight.
2. Awareness, Education and Cooperative Process (pg. 7)	Maintain intergovernmental cooperation and coordination, along with community participation and input in all stages of the transportation planning process.
3. Freight & Economic Vitality (pg. 7)	Support and improve the economic vitality of the county and region by providing access to economic development opportunities, such as business and industrial access, natural, scenic and historic resources or recreational travel and tourism.
4. Environment (pg. 8)	Reduce impacts to the county's natural environment, historic areas and underrepresented communities resulting from transportation programs and projects.
5. Finance & Funding (pg. 8)	Seek and acquire a variety of transportation funding sources to meet the many diverse system needs.
6. Maintenance and Preservation (pg. 8)	Preserve the existing transportation network and promote efficient system management to promote access and mobility for both people and freight.
7. Safety & Security (pg. 9)	Improve the safety and security of the transportation system by implementing transportation improvement that reduce fatalities and serious injuries as well as enabling effective emergency management operations.
8. Community & Health (pg. 9)	Facilitate development of transportation projects and programs that support economic development and healthy lifestyles in the county and region.
9. Tourism & Travel (pg. 9)	Improve travel opportunities through enhancement and preservation of access to tourism destinations or regionally significant facilities.

**Goal 1: Accessibility and Mobility**

Improve accessibility and mobility for people and freight.

**Strategies:**

1. Support opportunities to expand the transit system(s) in the region that improves access to health care facilities, education facilities, recreation centers, cultural and tourist sites and employment.
2. Develop a system to collect and monitor changes in population, employment, and major employers by Traffic Analysis Zone (TAZ).
3. Conduct a freight assessment for the county.
4. Review transportation improvements and expansion of services to ensure that the facility for one (1) mode of transportation doesn't create barriers for the access or mobility of other modes.
5. Participate with ODOT, Class III Rail Companies and communities in activities that will upgrade rail tracks, bridges and trusses to support the standardized railcar weight of 286,000 pounds.

**Goal 2: Awareness, Education and Cooperative Process**

Maintain intergovernmental cooperation and coordination, along with community participation and input in all stages of the transportation planning process.

**Strategies:**

1. Participate on state, regional, and local committees regarding County transportation issues.
2. Educate key stakeholders, businesses, local leaders and the public on the purpose and function of SORTPO.
3. Annually review the Public Participation Plan (PPP).
4. Develop a clearinghouse for regional data sets, such as pavement management systems and geographic information systems to help form sound planning decisions.
5. Facilitate and support the coordination of regional training opportunities.
6. Develop method to track the implementation of projects and regularly update the public on the status of projects, programs and finances.

**Goal 3: Freight & Economic Vitality**

Support and improve the economic vitality of the county and region by providing access to economic development opportunities, such as business and industrial access, natural, scenic and historic resources or recreational travel and tourism.

**Strategies:**

1. Prioritize transportation projects that serve major employment and activity centers, rail facilities and freight corridors.
2. Identify the locations of major employment centers, including existing and proposed developments and identify types of transportation available.
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.
5. Coordinate transportation planning with adjoining counties, regions and councils of government for transportation needs and improvements beyond those in our region.
6. Work with area employers and stakeholders to develop a database and map identifying transportation needs.
7. Identify and designate routes and connectors with heavy freight movements as freight priority corridors.

#### **Goal 4: Environment**

Reduce impacts to the county's natural environment, historic areas and underrepresented communities resulting from transportation programs and projects.

##### **Strategies:**

1. Consult with local, state and national agencies in the areas of environmental protection and historic preservation, in terms of transportation programs and projects.
2. Promote proper environmental stewardship and mitigation practices to restore and maintain environmental resources that may be impacted by transportation projects.
3. Promote the use of alternative fuels and technologies in motor vehicles, fleet and transit vehicles.
4. Develop database and mapping to identify the County's underrepresented communities.
5. Support designs of the transportation system that will protect cultural, historic, and scenic resources, community cohesiveness, and quality of life.

#### **Goal 5: Finance and Funding**

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

##### **Strategies:**

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, tribal, and state officials that includes public participation, private sector involvement, coordination among jurisdictions and modes and fiscal constraint.
4. Assist jurisdictions in finding and applying for funds.

#### **Goal 6: Maintenance and Preservation**

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

##### **Strategies:**

1. Identify sources of transportation data and develop a procedure to collect the data and present to the public.

2. Identify and collect transportation performance data and compare to previous years' data.

### **Goal 7: Safety and Security**

Improve the safety and security of the transportation system by implementing transportation improvement that reduce fatalities and serious injuries as well as enabling effective emergency management operations.

#### **Strategies:**

1. Coordinate with The Oklahoma Department of Transportation, local governments and other agencies to identify safety concerns, conditions, and recommend projects to address key deficiencies.
2. Coordinate county and regional actions with the Statewide Highway Safety Plan.
3. Collect and routinely analyze safety and security data to identify changes and trends.
4. Assist in the designation of corridors and development of procedures to provide for safe movement of hazardous materials.
5. Incorporate emergency service agencies in the transportation planning.
6. Support the Oklahoma Department of Transportation in its plans to add and improve roadway shoulders on two lane highways.
7. Reduce the number of at grade rail highway crossings.
8. Upgrade passively protected at grade rail highway crossings.

### **Goal 8: Community & Health**

Facilitate development of transportation projects and programs that support healthy lifestyles in the region.

#### **Strategies:**

1. Integrate healthy community design strategies and promote active transportation to improve the public health outcomes.
2. Support development of transportation systems that provide opportunities for populations walking, bicycling and utilizing non-motorized modes.

### **Goal 9: Tourism & Travel**

Improve travel opportunities through enhancement and preservation of access to tourism destinations or regionally significant facilities.

#### **Strategies:**

1. Develop a regional map that identifies tourism destinations and regionally significant facilities.
2. Establish procedures to increase coordination and communication with local governments, tribal governments and state agencies to identify projects that impact the communities' transportation system.
3. Collaborate with local economic development authorities, State and Federal economic development agencies in the identification of current and future transportation projects.



### **Key Issues, Challenges and Trends**

There are many issues facing the area that have a direct or indirect impact on the transportation system. Rural communities have problematic transportation issues such as intersections, congestion and limited or no access to transit. This section is intended to identify these issues, challenges and trends. At the onset of the transportation planning process, the SORTPO staff, policy board and technical committee members identified key issues, trends and challenges that impact the transportation system. Key issues, challenges and trends were also identified through public surveys, stakeholder meetings, public comments, other plans, data sources, and reports.

#### **Key Issues:**

- Access to healthcare and emergency services.
- Limited Transit Services.
- Forced school consolidations due to state of the State's flat revenues and multiple year budget cuts.
- Lack of shoulders on 2 lane highways.
- Urban versus rural mindset.
- Lack of funding to adequately maintain roadway systems and bridges.
- Improvements of rail crossings.
- Problematic traffic issue locations (areas with high accidents, intersections, truck generators).

#### **Challenges:**

- Age of infrastructure.
- Attracting workforce to support the employment needs
- Access to affordable to high speed internet.
- Coordination with developments by Native American Tribes.
- Competition for industry/business.
- Working together regionally to attract/maintain workforce, industry and community
- Funding limitation - revenues continue to be limited to meet the transportation system needs over time.
- Access to health and related services is limited.
- Lack of a system or process to reevaluate how, when and where new roads are built versus investment in upgrade to the existing road system.

#### **Trends:**

- Population declining in rural areas.
- Bedroom community to Comanche County.
- Freight traffic will grow.
- Population is aging.
- Motor vehicles will continue to be the primary mode of transportation.

- The energy sector and farming community will continue to rely heavily on trucks in rural areas.
- Technology impact on retail, employment and how medical services are obtained.
- Autonomous vehicle technology.
- State of Oklahoma's budget will have negative impact on rural communities.

## Chapter 2: Current Conditions

This chapter provides a “snapshot” of current conditions that relate to transportation in Cotton County. Demographics, economic conditions, environmental factors, community development and transportation and traffic data each provide information for transportation planning. Cotton County is located south western Oklahoma (Map 1.1). The county is bordered by Comanche County on the north, Stephens County to the northeast, Jefferson County to the southeast, Clay County Texas to the South, Wichita County Texas to the southwest and Tillman County to the west.

### **History**

Cotton County is in the southwest region of Oklahoma and covers 642 square miles (633 land area and 9.3 square miles in water). Cotton County population was 6,112 (2011-2015 American Community Survey (ACS) with a population density of 9.65 people per square mile of land area. Within the County are the following highways: Interstate-44, State Highways (SH) 5, 53 and 65 and US Highway 70. The County includes five (5) communities designated as a town, the largest being the town of Walters.

- The town of **Walters** is the County Seat and is the largest town in the County, with a population estimate of 2,554 (2011-2015 ACS). Walters lies at the junction of State Highways 5 and 53, and just east of Interstate 44 and U.S. 277/281, approximately nineteen miles south of Lawton. Ranching, wheat, cotton, and oil have been the primary economic staples and continue through the twentieth century.
- **Temple** is located five miles south and five east of Walters on State Highway 5. Early developers advertised the town as “Gateway to the Big Pasture.” Some claimed that Temple was surrounded by more good tillable acres than any other town in America.
- **Devol** is located just north of U.S. highway 70/State Highway 36 in Cotton County. The Town of Devol is six miles southeast of Grandfield and seven miles northwest of Randlett. Although no significant oil discoveries were found near the town, many refineries were built, including the Constantine Refining Company and the Oklahoma Petroleum and Gasoline Company. The Town of Devol is now mainly a bedroom community for Lawton, Oklahoma and Wichita Falls, Texas.
- **Randlett** lies in extreme southern Cotton County at the intersection of U.S. Highway 277/281 and U.S. 70 and is approximately one mile east of interstate 44 and sixteen miles southeast of Walters. Throughout the twentieth century Randlett remained a small agricultural community. In 1957 the schools of Devol, Randlett, and Union Valley consolidated, establishing the Big Pasture School district in Randlett.

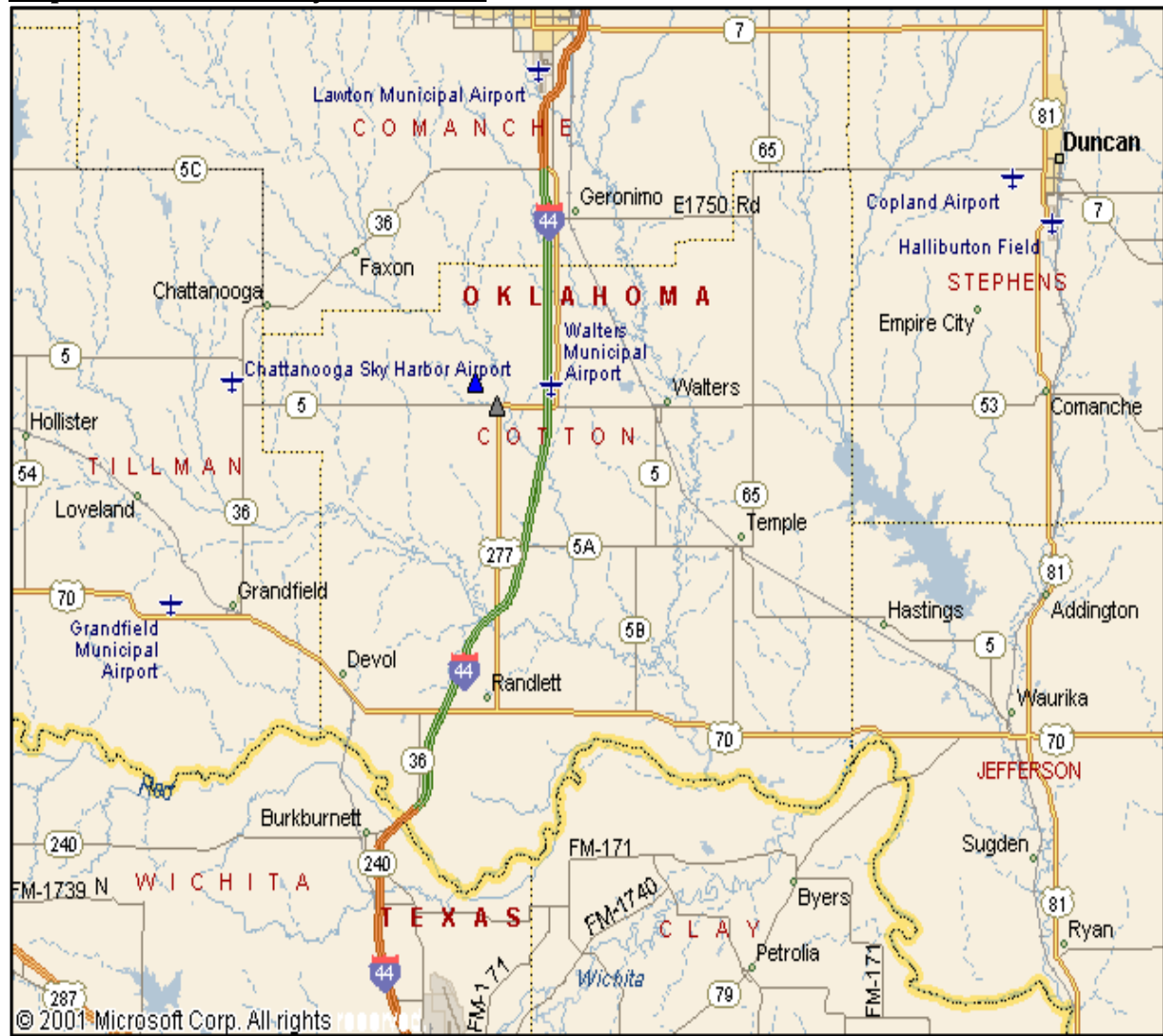
**Map 2.1: Cotton County, Oklahoma**

Table 2.1 provides population data for the cities, towns and County between 1990-2015. Additional demographic data can be found in Appendices 2.1-2.5. As the population fluctuates, either through economic changes, in or out migration or shifting within the region the needs of the communities including education, health care, social services, employment, and transportation remain relatively stable. Land use and development changes that particularly affect transportation in rural areas include, but are not limited to, loss or gain of a major employer, movement of younger sectors of the population to more urban areas, tribal land development.

Transportation is crucial to keeping older adults independent, healthy and connected to friends, family, recreation, shopping and health services. However, older residents' transportation needs differ based on their health, income, marital status, age, race and whether they live in a city/town or rural county area. The needs of this segment of population will continue to influence the transportation needs and services for this region.

**Table 2.1 Cotton County Population 1980-2015 Estimate**

	1980	1990	2000	2010	2011-2015 ACS ESTIMATED POPULATION
Devol	186	165	150	151	151
Randlett	461	458	511	438	362
Temple	1,339	1,223	1,146	1,002	1,091
Walters	2,778	2,519	2,657	2,552	2,554
<b>Balance of Cotton County</b>	2,574	2,386	2,150	2,050	1,954
<b>Cotton County, TOTAL</b>	<b>7,338</b>	<b>6,651</b>	<b>6,614</b>	<b>6,193</b>	<b>6,112</b>

Source: American Fact Finder, US Census Bureau

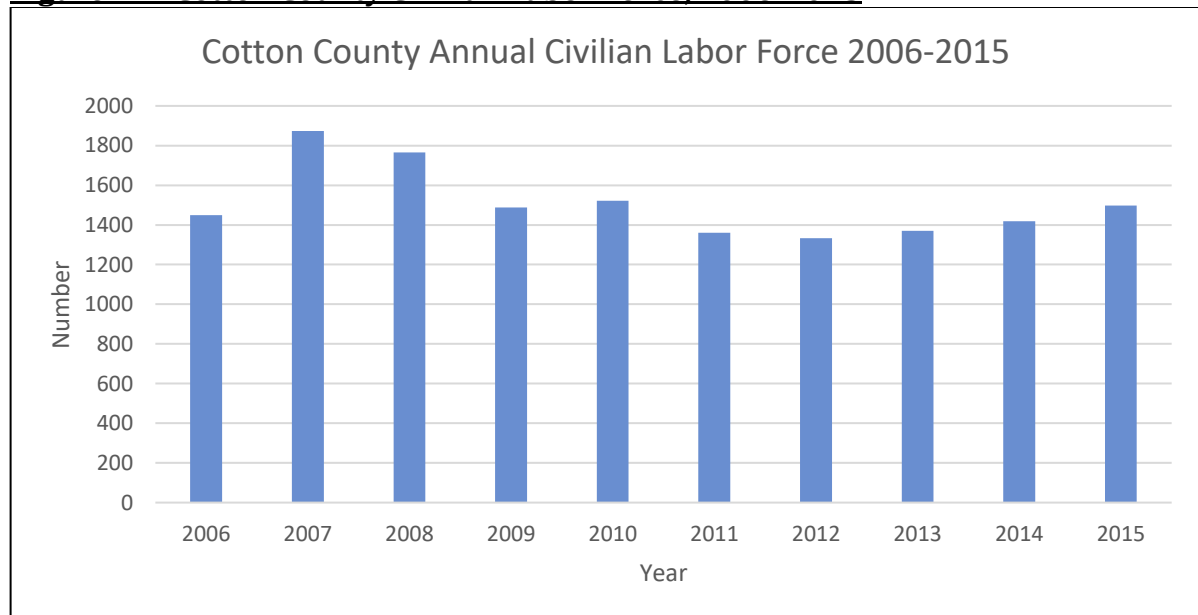
Data obtained from the 2011-2015 ACS further reveals:

- ✓ Population was distributed between male (49.8 %) and female (50.2 %),
- ✓ Median age – 41.5 years of age,
- ✓ Race:
  - White 92.9%,
  - African American 2.0%,
  - American Indian 8.5% and
  - Hispanic/Latino 7.0%
- ✓ Mean travel time to work - 23.3 minutes
- ✓ Vehicles Available Workers 16 years and over -2,578
  - No vehicles available – 1.4%
  - One vehicle available – 15.6%
  - Two vehicles available – 40.6%
  - Three or more vehicles available – 42.5%
- ✓ Total Housing Units – 3,109
  - Owner Occupied Units – 1,838
  - Renter Occupied Units – 591
  - Single Family Detached Housing Units – 2,613
  - 1 Unit attached – 29
  - 2 Units – 29
  - 3 or 4 Units – 11
  - 5-9 Units - 39
  - 20 or more Units - 19
  - Mobile Home or Other type of Home – 279
- ✓ Educational Attainment population 25 years and Older – 4,190
  - High School Graduate – 1,704
  - Some College – 982
  - Bachelor's Degree – 501
- ✓ Commute Patterns to Work Age 16 years and Older – 2,578
  - Car, truck or van – 2,150

- Public Transportation – 3
- Walked – 47
- Other Means – 22
- Worked at Home – 118
- ✓ Civilian Employed population 16 years and over – 2,607
  - Agriculture and forestry – 179
  - Construction – 203
  - Manufacturing – 266
  - Retail Trade – 171
  - Transportation and warehousing and utilities – 230
  - Finance, insurance and real estate - 113
  - Professional, scientific and management – 236
  - Educational service and health care and social assistance – 469
  - Arts, entertainment and recreation and accommodations – 338
  - Other services, except public administration – 100
  - Public Administration - 236

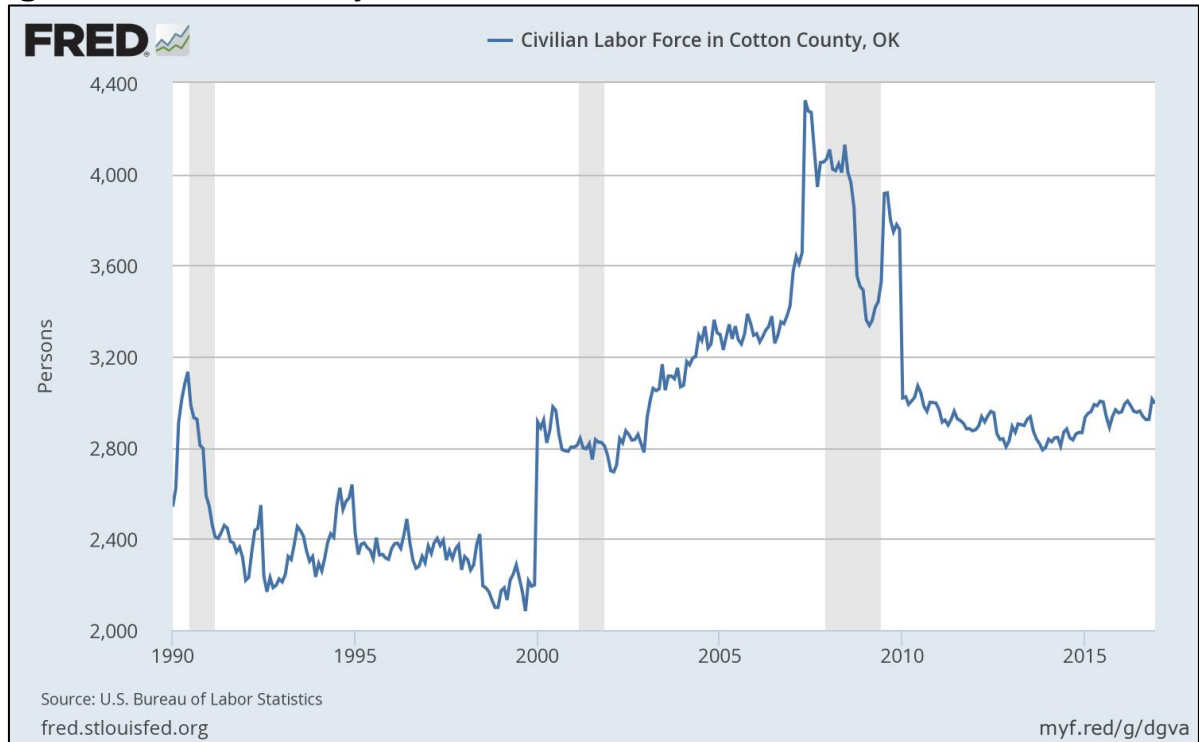
Annual civilian labor force data for years 2006-2015 can be found in Figure 2.1. Figure 2.2 illustrates the Civilian Labor Force between 1990-2015. The information portrayed in this graph developed by the Federal Reserve Bank illustrates a 25-year historical picture of the fluctuation in the Cotton County Civilian Labor Force. Figure 2.3 contains county business pattern data.

**Figure 2.1: Cotton County Civilian Labor Force, 2006-2015**



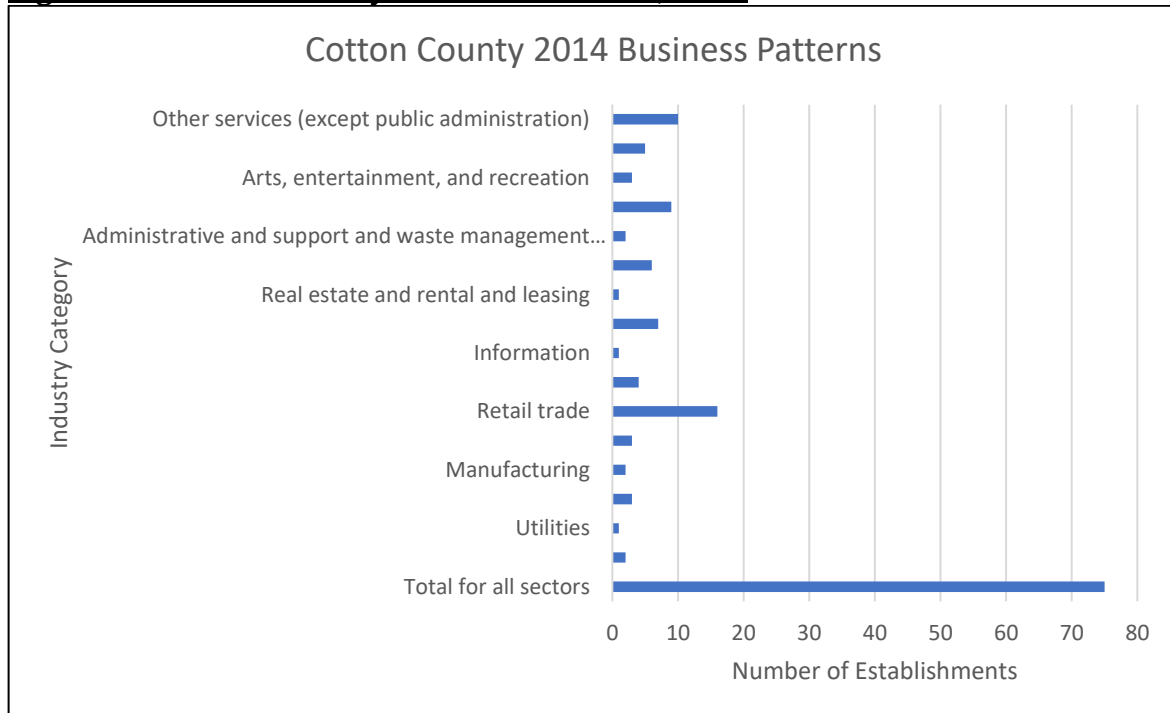
Source: BLS

**Figure 2.2: Cotton County, Civilian Labor Force 1990 – 2015**



Source: US. Bureau of Labor Statistics, Release: Unemployment in States and Local Areas (all other areas). Growth Rate Calculations | US recession dates.

**Figure 2.3: Cotton County Business Patterns, 2014**



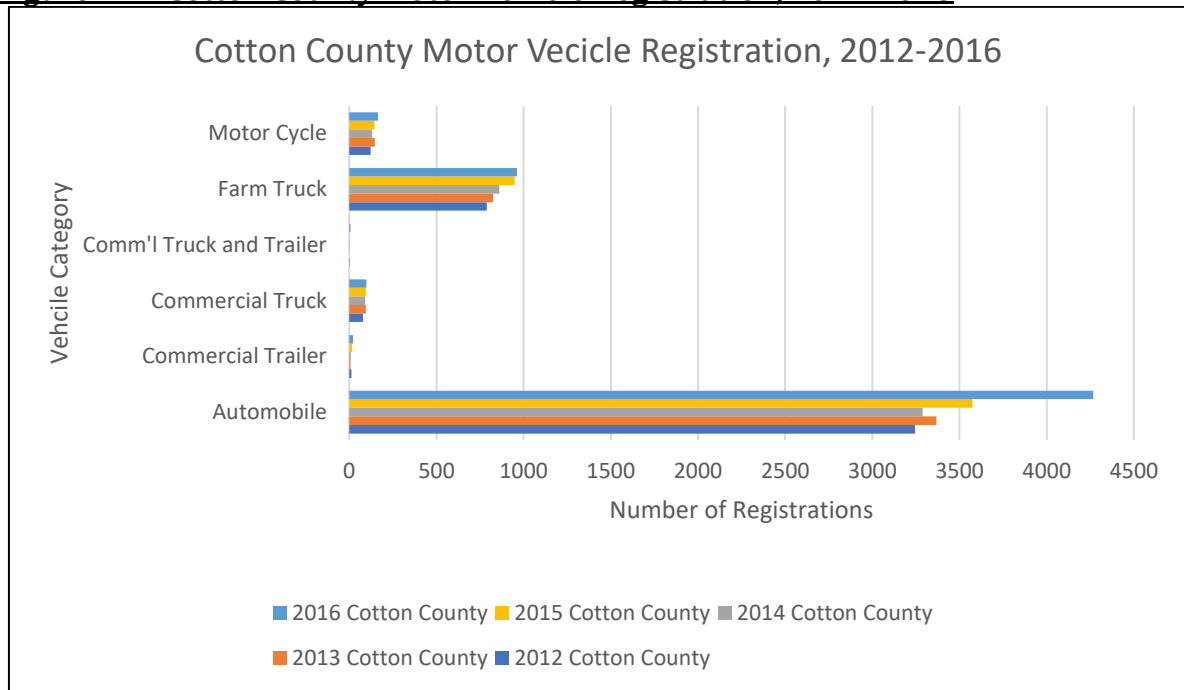
Source: US Census Statistics

Figure 2.4 provides information related to vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Automobile and farm truck registrations between



2012-2016 increased and the primary vehicle remains the automobile.

**Figure 2.4: Cotton County Motor Vehicle Registration, 2012-2016**



Source: Oklahoma Tax Commission

## **Traffic Analysis Zones**

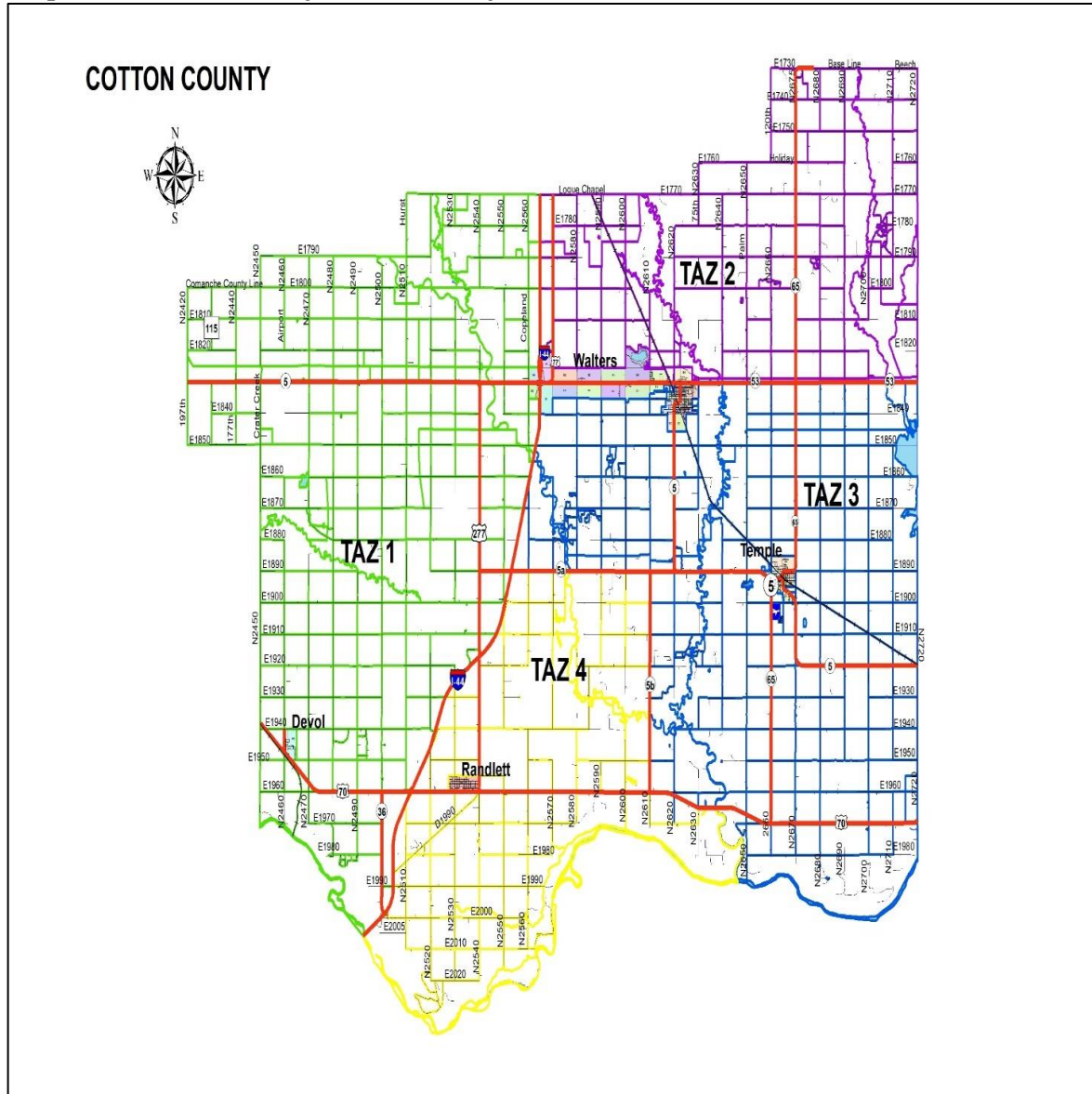
The Traffic Analysis Zone (TAZ) Program is a specialized computer program used for delineating zones in support of the Census Transportation Planning Products (CTPP). TAZ delineation follows the decennial census and is designed to allow planning agencies the ability to define areas to associate demographic data that supports transportation system analysis. Boundaries of a TAZ typically follow U.S. Census boundaries and are an aggregation of several census blocks. Data for the plan was obtained by the 2010 U.S. Census Bureau, CTPP and Oklahoma Department of Commerce. The year 2016 is the base year for the plan and 2011-2015 ACS population estimate is the base population.

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. Utilizing this default for the LRTP did not provide SORTPO with transportation data that met the needs of this planning process. SORTPO staff reviewed the existing TAZ boundaries and after analysis of data, community boundaries and TAZ guidelines new boundaries were drafted. The revised TAZ boundaries were based on the population thresholds of 200 to 400 and employment thresholds of 300. In the future SORTPO will work cooperatively with ODOT in designation or revision of TAZ boundaries.

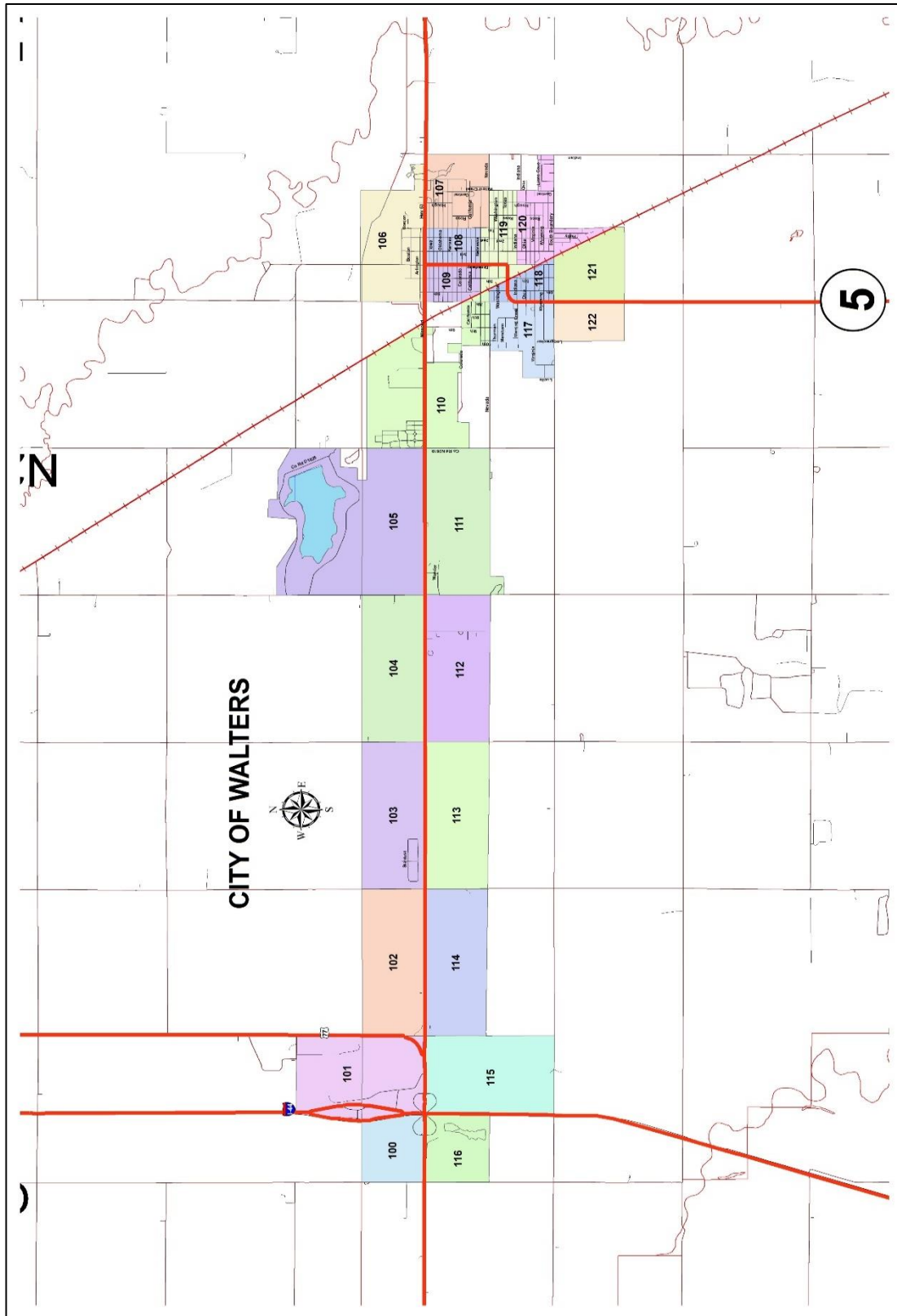
Geographically, the study area is subdivided into thirty (30) traffic analysis zones and the socio-economic data (including population and employment) were summarized for each TAZ. Map 2.2 illustrates the revised TAZ boundaries for the areas of the county.

Maps 2.3 through 2.6 illustrate TAZ areas for towns/cities. The 2011-15 ACS population estimate of 6,112 and civilian labor force estimate of 2,871 were distributed into the new TAZs Appendix 2.6 provides information on the population and employment data by TAZ. The rural nature of the County requires the Plan development consider that a major employer is determined by the individual community. In some instances, a major employer may be identified as an employer with as few as 5-9 employees. Major employers by city/town and County by TAZ are included in Appendix 2.7.

**Map 2.2: Cotton County Traffic Analysis Zones**

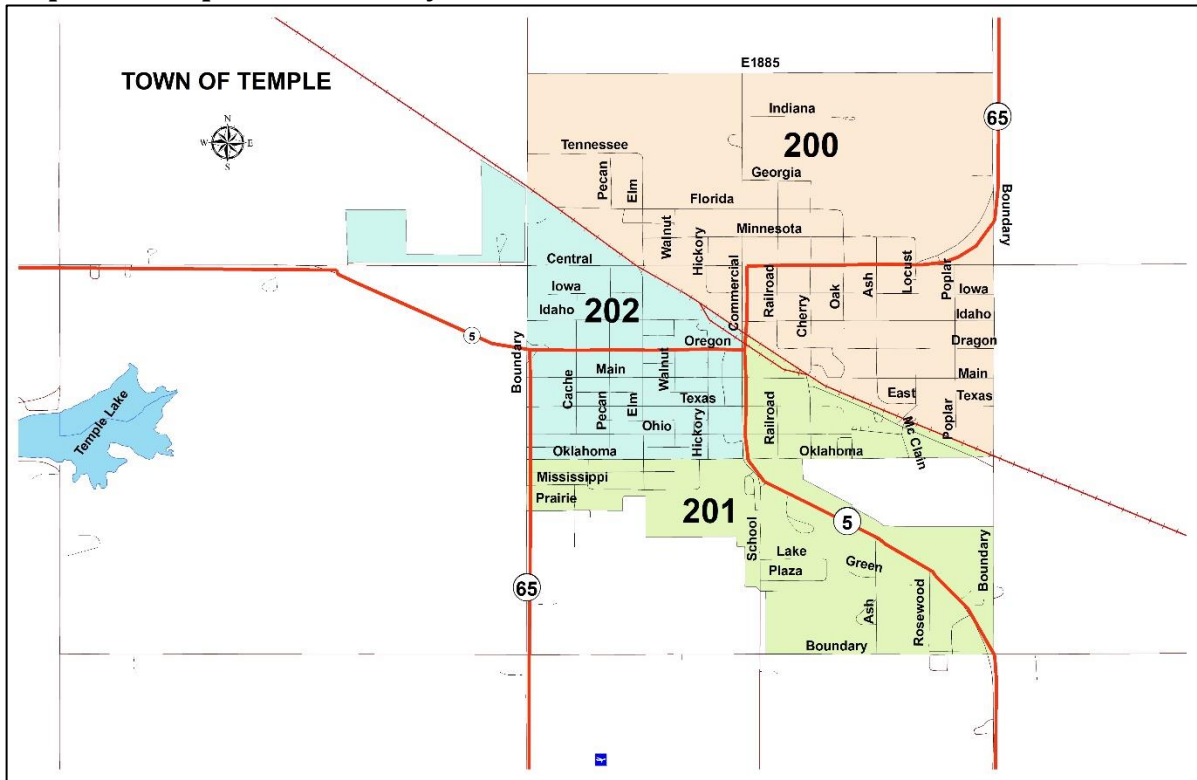


**Map 2.3: Walters Doyle Traffic Analysis Zones**



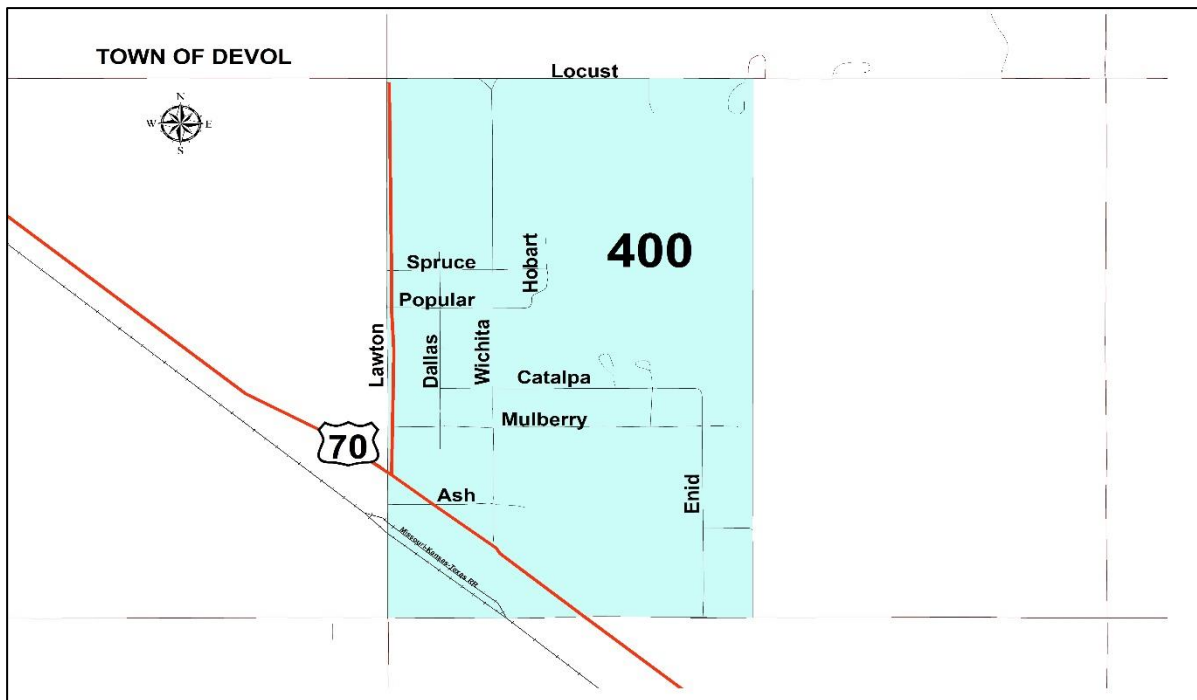
Source: ASCOG

**Map 2.4: Temple Traffic Analysis Zones**

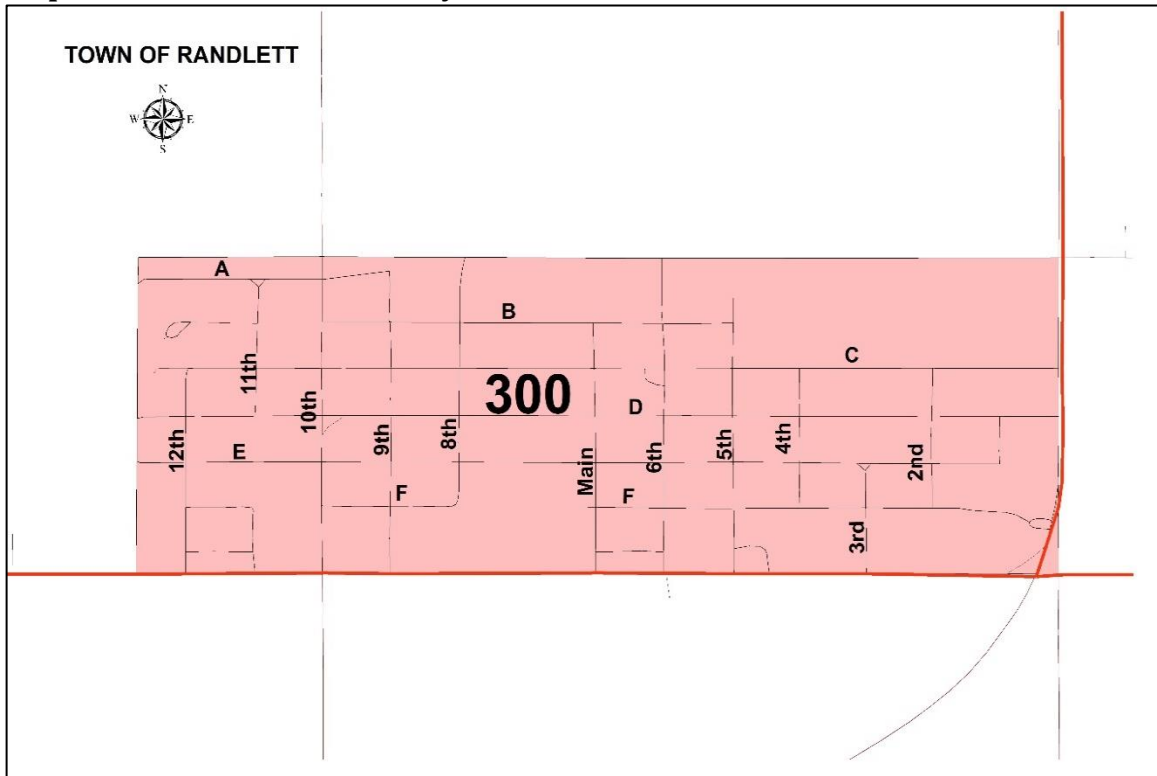


Source: ASCOG

**Map 2.5: Devol Traffic Analysis Zones**



Source: ASCOG

**Map 2.6: Randlett Traffic Analysis Zones**

Source: ASCOG

**Physical Development Constraints and Conditions**

There are transportation facilities, land ownership, existing development and environmental features and other constraints that affect the growth of Cotton County. Map 1.1 illustrates the location of transportation facilities and other significant development constraints. These constraints both physical and manmade have shaped and impacted the development of the County. Cotton County major physical constraints for development include I-44, SH 5, SH 53 and SH 65 and US 70. Creeks traversing the county to the Red River include: East Cache Creek, West Cache Creek and Deep Red Run Creek, Union Pacific rail lines, tribal land, and the towns are physical constraints to growth. I-44 is a physical barrier splitting the county from the north to the south to the Texas stateline. State Highway 65 bisects the County from north to south in the eastern half of the County and SH 5 bisect the County east to west along the northern portion of the County. US 70 bisects the County east and west along southern portion of the county. The Union Pacific (UP) Railroad lines through Cotton County continues at Walters and run southeasterly through Temple to Waurika, Oklahoma (Jefferson County). Tribal land as identified on Map 2.7 illustrates sovereign land holdings.





- Historical/Cultural Resources
- Right-of-Way/Property Impacts, Including Impacts to Parks, Farmland and Neighborhoods
- Scenic View sheds
- Traffic and Train Noise

State and federal environmental regulations, require that environmental considerations be addressed in transportation decision making, plans and programs. Most transportation capital and maintenance projects have the potential to affect natural and human-made resources in both positive and negative ways. Appendix 2.8 summarizes environmental concerns Appendix 2.9 provides description of significant environmental features to be considered in development of residential, commercial/industrial or transportation projects.

### **Public Safety Issues**

The vulnerability of a region's transportation system and its use in emergency evacuations are issues receiving additional attention with the threat of intentional damage or destruction caused by 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. SORTPO and its member jurisdiction transportation and emergency service staff are regular participants in security planning and preparation activities include development of the Cotton County Hazard Mitigation Plan. Ongoing participation in these planning activities helps prepare for and to better manage transportation safety and security situations.

MAP-21 required all states to prepare and annually evaluate their Strategic Highway Safety Plan (SHSP). A SHSP is a statewide, coordinated safety plan which includes goals, objectives and emphasis areas for reducing highway fatalities and serious injuries on all public roads. More information on the Oklahoma SHSP can be found on the ODOT website (<http://www.okladot.state.ok.us/oshsp/index.htm>).

The safety of the traveling public, regardless of vehicle type or highway system classification, is of principal concern for ODOT and SORTPO. 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 provides a more accurate indication of the safety condition in the county. Data from ODOT was obtained for calendar years 2011-2016. Between 2011-2016 there were 596 collisions with 12 fatalities occurring on the roadways. The highest concentration of collisions occurred along I-44 and SH 70. Tables 2.2 and 2.3 provides information on total collisions and collisions by



concentration and severity. Most collisions occurred with a fixed object (41.6%), animal (12.1%) and rear-end (10.48%). Map 2.8 illustrates the location of collisions. Appendices 2.10 and 2.11 provide supplemental information on collision data.

**Table 2.2: Cotton County Collision Total, 2011-2016**

	FAT	INCAP INJ	NON INCAP INJ	POSSIBLE INJURY	PROPERTY DAMAGE	TOTAL
Collisions	11	35	88	64	398	596
Persons	11	47	142	104	x	305

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

**Table 2.3: Cotton County Collision Concentration, 2011-2016**

CITY	CITY STREET NAME/HWY	CITY STREET NAME/HWY	SEV INDEX	NUM COLLS	RANK
	I-44	SH-36 UP*1*/SH-36	28	13	1
Walters	US-277	HE BAILY TPK/I-44 OP	14	12	2
	US-70	HE BAILY UP*2*/I-44	11	5	3
	SH-36		11	4	4
Randlett	US-70	US-277	10	3	5
Walters	HE BAILY TPK/I44		8	5	6
	I-44		8	4	7
	HE BAILY TPK/I44		8	3	8
	SH-36		8	2	9
Walters	SH-5	7 ST./SH 53	7	4	10
	US-70	NS 247	7	2	11
	HE BAILY TPK/I44		7	2	12

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

### **Existing Road System**

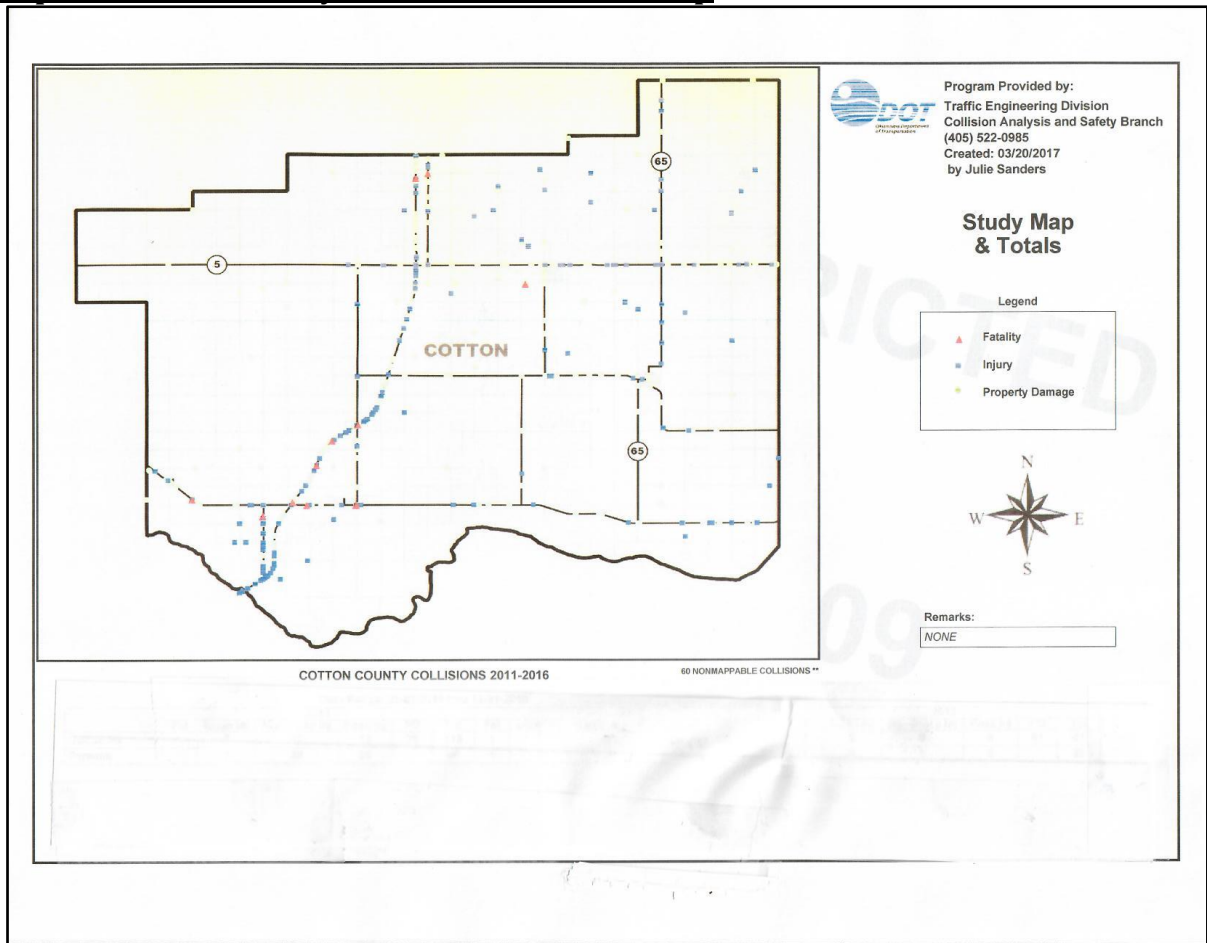
The state-owned highway system in Oklahoma is comprised of the State numbered route highways, the US numbered route highways and the Interstate Highway System. The state system of highways encompasses 12,257 centerline miles as measured in one direction along the dividing stripe of two lane facilities and in one direction along the general median of multilane facilities. Transportation on our highways is also facilitated by over 6,800 bridge structures that span major rivers and lakes, named and unnamed perennial streams and creeks, other roads and highways and railroads.

Oklahoma's rural nature and historically agricultural and energy based economy has witnessed the conversion of many farm-to-market roads and bridges into highways.

While these roads were ideal for transporting livestock and crops to market 70 years ago, they are less than adequate when supporting today's heavier trucks, increased traffic demands and higher operating speeds. Almost 4,600 miles of Oklahoma highways are two-lane facilities without paved shoulders Appendix 2.12 illustrates the location of two lane highways with no shoulders. Appendix 2.13 illustrates the Steep Hill/Sharp Curves areas of concern (statewide).

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 2016 reveals about 30% or approximately 3,687 of the State's 12,257 miles of highway rate as poor which includes 3,211 miles of two-lane highway.

**Map 2.8: Cotton County 2011-2016 Collision Map**



## **Traffic Count**

ODOT collects traffic count data on a triennial basis primarily on the highway system and in rural areas. Other governmental entities may also be a source of additional traffic counts. Appendix 2.14 illustrates the 2015 Traffic Count Data collected by ODOT.

## **Functional Classification and Road Systems**

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 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 functional classification of streets includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector. Appendix 2.15 provides additional information on this topic. Appendix 2.16 illustrates Cotton County Functional Classification system.

## **Bridges**

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



Bridges are rated on a numerical scale of “1” to “7” that translates into a range of Poor, Fair, Good, and Excellent. Bridges are also described as “Structurally Deficient” and

“Functionally Obsolete” (Appendix 2.17). The former may have any of many structural problems noted in the inspection; while some may be closed or load-posted, many remain safe for traffic. The latter are bridges that do not meet current design standards. They may have narrow lanes, or inadequate clearances, but they may also be structurally sound. These structures enable vehicles, bicycles, pedestrian and wildlife to cross an obstacle. Bridges are structures that span more than 20 feet between supports and 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 bridges undergo regular inspections by qualified engineers. Inspections help locate and identify potential problems early and trigger protection mechanisms when a problem is found.

Cotton County bridge inventory includes one hundred thirty (130) On System and two hundred eleven (211) Off System Bridges that are critical for regional mobility. The bridges in the County vary greatly in their age with the oldest constructed in 1901 and most recent construction occurred in 2016. Between 2010 – 2016 two hundred twenty-nine (229) bridges were replaced or constructed. County bridges (off system) with a sufficiency rating of 60 to 79 total eight and bridges with a sufficiency rating of 59 or less total one hundred four (104)). Appendices 2.18 and Appendices 2.19 includes the On and Off-System bridges for Cotton County.

### **Traffic Control**

Traffic signals are a key element of traffic control. Their location and timing affect the mobility of vehicles and pedestrians. National studies demonstrate that poorly timed traffic signals are responsible for a significant proportion of urban traffic congestion. Signal timing that does not allow sufficient time for pedestrians to cross a street can contribute to safety problems and act as a barrier to walking. The Manual on Uniform Traffic Control Devices (MUTCD) establishes minimum warrants that are to be met for installation of a signal, and for designation of exclusive turn lanes and movements. Signal ownership is an important element, as each jurisdiction may have its own protocols for maintaining and retiming signals. There is currently no inventory of traffic control devices in Cotton County which if developed can assist in prioritization of maintenance and scheduling upgrade of devices.

### **Freight System**

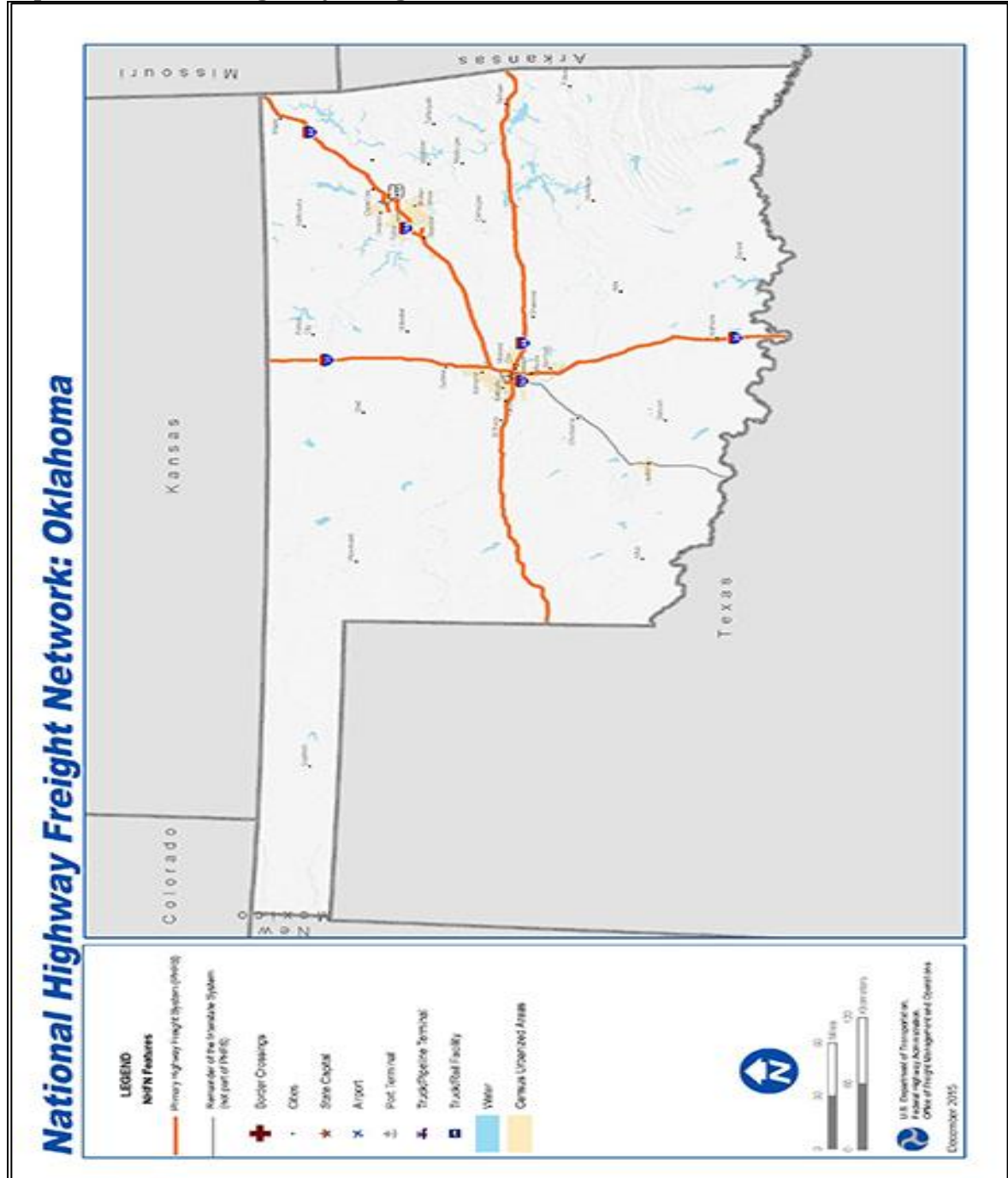
The Fixing America's Surface Transportation Act (FAST Act) repealed both the Primary Freight Network and National Freight Network and directed the FHWA Administrator to establish a National Highway Freight Network (NHFN), additional information on the NHFN can be found in Appendix 2.19. The Act includes the Interstate System—including Interstate facilities not located on the Primary Highway Freight System (PHFS) in the NHFN. All Interstate System roadways may not yet be reflected on the national and state NHFN as shown on Map 2.9. The SORTPO Policy Board identified corridors listed in Table 2.4 and illustrated in Map 2.10 as significant statewide and regional highway freight corridors. Figure 2.5 illustrates the 2011 average daily long-haul truck volume and map 2.11 illustrates the Oklahoma 2014 High Volume Truck Corridors.

**Table 2.4: Cotton County Significant Freight Corridors**

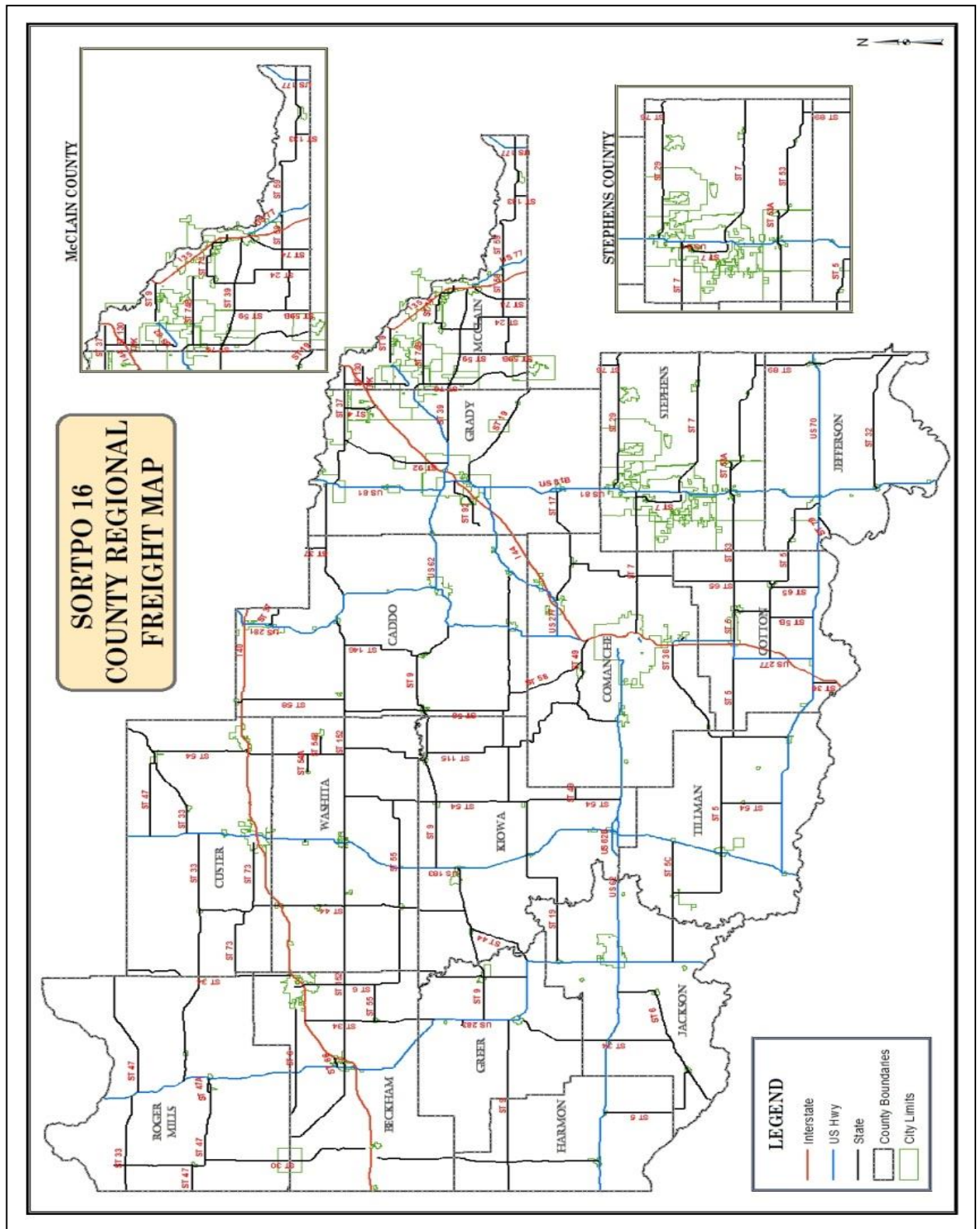
CITY/TOWN	LOCATION/DESCRIPTION
	US 70
	Interstate 44

Source: SORTPO

**Map 2.9: National Highway Freight Network**

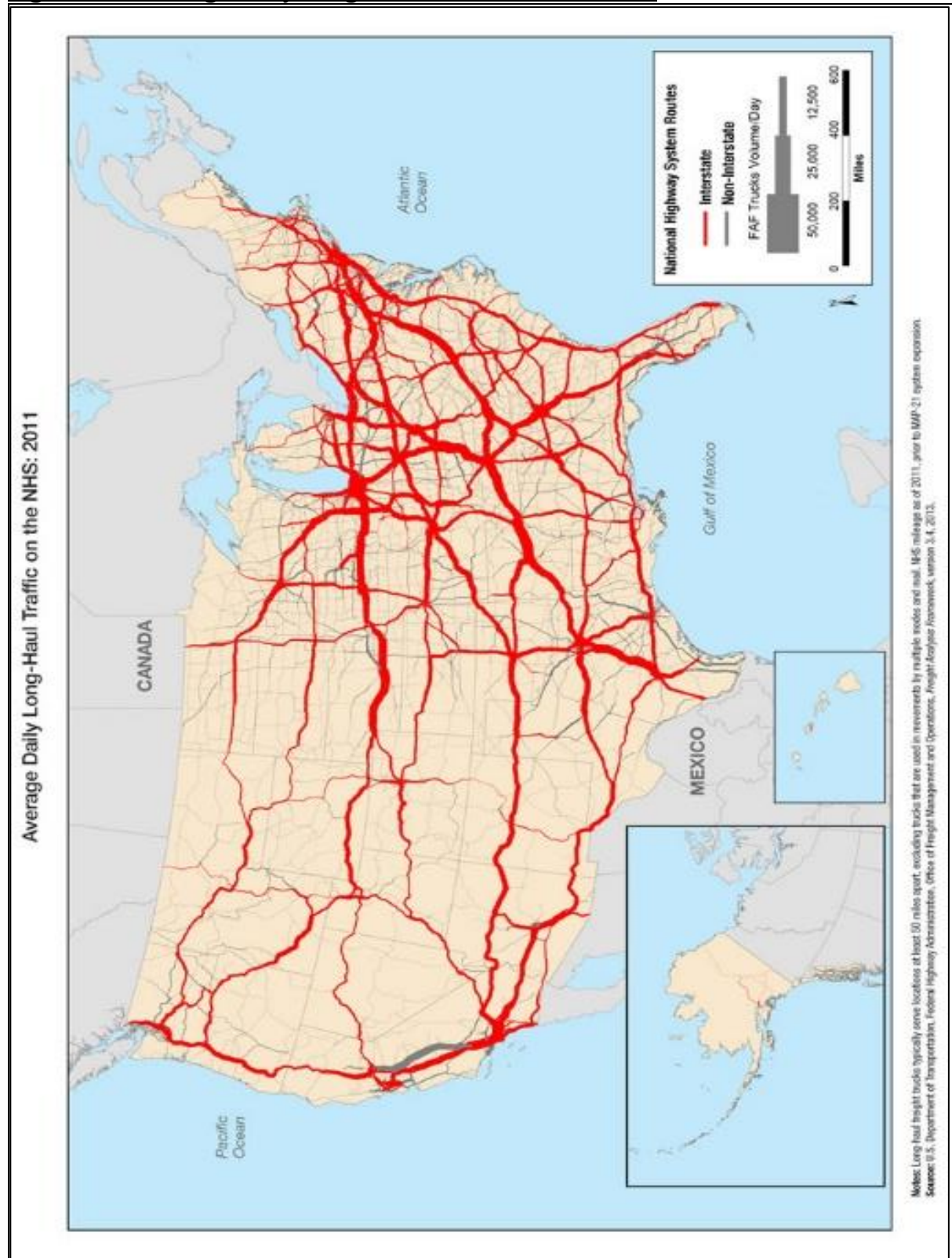


Map 2.10: Regionally Significant Freight Routes



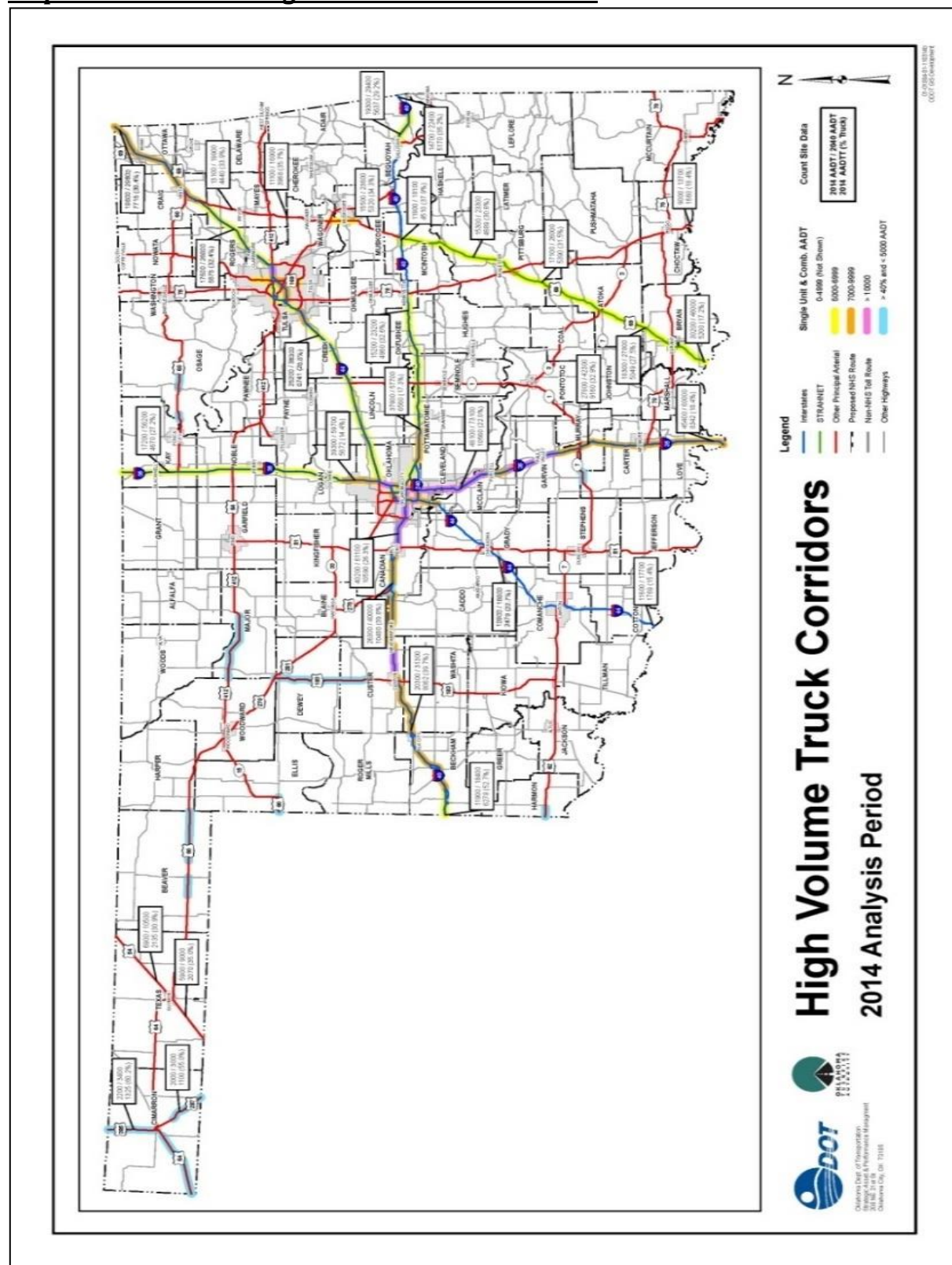


**Figure 2.5: Average Daily Long-Haul Traffic on NHS 2011**



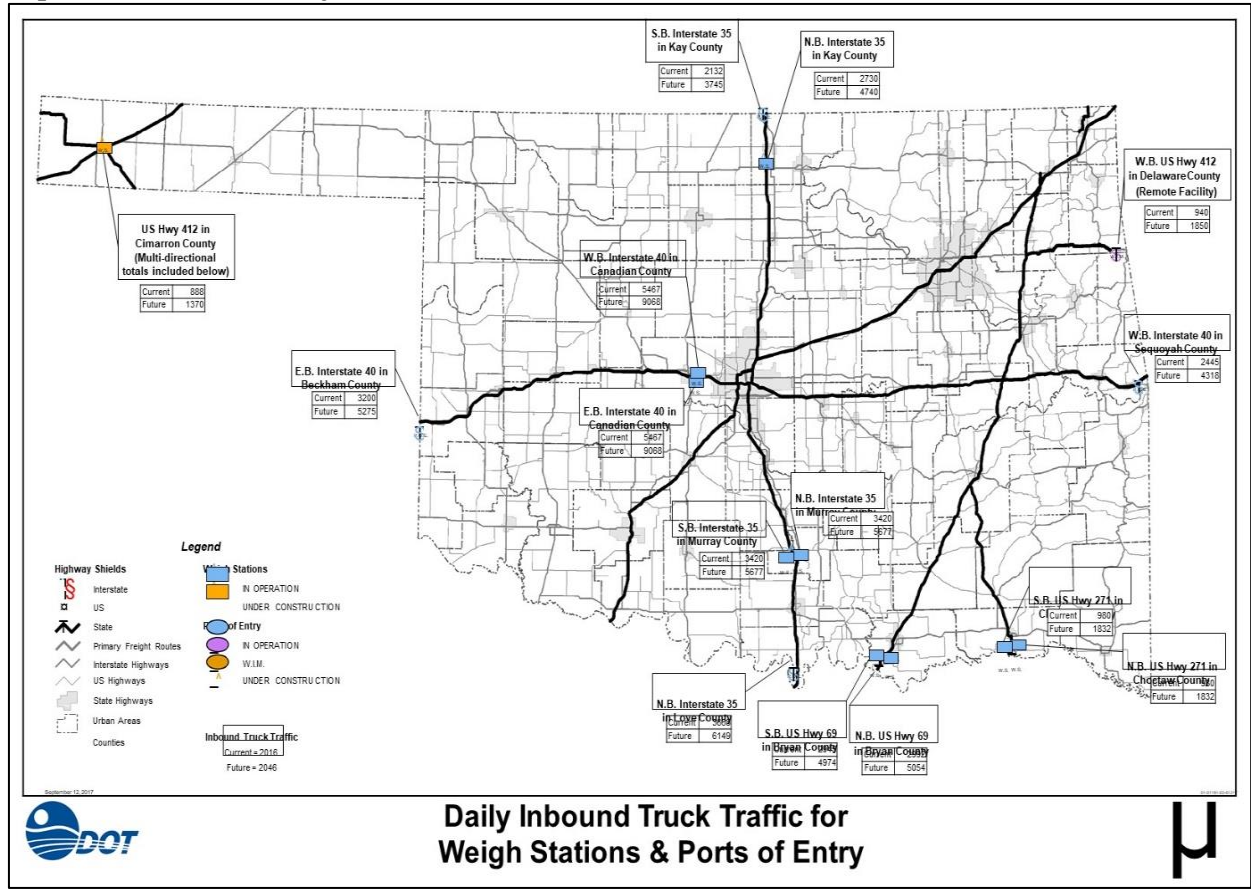


### **Map 2.11: Oklahoma High Volume Truck Corridors**



To assist with the inspection and enforcement of truck permits Ports of Entry (POE) facilities were constructed by ODOT. This system of POE monitors freight ingress at the state line and allows better enforcement of vehicle and freight laws. The POE (Map 2.12) are state-of-the-art facilities established as the mechanism to create a more controlled freight transportation environment on the highway system.

**Map 2.12: Port of Entry**



## Railroads

ODOT Rail Programs Division oversees and monitors five different railroad companies operating through leases on approximately 212 miles of State owned track and serves as a liaison between ODOT and rail companies for ODOT projects which involve railroads or railroad property. In August 2014, ODOT and the Stillwater Central Railroad completed a sale of the Sooner Sub rail line between Midwest City and Sapulpa. After this sale ODOT began a \$100 million initiative to improve safety at railroad crossings statewide. The state-owned tracks are leased by privately operated railroads. Statewide there are three (3) Class I railroads and nineteen (19) Class III railroads. Class I railroad lines include Burlington Northern Santa Fe Railway (BNSF), Union Pacific Railroad (UP), and Kansas City Southern Railway Co. (KCS).

There was only one railroad in Cotton County. The company was a smaller railroad and through the years was owned by a number of successor rail companies but is now owned

by Union Pacific (UP). The railroad ran from Lawton/Ft. Sill to Geronimo, Walters, Temple, Hastings, and terminated at Waurika where it interconnected with other railroad facilities. The north section from Walters to Geronimo to Lawton was abandoned and salvaged many years ago. It appears that the right-of-way reverted to land owners on each side of the track. The south section out of Walters that serviced Walters, Temple, and Hastings has been abandoned since the mid 1990's. Truck transportation of wheat overtook the need for the railroad.

While the tracks remain in place on the south section, the tracks are no longer usable. Vandals set fire to the bridge directly south of Walters and another south of Temple has collapsed. The railroad would have to be mostly rebuilt to make it usable.

The Railroad Crossing on State Highway 5 in Walters was repaved a few years ago and the ODOT contractor left the rails at the highway crossing in place but paved over them making for a smooth transition. Likewise, the City of Walters did the same thing when South Boundary Avenue was repaved in 2015. The City of Walters was notified in 2009 that UP intended to salvage the road and dispose of the right-of-way. The City requested that 300 feet of track be left in place at the Depot for historic preservation. Lawyers for the railroad company informed the City that the City would have to make arrangement with the salvager to purchase that amount of rail from them. The Depot is pictured on the front cover of this report and is on the National Register of Historic Places.

Total removal of the railroad will provide a number of smooth transitions on all the County roads where it crosses and allow signage and crossing markers to be removed. There will no longer be any safety issues associated with the railroad.

### **Bicycle & Pedestrian System**

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

One opportunity to develop and implement bicycle and pedestrian facilities is the Transportation Alternative Program (TAP), administered by ODOT. In FFY 2016, seven TAP projects were awarded in the SORTPO region to the following communities: Apache, Bessie, Chickasha, Duncan, Elk City, Hobart, and Lawton. Future TAP applications in Cotton County include: Streetscape projects for Walters and Temple and Safe Routes to Schools projects for Walters and Temple.

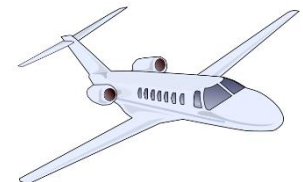
## **Public Transit**

Service provided within the SORTPO region is limited to demand response service. This service is provided based on a pre-arrangement or an agreement between a passenger (or group of passengers or an agency representing passengers) and a transportation provider for those needing “curb-to-curb” transportation. The pre-arrangement may be scheduled well in advance or, if available, on short notice and may be for a single trip or for repetitive trips over an extended period (called “subscription service”). Demand response services are provided by Red River Transportation. Red River Public Transportation Service began operating fixed route services in 1984 and serves selected cities within the counties of Roger Mills, Stephens, Custer, Washita, Kiowa, Tillman, and Cotton. All services are open to the public. Additional services provided include contracted services to schools, businesses, health providers, churches and private organizations. Destinations include: medical, shopping, school, employment, TANF, head start, airport, and social venues. Information obtained in 2015 from Red River Transportation revealed four vehicles: 2 fourteen passenger vans and 2 mini vans, which meet ADA requirements were in operation. These vehicles operate five days a week, eight hours daily. Ridership total for 2011-2015 was 30,000. The vehicles models are 2011 and older and have 200,000 miles or more. Red River Transportation ridership is comprised of 30% elderly and 30% disabled. Vehicle replacement was expected within in two years.



## **Airports**

The Oklahoma Airport System Plan classifies airports by their functional classification: Regional Business Airport (RBA), District Airport (DA) and Community Airport (CA). These classifications were developed to characterize each airport on how they relate to each other. The concept of classification of airports is like the concept of classifying the roadway system.



A RBA serves multiple communities. Normally, it will serve:

- a community of at least 5,000 persons, generally larger,
- a county population of 10,000 or more persons,
- serve major employers (businesses with 50 or more employees),
- located near the center of a local sustaining economy, and
- closely match the local sustaining economies identified by the Oklahoma Department of Commerce.

Features of a DA include providing access to a part of the state that is not well served by a RBA. Typically, these airports will:

- have a supporter with a defined interest in promoting airport and with a demonstrated financial capability,
- about five or more based aircraft at these airports or an equivalent number of annual itinerant operations, and

- airports are attended, aviation gasoline is available and there is a public terminal building.

The CA airports are entry-level airports. These airports regularly serve

- small communities, where the city population is less than 5,000, and for many, the population is less than 2,000,
- normally these airports are not attended, have no services available, and
- the sponsor has limited financial capability to fund capital improvement projects.

The Walters Municipal Airport was notified by FAA in 2015 that the federal regulations had been modified so that all Non-Primary Entitlement (NPE) funds would no longer be available to airports with less than 10 based aircraft. Walters falls into this category. At the time the regulations changed, Walters had accumulated \$450,000 in NPE funds. There were issues with the initial design of the airport which would not allow the airport to be repaired or updated without a total redesign and rebuild of the airport. The City of Walters with the aid of state legislators brought political pressure on the FAA and funds were released in 2016. The runway was repaved, and a new beacon light was installed using the remaining NPE funds that had been allocated but not expended. Before the airport can again apply for FAA funding the number of based aircraft will have to increase.

The Walters Airport is a 50-foot-wide by 2,900-foot-long general use municipal airport. Its length limits it to small aircraft. There is a commercial agricultural spraying company (Cotton Ag) based at the airport that operates 2 spray planes. The SORTPO area consists of twenty-two (22) general aviation airports identified in Table 2.5. Cotton County is home to one public airport and is illustrated on Map 2.1.

**Table 2.5: SORPTO Public Airports**

CITY	COUNTY	AIRPORT NAME	TYPE OF AIRPORT	OWNER
Sayre	Beckham	Sayre Municipal	CA	Municipal
Elk City	Beckham	Elk City Regional	RBA	Municipal
Carnegie	Caddo	Carnegie Municipal	CA	Municipal
Anadarko	Caddo	Anadarko Municipal	DA	Municipal
Hinton	Caddo	Hinton Municipal	DA	Municipal
Lawton	Comanche	Lawton-Ft. Sill Regional	RBA	Municipal
Walters	Cotton	Walters Municipal	CA	Municipal
Clinton	Custer	Clinton Regional	RBA	Municipal
Weatherford	Custer	Thomas P Stafford	RBA	Municipal
Chickasha	Grady	Chickasha Municipal	RBA	Municipal

<b>CITY</b>	<b>COUNTY</b>	<b>AIRPORT NAME</b>	<b>TYPE OF AIRPORT</b>	<b>OWNER</b>
Mangum	Greer	Scott Field	DA	Municipal
Hollis	Harmon	Hollis Municipal	DA	Municipal
Altus	Jackson	Altus/Quartz Mt. Reg.	RBA	Municipal
Hobart	Kiowa	Hobert Regional	RBA	Municipal
Purcell	McClain	Purcell	DA	Municipal
Cheyenne	Roger Mills	Migon Laird Municipal	CA	Municipal
Duncan	Stephens	Halliburton Field	RBA	Municipal
Tipton	Tillman	Tipton Municipal	CA	Municipal
Grandfield	Tillman	Grandfield Municipal	DA	Municipal
Frederick	Tillman	Frederick Regional	RBA	Municipal
Cordell	Washita	Cordell Municipal	CA	Municipal
Burns Flat	Washita	Clinton/Sherman	RBA	Municipal

Source: Oklahoma Aeronautics Commission

### **Areas of Concern**

Areas of concern were identified through surveys, public meetings and soliciting comments from stakeholders. Table 2.6 summarizes the locations identified as areas of concern through surveys, public meetings and other reports/data.

**Table 2.6: Cotton County Transportation Areas of Concern**

<b>CITY/TOWN</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
Waters	Public Schools	Sidewalks need repair
Walters	Eastside	Roads are bad at casino and tax business
Temple	In town	Streets are bad
		Two bridges on Highway 277 and E1930, north bridge in disrepair
		Cache Creek flooding at E1800 and N2620
	East of Waurika	Speed limit at casino
Waurika	Ross Street	Between California and Kansas Street for Housing Authority and Nutrition Center
	E1790	Condemned bridge closed on E1790 between N2690 and N2700
		Deep Red Crossing at E1880 and N2490
	Highway 70 and Highway 36	Traffic congestion
	Highway 5	Wild hogs crossing between N2570 and N 2580

Source: Stakeholder Meetings, Surveys, SORTPO



## Chapter 3: Future Conditions and Improvements

The objective of the Future Conditions and Improvements chapter is to portray a “snapshot” of future population and employment growth and transportation improvements. It is assumed that only those transportation projects included in the current ODOT eight (8) year construction plan, County Improvements for Road & Bridges Program (CIRB) and projects funded by local governments will be constructed by the year 2040

### **Future Conditions**

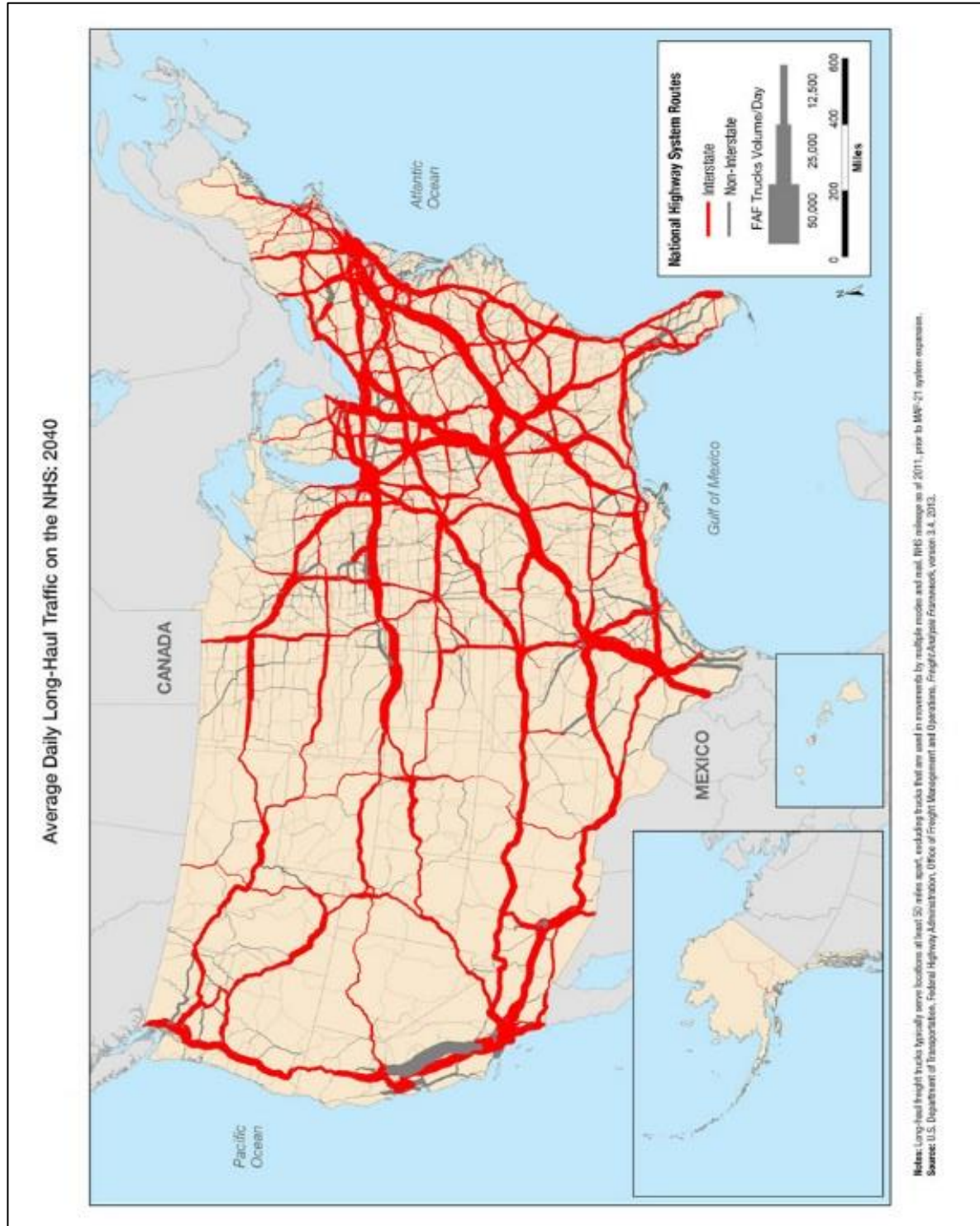
Cotton County and its towns and communities continue to show a downward turn in population and employment. Employment opportunities in the County continue to be dependent on the construction and manufacturing, oil and gas, education and healthcare industries. However, with the State of Oklahoma multiyear revenue failure due to the State’s economy and a budget tied to the oil and gas industry all levels of government are negatively impacted. The impact of the State’s budget as recent as 2016 when the Oklahoma Department of Corrections curtailed contracts with 16 county jails to house state inmates. Cotton County is one of the 16 counties that lost this source of revenue. With this information as well as knowledge of the decline in the oil and gas industry and no new industries planned for the County the 2040 projection will shows a decline.

The SORTPO Transportation Policy Board recommends utilizing the 2012 State of the State Report’s showing Cotton County’s 2040 projected population of 5,489. Civilian labor force projection is projected at 2,350. The civilian labor force projection was developed after reviewing the 2011-2015 ACS age distribution, employment by industry and number of employed. The 2040 population projection of 5,489 and employment projection totaling 2,350 were distributed through the TAZs. The process for distributing decline across the TAZ is challenging due to the rural nature of the county and the very low population density. The assumption is made that the population and employment will be concentrated in Walters and surrounding areas. Walters employment and population will decline but at a slower rate due to the County being a bedroom community to Comanche County and is its proximity Fort Sill Military Installation. Civilian labor force in TAZ 1 will increase due to the investment in multiple recreational and tourist centers by the Kiowa Tribe and Comanche Nation. Appendix 3.1 provides the Cotton County 2040 projected population and employment by TAZ.

Within Cotton County, there may be areas that experience congestion such as areas near major activity generators. Studies to identify specific causes and solutions for these areas will need to be considered on a case by case basis. As population changes the impact on the traffic volume and roadway capacity will need to be re-examined. Future truck freight growth is projected to continue. Development of the SORTPO Regional Freight Plan will provide the region an opportunity to look long term at the needs of the freight industry, interconnecting between regions and identification of future freight projects that will support the growth. Figure 3.1 illustrates the Projected Average Daily Long-Haul Traffic on National Highway System (NHS).



**Figure 3.1: Projected Average Daily Long-Haul Traffic on NHS 2040**



## **2040 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, and county and city governments.

### **Federal**

In general, transportation revenues continue to follow an unsustainable course as multiple factors force the funding available for transportation to continue in 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. There is a price elasticity associated with gasoline. Consumers change driving habits and stop purchasing gasoline as the price per gallon increases and then revenues generated from gasoline sales decrease. As the cost of transportation infrastructure projects increases, the amount of revenue generated from the gas tax remains static. It is not possible to maintain past levels of transportation investments as per capita collections continue to decline. Additionally, as cars become more fuel efficient, drivers pay less in gas taxes. At the same time, the wear and tear on roadways caused by these vehicles remains the same. The federal funding levels related to highways are typically established through authorizing legislation commonly referred to as the Federal Highway Bill. This legislation normally authorizes projected funding levels for a period of six years. Consistent, long-term funding anticipations are critical 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 Highway Trust Fund.



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

Taxes on gasoline and other motor fuels are collected and distributed from the Federal Highway Trust Fund (HTF) and are distributed to the states by the FHWA and the FTA to each state through a system of formula grants and discretionary allocations. Motor fuels taxes, consisting of the 18.4-cent per gallon tax on gasoline and 24-cent 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) is federal funds utilized on road projects. These STP funds may provide up to eighty percent (80%) of the construction costs of these projects. Counties fund the remaining twenty percent (20%) match for construction costs, plus the costs for engineering, right of way and utility relocation through local sources or state funding.

**State**

The ODOT 8 Year Construction Work Program 2017-2024 assembles projects according to anticipated state and federal fund categories. Regarding 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 federal regulations dictate 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 (6) years. Appendix 3.2 illustrates and identifies the location of projects included in the ODOT Eight Year Construction Program 2017-2024. Funding for projects in years 2022-2024 is not in place.

The total expenditures identified in Table 3.1 are the total federal, state and local revenues estimated for the 2040 LRTP and are adequate to fund the projects listed. 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 to accomplish the projects.

**Table 3.1: State Funding Categories**

	<b>FY13 Actual</b>	<b>FY14 Actual</b>	<b>FY15 Actual</b>	<b>FY16 Budget</b>
State Transportation Fund	\$206,405,702	\$208,707,119	\$197,228,227	\$184,901,463
Motor Fuel Tax – HP Bridges	\$6,047,108	\$6,130,546	\$6,238,149	\$6,200,000
Income Tax	\$297,400,000	\$357,100,000	\$416,800,000	\$476,500,000
Total allocation	\$509,852,810	\$571,937,665	\$620,266,376	\$667,601,463
OTA Transfers	\$41,340,937	\$41,712,534	\$44,049,331	\$42,000,000
Total State Revenue	\$551,193,747	\$613,650,199	\$664,315,707	\$709,601,463
CIP Debt Service	\$11,526,973	\$11,358,296	\$0	\$0

**2040 Cotton County LRTP**

	<b>FY13 Actual</b>	<b>FY14 Actual</b>	<b>FY15 Actual</b>	<b>FY16 Budget</b>
ROADS Debt Service	\$32,367,490	\$35,971,788	\$42,599,529	\$36,434,743
Highways and Bridges	\$495,399,284	\$554,420,115	\$612,316,178	\$662,766,720
Lake & Industrial Access	\$5,000,000	\$5,000,000	\$2,500,000	\$3,500,000
Passenger Rail	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Public Transit	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Intermodal	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
<b>Total Allocation</b>	<b>\$551,193,747</b>	<b>\$613,650,199</b>	<b>\$664,315,707</b>	<b>\$709,601,463</b>

Source: ODOT

### **County**

The main funding program for county roads and bridges is the county highway fund, which consists of revenues from the state taxes on gasoline and diesel fuels as well as motor vehicle registration fees and a portion of the of the state gross production tax on oil and gas in the case of counties that have oil and gas production. A county's apportionment is based on several formulas that use proportional shares of each factor as it relates to the total statewide county totals. Counties that have oil and natural gas production receive a portion of the seven percent (7%) state tax on natural gas and oil. Counties have authority to impose a countywide sales tax for roads and bridges with revenues earmarked for roads and bridges.

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 specifically for the CIRB category are collected from state gasoline and diesel tax, special fuel tax and state gross production tax on oil. The county uses a small percentage of tax revenues for maintenance and minor improvements, relying on outside funding sources for major improvements.

The County Commissioners established Circuit Engineering Districts (CEDs) to provide common engineering and project support services. All potential transportation projects are initiated by the County Commissioners and are coordinated with the appropriate CED who directs the development of the recommended list of projects to be considered by ODOT for inclusion in the CIRB Construction Work Plan. ODOT and the

Transportation Commission have the responsibility for the expenditure of the CIRB funding. When the CIRB Construction Work Plan is approved, ODOT coordinates and cooperates with the Counties and the CEDs in management of the project.

**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 Grants (CDBG) through Oklahoma Dept. of Commerce, Economic Development Administration (EDA), and US Department of Agriculture Rural Development (USDA RD) programs. Oklahoma has limited funding available for projects through Rural Economic Action Plan (REAP) administered by Councils of Government (COG). Planned improvements identified in Table 3.2 are unfunded local (city/county) projects. The projects were identified through a public survey, public meetings and local expertise.

**Table 3.2: Cotton County Future Transportation Projects**

<b>CITY/TOWN</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
Walters	Mainstreet	Streetscape
Walters	Public Schools	Safe Routes to Schools
Temple	Main Street	Streetscape
Temple	Public Schools	Safe Routes to Schools

Source: SORTPO, City/Town (Waurika and Temple)

## Chapter 4: Public Participation

This chapter presents and describes the public participation tools the RTPOs utilize as part of the planning process. Public participation is a federal requirement outlined in MAP21 and The FAST Act. SORTPO has an adopted Public Participation Plans (PPP) that was followed.

### **Environmental Justice**

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, Hispanic, 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 (EJ).

Cotton County's racial and ethnic composition for 2011-2015 (ACS): 92.9% white, 8.5% American Indian, 2% African American and 7% Hispanic or Latino. In comparison, Oklahoma's racial ethnic composition for 2011-2015 ACS was 73.1% White, 8.2% African American, 7.3% American Indian and 9.6% Hispanic or Latino. Data from 2011-2015 ACS identifies 17.3% of the population below the poverty level. The HHS 2017 poverty guidelines for a family of four is \$24,600.

As part of the LRTP development and public outreach process, consultation with federally recognized tribes in the region was initiated. Several environmental laws require tribal consultation during project development. The Kiowa Tribe, Comanche Nation and Apache Tribe were invited to participate in the planning process. In addition, a copy of the LRTP was mailed to each tribal headquarters during the public review process.

### **Coordination with Other Plans**

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

- FAST Act Federal Planning Factors,
- MAP-21 Federal Planning Factors,
- 2012 Transit Gap Overview and Analysis,
- Oklahoma Mobility Plan,
- Oklahoma Aeronautics Commission, and
- ODOT 2015-2040 Long Range Transportation Plan.



Conversation and consultation has been initiated and will be ongoing with the local and

State Agencies (including, but not limited to: State Historic Preservation Office, Oklahoma Department of Transportation, Oklahoma Department of Environmental Quality, Oklahoma Water Resources Board, Oklahoma Department of Wildlife Conservation, Aeronautics Commission, and Bureau of Indian Affairs. All the above agencies will be given an opportunity for input during the Public Review and Comment period.

Public involvement is an integral part of the transportation process. SORTPO is proactive in its efforts to effectively communicate with the public and has adopted a PPP to ensure that the transportation planning process and procedures complies with federal requirement for public involvement and participation. These procedures provide opportunities for the public to take an active role in the decision-making process.



The SORTPO hosted 15 public meetings and/or provided notice of availability for public outreach to involve interested parties in the early stages of the plan development. Notices of public hearings and/or notices of availability for public outreach for the RTPPO were published in local newspapers and SORTPO website. Surveys were distributed throughout the County and were made available at [www.sortpo.org](http://www.sortpo.org). Appendix 4.1 provides a summary of the survey results. Appendix 4.2 contains information identifying the public outreach processes utilized in development of the 2040 Tillman County LRTP.



## Chapter 5: Transportation Recommendations

This chapter identifies the recommendations and summary of improvements that were developed because of the previous review of demographics, growth, activity generators, transportation system and other such issues. It is assumed that only Cotton County projects included in the FFY 2017-2024 ODOT 8 Year Construction Work Program, FFY 2017-2020 Asset Preservation Program, FFY 2017-2021 CIRB and those identified by cities and towns will be constructed by the year 2040.

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 while many potential funding sources are identified for each project, these represent the primary sources and additional sources not listed may also be available. When implementing this plan, SORTPO will continue to review potential funding sources as they become available or as projects become eligible for other sources. SORTPO 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 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 to develop a comprehensive set of solutions.

### **Committed Improvements**

The ODOT 8 Year Construction Work Program 2017-2024 assembles projects according to anticipated state and federal fund categories. Regarding 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 federal regulations dictate 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 (6) years.

Table 5.1 identifies projects through the year 2040 and includes those identified in the ODOT 8 Year Construction Work Program for years 2017-2020, CIRB FY 2017-2021, FY 2017-2020 Asset Preservation and other projects such as development of studies, plans, and collection of data identified in Chapter 1 goals and strategies. The development of studies, plans and collection of data can be included in SORTPO's Planning Work Program (PWP).

**Table 5.1: Cotton County Transportation Projects**

COUNTY	YEAR	DESCRIPTION	TOTAL
COTTON 28804 (04) GRADE, DRAINING, BRIDGE & SURFACE	2017- 2021		\$80,000
COTTON JS- 8372(004) CI BRIDGES & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (EW-179) OVER BEAVER CREEK, 4.0 MILES NORTH AND 2.8 MILES EAST OF JCT SH- 53/SH-65	\$815,000
COTTON J3- 1797(005) RB CONTRACT P.E.	2017- 2021	BRIDGE AND APPROACHES (EW-179) OVER TRIBUTARY TO SHARON STREAM, 4.0 MILES NORTH AND 2.2 MILES WEST OF JCT SH-53/SH-65 (PE FOR 31797(04))	\$220,000
COTTON 31797(04) BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (EW-179) OVER TRIBUTARY TO SHARON STREAM, 4.0 MILES NORTH AND 2.2 MILES WEST OF JCT SH-53/SH-65	\$750,000
COTTON 31797(05) CONTRACT PE (AS OF 10/1/2013)	2017- 2021	BRIDGE AND APPROACHES (EW-179) OVER TRIBUTARY TO SHARON STREAM, 4.0 MILES NORTH AND 2.2 MILES WEST OF JCT SH-53/SH-65 (PE FOR 31797(04))	\$80,000
COTTON 31797(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (EW-179) OVER TRIBUTARY TO SHARON STREAM, 4.0 MILES NORTH AND 2.2 MILES WEST OF JCT SH-53/SH-65 (ROW FOR 31797(04))	\$40,000
COTTON CIRB- 117D (091) RB BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (EW-185) OVER WEST CACHE CREEK TRIB., 2.0 MILES SOUTH AND 1.4 MILES WEST OF JCT US-277/I-44	\$502,000
COTTON 29377(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (EW-190) OVER DEEP RED CREEK, 1.0 MILE SOUTH AND 2.4 MILES WEST OF JCT US-277/SH-5A (LOW WATER XING) (ROW FOR 29377(04))	\$40,000

**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
COTTON 29366(04) BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (EW-193) OVER TRIB. TO DEEP RED CREEK, 2.7 MILES NORTH AND 1.2 MILES WEST OF RANDLETT	\$827,000
COTTON 31119(04) BRIDGE & APPROACH	2017- 2021	BRIDGE AND APPROACHES (EW-195) OVER TRIB. TO WHISKEY CREEK, 2.0 MILES NORTH AND 0.7 MILES EAST OF JCT US-70/SH-65	\$487,000
COTTON J3- 1119(004) CI BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (EW-195) OVER TRIB. TO WHISKEY CREEK, 2.0 MILES NORTH AND 0.7 MILES EAST OF JCT US-70/SH-65	\$637,000
COTTON 3119(05) CONTRACT PE (AS OF 10/1/2013)	2017- 2021	BRIDGE AND APPROACHES (EW-195) OVER TRIB. TO WHISKEY CREEK, 2.0 MILES NORTH AND 0.7 MILES EAST OF JCT US-70/SH-65 (PE FOR 31119(04))	\$80,000
COTTON 31119(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (EW-195) OVER TRIB. TO WHISKEY CREEK, 2.0 MILES NORTH AND 0.7 MILES EAST OF JCT US-70/SH-65 (ROW FOR 31119(04))	\$40,000
COTTON 31119(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (EW-195) OVER TRIB. TO WHISKEY CREEK, 2.0 MILES NORTH AND 0.7 MILES EAST OF JCT US-70/SH-65 (ROW FOR 31119(04))	\$40,000
COTTON 31802(05) CONTRACT PE (AS OF 10/1/2013)	2017- 2021	BRIDGE AND APPROACHES (NS-257) OVER DEEP RED CREEK, 4.0 MILES WEST AND 3.1 MILES NORTH OF JCT SH-5B/US-70 (LOW WATER XING) (PE FOR 31802(04))	\$80,000
COTTON 31802(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (NS-257) OVER DEEP RED CREEK, 4.0 MILES WEST AND 3.1 MILES NORTH OF JCT SH-5B/US-70 (LOW WATER XING) (ROW FOR 31802(04))	\$40,000

**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
COTTON 31802(06) RIGHT OF WAY	2017- 2021	BRIDGE AND APPROACHES (NS-257) OVER DEEP RED CREEK, 4.0 MILES WEST AND 3.1 MILES NORTH OF JCT SH-5B/US-70 (LOW WATER XING) (ROW FOR 3180204)	\$40,000
COTTON JS- 9900(004) CI BRIDGES & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (NS-269) OVER GOODEN CREEK, 2.0 MILES EAST AND 6.1 MILES NORTH OF JCT SH- 53/SH-65	\$425,000
COTTON 31110(04) BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (NS-270) OVER TRIB. TO WHISKEY CREEK, 3.5 MILES EAST AND 2.4 MILES SOUTH OF TEMPLE (LOW WATER XING)	\$551,000
COTTON CIRB- 117C (064) RB	2017- 2021	CO RD (NS-270) BEGIN 3.5 MILES EAST OF JCT SH-65/SH-5 IN TEMPLE & EXTEND NORTH 6 MILES	\$5,400,000
Cotton County	2017- 2021	Conduct a freight assessment for the county.	SPR/Local
Cotton County	2017- 2021	Conduct speed study at intersection locations with high accident severity index and corridors with major attractors.	SPR/Local
COTTON 29377(05) CONTRACT PE (AS OF 10/1/2013)	2017- 2021	COTTON 28804(06) UTILITIES	\$100,000
COTTON 28372(04) BRIDGES & APPROACHES	2017- 2021	COTTON 29573(04)	\$725,000
COTTON 29900(04) BRIDGE & APPROACHES	2017- 2021	COTTON 29573(05) RIGHT OF WAY	\$482,000
COTTON 28037(04) BRIDGE & APPROACHES	2017- 2021	COTTON 29573(05) RIGHT OF WAY	\$3,498,845

**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
COTTON 31110(06) RIGHT OF WAY	2017- 2021	COTTON 29573(06) UTILITIES	\$50,000
COTTON 28804(04) GRADE, DRAINING, BRIDGE & SURFACE	2017- 2021	COTTON 29573(06) UTILITIES	\$7,000,000
COTTON 32035(06) RIGHT OF WAY	2017- 2021	COTTON 29596(05) RIGHT OF WAY	\$100,000
COTTON 32035(08) BRIDGES & APPROACHES	2017- 2021	COTTON 29596(06) UTILITIES	\$2,200,000
COTTON 29596(04) BRIDGES APPROACHES	2017- 2021	COTTON 29596(06) UTILITIES	\$2,217,600
Cotton County	2017- 2021	Develop a clearinghouse for regional data sets, such as pavement management systems and geographic information systems.	SPR/Local
Cotton County	2017- 2021	Develop a system to collect and monitor changes in population, employment, and major employers by Traffic Analysis Zone (TAZ).	SPR/Local
Cotton County	2017- 2021	Develop data collection standards.	SPR/Local
Cotton County	2017- 2021	Establish procedures that enhance the consultation and coordination of transportation planning with local, regional, state and tribal government representatives.	SPR/Local
COTTON 29800(04) GRADE, DRAIN & SURFACE	2017- 2021	GRADE, DRAIN & SURFACE ON NS-250, BEGIN AT US-70 AND EXTEND NORTH 5.0 MILES	\$3,300,000

**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
COTTON 32960(05) CONTRACT PE (AS OF 10/1/2013)	2017- 2021	GRADE, DRAIN, & SURFACE EW-198 (P.E. FOR 3296004), BEGIN AT SH-36 EXT. WEST APPROX. 2 MILES TO NS- 248 AND EXT. NORTH 1 MILE TO EW- 197	\$300,000
COTTON 32960(06) RIGHT OF WAY	2017- 2021	GRADE, DRAIN, & SURFACE EW-198 (ROW FOR 3296004) BEGIN AT SH-36 EXT. WEST APPROX. 2 MILES TO NS- 248 AND EXT. NORTH 1 MILE TO EW- 197	\$50,000
COTTON 32960(07) UTILITIES	2017- 2021	GRADE, DRAIN, & SURFACE EW-198 (UT FOR 3296004) BEGIN AT SH-36 EXT. WEST APPROX. 2 MILES TO NS- 248 AND EXT. NORTH 1 MILE TO EW- 197	\$20,000
COTTON 32960(07) UTILITIES	2017- 2021	GRADE, DRAIN, & SURFACE EW-198 (UT FOR 3296004) BEGIN AT SH-36 EXT. WEST APPROX. 2 MILES TO NS- 248 AND EXT. NORTH 1 MILE TO EW- 197	\$20,000
COTTON 32960(04)	2017- 2021	GRADE, DRAIN, & SURFACE EW-198 BEGIN AT SH-36 & EXT. WEST APPROX. 2 MILES TO NS-248 AND EXT. NORTH 1 MILE TO EW-197	\$625,000
COTTON 26500(05) RIGHT OF WAY	2017- 2021	I-44: 1.0 MI NORTH OF THE TEXAS STATE LINE (INTERCHANGE IMPROVE RW FOR 26500(04)	\$163,500
COTTON 26500(06) UTILITIES	2017- 2021	I-44: 1.0 MI NORTH OF THE TEXAS STATE LINE (INTERCHANGE IMPROVE UT FOR 26500(04)	\$131,490
COTTON 26500(06) UTILITIES	2017- 2021	I-44: 1.0 MI NORTH OF THE TEXAS STATE LINE (INTERCHANGE IMPROVE UT FOR 26500(04)	\$131,490
COTTON 3294304	2017- 2021	PEDESTRIAN IMPROVEMENTS SH 53: BEGIN AT SH-5 EAST JCT., EXT. EAST 0.35 MILES	\$80,000
COTTON 29573(05) RIGHT OF WAY	2017- 2021	SH-5 OVER COX CREEK, APPROXIMATELY 11.6 MILES E. OF Tillman C/L RW FOR JP 29573(04)	\$179,850

**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
COTTON 29573(06) UTILITIES	2017- 2021	SH-5 OVER COX CREEK, APPROXIMATELY 11.6 MILES E. OF Tillman C/L RW FOR JP 29573(04)	\$269,230
COTTON 28804(05) RIGHT OF WAY	2017- 2021	SH-5: FROM 3.8 MIS SOUTH AND EAST OF SH-65 EXTEND E. 2.1 MILES INCLUDING 5 BRIDGES RW FOR 28804(04)	\$441,100
COTTON 28804(06) UTILITIES	2017- 2021	SH-5: FROM 3.8 MIS SOUTH AND EAST OF SH-65 EXTEND E. 2.1 MILES INCLUDING 5 BRIDGES RW FOR 28804(04)	\$518,900
COTTON 29524(04) Money Only	2017- 2021	SH-5A OVER H.E. H.E. Bailey TP TURNPIKE, FROM 1.1 MIS E OF US-277, EAST 0.5 MIS (OTA PROJECT-ODOT PARTICIPATION 50%)	\$1,500,000
COTTON 29596(05) RIGHT OF WAY	2017- 2021	US-70 OVER WHISKEY CREEK APPROX 2.96 MILES W. OF Jefferson	\$241,718
COTTON 26500(04) INTERCHANGE	2022 – 2026	COTTON 28037(04) BRIDGE & APPROACHES	\$12,284,02 5
Cotton County	2022 – 2026	Develop database and mapping to identify the County's underrepresented	SPR
Cotton County	2022 – 2026	Develop method to track the implementation of projects and regularly update the public on the status of projects, programs and finances.	SPR/Local
Cotton County	2022 – 2026	Develop procedures to identify and collect traffic count data at specific locations within the county.	SPR/Local
Cotton County	2022 – 2026	Identify the locations of major employment centers, including existing and proposed developments and identify types of transportation available	SPR/Local
Cotton County	2022 – 2026	Working with area employers and stakeholders develop a database and map identifying transportation needs	SPR/Local



**2040 Cotton County LRTP**

<b>COUNTY</b>	<b>YEAR</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
Cotton County	2027-2031	Develop a data file and create a map identifying location of wind farms and pipelines and relationship to communities and the transportation system.	SPR/Local
Cotton County	2027-2031	Develop a regional map that identifies tourism destinations and regionally significant facilities	SPR/Local
Cotton County	2032-2036	Conduct study at intersection locations with high accident severity index and corridors with major attractors.	SPR/Local
Cotton County	2037-2040	Collect and routinely analyze safety and security data by mode and severity to identify changes and trends.	SPR/Local
Cotton County	2037-2040	Conduct study at intersection locations with high accident severity index and corridors with major attractors.	SPR/Local

Source: ODOT, SORTPO

**Acronyms**

ACS	American Community Survey
ADA	Americans with Disabilities Act
ASCOG	Association of South Central Oklahoma Governments
BNSF	Burlington Norther Santa Fe
CA	Community Airport
CED	Circuit Engineering District
CIP	Capital Improvement Program
CIRB	County Improvement for Roads and Bridges
C/L	County Line
COEDD	Central Oklahoma Economic Development District
COG	Council of Government
CORTPO	Central Oklahoma Regional Transportation Planning Organization
DA	District Airport
EDA	Economic Development Administration
EJ	Environmental Justice
FAST Act	Fixing America's Transportation Act
FAT	Fatality
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
FFY	Federal Fiscal Year
GIS	Geographic Information System
HHS	Health and Human Services
HTF	Highway Trust Fund
HWY	Highway
INJ	Injury
IRI	International Roughness Index
JCT	Junction
KCS	Kansas City Southern
LEP	Limited English Proficiency

LOS	Levels of Service
LRTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
MI	Mile(s)
MPO	Metropolitan Planning Organization
MUTCD	Manual of Uniform Traffic Control Devices
NHFN	National Highway Freight Network
NHS	National Highway System
NODA	Northern Oklahoma Development Authority
NORTPO	Northern Oklahoma Regional Transportation Planning Organization
NRHP	National Register of Historic Places
OARC	Oklahoma Association of Regional Councils
ODEQ	Oklahoma Department of Environmental Quality
ODOT	Oklahoma Department of Transportation
OTA	Oklahoma Turnpike Authority
PD	Property Damage
PHFS	Primary Highway Freight System
POE	Port of Entry
PPP	Public Participation Plan
PWP	Planning Work Program
RBA	Regional Business Airport
REAP	Rural Economic Action Plan
RTPO	Regional Transportation Planning Organization
SH	State Highway
S/L	State Line
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users
SORTPO	Southwest Oklahoma Regional Transportation Planning Organization
SPR	State Planning & Research
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program

STRAHNET	Strategic Highway Network
SWODA	South Western Oklahoma Development Authority
TAP	Transportation Alternate Program
TAZ	Traffic Analysis Zone
UP	Union Pacific
US	United States
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation

## **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.

**Capacity** - The maximum number of vehicles that can pass over a given section of a lane or roadway in one direction during a given 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.

**Capital Improvement Plan CIP** – A comprehensive schedule of capital improvements needed within the city and establishes a program to accomplish those needs within the city's ability to pay.

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

**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** - 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.

**Functionally Obsolete Bridge** - A bridge inadequate to properly accommodate the traffic can be due to inadequate clearances, either horizontal or vertical, approach roadway alignment, structural condition, or waterway adequacy. Any posted bridge which is not structurally deficient would be included in this category. Structures in this category could include narrow bridges.

**General Aviation Airport** - Provide access to the population and economic activity centers of the state.

**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.

**Local Sustaining Economies** - Geographical regions that function with some degree of

independence from the rest of the state. The Oklahoma Department of Commerce (ODOC) has identified 47 of these regions.

**Long Range Transportation Plan** - Every state and MPO must develop a long-range transportation plan (LRTP) for transportation improvements, including a bicycle and pedestrian element. The LRTP looks twenty (20) years ahead and is revised every five (5) years.

**Multi-modal** - The consideration of more than one mode to serve transportation needs in each 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** - Represents four percent (4%) to five percent (5%) of the total public road mileage in the US. This system was designed to contain the following 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, airports, international border crossings, public transportation and transit facilities, interstate bus terminals and rail and intermodal transportation facilities.

**National and State Scenic Byways** - Recognize highways that are outstanding examples of our nation's beauty, culture and recreational experience in exemplifying the diverse regional characteristics of our nation.

**Primary Commercial Service Airport** - An airport that receives scheduled passenger service and enplanes 10,000 or more passengers annually, as reported by the FAA.

**Strategic Highway Network (STRAHNET)** - Designation given to roads that provide "defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war." STRAHNET includes Routes (for long-distance travel) and Connectors (to connect individual installations to the Routes). This system includes the Dwight D. Eisenhower System of Interstate and Defense Highways, identified as strategically important to the defense of the United States.

**Structurally Deficient Bridge** - A bridge can be inadequate to carry legal loads, whether caused by obsolete design standards, structural deterioration, or waterway inadequacy. Structures in this category may include those posted to restrict load limits as well as those closed to all traffic.

**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** - 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**

**Appendix A: Resolution 09-04**

**RESOLUTION NO. 09-04**

**CREATION OF THE RURAL TRANSPORTATION  
PLANNING ORGANIZATION COMMITTEE**

WHEREAS, local business and community leaders have expressed a strong desire to convene and discuss transportation needs and goals in the eight-county SWODA Region, and

WHEREAS, regional transportation planning is encouraged by legislation of the Federal Highway Administration, and

WHEREAS, SWODA is the federally recognized regional planning organization for the eight-county area, and

WHEREAS, the SWODA Board of Trustees seeks to facilitate the planning process for surface, air and rail development to aid the region in economic development, workforce development, business and industry growth, tourism development and other pursuits;

NOW THEREFORE, BE IT RESOLVED by the Board of Trustees of the South-Western Oklahoma Development Authority does hereby create the Rural Transportation Planning Organization as a standing committee of the Authority.

PASSED AND APPROVED this 13th day of October 2009.

  
T.L. GRAMLING, Chairman

ATTEST:

  
MIKE BROWN, Secretary

## **Appendix B: Resolution 16-06**

### **RESOLUTION NO. 16-06**

#### **EXPANSION OF THE REGIONAL TRANSPORTATION PLANNING**

#### **ORGANIZATION COMMITTEE**

**WHEREAS**, local business and community leaders have expressed a strong desire to convene and discuss transportation needs and goals in the sixteen (16) county South Western Oklahoma Development Authority (SWODA) and Association of South Central Oklahoma Governments (ASCOG) region, and

**WHEREAS**, regional transportation planning is encouraged by legislation of the Federal Highway Administration, and

**WHEREAS**, SWODA is the federally recognized regional planning organization for the sixteen (16) county area, and

**WHEREAS**, the SWODA Board of Trustees seeks to facilitate the planning process for surface and rail development to aid the region in economic development, workforce development, business and industry growth, tourism development and other pursuits;

**NOW THEREFORE, BE IT RESOLVED** by the Board of Trustees of the South Western Oklahoma Development Authority does hereby expand the Regional Transportation Planning Organization as a standing committee of the Authority.

**PASSED AND APPROVED** this 8<sup>th</sup> day of November, 2016

  
\_\_\_\_\_  
John Schaufele, Chairman

**ATTEST:**

  
\_\_\_\_\_  
John Dee Butcher, Secretary

## **Appendix C: Performance Measures**

Performance measures for State departments of transportation (State DOT) and Metropolitan Planning Organizations (MPO) were established by the Moving Ahead for Progress in the 21st Century Act (MAP-21). This Act transformed the Federal-aid highway program by establishing new requirements for performance management to ensure the most efficient investment of Federal transportation funds. Performance management increases the accountability and transparency of the Federal-aid highway program and provides a framework to support improved investment decision-making through a focus on performance outcomes for key national transportation goals. As part of performance management, recipients of Federal-aid highway funds will make transportation investments to achieve performance targets that make progress toward the following national goals:

- Safety—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure condition—To maintain the highway infrastructure asset system in a state of good repair.
- Congestion reduction—To achieve a significant reduction in congestion on the NHS.
- System reliability—To improve the efficiency of the surface transportation system.
- Freight movement and economic vitality—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental sustainability—To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced project delivery delays— To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

State DOTs and MPOs will be expected to use the information and data generated as a result of the new regulations to inform their transportation planning and programming decisions. The new performance aspects of the Federal-aid highway program that result from this rule will provide FHWA the ability to better communicate a national performance story and to assess the impacts of Federal funding investments more reliably.

The FHWA is required to establish performance measures to assess performance in 12 areas 1 generalized as follows:

- (1) Serious injuries per vehicle miles traveled (VMT);
- (2) fatalities per VMT;
- (3) number of serious injuries;
- (4) number of fatalities;
- (5) pavement condition on the Interstate System;
- (6) pavement condition on the non-Interstate NHS;

- (7) bridge condition on the NHS;
- (8) performance of the Interstate System;
- (9) performance of the non-Interstate NHS;
- (10) freight movement on the Interstate System;
- (11) traffic congestion; and
- (12) on-road mobile source emissions.

Table 3-1 in ODOT's 2015-2040 Long- Range Transportation Plan compares the 2015-2040 LRTP Goals and Performance Measures. Below is information contained in Table 3.1 of this Plan.

Table 3-1 ODOT 2015-2040 Long Range Transportation Plan.

<b>2015-2040 LRTP Goals</b>	<b>Recommended Performance Measure</b>
Safe and Secure Travel	<ul style="list-style-type: none"> <li>• Reduction in traffic related fatalities and serious injuries                             <ul style="list-style-type: none"> <li>– Rate and number of traffic fatalities annually on all Oklahoma public roads</li> <li>– Rate and number of traffic-related serious injuries annually on all Oklahoma public roads</li> </ul> </li> </ul>
Infrastructure Preservation	<ul style="list-style-type: none"> <li>• Bridge Condition – Number of structurally deficient bridges</li> <li>• Preservation of Pavement – Good/fair/poor condition index for NHS highways</li> </ul>
Economic Vitality	<ul style="list-style-type: none"> <li>• Freight Movement                             <ul style="list-style-type: none"> <li>– Annual freight tonnage/value for truck, rail, and barge modes</li> <li>– Measure of freight travel time reliability and/or speed</li> </ul> </li> <li>• Congestion                             <ul style="list-style-type: none"> <li>– Travel time-based measure(s) of congestion</li> </ul> </li> </ul>
Mobility Choice, Connectivity and Accessibility	<ul style="list-style-type: none"> <li>• Public Transit- Annual rural transit vehicle revenue miles</li> <li>• Passenger Rail - Annual ridership and on-time performance for Amtrak Heartland Flyer</li> </ul>
Environmental Responsibility	<ul style="list-style-type: none"> <li>• Clean fuels and improved air quality - Clean fuels as a share of ODOT's total fleet fuel use in gasoline gallon equivalents</li> <li>• Reduce roadway flooding and support improved water quality - Quantity of Litter/Debris (cubic yards or other measure of weight and volume) cleared from storm drains/culverts/roadsides</li> </ul>

Source: Oklahoma Department of Transportation

## Appendix 2: Current Conditions

### Appendix 2.1: Cotton County, Socio Economic Information, 2011-2015 ACS

SEX AND AGE	2011-2015 ACS	MARGIN OF ERROR	2011-2015 ACS %
Total population	6,112	***	
Male	3,042	+/-71	49.8%
Female	3,070	+/-71	50.2%
Under 5 years	361	+/-34	5.9%
Median age (years)	41.5	+/-1.5	x
18 years and over	4,668	-	-
Male	2,289	+/-39	49.0%
Female	2,379	+/-39	51.0%
65 years and over	1,110	+/-43	
Male	499	+/-37	45%
Female	611	+/-28	55%
Race			
Total population	6,112		
One race	5,680	+/-147	92.9%
Two or more races	432	+/-147	7.1%
White	5,680	+/-147	92.9%
Black or African American	120	+/-11	2.0%
American Indian and Alaska Native	522	+/-113	8.5%
Asian	42	+/-38	.7%
Native Hawaiian/Other Pacific Islander	0	-	0.0%
Hispanic/Latino	428	-	7.0%

Source: 2011-2015 ACS

### Appendix 2.2: Cotton County Housing Units 2011-2015 ACS

	Estimate	Margin of Error	Percent
HOUSING OCCUPANCY			
Total housing units	3,019	+/-39	3,019
Occupied housing units	2,429	+/-85	80.5%
Vacant housing units	590	+/-86	19.5%

**2040 Cotton County LRTP**

	<b>Estimate</b>	<b>Margin of Error</b>	<b>Percent</b>
Homeowner vacancy rate	0.9	+/-1.0	(X)
Rental vacancy rate	4.1	+/-4.4	(X)
<b>UNITS IN STRUCTURE</b>			
Total housing units	3,019	+/-39	3,019
1-unit, detached	2,613	+/-88	86.6%
1-unit, attached	29	+/-21	1.0%
2 units	29	+/-23	1.0%
3 or 4 units	11	+/-10	0.4%
5 to 9 units	39	+/-24	1.3%
10 to 19 units	0	+/-13	0.0%
20 or more units	19	+/-20	0.6%
Mobile home	279	+/-57	9.2%
Boat, RV, van, etc.	0	+/-13	0.0%
<b>VEHICLES AVAILABLE</b>			
Occupied housing units	2,429	+/-85	2,429
No vehicles available	138	+/-48	5.7%
1 vehicle available	648	+/-111	26.7%
2 vehicles available	910	+/-108	37.5%
3 or more vehicles available	733	+/-102	30.2%

Source: 2011-2015 ACS

**Appendix 2.3: Cotton County Educational Attainment 2011-2015 ACS**

<b>Subject</b>	<b>TOTAL</b>	
	<b>2011-2015 ACS</b>	<b>MARGIN OF ERROR</b>
Population 25 years and over	4,190	+/-40
Less than 9th grade	182	+/-69
9th to 12th grade, no diploma	461	+/-99
High school graduate/GED	1,704	+/-141
Some college, no degree	982	+/-135
Associate's degree	216	+/-81
Bachelor's degree	501	+/-113
Graduate or professional degree	144	+/-59

Source: 2011-2015 ACS

**Appendix 2.4: Cotton County, Employment Status and Commute to Work 2011-2015 ACS**

	<b>Estimate</b>	<b>Margin of Error</b>	<b>Percent</b>
<b>EMPLOYMENT STATUS</b>			
Population 16 years and over	4,841	+/-42	4,841
In labor force	2,895	+/-165	59.8%
Civilian labor force	2,871	+/-165	59.3%
Employed	2,607	+/-149	53.9%
Unemployed	264	+/-77	5.5%
Armed Forces	24	+/-22	0.5%
Not in labor force	1,946	+/-153	40.2%
<b>COMMUTING TO WORK</b>			
Workers 16 years and over	2,578	+/-156	2,578
Car, truck, or van -- drove alone	2,150	+/-157	83.4%
Car, truck, or van -- carpooled	238	+/-87	9.2%
Public transportation (excluding taxicab)	3	+/-5	0.1%
Walked	47	+/-30	1.8%
Other means	22	+/-20	0.9%
Worked at home	118	+/-52	4.6%
Mean travel time to work (minutes)	23.3	+/-2.0	(X)
<b>OCCUPATION</b>			
Civilian employed population 16 years and over	2,607	+/-149	2,607
Management, business, science, and arts occupations	828	+/-142	31.8%
Service occupations	462	+/-79	17.7%
Sales and office occupations	590	+/-101	22.6%
Natural resources, construction, and maintenance occupations	311	+/-76	11.9%
Production, transportation, and material moving occupations	416	+/-84	16.0%
<b>INDUSTRY</b>			
Civilian employed population 16 years and over	2,607	+/-149	2,607
Agriculture, forestry, fishing and hunting, and mining	179	+/-59	6.9%



**2040 Cotton County LRTP**

	<b>Estimate</b>	<b>Margin of Error</b>	<b>Percent</b>
Construction	203	+/-64	7.8%
Manufacturing	266	+/-79	10.2%
Wholesale trade	20	+/-19	0.8%
Retail trade	171	+/-61	6.6%
Transportation and warehousing, and utilities	230	+/-68	8.8%
Information	46	+/-27	1.8%
Finance and insurance, and real estate and rental and leasing	113	+/-55	4.3%
Professional, scientific, and management, and administrative and waste management services	236	+/-79	9.1%
Educational services, and health care and social assistance	469	+/-88	18.0%
Arts, entertainment, and recreation, and accommodation and food services	338	+/-85	13.0%
Other services, except public administration	100	+/-46	3.8%
Public administration	236	+/-80	9.1%

Source: 2011-2015 ACS

**Appendix 2.5: Cotton County Commuting Characteristics 2011-2015 ACS**

<b>Subject</b>	<b>Total</b>	
	<b>Estimate</b>	<b>Margin of Error</b>
Workers 16 years and over	2,578	+/-156
<u>Means of Transportation to Work</u>		
Car, truck, or van	92.6%	+/-2.6
Drove alone	83.4%	+/-3.9
Carpooled	9.2%	+/-3.3
In 2-person carpool	6.1%	+/-2.8
In 3-person carpool	2.6%	+/-1.3
In 4-or-more person carpool	0.5%	+/-0.5
Workers per car, truck, or van	1.06	+/-0.02
Public transportation (excluding taxicab)	0.1%	+/-0.2
Walked	1.8%	+/-1.2
Bicycle	0.0%	+/-0.8
Taxicab, motorcycle, or other means	0.9%	+/-0.8
Worked at home	4.6%	+/-2.0

**2040 Cotton County LRTP**

Subject	Total	
	Estimate	Margin of Error
<u>Time Leaving Home to Go to Work</u>		
12:00 a.m. to 4:59 a.m.	7.3%	+/-2.4
5:00 a.m. to 5:29 a.m.	3.8%	+/-2.0
5:30 a.m. to 5:59 a.m.	6.7%	+/-2.4
6:00 a.m. to 6:29 a.m.	11.9%	+/-3.0
6:30 a.m. to 6:59 a.m.	6.3%	+/-2.2
7:00 a.m. to 7:29 a.m.	16.3%	+/-3.0
7:30 a.m. to 7:59 a.m.	16.5%	+/-3.4
8:00 a.m. to 8:29 a.m.	5.9%	+/-2.2
8:30 a.m. to 8:59 a.m.	3.1%	+/-1.3
9:00 a.m. to 11:59 p.m.	22.2%	+/-3.9
<u>Travel Time to Work</u>		
Less than 10 minutes	33.4%	+/-5.0
10 to 14 minutes	5.8%	+/-2.2
15 to 19 minutes	8.4%	+/-3.1
20 to 24 minutes	3.5%	+/-1.7
25 to 29 minutes	4.2%	+/-1.7
30 to 34 minutes	19.4%	+/-3.9
35 to 44 minutes	12.9%	+/-3.5
45 to 59 minutes	8.6%	+/-2.7
60 or more minutes	3.8%	+/-1.4
Mean travel time to work (minutes)	23.3	+/-2.0
<u>Vehicles Available</u>		
Workers 16 years and over in households	2,578	+/-156
No vehicle available	1.4%	+/-1.1
1 vehicle available	15.6%	+/-4.0
2 vehicles available	40.6%	+/-6.1
3 or more vehicles available	42.5%	+/-5.9

Source: 2011-2015 ACS

**Appendix 2.6: Cotton County Population and Employment by TAZ**

TAZ NO.	2010 POPULATION	2011-2015 POPULATION	2011-2015 EMPLOYMENT
1	530	500	525
2	635	625	225
3	790	755	145

<b>TAZ NO.</b>	<b>2010 POPULATION</b>	<b>2011-2015 POPULATION</b>	<b>2011-2015 EMPLOYMENT</b>
4	95	74	135
100	75	75	0
101	65	65	100
102	25	25	0
103	0	0	0
104	45	45	0
105	210	210	25
106	246	246	145
107	233	233	75
108	267	267	165
109	284	284	220
110	37	37	145
111	7	7	10
112	9	9	35
113	0	0	0
114	6	6	0
115	10	10	0
116	87	87	5
117	245	245	15
118	256	256	45
119	212	212	135
120	223	225	65
121	0	0	46
122	10	10	0
200	303	315	55
201	325	341	181
202	374	435	145
300	438	362	167
400	151	151	62

Source: SORTPO

**Appendix 2.7: Cotton County Major Employers by TAZ**

<b>BUSINESS / INDUSTRY NAME</b>	<b>STREET ADDRESS</b>	<b>CITY / TOWN</b>	<b>2016 EMPL RANGE</b>	<b>TAZ</b>
Comanche Nation Red River Casino	196747 Highway 36	Devol	100-249	1
Comanche Nation Travel Plaza	250510 E 2000 Rd	Devol	20-49	1
Devol Volunteer Fire Dept.		Devol	10-19	400
Kiowa Casino	36 CR E 1980	Devol	250-499	1
Big Pasture Elementary	1502 N 10th St	Randlett	10-19	400
Big Pasture High School	1502 N 10th St	Randlett	20-49	400
Big Pasture Kindergarten	Ranger Rd Ave B	Randlett	10-19	400
Big Pasture Public Schools	1502 N. 10th St	Randlett	20-49	400
Big Pasture School Supt	1502 N 10th St	Randlett	20-49	400
Cotton County District 3	400 D Ave	Randlett	5-9	400
County Barn	Pecan St & S Central St	Temple	5-9	200
First State Bank In Temple	111 S. Commercial	Temple	10-19	200
Hop & Sack	101 S. Highway 5	Temple	5-9	202
K Star Fees/KFM	201 E. Main St.	Temple	5-9	202
Recap Head Start C A D C	102 W Texas St	Temple	5-9	202
Temple Elementary School	200 W Mississippi St	Temple	10-19	201
Temple High School	206 School Rd	Temple	20-49	201
Temple Manor Nursing Home	100 Green Ave	Temple	20-49	201
Arvest Bank	924 W. Missouri	Walters	10-19	110
Aspire Home Health	120 S. Broadway	Walters	10-19	108
Busy Bees Learning Ctr	225 W. South Boundary	Walters	5-9	118
City Manager	129 E Colorado St	Walters	5-9	108
Comanche Star Casino	263171 Highway 53	Walters	50-99	2
Cotton County Courthouse	302 N. Broadway	Walters		108
Cotton Electric Coop	226 N. Broadway	Walters	50-99	109
Cotton Electric Svc Inc	127 W Colorado St	Walters	5-9	109
County Barn	1124 W Colorado St	Walters	5-9	110
County Sheriff	301 N Broadway St # 10	Walters	10-19	108
Helping Hands Healthcare	230-3 E Missouri	Walters	10-19	108
ODOT Highway Department	6201 S 11th St	Walters	5-9	118
Personal Touch Home Care	230 E. Missouri	Walters	10-19	108
Powers Heating & Air	605 W. Missouri	Walters	10-19	109
Simple Simons Pizza	311 W. Missouri	Walters	10-19	108
Walters Bank & Trust	201 N. Broadway St	Walters	10-19	108
Walters Coop Elevator Assn	409 W. Missouri	Walters	10-19	109

---

**2040 Cotton County LRTP**

---

<b>BUSINESS / INDUSTRY NAME</b>	<b>STREET ADDRESS</b>	<b>CITY / TOWN</b>	<b>2016 EMPL RANGE</b>	<b>TAZ</b>
Walters Elementary School	418 S Broadway St	Walters	20-49	119
Walters Family Clinic	230 E. Missouri	Walters	5-9	108
Walters High School	105 E Washington St	Walters	20-49	119
Walter's Hometown Grocery	502 S. 7th	Walters	10-19	117
Walters Middle School	418 S Broadway St	Walters	20-49	119
Walters Super Store	311 W. Missouri	Walters	10-19	108
Walters Work Ctr	261527 W Missouri Ave	Walters	10-19	110
Wendy Tunnessen	420 E. Wyoming	Walters	10-19	120

Source: OESC, SORTPO

### **Appendix 2.8: Environmental and Development Concerns**

The environmental features and constraints were identified using secondary source information from the following: United States Environmental Protection Agency (USEPA), Oklahoma Geological Survey, Oklahoma Department of Fish and Wildlife Resources, Oklahoma Department for Environmental Quality (ODEQ), United States Department of Agriculture (USDA), United States Department of the Interior Fish and Wildlife Service (USFWS), United States Geological Survey (USGS), Oklahoma University Geographic Information System (GIS) and other state and local agencies

Streams are natural corridors that provide habitat for fish, insects, wildlife and recreational benefits to people such as hunting, fishing, boating, bird watching, as well as, aesthetic benefits. Streams also provide drinking water for wild animals, livestock and people. There are two (2) major rivers in the county, supplied by numerous streams; however, following years of extreme drought, many of these streams are dry. As of the origin of this plan, none are on the “watch list” of the Oklahoma Department of Environmental Quality (ODEQ) and none are designated as scenic waterways.

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. However, there is no state or federally listed endangered species specific to Cotton County.

The Special Flood Hazard Area is an area designated width along a stream or river with a 1% chance of flooding annually. These areas are protected to prevent any increase in the risks or severity of possible future floods and to maintain their natural and ecological benefits.

The National Register of Historic Places (NRHP) is a list of properties determined significant in American history, architecture, archaeology, engineering, or culture, by virtue of design or architectural criteria, association with historical persons and events, and/or value for historic or prehistoric information. Under state and federal law, NRHP listed and NRHP eligible properties are afforded equal protection from impact. NRHP properties are designated to help state and local governments, Federal agencies, and others identify important historic and archaeological resources, to ensure their protection, either through preservation, or minimization and mitigation of impact.

### **Appendix 2.9: Cotton County Environmental Features**

DESCRIPTION	LOCATION
Cotton County Courthouse (National Register 84002990)	Walters
First United Methodist Church (National Register 83002082)	Walters
Walters Rock Island Depot (National Register 98001147)	Walters

<b>DESCRIPTION</b>	<b>LOCATION</b>
Water Features (E. Cache Creek, West Cache Creek, Deep Red Run Creek)	
Tribal Land	

Source: SORTPO, Oklahoma Historical Society

**Appendix 2.10: Cotton County Type of Collision Total, 2011-2016**

<b>Type Of Collision</b>	<b>Total</b>				
	<b>Fat</b>	<b>Inj *</b>	<b>PD</b>	<b>Tot</b>	<b>Pct.</b>
Rear-End (front-to-rear)	3	22	37	62	<b>10.4</b>
Head-On (front-to-front)	-	8	1	9	<b>1.5</b>
Right Angle (front-to-side)	1	16	37	54	<b>9.1</b>
Angle Turning	-	11	16	27	<b>4.5</b>
Sideswipe Same Direction	2	4	11	17	<b>2.9</b>
Sideswipe Opposite Direction	-	2	2	4	<b>0.7</b>
Fixed Object	2	80	166	248	<b>41.6</b>
Pedestrian	2	2	0	4	<b>0.7</b>
Pedal Cycle	-	-	-	-	-
Animal	-	15	57	72	<b>12.1</b>
Overturn/Rollover	1	24	25	50	<b>8.4</b>
Other Single Vehicle Crash	-	2	8	10	<b>1.7</b>
Other	-	1	38	39	<b>6.5</b>
<b>Total</b>	<b>11</b>	<b>187</b>	<b>398</b>	<b>596</b>	<b>100</b>
<b>Percent</b>	<b>1.8</b>	<b>31.4</b>	<b>66.8</b>	<b>100</b>	

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

\*Include incapacitating, non-incapacitating and possible injuries

**Appendix 2.11: Cotton County Collision Vehicles by Vehicle Type, Total, 2011-2016**

<b>Vehicle Type</b>	<b>Total</b>				
	<b>Fat</b>	<b>Inj *</b>	<b>PD</b>	<b>Tot</b>	<b>Pct.</b>
Passenger Vehicle-2 Door	-	7	38	46	<b>5.5</b>
Passenger Vehicle-4 Door	4	69	196	269	<b>33.1</b>
Passenger Vehicle-Convertible	-	-	1	1	<b>0.1</b>
Pickup Truck	1	66	192	259	<b>31.9</b>
Single-Unit Truck (2 axles)	-	1	2	3	<b>0.4</b>

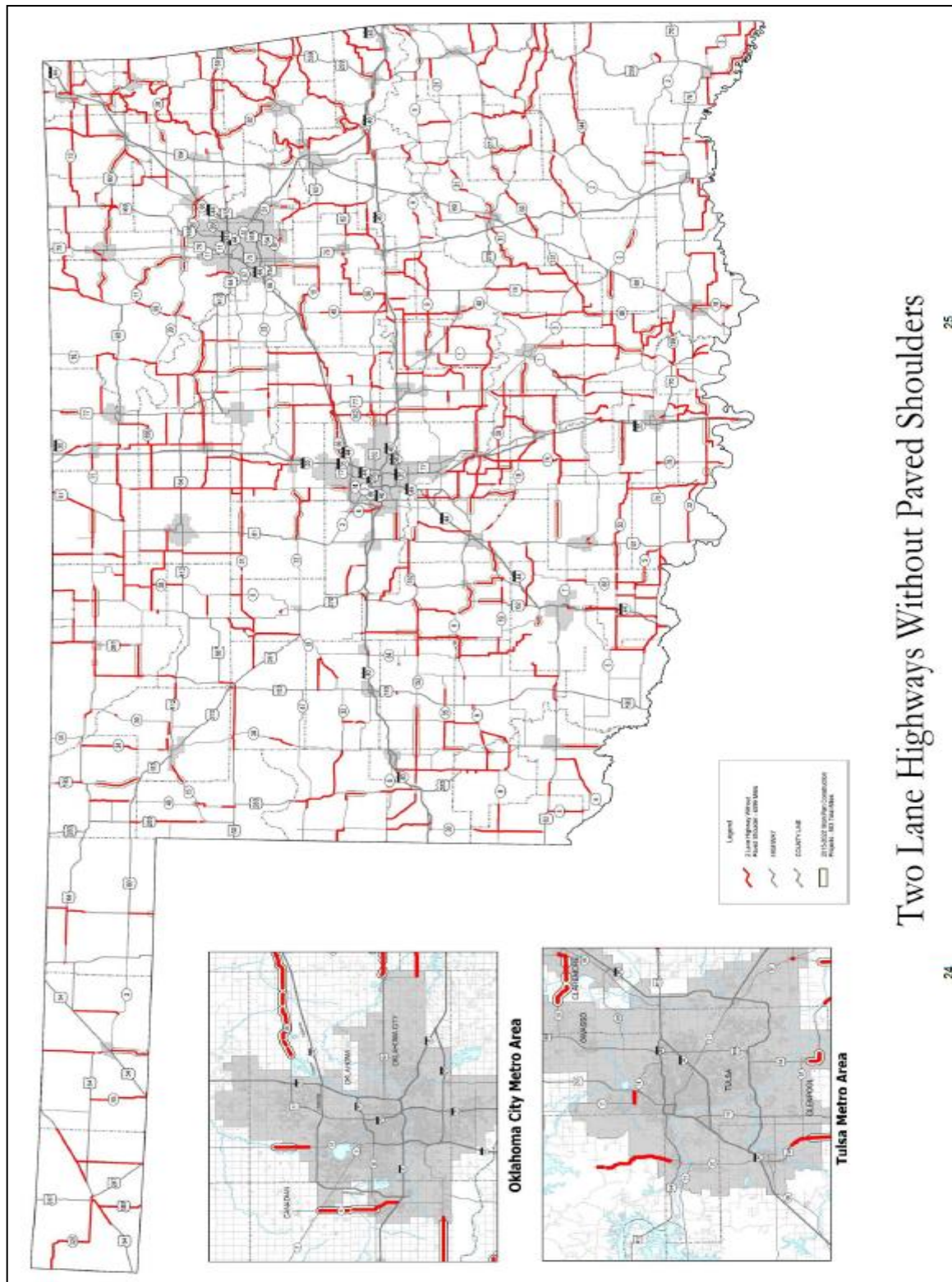
<b>Vehicle Type</b>	<b>Total</b>				
	<b>Fat</b>	<b>Inj *</b>	<b>PD</b>	<b>Tot</b>	<b>Pct.</b>
Single-Unit Truck (3 or more axles)	-	-	4	4	<b>0.5</b>
School Bus	-	-	5	5	<b>0.6</b>
Truck/Trailer	-	1	6	7	<b>0.9</b>
Truck-Tractor (bobtail)	-	-	1	1	<b>0.1</b>
Truck-Tractor/Semi-Trailer	-	4	29	33	<b>4.1</b>
Truck-Tractor/Double	-	-	-	-	-
Bus (16+ seats)	-	-	1	1	<b>0.1</b>
Motorcycle	2	10	2	14	<b>1.7</b>
Motor Home	-	-	1	1	<b>0.1</b>
Farm Machinery	-	-	2	2	<b>0.2</b>
ATV	-	-	-	-	-
Sport Utility Vehicle (SUV)	2	39	90	131	<b>16.1</b>
Passenger Van	-	9	14	23	<b>2.8</b>
Truck More Than 10,000 lbs.	-	-	1	1	<b>0.1</b>
Van (10,000 lbs. or less)	-	3	4	7	<b>0.9</b>
Other	-	-	6	6	<b>0.7</b>
<b>Total</b>	<b>9</b>	<b>209</b>	<b>595</b>	<b>813</b>	<b>100</b>
<b>Percent</b>	<b>1.1</b>	<b>25.7</b>	<b>73.2</b>	<b>100</b>	

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

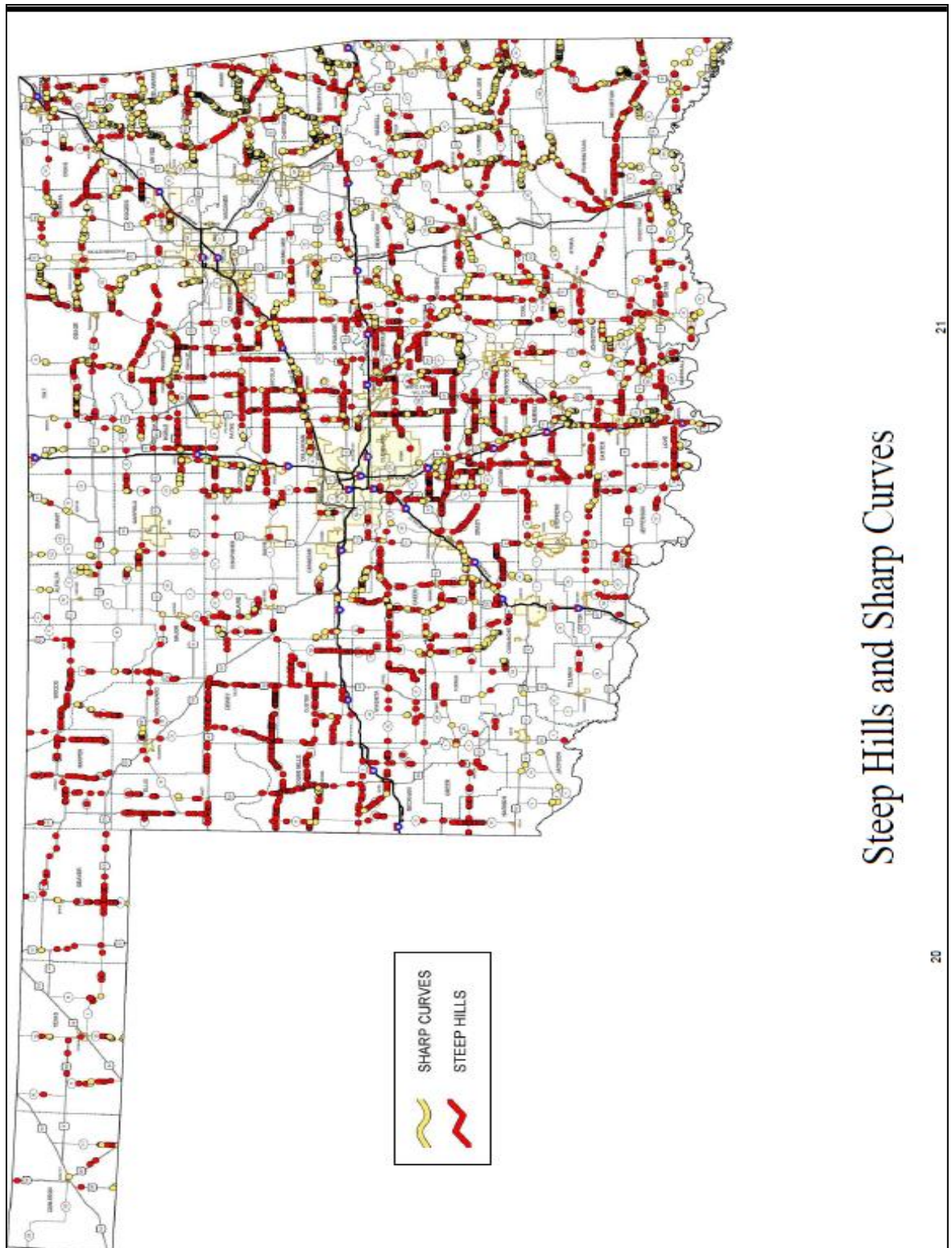
\*Include incapacitating, non-incapacitating and possible injuries



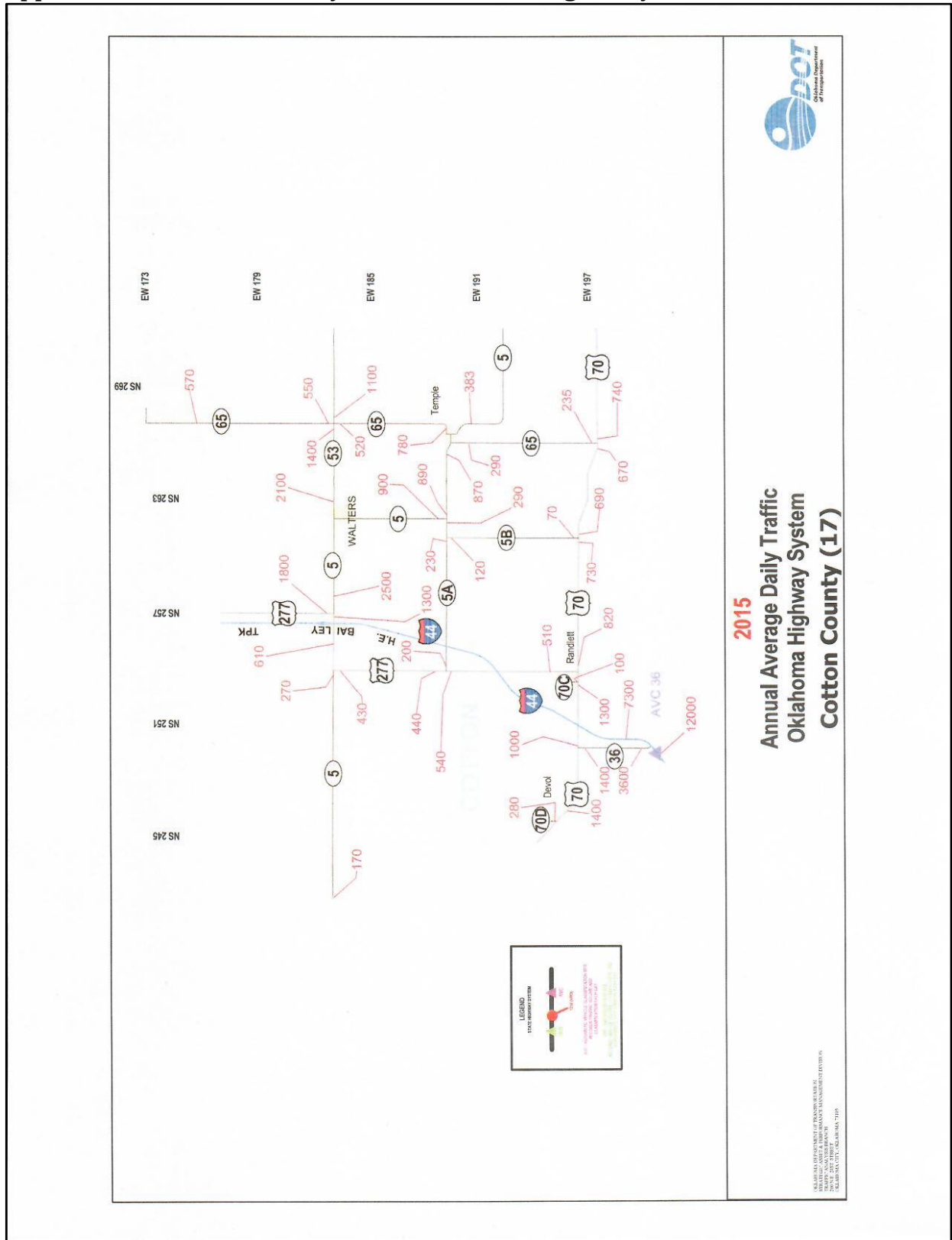
## Appendix 2.12: Two Lane Highways Without Paved Shoulders



**Appendix 2.13: Steep Hills and Sharp Curve**



**Appendix 2.14: Cotton County 2015 Annual Average Daily Traffic Count**



### **Appendix 2.15: Functional Classification and Road Systems**

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 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.

Functional classification can be used for, but is not limited to, the following purposes:

- Provide a framework for highways serving mobility and connecting regions and cities within a state.
- Provide a basis for assigning jurisdictional responsibility according to the overall importance of a road.
- Provide a basis for development of minimum design standards according to function.
- Provide a basis for evaluating present and future needs.
- Provide a basis for allocation of limited financial resources.

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 functional classification of streets includes the following functional classes: Interstate, Freeway, Rural Principal Arterial, Rural Minor Arterial, Rural Major Collector and Rural Minor Collector.

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

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



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

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

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

- Traffic movements with trip length and density suitable for inter-county service.
- Traffic movements between traffic generators, between traffic generators, 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.

#### Level of Service

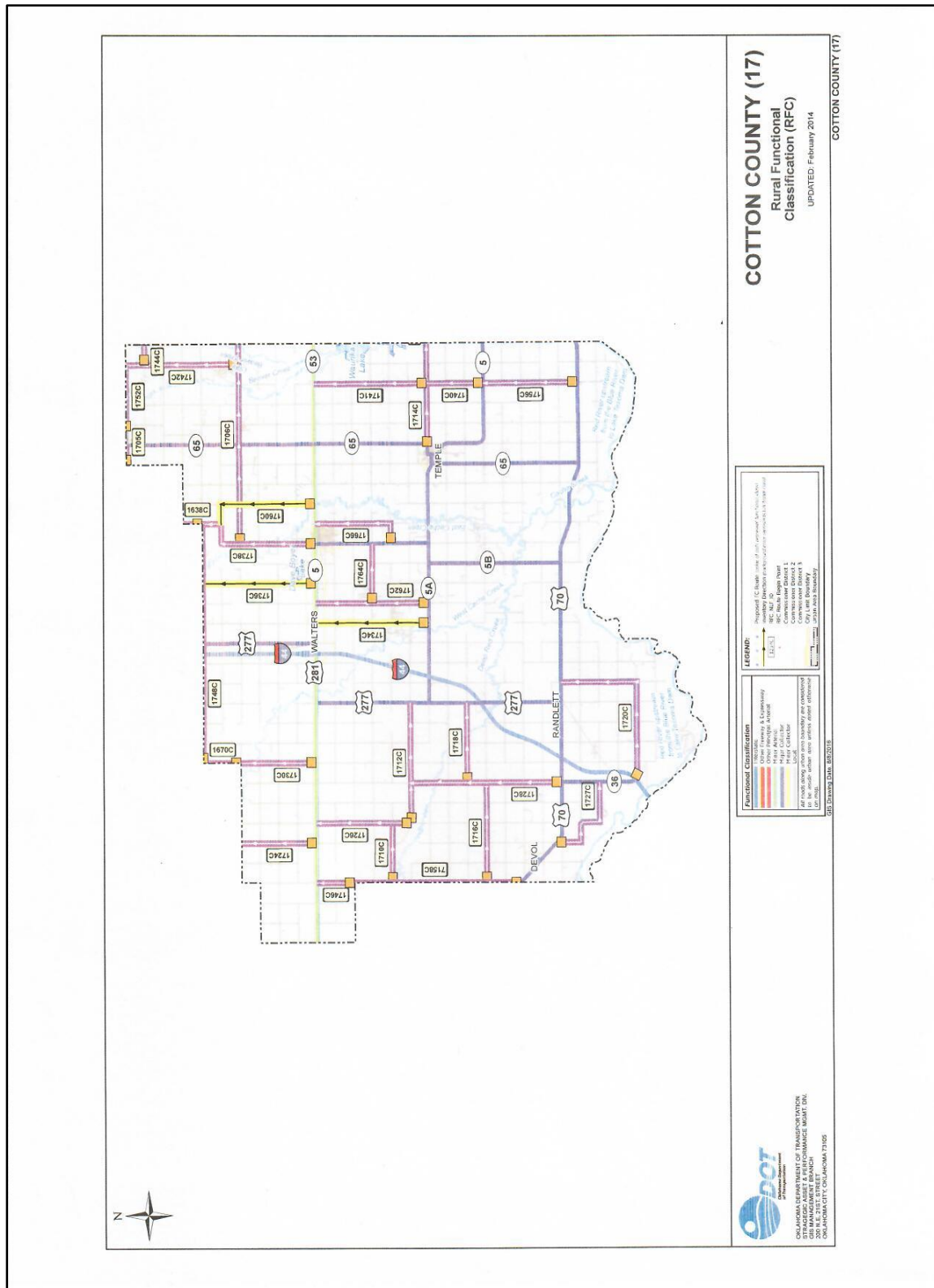
Street Capacity: The measure of a street's ability to accommodate the traffic volume along the street. Level of Service Ranges from LOS A: Indicates good operating conditions

with little or no delay, to LOS F, which indicates extreme congestion and long vehicle delays.

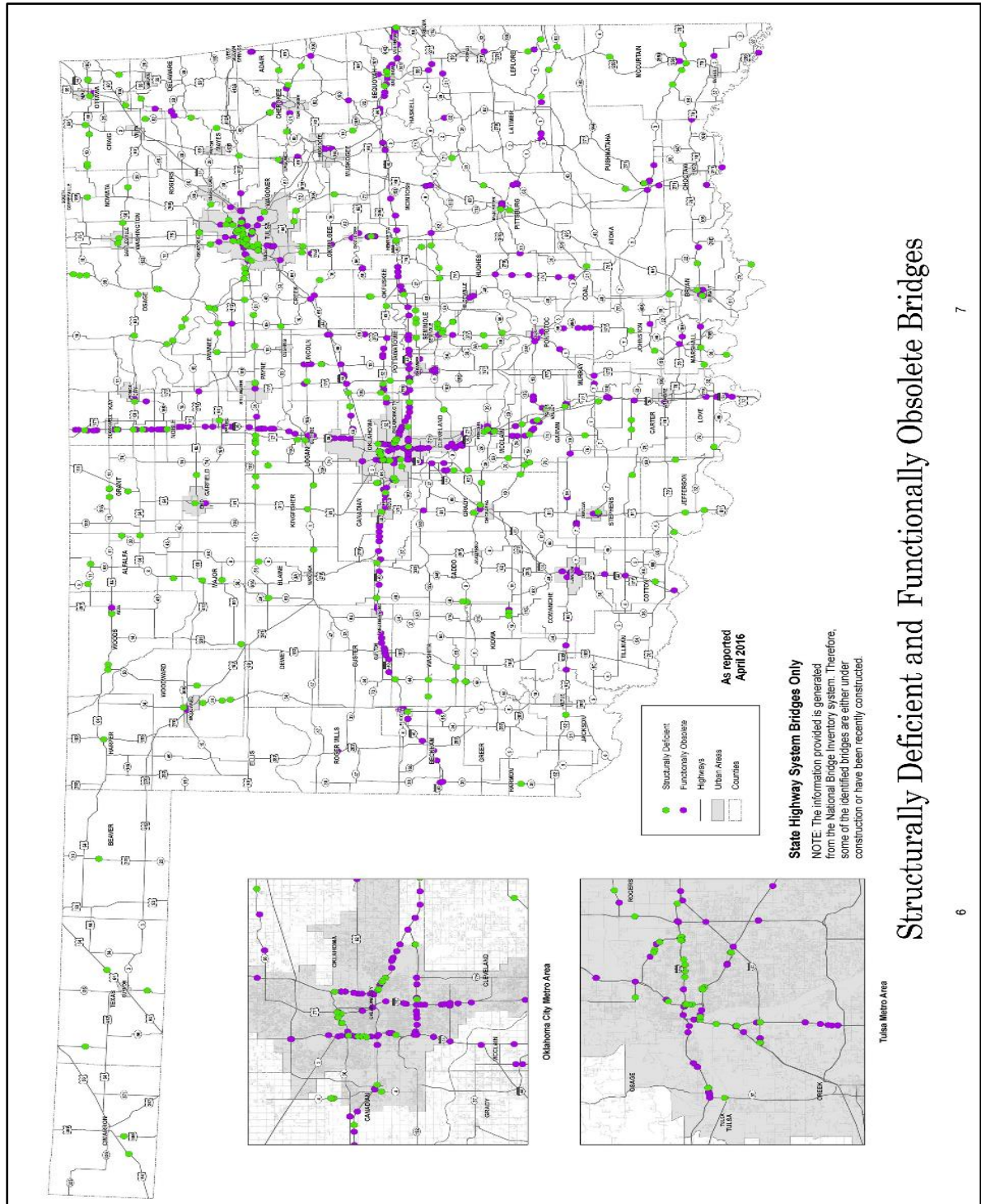
The following is a list of the various LOS with abbreviated definitions from the Highway Capacity Manual:

- 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 thirty percent (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 fifty percent (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 sixty-nine percent (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 seventy percent (70%) to ninety percent (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 ninety percent (90%) to ninety-nine percent (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 one hundred percent (100%) of capacity.

### **Appendix 2.16: Cotton County Functional Classification**



## Appendix 2.17: Oklahoma Structurally Deficient and Functionally Obsolete Bridges



7

6

## Structurally Deficient and Functionally Obsolete Bridges



**Appendix 2.18: Cotton County On System Bridges with Sufficiency Rate**

<b>FACILITY</b>	<b>LOCATION</b>	<b>SUFFICIENCY RATE</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>
SH 53	9.3 MI. E JCT SH 5	49.9	1933	1200	2010
CO. RD. E1840	HE Bailey BR. NO. 11.33	62.1	1964	6300	2015
CO. RD. E1790	HE Bailey BR. NO. 6.35	60	1964	7700	2015
CO. RD. 1748C	HE Bailey BR. NO. 4.35	79.9	1964	7700	2015
CO. RD. E1800	HE Bailey BR. NO. 07.34	80	1964	7700	2015
SH 5A	3.7 MI. E JCT US 277	73.1	1958	300	2015
SH 5	0.2 MI. E OF Tillman C/L	96.9	2008	290	2015
SH 5	4 MI. E OF Tillman C/L	96.9	2008	290	2015
SH 5	7.4 MI. E OF Tillman C/L	96.9	2008	290	2015
SH 53	8.6 E JCT SH 5	98.5	2012	1200	2015
SH 53	9.3 E JCT SH 5	98.5	2012	1200	2015
SH 53	9.3 E JCT SH 5	98.5	2012	1200	2015
SH 5	4.2 S OF JCT SH 53	98.5	2015	1300	2015
SH 5A	1.3 E OF US 277	96	2016	6300	2015
SH 5	4.1 SE JCT SH 65	-1	1901	-1	-1
SH 5	2.2 W Jefferson C/L	-1	1901	-1	-1
SH 5	2.1 W Jefferson C/L	-1	1901	-1	-1
SH 5	3 MI. E Tillman C/L	98.5	1974	290	2015
SH 5	0.40 MI. E US 281	94.3	1976	3000	2015
SH 5B	2.5 MI. N JCT US 70	79.7	1982	120	2015
SH 53	1.6 MI. E JCT SH 5	97.8	1986	1700	2015
SH 53	2.1 MI. E JCT SH 5	97.8	1986	1700	2015
SH 5B	3.6 MI. N JCT US 70	99.8	1988	120	2015
SH 5B	1.8 MI. N JCT US 70	99.8	1989	120	2015
SH 5	3.8 MI. W JCT SH 65	98.4	1989	1200	2015
SH 5	3.4 MI. W JCT SH 65	98.4	1989	1200	2015
I-44	4 N OK. TEXAS LINE	79.6	1963	7500	2015
SH 5	2.6 MI. W JCT SH 65	98.4	1989	1200	2015
SH 5	2.8 MI. W JCT SH 65	98.4	1989	1200	2015
US 277	.2 MI. E JCT SH 5 & US 277	99.1	1994	450	2015

**2040 Cotton County LRTP**

<b>FACILITY</b>	<b>LOCATION</b>	<b>SUFFICIENCY RATE</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>
I-44 Frontage Rd.	0.4 S JCT I-44/US 70	95	1963	100	2015
I-44	5.3 N Oklahoma – Texas S/L	93	1963	7600	2015
SH 36	1.6 N Oklahoma – Texas S/L	74.5	1963	13100	2015
US 277	.3 MI. E JCT SH 5 & US 277	99.1	1994	450	2015
US 277	.5 MI. E JCT SH 5 & US 277	99.1	1994	450	2015
I-44 WB	Oklahoma – Texas S/L	96.9	2003	6550	2015
HE Bailey TP (I-44)	4.5 MI. N US70 - HE Bailey TP 19.55	96.1	1964	6300	2015
US 277	2.6 MI. E SH5 HE Bailey TP #10.33	78.1	1964	7700	2015
CO. RD. E1990	2.6 N Oklahoma – Texas S/L	90	1963	7500	2015
HE Bailey TP (I-44)	1.3 MI. E SH36	97.1	1964	6300	2015
US 70	2.9 W Jefferson C/L	-1	1901	-1	-1
US 277	3.1 N JCT US 70	42.9	1938	600	2015
US 70	12.5 E HE Bailey TP	78.7	1955	930	2015
CO. RD. E1899	HE Bailey TP BR. NO. 17.41	49.6	1964	6300	2015
I-44 EB	Oklahoma – Texas S/L	95.9	1978	6200	2015
US 70	1.3 W Jefferson C/L	87.6	1938	1200	2015
US 70	1 W Jefferson C/L	93.5	1938	1200	2015
US 70	3.3 W Jefferson C/L	85.3	1938	1200	2015
SH 5	6.1 MI. S JCT SH 53	85.2	1931	1300	2015
SH 5	.1 MI. W JCT SH 53	65.1	1932	2700	2015
US 277	11.4 MI. N JCT US 70	95.9	1932	390	2015
US 277	1.4 MI. E SH 5	85	1932	450	2015
SH 5	.9 E Tillman C/L	85	1926	290	2015
US 277	1.5 MI. E JCT SH 5	70.3	1932	700	2015
SH 5A	1.3 MI. E US277 - HE Bailey TP 16.45	94	1964	6300	2014
US 277	1 MI. S JCT SH 5	93.2	1932	390	2015
US 277	.3 MI. S JCT SH 5	97.1	1932	390	2015
SH 5	1.9 MI. S JCT SH 65	70.5	1934	540	2015

**2040 Cotton County LRTP**

<b>FACILITY</b>	<b>LOCATION</b>	<b>SUFFICIENCY RATE</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>
US 70	2.9 W Jefferson C/L	66.7	1938	1200	2015
US 277	3.5 MI. N JCT US 70	78.3	1940	600	2015
US 277	2.9 N JCT US 70	78.5	1940	600	2015
SH 5	4.3 S & E JCT SH65	77.7	1934	540	2015
SH 5	1.2 W Jefferson C/L	77.5	1934	540	2015
SH 5	4 S & E JCT SH 65	62.3	1934	540	2015
SH 5	2.2 MI. W Jefferson CL	58.5	1934	540	2015
SH 5	2.1 W Jefferson C/L	58.5	1934	540	2015
SH 5	11.6 MI. E Tillman C/L	68.5	1934	290	2015
SH 5	4.1 S & E JCT SH65	64.3	1934	540	2015
US 70	2.4 MI. E Tillman C/L	93.6	1949	1600	2015
US 70	4.7 MI. E Tillman C/L	89.7	1949	1600	2015
US 70	5.3 MI. S Tillman C/L	89.9	1949	1600	2015
US 70	2.3 MI. E Tillman C/L	86.7	1949	1600	2015
US 70	10.9 E H.E. Bailey TP	98.1	1955	930	2015
US 70	11.8 E H.E. Bailey TP	98.1	1955	930	2015
US 70	13.3 E H.E. Bailey TP	94.9	1955	930	2015
US 70	12.7 E H.E. Bailey TP	80.4	1955	930	2015
US 70	12.1 E H.E. Bailey TP	80.4	1955	930	2015
US 70	.7 W Jefferson C/L	92.9	1938	1200	2015
SH 5A	3.6 MI. E JCT US 277	90	1958	300	2015
SH 5A	3.9 MI. E JCT US 277	96.5	1958	300	2015
SH 5A	2.2 MI. E JCT US 277	96.5	1960	300	2015
SH 65	6.7 MI. N JCT SH 53	89.7	1962	620	2015
US 70	W. of Turnpike Gate	93.5	1962	1700	2015
SH 65	7.4 MI. N JCT SH 53	88.5	1962	620	2015
SH 65	7.3 MI. N JCT SH 53	97.7	1962	620	2015
SH 53	2.7 MI. E JCT SH 5	74.9	1929	1600	2015
SH 53	6.5 MI. E JCT SH 5	75.4	1930	1200	2015
US 277	2.3 S Comanche C/L	73.4	1936	2300	2015
US 277	1.4 MI. S Comanche C/L	89.5	1936	2300	2015

**2040 Cotton County LRTP**

<b>FACILITY</b>	<b>LOCATION</b>	<b>SUFFICIENCY RATE</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>
US 277	3.1 N JCT US 70	-1	1901	-1	-1
CO. RD. E1930	HE Bailey TP NO.21.47	63.5	1964	6300	2015
CO. RD. N2530	HE Bailey TP NO.20.86	63.5	1964	6300	2015
US 277	3.5 N JCT US 70	-1	1901	-1	-1
HE Bailey TP (I-44)	HE Bailey TP NO.20.11	91.1	1964	6300	2015
SH 5A	3.7 E JCT. US 277	-1	1901	-1	-1
SH 5A	3.9 E JCT. US 277	-1	1901	-1	-1
US 277	2.9 N JCT US 70	-1	1901	-1	-1
CO. RD. N2520	HE Bailey TP NO B 22.66	64.7	1964	6300	2015
CO. RD. E1870	HE Bailey TP BR NO 14.38	59.5	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR. NO. 07.92	90.3	1964	7700	2015
HE Bailey TP (I-44)	HE Bailey TP NO B 23.62	77	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP NO.19.26	94.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR. NO.18.30	91.2	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR NO 15.71	94.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR NO 14.54	94.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR NO 13.62	94.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP.NO.20.43	91.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP NO 12.56	92.1	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR NO 13.37	73.8	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP BR NO 13.08	77.9	1964	6300	2015
HE Bailey TP (I-44)	HE Bailey TP NO.20.28	91.1	1964	6300	2015
CO. RD. E1910	HE Bailey TP BR NO	49.6	1964	6300	2015

**2040 Cotton County LRTP**

<b>FACILITY</b>	<b>LOCATION</b>	<b>SUFFICIENCY RATE</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>
	18.56				
HE Bailey TP (I-44)	HE Bailey TP BR NO. 09.42	93.9	1964	7700	2015
HE Bailey TP (I-44)	HE Bailey TP BR. NO. 05.47	96.9	1964	7700	2015
SH 5	.2 E Tillman C/L	69.8	1934	260	2006
SH 5	4 MI. E Tillman C/L	69.8	1934	260	2006
US 277	.3 MI. E JCT SH 5 & US 277	84.2	1994	800	1999
SH 53	8.6 MI. E JCT SH 5	36.6	1933	1200	2010
I-44	Oklahoma – Texas S/L	64.2	1963	5700	2002
US 277	.5 MI. E JCT SH 5 & US 277	88.1	1994	800	1999
US 277	.2 MI. E JCT SH 5 & US 277	88.1	1994	800	1999
US 277	.5 MI. E JCT SH 5 & US 277	98.5	1994	800	1999
SH 5	7.4 MI. E Tillman C/L	81	1934	260	2006
US 277	.3 MI. S JCT SH 5	96.2	1932	400	1999
US 277	.2 MI. E JCT SH 5 & US 277	98.5	1994	800	1999
US 277	.3 MI. E JCT SH 5 & US 277	98.5	1994	800	1999
SH 53	9.3 MI. E JCT SH 5	72.4	1928	1200	2010
SH 53	8.7 MI. E JCT SH 5	31.4	1933	1200	2010
SH 53	9.1 MI. E JCT SH 5	33.9	1933	1200	2010
SH 5	4.2 MI. S JCT SH 53	51.2	1931	1300	2014

Source: ODOT

**Appendix 2.19: Cotton County Off System Bridges**

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
1.2 MI. W US 281-2 S. SH5A	100	1993	100	1999	County
0.7 MI. N SH 53	32.9	1960	100	1999	County
8.4 MI. N US 277	67.2	1960	100	1999	County
0.8 MI. W US 277 & 1.N. SH5A	40	1960	29	1999	County
1.0 MI. N SH 53	30.9	1952	100	1999	County
0.2 MI. N SH 53	40.9	1973	100	1999	County
3.2 MI. N SH 5-3M W-5 & 277	99.9	1993	100	1999	County
4.0 MI. N SH 53	18.4	1915	100	1999	County
6 MI N & 1.3M W JCT SH5 & S 53	24.6	1945	100	1999	County
4 MI. S 4.9 E OF US 70-SH36	39.9	1991	100	2009	County
2.1 MI. N SH 53- SH5	58.7	1974	214	2011	County
6 MI N. & 1.4M W. JCT 5 & 53	96	1998	100	2014	County
1.3 MI. N SH 53-SH5	85.9	1947	214	2011	County
4.0 MI. N SH 53-4.5 E SH65	32.9	1979	100	2011	County
4 MI. W.&.6 MI. S. US277 & 5A	45.5	1945	100	1999	County
4 MI. W 3.6 S OF US 277-US 70	85.7	1950	100	2015	County
2.6 MI. N US 70-SH36	85.7	1950	100	2015	County
2 MI. S 2.4 W OF US 277-SH5A	85.7	1948	36	2015	County
4 MI. S 7.4W of US 281/ SH 5	99.9	2002	100	2015	County
3 MI. E 4.2 N OF SH 5	85.7	1987	100	2015	County
6 MI. N & .6 M E JCT 5 & 277	100	1990	100	2015	County
1.7 MI. W US 281-2. S. SH5A	97.1	1992	36	2015	County
1.3 MI. N OF S.H. 53 / S.H. 5	99.9	2013	214	2015	County
4.0 MI. N SH 53	100	1995	91	2015	County
1.2 MI. W US 281-2.S.SH5A	99.3	1993	100	2015	County
3.2 MI. N SH 5-3M W-5 & 277	99.7	1993	100	2015	County
6 MI. N & 1.3M W JCT SH 5 & SH 53	100	1998	41	2015	County
0.8 MI. W US 277 & 1 N. SH 5A	97	1995	29	2015	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
3.7 MI. S OF SH 70	97	2011	100	2015	County
4 MI. S 4.9 E OF US 70/SH 36	93.9	2011	100	2015	County
6N 1.4W OF JCT SH 53/SH 5	98.8	2015	100	2015	County
4 MI. S 7.4 W OF US 281-SH 5	39.8	1972	100	1999	County
4 MI. W .6S JCT US 277/SH 5A	95	2003	100	2015	County
.6 MI. S 1.5W JCT I-44 / US 281	100	2006	25	2015	County
4 MI. N of SH 53 / 2.7E SH 5	43.3	1920	100	2015	County
4 MI. W & .3 S US 277&-SH 5A	88.7	1985	100	2015	County
10 MI. N & 2.5M E JCT SH 55 & SH 65	100	1986	100	2015	County
3 MI. E 2.4 N OF SH 5	85.7	1939	100	2015	County
3 MI. E 1.8 N OF SH 5	53	1939	100	2014	County
2 MI. S 2.2 W OF US 277-SH 5A	85.8	1947	36	2015	County
0.8 MI. E SH 65	80.2	1947	243	2015	County
4.6 MI. N SH 53	85.7	1961	100	2015	County
4.0 MI. N SH 53-2.8 E SH 65	36.9	1982	100	2015	County
4.3 MI. N OF US 70	85.7	1963	100	2015	County
3.6 MI. N OF US 70	85.7	1963	100	2015	County
4 MI. N 2.8 E of JCT SH 53/SH 65	-1	1901	100	2011	County
2 MI. S 1.2 E OF SH 5	39.9	1957	100	2008	County
1 MI. E 3.5 S OF US 277-SH 5A	32.8	1945	100	1999	County
E1940N2490002	39.9	1950	100	1999	County
E1980N2530009	37.9	1950	100	1999	County
1 MI. S 2.6 E OF SH 5A	20.9	1950	100	1999	County
2 MI. N 7.6 W OF US 277	10.8	1965	1400	1999	County
1 MI. N & 7.7 M W JCT SH 5 & SH 277	33.9	1935	100	2008	County
E1980N2560007	24.8	1955	100	1999	County
1 MI. N. 8 E OF SH 53	21.7	1950	100	1999	County
2.5 MI. E 3.3 S OF SH 5	23.3	1960	100	1999	County
3 MI. E 2.7 S OF SH 5A	38.9	1950	100	2009	County
8 MI. S 2.3 E OF SH 53	24.3	1950	100	1999	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
N2610E1830004	33.9	1950	100	1999	County
2 MI. N 2.1 E OF US 70	27.8	1950	100	1999	County
E1810N2700008	24.3	1960	100	1999	County
6.1 MI. W .3 N OF US 277-SH 5	21.4	1935	100	1999	County
1.1 MI. S SH 53	32.9	1960	100	1999	County
1.9 MI. S 1.2 W OF US 277	45.2	1975	100	1999	County
1 MI. N 2.9 E OF US 70	37.9	1976	100	1999	County
3.7 MI. S 3.1 E OF SH 5	28.9	1960	100	1999	County
E1810N2710001	19.1	1960	100	1999	County
E1850N2630009	15.8	1910	100	1999	County
2 MI. E 1.8 N OF SH 53	42.6	1930	100	1999	County
E1810N2630008	36.5	1929	100	1999	County
1MI. N 2.7 W OF US 70	9.3	1929	100	1999	County
2 MI. E .4 S OF SH 53	26	1929	25	1999	County
2 MI. W 2.1 N OF SH 53	20.1	1929	100	1999	County
1 MI. S 2.8 E OF SH 65	36.5	1929	100	1999	County
N2680E1830005	29.9	1925	100	1999	County
1 MI. E .9 N OF SH 53	38.6	1935	100	1999	County
2 MI. W 3.5 N OF SH 53-SH 5	24.6	1920	100	1999	County
E1961N2640002	15.8	1916	100	1999	County
2 MI. W 4.4 S OF US 277-SH 5A	24.8	1940	100	1999	County
E1740N2690004	19.6	1940	100	1999	County
1 MI. N 3.1 W OF US 70-SH 36	48.6	1940	100	2005	County
3 MI. S 4.6 W OF US 281-SH 5	38.8	1930	100	2002	County
2 MI. E 6.1N of JCT SH 53/SH 65	-1	1901	100	2014	County
2 MI. E 2.1 N OF SH 53	42.5	1920	100	2002	County
0.4 MI. N SH 5	32.9	1976	100	1999	County
3 MI. E 1.8 N OF SH 5	100	2015	100	2015	County
.2 MI. E 1.2 N OF SH 53-SH 5	49.9	1975	214	2011	Municipal
1 MI. S 2.4 E OF US 70	51.2	1978	100	2012	County
1 MI. S 1.7 W OF US 281	80.9	1940	100	2012	County
4 MI. S 1.7 W OF US 281-SH 5A	62	1950	50	2012	County
5 MI. E 4.2 S OF US 70-SH3 6	34.9	1939	100	2007	County



**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
1 MI. W .2 N OF US 277-SH 5W	33.9	1925	100	2011	County
2 MI. E 2.8 N OF SH 53	36.4	1940	100	2012	County
5.7 MI. S 2.6 E OF SH 5	80	1967	100	2012	County
4 MI. E 6.9 S OF SH 53	65.5	1969	100	2014	County
5 MI. E 8.3 S OF SH 53	43.1	1969	100	2014	County
3 MI. E 3.2 N OF SH 53	39.9	1929	100	2011	County
1 MI. W .8 N OF SH 53	19.1	1965	100	2011	County
1 MI. W 2.2 N OF US 277	26.7	1950	100	2011	County
7 MI. E 1.7 S OF US 70	32.5	1950	100	2010	County
5 MI. E 1.5 N OF SH 53-SH65	36.9	1957	100	2011	County
2 M N & 10.9M W JT 5&277S	37.9	1929	100	2007	County
6 MI. E 4.2 S OF US 70-SH36	26.3	1929	100	2006	County
E1810N2690004	23.2	1930	100	2004	County
2 MI. N 3.2 W OF US 70-SH36	38.8	1945	100	1999	County
8 MI. N & 2.8M E JCT S53&65	24.2	1925	100	2002	County
2 MI. S 11.2 W OF US 281-SH5	39.9	1930	100	2004	County
6 MI. W 5.7 S OF US 277-SH 5	97	1982	100	1999	County
3 MI. E 4.7S JCT SH53/SH64	-1	1901	100	2012	County
3.5 MI. 5.1N of TEMPLE	-1	1901	100	2012	County
6 MI. N & 1.5 W JCT SH5/SH65	38.9	1950	100	2009	County
E1800N2640005	49.3	1935	100	1999	County
1 MI. W 1.1 N OF SH 53	20.1	1939	100	1999	County
N2680E1790004	21.2	1935	100	1999	County
.5 MI. N .6 E OF SH 53	34.9	1939	100	1999	County
2. MI. W 2. N OF SH 53	25.3	1940	100	1999	County
3 MI. W .8 N OF US 70	24.3	1939	100	1999	County
1.4 MI. E 1.8 S OF US 70-SH36	88.7	1950	100	2015	County
6 MI. N 2.2 E OF SH 53-SH 65	78.2	1948	100	2015	County
1.4 MI. S .8 E OF US 70-SH 36	88.7	1950	100	2015	County
.9 MI. S 2.8 E OF US 70-SH 36	88.7	1950	100	2015	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
4 MI. N 2.2 W OF SH 5A	38	1950	50	2015	County
2.5 MI. E 3.3 S OF SH 5	100	1997	100	2015	County
E1810N2630008	100	1998	25	2015	County
6 MI. W 5.7 S OF US 277-SH5	100	1999	85	2015	County
2 MI. W 3.5 N OF SH 53-SH5	100	2001	100	2015	County
2 MI. E .4 S OF SH 53	100	2000	25	2015	County
4.0 MI. N & 2.4 E SH 53/SH 65	97.9	1998	100	2015	County
6 MI. N & 1.5 W JCT SH5/SH65	99	1998	100	2015	County
6 MI. N & 3M E JCT SH53&SH65	100	1988	100	2015	County
4 MI. E .7 S OF US 70	88.7	1988	100	2015	County
5 MI. E .4 S OF US 70	100	1989	100	2015	County
3 MI. N 2.5W JCT US70 & SH5B	99.8	1990	100	2015	County
1.9 MI. E 2. S OF SH 33	96.1	1993	100	2015	County
8 MI. S 2.3 E OF SH 53	96.1	1993	100	2015	County
5 MI. N .8 E OF US 277	73.1	1995	100	2015	County
.2 MI. E 1.2N OF SH 53/SH 5	21.4	2013	214	2015	County
1 MI. 2.4E OF US 70	97	2013	100	2015	County
3 MI. .2W OF SH 5A/5B JCT	97	2013	100	2015	County
1 MI. E 3.5 S OF US 277-SH 5A	92.9	1996	150	2015	County
4 MI. E 6.9S of SH 53	97	2015	100	2015	County
5 MI. E 8.3S of SH 53	97	2015	100	2015	County
3 MI. E 2.7S of SH-5A / SH-5	100	2011	100	2015	County
2 MI. N of SH 5 in WALTERS	99.9	2013	440	2015	County
5 MI. E 4.2S of JCT US 70 & SH36	97	2009	100	2015	County
1 MI. W .2 MI. N OF US277/SH-5W	100	2013	100	2015	County
7 MI. E 1.7 MI. S OF US 70	100	2012	100	2015	County
5 MI. N .8 MI. E OF US 277	25.8	1960	100	1999	County
5 MI. E .9 MI. N OF US 70	36.9	1978	100	1999	County
2 MI. N 1.7 MI. E OF US 70	41.8	1929	100	2004	County
2 MI. W .5 MI. N OF US 277-SH 5W	73.5	1931	100	2005	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
4.7 MI. S 3.2 MI. E OF SH 5	42.1	1960	100	2005	County
2.3 MI. N OF SH 5A	23.3	1955	100	2002	County
0.1 MI. N OF SH 5A	24.3	1960	100	2002	County
2 MI. S 1.8 MI. W OF US 70	76.2	1981	100	1999	County
2 MI.. S 3.7 MI. W OF SH 5A	95	1970	24	2007	County
3 MI.. S 1.6 MI. E OF US 70	32.9	1947	100	1999	County
3 MI.. S 1.7 MI. W OF SH 5A	33.9	1950	100	1999	County
6E MI. .4S MI. OF US 70	44.1	2007	100	2015	County
2 MI. N, 10.9 MI. W SH 5/US277	100	2009	100	2015	County
6 MI. E, 4.2 MI. S US 70-SH 36	80.8	2008	10	2015	County
7 MI. N .2 MI. E OF JCT SH 65/SH 53	100	2007	100	2015	County
7 MI. N .2 MI. E OF JCT SH 65/SH5 3	100	2007	100	2015	County
E1810N2690004	100	2005	100	2015	County
.7 MI. S 1.5 MI. W JCT I-44 / US281	100	2006	25	2015	County
0.5 MI. N. 2.0 MI. W OF US281/S.H5	100	2007	100	2015	County
2.0 MI. S,1.0 MI. E OF SH 53/SH 5	100	2010	100	2015	County
4.7 MI. S 3.2 MI. E OF SH 5	97	2006	100	2015	County
3.5 MI. E 4.8 MI. S OF SH 5	84.7	1935	100	2015	County
.2 MI. E 5.7 MI. S OF SH 5	69.3	1935	100	2015	County
1 MI. N, 1.3 MI. E US 70	96.8	2008	100	2015	County
1 MI. N 7.7 MI. W JCT SH 5/ SH277	100	2010	100	2015	County
1 MI. N 7.7 MI. W JCT SH 5/US 277	100	2010	100	2015	County
1 MI. E 4.8 MI. N of US 277N & SH 5	84.7	1918	100	2015	County
3.3 MI. W OF US 70-SH 36	85.7	1979	100	2015	County
2 MI. S 1.3 MI. W OF US 281-SH 5	95.9	1982	100	2015	County
2 MI. S 2.2 MI. E OF SH 5A	75.9	1983	100	2015	County
1 MI. N 3.1 MI. W OF JCT US70/SH36	100	2007	100	2015	County
1 MI. W 2.1 MI N OF SH 53	39.9	1939	100	2015	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
2 MI. E 1.2 MI. N OF US 277-SH 5A	85.7	1939	100	2015	County
2 MI. S 2.7 MI. E OF SH 5A	84.7	1939	100	2015	County
8 MI. N & 2.8 MI. E JCT SH 53 & SH 65	100	2004	100	2015	County
4 MI. W .8 MI. N OF US 70	58.7	1939	100	2015	County
4 MI. E 2.3 MI. S OF US 70-SH36	88.7	1939	100	2015	County
3 MI. E 1.7 MI. S OF US 70-SH 6	85.7	1939	100	2015	County
.2 MI. E .4 MI. N OF SH 53	86.2	1940	214	2015	Municipal
8 MI. W .9 MI. S OF US 281-SH 5A	88.7	1940	100	2015	County
1 MI. E 1.4 MI. N OF US 70	85.7	1940	100	2015	County
1 MI. N 8.8 MI. W OF US 281-SH 5A	88.7	1940	100	2015	County
2 MI. S 1.9 MI. W OF US 281-SH5	38.8	1940	100	2014	County
4 MI. E .9 MI. S OF US 70	38.9	1945	100	2015	County
3 MI. E 4.7S MI. JCT. SH 53/SH 64	55.5	2001	100	2015	County
3 MI. S 4.6 MI. W OF US 281/SH 5	100	2004	100	2015	County
2.3 MI. N OF SH 5A	100	2004	100	2015	County
3 MI. E OF WALTERS, 2N OF SH 53	100	2004	100	2015	County
BETWEEN COOKIETOWN & TEMPLE	100	2004	100	2015	County
3.75 MI. E Tillman CO. 2 MI. S OK5	100	2005	100	2015	County
1.75 MI. E 2 MI. N OF JCT US 60/ SH 5B	99.9	2006	100	2015	County
1 MI. N 3 MI. E JCT SH 65/US 70	97	2002	50	2015	County
4 MI. E 2.8 S JCT SH 53/SH 65	84.7	2002	50	2015	County
1 MI. N.& .9 MI. W. SH 5 & SH 53	58.3	1955	100	2015	County
2 MI. E .3 MI. N OF US 70	85.7	1957	100	2015	County
1 MI. S .7 MI. W OF US 281-SH5	88.7	1960	100	2015	County

**2040 Cotton County LRTP**

<b>LOCATION</b>	<b>SUFFICIENCY</b>	<b>YEAR BUILT</b>	<b>ADT TOTAL</b>	<b>ADT YEAR</b>	<b>OWNER</b>
1.2 MI. E .4 MI. S OF US 70-SH 36	88.7	1965	100	2015	County
5.7 MI. S .8 MI. E OF SH 5	69.7	1935	100	2015	County
1 MI. N 1.3 MI. E OF US 70	39.9	1935	100	2006	County
7 MI. N .1 E OF SH 53-SH65	24.3	1939	100	2006	County
6 MI. E .4 MI. S OF US 70	34	1940	100	2005	County
2 MI. S 1.9 MI. W OF JCT SH 5-US 281	99.9	2016	100	2015	County
2 MI. E 6.1 MI. N OF SH 53-SH 65	52.2	1938	100	2015	County
9 MI. N 1.4 MI. E OF SH 53-SH 5	38.9	1952	100	2015	County

Source: ODOT

**Appendix 2.19: National Highway Freight Network – Oklahoma**

The NHFN includes the following subsystems of roadways:

- **Primary Highway Freight System (PHFS):** This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data. The network consists of 41,518 centerlines miles, including 37,436 centerline miles of Interstate and 4,082 centerline miles of non-Interstate roads.
- **Other Interstate portions not on the PHFS:** These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. These portions amount to an estimated 9,511 centerline miles of Interstate, nationwide, and will fluctuate with additions and deletions to the Interstate Highway System.
- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.
- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

<b>Primary Highway Freight System (PHFS) Routes</b>			
	<b>START ROUTE No POINT</b>	<b>END POINT</b>	<b>LENGTH (MILES)</b>
Creek Type	I44	U75	4.9
I240	I44	I35	4.61
I244	OK3R	I44	3.52
I35	TX/OK Line	OK/Ks Line	236.13
I40	TX/OK Line	I35	151.76
I40	I35	OK/AR line	177.96
I44	I240	4.68 Miles North of I40	7.92
I44	I35	OK/MO Line	194
U412	OK6P	I44	6.4
Subtotal			787.19

<b>PHFS Intermodal Connectors</b>			
<b>FACILITY ID</b>	<b>FACILITY NAME</b>	<b>FACILITY DESCRIPTION</b>	<b>LENGTH (MILES)</b>
OK2L	Williams Pipeline Station	21st St. (33rd W. Avenue to Burlington Northern RR at 23rd St.)	1.27
OK3R	Burlington Northern Railroad	23rd St. (BN Terminal to Southwest Avenue) SW Avenue (23rd St. to I-244 ramp.)	0.56
OK5P	Port of Catoosa	SR 266 (Port to US 169)	11.42
OK6P	Johnston's Port 33 (Verdigris River near Muskogee)	From US 412/NS 414, south 0.25 miles, east 1 mile to Terminal	1.14
Subtotal			14.39
PHFS TOTAL			801.58

<b>Interstate Not on the PHFS</b>			
<b>ROUTE No.</b>	<b>START POINT</b>	<b>END</b>	<b>LENGTH (MILES)</b>
I235	I40	I44	5.14
I240	I35	I40	11.68
I244	S. 21st St.	I44	12.24
I44	TX/OK Line	I240	114.91
I44	0.35 miles S. of S66	I35	7.7
I444	I244 S	I244 N	2.5
Subtotal			154.15

## Appendix 3: Future Conditions

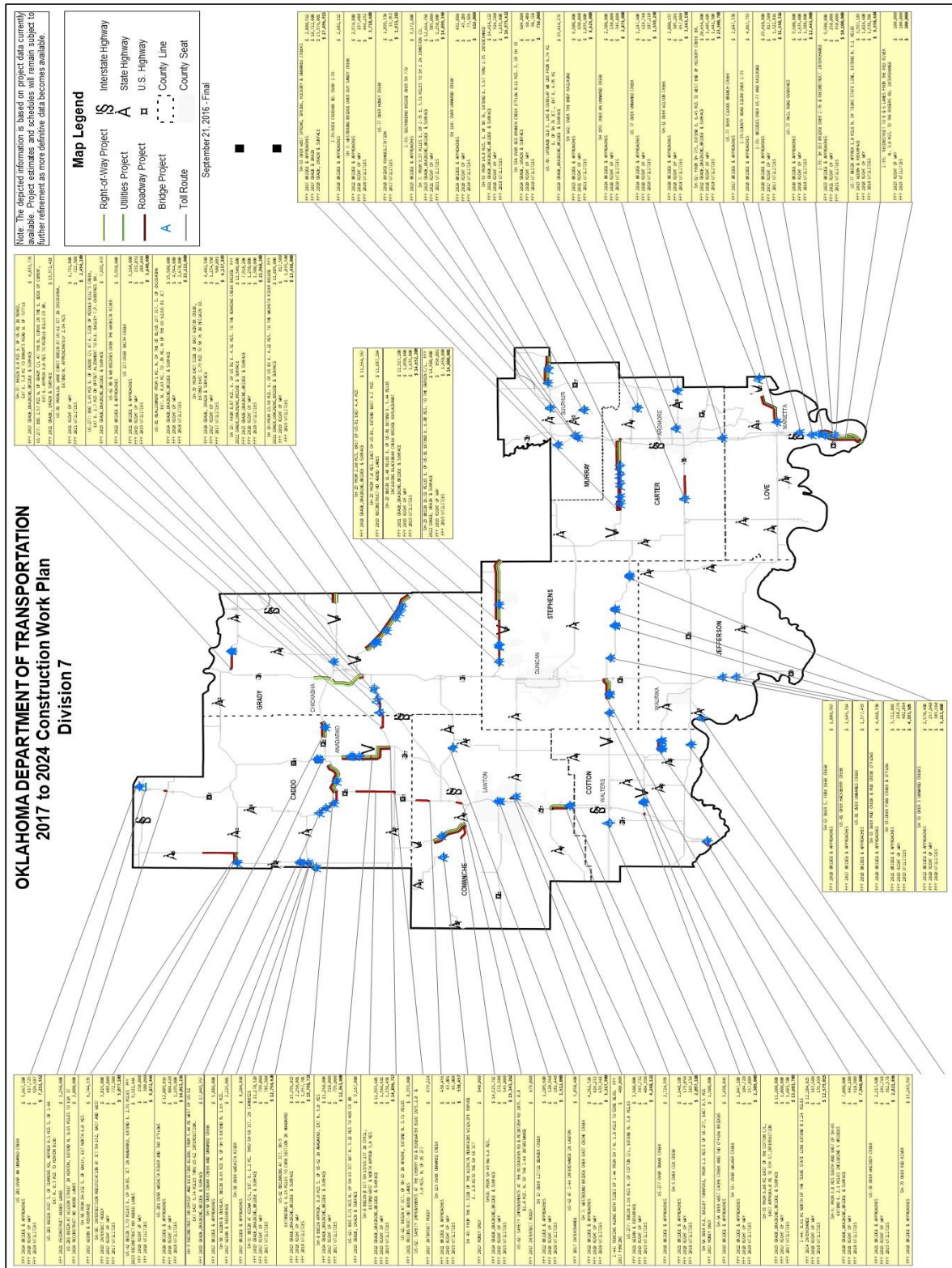
### **Appendix 3.1: Cotton County 2040 Population and Employment Projection by TAZ**

<b>TAZ NO.</b>	<b>2010 POPULATION</b>	<b>2040 POPULATION</b>	<b>2040 EMPLOYMENT</b>
1	530	465	543
2	635	605	185
3	790	635	120
4	95	65	105
100	75	71	0
101	65	60	85
102	25	25	0
103	0	0	0
104	45	45	0
105	210	185	15
106	246	205	130
107	233	202	65
108	267	235	125
109	284	268	145
110	37	35	120
111	7	5	2
112	9	6	15
113	0	0	0
114	6	5	0
115	10	5	0
116	87	82	5
117	245	235	10
118	256	200	20
119	212	195	85
120	223	205	45
121	0	0	35
122	10	0	0
200	303	310	45
201	325	315	145
202	374	375	105
300	438	325	145
400	151	125	55

Source: SORTPO

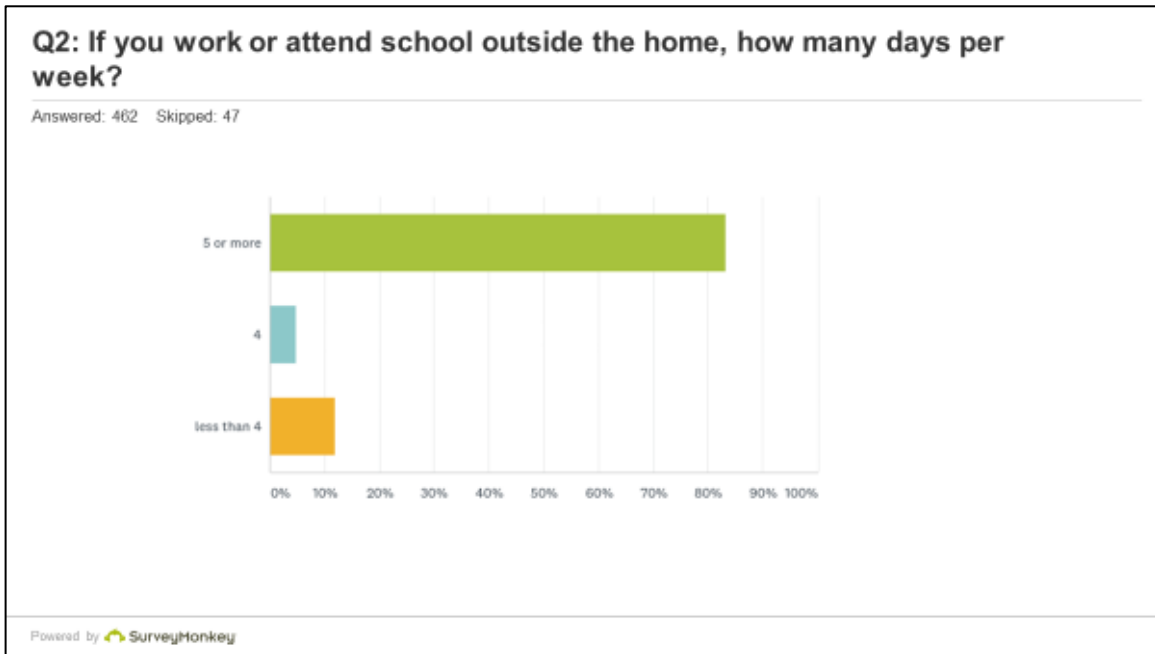
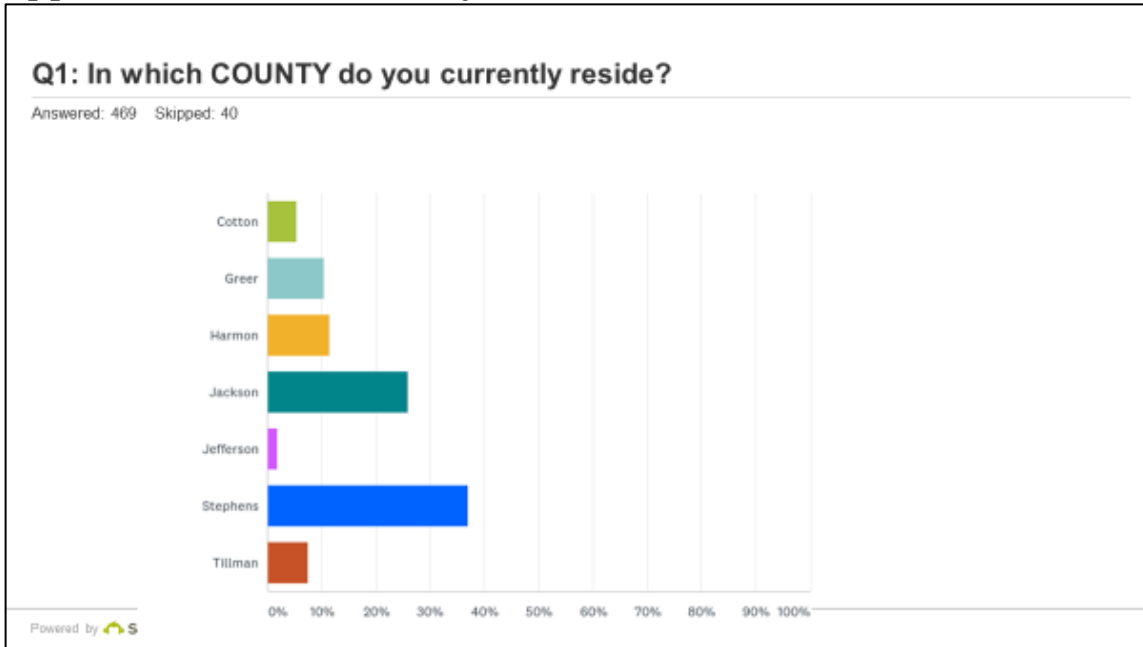


### Appendix 3.2 ODOT 8 Year Construction Work Program FFY 2017-2024 Map



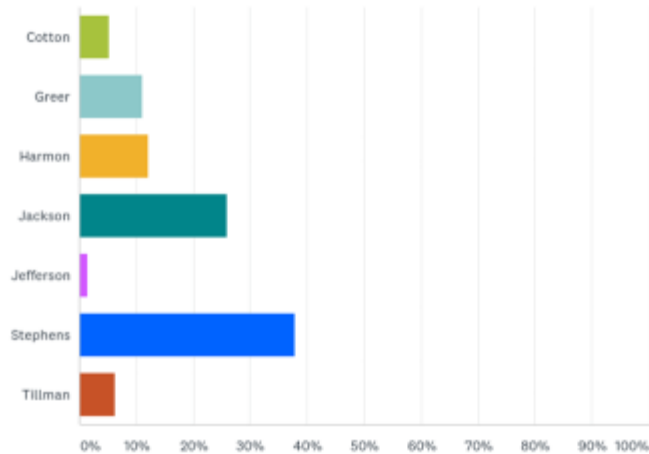
## Appendix 4: Survey

### Appendix 4.1: Public Survey



### Q3: In which county do you work or attend school?

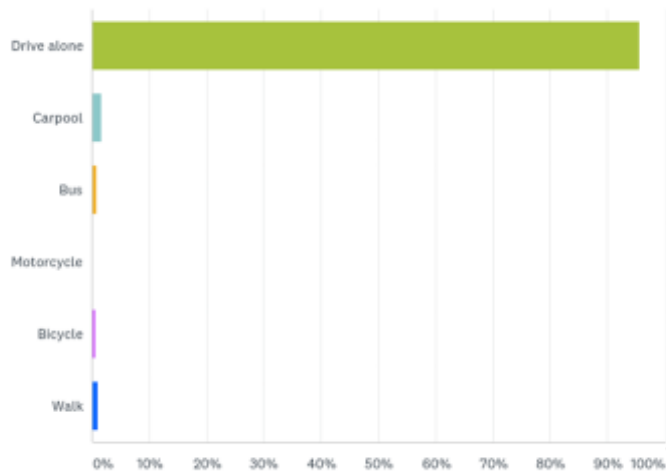
Answered: 432 Skipped: 77



Powered by S

### Q4: What type of transportation do you use most often to go to work/school?

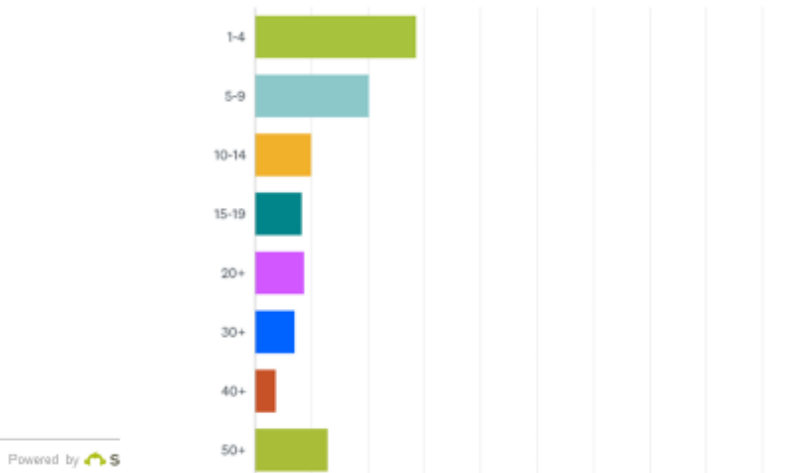
Answered: 468 Skipped: 41



Powered by S

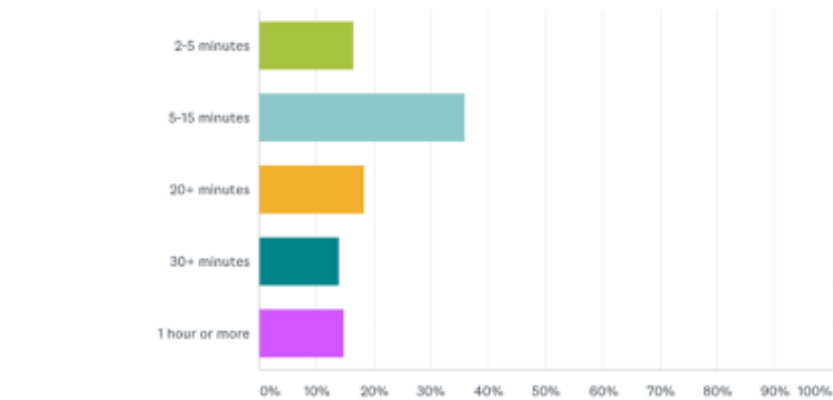
### Q5: Number of miles travelled (round trip) for work/school?

Answered: 468 Skipped: 41



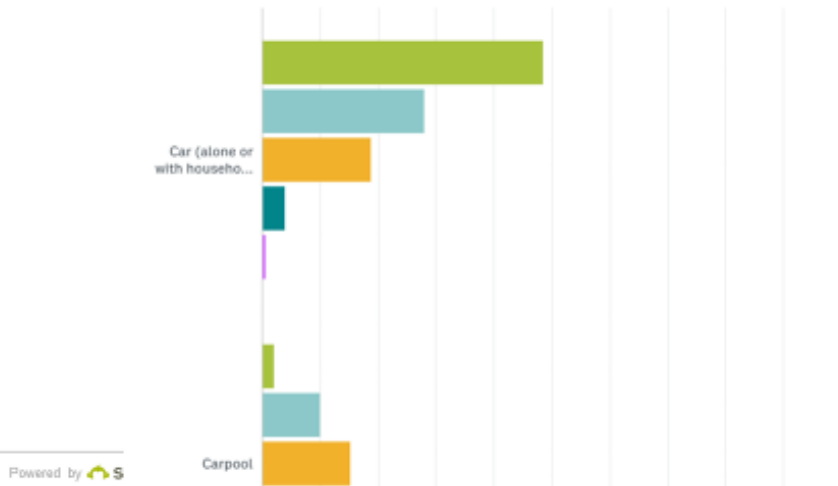
### Q6: How much TIME does it usually take to travel (round trip) to work/school?

Answered: 463 Skipped: 46



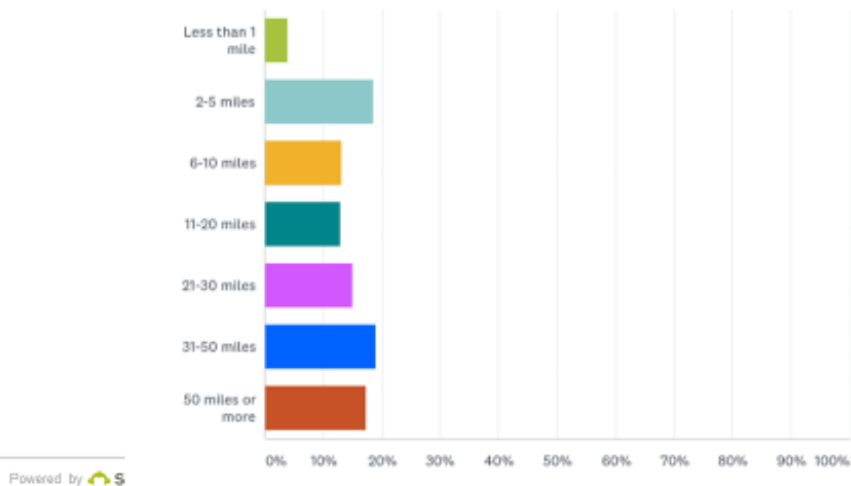
### Q7: What is your usual method of transportation for OTHER trips such as shopping, appointments, or social outings?

Answered: 481 Skipped: 28



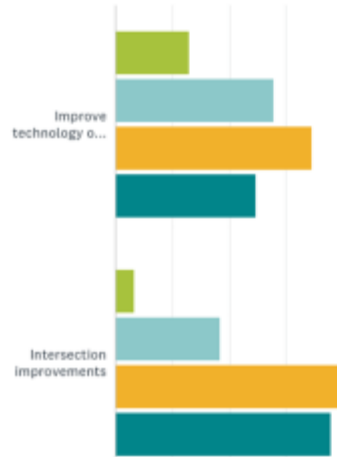
### Q8: How many miles do you usually travel for these other trips (per outing)?

Answered: 473 Skipped: 36



**Q9: Please indicate how important each of these transportation system components is to you:**

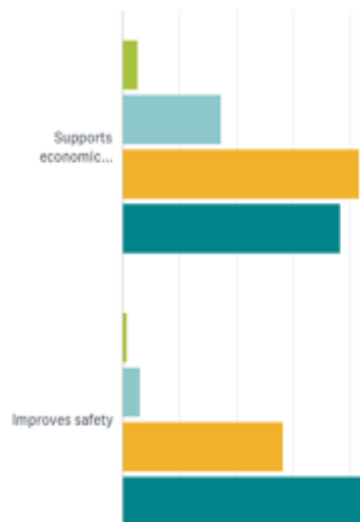
Answered: 470 Skipped: 39



Powered by S

**Q10: Which do you think should be a priority when selecting transportation projects?**

Answered: 460 Skipped: 49



Powered by S

Survey for 2040 Regional Transportation Plan

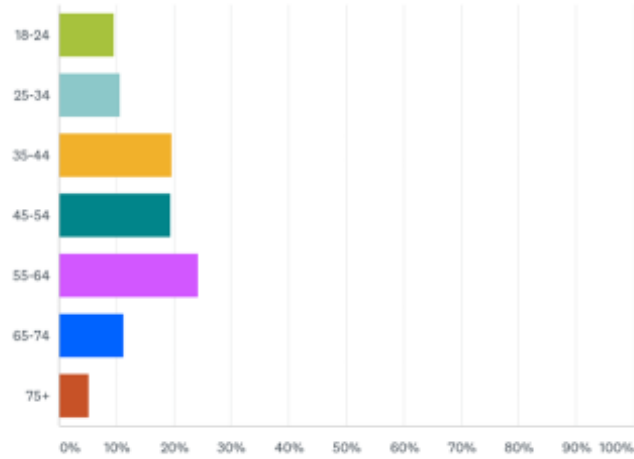
Q11 What are some specific locations with traffic problems that you encounter?

Answered: 19 Skipped: 7

#	RESPONSES	DATE
1	Walters - Sinters 2 blocks on Ross Street between Calif. & Kansas	3/16/2017 4:31 PM
2	Walters - Sinters 2 Blocks on Ross between Kansas & California	3/16/2017 4:27 PM
3	Walters - Sinters chuckholes	3/16/2017 4:24 PM
4	Walters - Sinters Huge pot holes on 500 California Street	3/16/2017 4:20 PM
5	Walters - Sinters California St. (low income housing) Street Town drainage - new hosing & old	3/16/2017 4:17 PM
6	Walters - Sinters Street to the nutrition center in Walters	3/16/2017 4:14 PM
7	Walters - Sinters Street in front of the Nutrition Center East California	3/16/2017 3:55 PM
8	Walters - Sinters Walters Public Housing Authority 500 E California	3/16/2017 3:51 PM
9	Walters - Sinters Ross - the holes in the road. Walters Housing Authority S of E California ST.	3/16/2017 3:49 PM
10	Walters - Sinters Traffic for resort site	3/16/2017 3:38 PM
11	Walters - Sinters City streets in bad condition in smaller cities and counties.	3/15/2017 4:23 PM
12	Highways Highway 5B and highway 70 intersection	3/3/2017 1:51 AM
13	Safety Over grown trees and parking that blocks view of oncoming traffic	2/27/2017 11:57 AM
14	Walter THERE HASN'T BEEN ANY ROAD WORK DONE IN THE LAST 30 YEARS IN WALTERS AND MOST OF ALL THE COUNTY ROADS ARE JUST DIRT ROADS. THERE ARE NO FEELINGS OF ANY KIND OF TRANSPORTATION TO ANY WHERE IN TOWN OR OUT OF TOWN	2/24/2017 3:22 PM
15	None.	2/24/2017 1:18 PM
16	Certain new intersections in Lawton need censored signals. Identical intersections within a mile of the same intersections are censored, which makes no sense.	2/24/2017 10:55 AM
17	No shoulder on the highways to and from Lawton and Wichita Falls, unless you take the interstate. No shoulders on the highways to Duncan. Intersections in rural areas with severely damaged or no yield and stop signs.	2/24/2017 9:42 AM
18	Roads into Lawton OK. South Sheridan County (Dirt) Roads in Cotton County. Even though they are dirt roads they still need to be maintained	2/24/2017 9:30 AM
19	Roads County 12620 is a heavily traveled road. Turns into SE 75th Comanche Co. Main road to Waller from SE Lawton.	2/16/2017 2:10 PM

### Q12: Your age group:

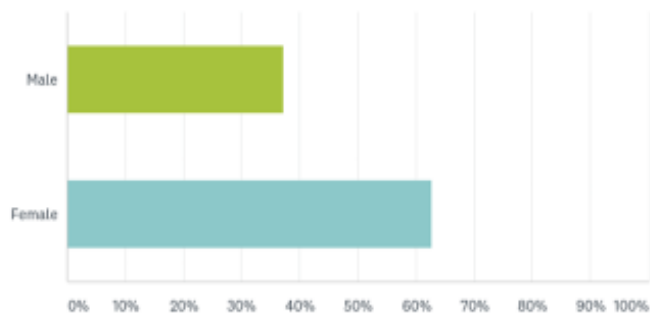
Answered: 459 Skipped: 50



Powered by  S

### Q13: Gender:

Answered: 450 Skipped: 59

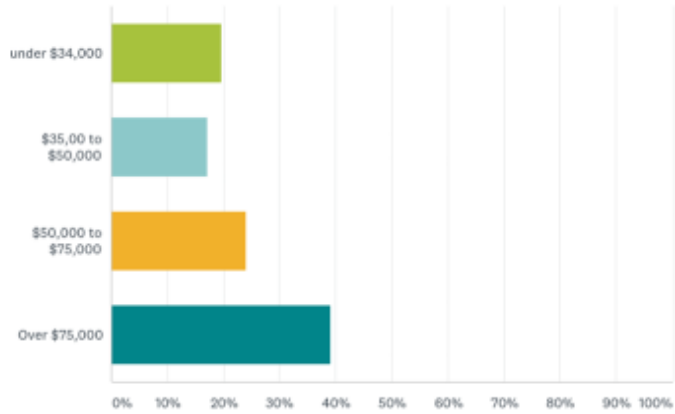


Powered by  SurveyMonkey



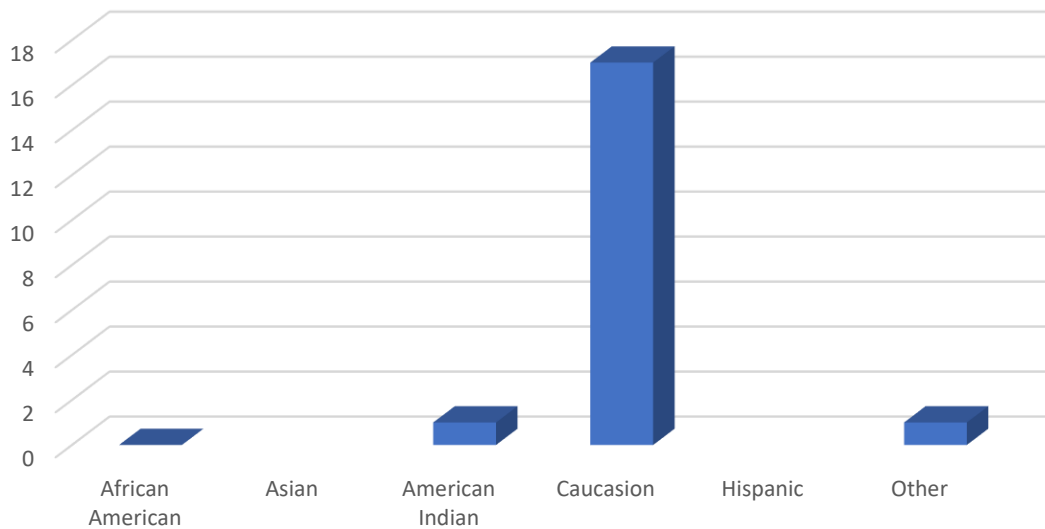
### Q14: Household income:

Answered: 443 Skipped: 66



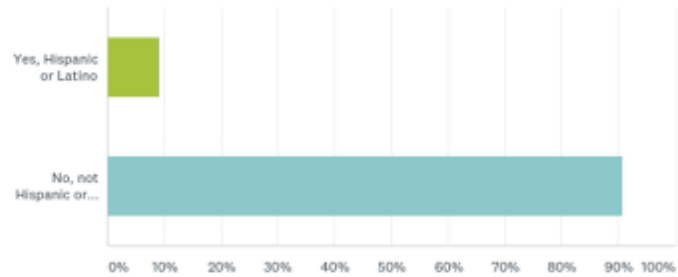
Powered by  SurveyMonkey

### Question 15: Survey Response on Race



### Q16: Are you of Hispanic or Latino origin or descent?

Answered: 402 Skipped: 107



Powered by  SurveyMonkey

#### **Appendix 4.2: Public Outreach**

On February 15, 2017 a stakeholder's meeting was held at Walters Public Library, 202 N. Broadway, Walters, Oklahoma.

SORTPO staff distributed a copy of the 2040 Cotton County LRTP to the following agencies: Cotton County Commissioners, City/Towns (Walters and Temple), Oklahoma Aeronautics Commission, Oklahoma Agriculture Food & Forestry, Oklahoma Department of Environmental Quality, Oklahoma Geological Survey, Oklahoma Department of Transportation, Oklahoma Department of Wildlife, Oklahoma Historical Society, and Oklahoma Water Resources Board.

A legal notice advertising SORTPO's public hearing to adopt the 2040 Cotton County LRTP was placed in The Walter Herald. The SORTPO Policy Board held a public hearing on November 30, 2017 to receive comments on the 2040 Cotton County LRTP prior to its' adoption.

## **Stakeholder Invitation Letter**



February 2, 2017

The Southwest Oklahoma Regional Transportation Planning Organization (“SORTPO”) is the regional transportation planning organization for southwest Oklahoma. Within this region are 16 counties, including the eight counties within the South Western Oklahoma Development Authority (SWODA) Council of Government and the eight counties comprising the Association of South Central Oklahoma Government (ASCOG). SORTPO is in the process of developing a regional long-range transportation plan for the sixteen counties.

A stakeholder meeting is scheduled to introduce the long-range transportation planning process and to engage you in the early stage of this plan development.

Date: Tuesday February 15, 2017

Time: 1:30 pm.

Location: Walters Public Library,

202 N. Broadway,

Walters, Oklahoma.

This meeting will present opportunities for you to share your areas of concern as well as to help identify transportation programs to meet the needs of the future. Please share this invitation with your associates, as all are welcome, and the meeting is open to the public. We look forward to seeing you there!

**Press Release**



February 2, 2017

The Southwest Oklahoma Regional Transportation Planning Organization (“SORTPO”) is the regional transportation planning organization for southwest Oklahoma. Within this region are 16 counties, including the eight counties within the South Western Oklahoma Development Authority (SWODA) Council of Government and the eight counties comprising the Association of South Central Oklahoma Government (ASCOG). SORTPO is in the process of developing a regional long-range transportation plan for the sixteen counties.

A stakeholder meeting is scheduled to introduce the long-range transportation planning process and to engage you in the early stage of this plan development.

Date: Tuesday February 15, 2017

Time: 1:30 pm.

Location: Walters Public Library,  
202 N. Broadway,  
Walters, Oklahoma

This meeting will present opportunities for you to share your areas of concern as well as to help identify transportation programs to meet the needs of the future. Please share this invitation with your associates, as all are welcome, and the meeting is open to the public. We look forward to seeing you there!

**Public Review and Comments**

**(Beginning October 30, 2017 – November 28, 2017)**

<b>Agency</b>	<b>Contact Name</b>	<b>Comments</b>
		No Comments