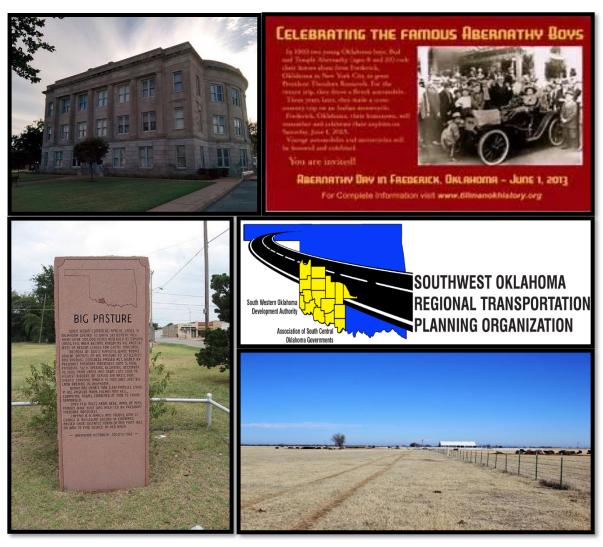
2040 TILLMAN COUNTY OKLAHOMA

LONG RANGE TRANSPORTATION PLAN



Amendment #1 February 28, 2019

Prepared by:

Southwest Oklahoma Regional Transportation Planning Organization

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

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Resolution No. 2019-5

Adopting Amendment #1 to the Tillman 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 Tillman 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 adopted on September 28, 2017; and

Whereas, Amendment #1 relates to revision to the traffic analysis zone population and employment thresholds; and

Whereas, Amendment #1 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 January 28, 2019 and February 26, 2019 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 amendment #1 to the Tillman County 2040 Long Range Transportation Plan.

Approved and Adopted by SORTPO Policy Board and signed this 28th day of February, 2019

Me Miller, Chairman SORTPO Policy Board

ATTEST:

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Chapter 1: Goal, Strategies and Issues

SORTPO History

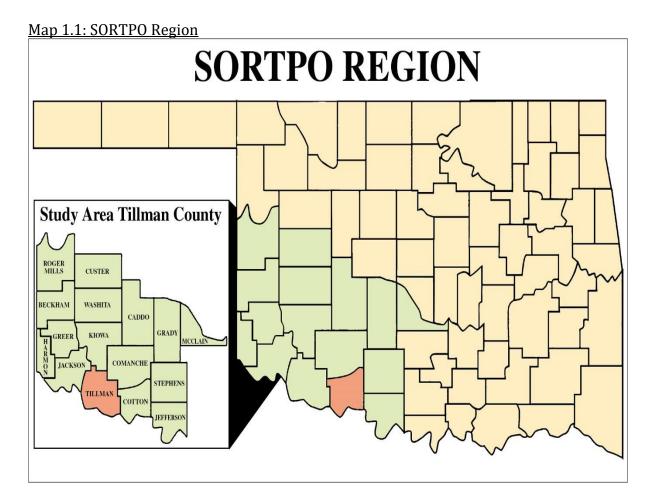
In 1970, Oklahoma's governor established eleven (11) sub-state planning districts. Subsequently, the local governments served by the planning districts created the eleven (11) Councils of Governments (COGs) using the sub-state planning district boundaries. These districts make up the Oklahoma Association 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) a Central Oklahoma Economic Development District (COEDD). SWODA on October 13th, 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 the Oklahoma Department of Transportation (ODOT) a transportation planning pilot project comprising sixeen 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.



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 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 Tillman County as well as the SORTPO region. The LRTP was developed within the regulatory framework of The Moving Ahead for Progress in the 21st 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 Tillman 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 because it 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 Tillman 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 The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST) was signed into law in 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 Tillman 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 Tillman 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: Tillman County Goal Categories

Goal	Description
1. Accessibility and Mobility (pg. 6)	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. 8)	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. 8-9)	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 SORTPO Public Participation Plan.
- 4. Develop and implement a bicycle and pedestrian public awareness and education program.
- 5. Develop a clearinghouse for regional data sets, such as pavement management systems and geographic information systems to help form sound planning decisions.
- 6. Facilitate and support the coordination of regional training opportunities.
- 7. Develop method to track the implementation of projects and regularly update the public on the status of projects, programs and finances.

Goal 3: 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. Continue to coordinate transportation planning with adjoining counties, regions and councils of government for transportation needs and improvements beyond those in our region.

- 6. Working with area employers and stakeholders develop a database and map identifying transportation needs.
- 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:

Consult with local, state and national agencies in the areas of environmental protection and historic preservation, in terms of transportation programs and projects.

- 1. Promote proper environmental stewardship and mitigation practices to restore and maintain environmental resources that may be impacted by transportation projects.
- 2. Promote the use of alternative fuels and technologies in motor vehicles, fleet and transit vehicles.
- 3. Develop database and mapping to identify the County's underrepresented communities.
- 4. 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 local governments and other agencies to identify safety concerns and 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 by mode and severity 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. Adopt best practices to provide and improve facilities for safe walking and bicycling.
- 6. Incorporate emergency service agencies in the transportation planning and implementation process.
- 7. Support the Oklahoma Department of Transportation in its plans to add and improve roadway shoulders to designated two lane highways.
- 8. Reduce the number of at grade rail highway crossings.
- 9. 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

Support enhancement of transportation facilities to access Hackberry Flat Wildlife Management Area.

Strategies:

- 1. Develop a regional map that identifies access to Hackberry Flat Hackberry Flat Management Area.
- 2. Coordinate with Hackberry Flat Director on future transportation projects to support Hackberry Flat as a tourist destination.

Key Issues, Trends and Challenges

Rural communities have problematic transportation areas even if they do not experience congestion. Understanding the true nature of the problem at these locations and

developing a plan to address them is an important part of rural planning. Unanticipated changes may happen that can have impacts on a city, town, county or region. There are many issues facing the area that have a direct or indirect impact on the transportation system.

There are many issues facing the area that have a direct or indirect impact on the transportation system. This section is intended to identify these issues, trends and challenges. 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.
- Expand Transit Services.
- Lack of funding to adequately maintain roadway systems and bridges.
- 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.
- Improvements of rail crossings.
- Problematic traffic issue locations (areas with high accidents, intersections, truck generators). Safety and access near and around the schools in Frederick.

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 is 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 a negative impact on rural communities.

Chapter 2: Current Conditions

This chapter provides a "snapshot" of current conditions that relate to transportation in Tillman County. Demographics, economic conditions, environmental factors, community development and transportation and traffic data each provide information for transportation planning. Tillman County is located south western Oklahoma (Map 1.1). The county is bordered by Kiowa County to the north, Comanche County to the northeast, Cotton County to the east, Wichita County, Texas to the south, Wilbarger County, Texas to the southwest and Jackson County to the north. Tillman County's southern boundary is the Red River and the North Fork of Red River forms most of the western boundary.

History

Tillman County is in the southern area of the SORTPO region and covers 879 square miles (871 land square miles and 8.1 square miles of water). Tillman County population was 7,715 (2011-2015 American Community Survey (ACS) with a population density of 9 people per square mile. The county includes eight areas designated as a city or town, the largest being the town of Frederick.

- ➤ **Chattanooga** is located in the far southwestern corner of Comanche County, just east of the county line between Comanche and Tillman counties. The Town of Chattanooga became an agricultural center and has maintained that position in southwest center Oklahoma.
- ➤ **Davidso**n was originally called Texowa. The Town of Davidson is located at the junction of US. highways 70 and 183 in southwestern Tillman County. Agriculture continues to provide the area's economic base, and the local cooperative operates the on remaining elevator and all large fuel supply business.
- Frederick is the county seat of Tillman County and is located at the junction of U.S. 183 and State Highway 5. In April 1905 President Theodore Roosevelt selected this area for a vacation that included a wolf hunt conducted by "Catch-'em-Alive" Jack Abernathy. Roosevelt promised then to make Oklahoma and Indian territories into a state. The Frederick Army Air Field opened in 1941 for final training of cadets on UC-78s andB-25s. The field developed into Frederick Industrial Park, and the runways continued in use at the turn of the twenty-first century. Local farmers continue to raise wheat, cotton, and cattle, and operate three dairies.
- ➤ **Grandfield** is situated twenty-two miles due southeast of Frederick at the intersection of U.S>70 and State Highway 36. Originally within the Big Pasture, Grandfield is thirty-five miles from Fort Sill, in Lawton, Oklahoma. Known as Grandfield, Oklahoma, "Where the Harvest Begins," the town has been a service center for a surrounding agricultural area that produces wheat, cotton, and other farm output.
- ➤ **Hollister** is located on Oklahoma Highway 54; the town lies ten miles southeast of Frederick. St the turn of the twenty-first century Hollister had a post office, and a Baptist church, and two grain elevators which services the local farmers and ranchers

- ➤ **Loveland** is located in Tillman County, it was formerly Harriston, located thirteen miles due east of the county seat of Frederick and six miles south of State Highway 5 on County Roads E1870/N2360. Loveland has received its most widespread acclaim because of its name. Romantically inclined individuals send their Valentine greetings to be mailed and postmarked from Loveland. The postmaster later added to the service by affixing a red, heart-shaped rubber stamp bearing the words, "Valentine Greetings from the heart of the Big Pasture, Loveland, OK"
- ➤ Manitou is situated eight miles north of the county seat of Frederick on U.S> Highway 183. Local's called a meeting to choose a name for the town. A legend emerged that a man from the north had come into the territory, and when he returned from the trip, he was asked what he saw. He replied, "A man or two." Names were submitted and placed in a hat, and the name Manitou was drawn. However, Manitou is an American Indian name given to a great spirit or to an object of worship. Manitou is the only town in Tillman County that was not named for a railroad company official or y the postal service. Manitou is considered a bedroom community.
- ➤ **Tipton** is situated fourteen miles northwest of the county seat of Frederick at the junction of State highways 5 and 5C. Because of the region's rich farmland, Tipton grew into an agricultural service center. In 1924 Tipton Church of Christ members moved the operation of a children's home to Tipton from Canadian, Texas. The Tipton Home, originally called Tipton Orphans' Home, continued in operation at the turn of the twenty-first century.

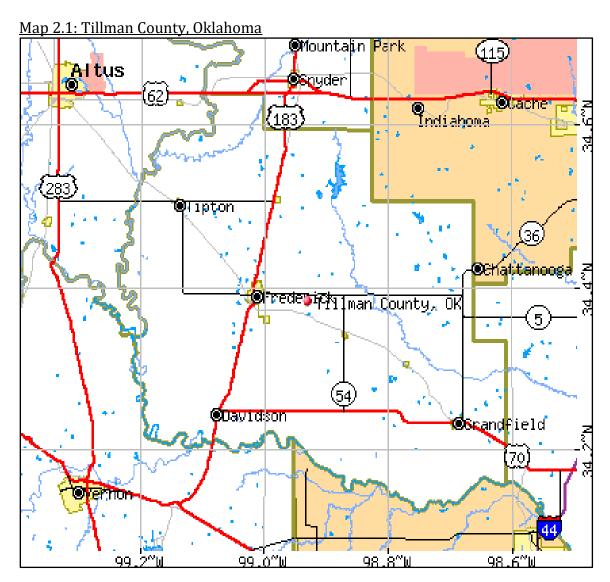


Table 2.1 provides population data for the cities, towns and County between 1990-2015. Additional demographic data can be found in Appendices 2.1-2.7. As the population fluctuates, either through economic changes, in or out migration or shifting within the region the needs of the communities including 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: Tillman County Population 1980-2015 ACS Estimate

	1980	1990	2000	2010	2011-2015 ACS ESTIMATED POPULATION
Chattanooga*	17	n/a	n/a	n/a	n/a
Davidson	501	473	375	315	343
Frederick	6,153	5,221	4,637	3,940	3,804
Grandfield	1,445	1,225	1,110	1,038	915
Hollister	82	59	60	50	16
Loveland	21	13	14	13	6
Manitou	322	244	278	181	228
Tipton	1,475	1,043	916	847	867
Balance of Tillman County	2,382	2,107	1,897	1,608	1,479
Tillman County, TOTAL	12,398	10,385	9,287	7,992	7,715

Source: American Fact Finder, US Census

Data obtained from the 2011-2015 ACS further reveals:

- ✓ Population was distributed between male (51.2%) and female (48.8%),
- ✓ Median age 40.5 years of age,
- ✓ Race:
 - o White 74.3%,
 - o African American 8.0%,
 - o American Indian 1.9% and
 - o Hispanic/Latino 24.4 %
- ✓ Mean travel time to work 19.2 minutes
- ✓ Vehicles Available Workers 16 years and over 3,019
 - No vehicles available 3.4%
 - o One vehicle available 23.6%
 - o Two vehicles available 47.2%
 - o Three or more vehicles available 25.8%
- ✓ Total Occupied Housing Units 3,057
 - Owner Occupied Units 2,234
 - o Renter Occupied Units 823
 - Single Family Detached Housing Units 89.8%
 - o Mobile Home or Other type of Home 5.2%
- ✓ Educational Attainment population 25 years and Older
 - o Less than 9th Grade 532
 - o High School Graduate and equivalent- 1,872
 - o Some College 1,002
 - o Bachelor's Degree 621
- ✓ Commute Patterns to Work Age 16 years and Older
- ✓ Car, truck or van 81.0%
- ✓ Public Transportation 0.3%

- ✓ Walked 2.7%
- ✓ Other Means 1.3%
- ✓ Worked at Home 4.3%
- ✓ Civilian Employed population 16 years and over 3,098
 - Agriculture and forestry 410
 - o Construction 210
 - Manufacturing 376
 - o Retail Trade 294
 - Transportation and warehousing and utilities 160
 - o Professional, scientific and management 119
 - Educational service and health care and social assistance 731
 - Arts, entertainment and recreation and accommodations 234
 - o Other services, except public administration 153
 - Public Administration 213

Annual civilian labor force data for years 2006-2015 is 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 Tillman County Civilian Labor Force. Figure 2.3 contains county business pattern data.

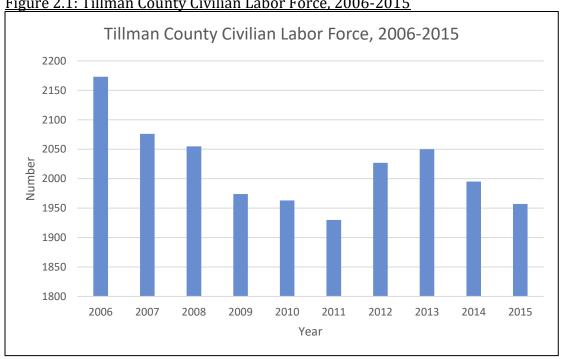


Figure 2.1: Tillman County Civilian Labor Force, 2006-2015

Source: BLS



Figure 2.2: Tillman 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.

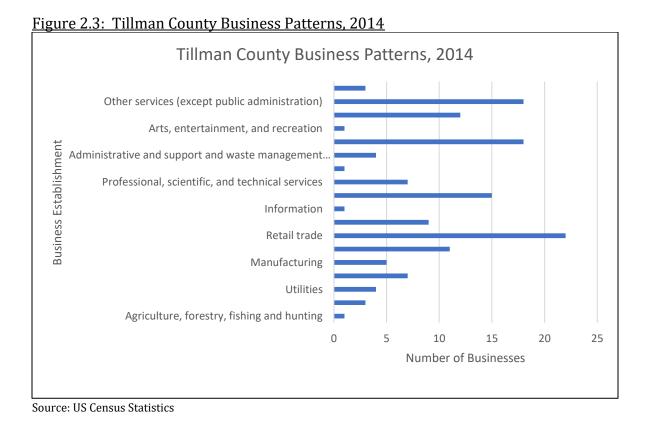


Figure 2.4 provides information related to vehicle registration data obtained from the Oklahoma Tax Commission (OTC). Vehicle registrations between 2012-2016 show a slight decline for all vehicle registrations. The data in the graph confirms that the primary vehicle is the automobile.

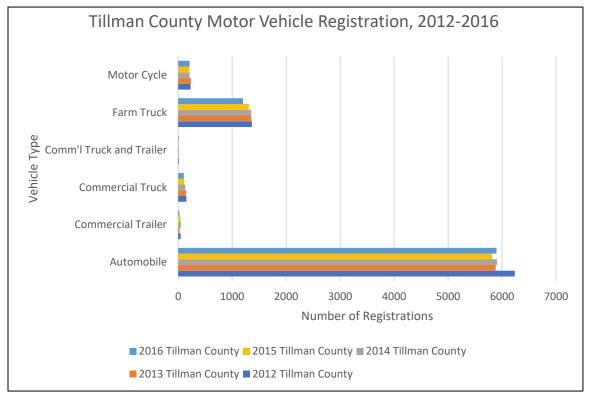


Figure 2.4: Tillman County Motor Vehicle Registration, 2012-2016

Source: Oklahoma Tax Commission

Traffic Analysis Zones

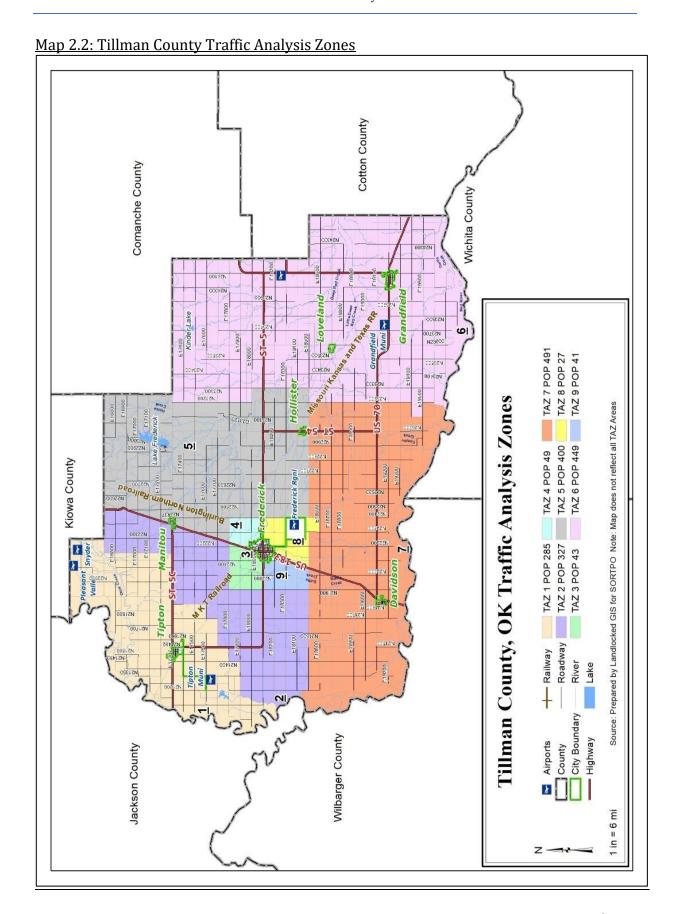
The Traffic Analysis Zone (TAZ) Program is a specialized computer program used for delineating zones in support of the Census Transportation Planning Products (CTPP). TAZ delineation follows the decennial census and is designed to allow planning agencies the ability to define areas to associate demographic 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 plan 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 boundaries were drafted. The RTPO's are responsible for developing these zones and supporting data. As rural transportation planning continues to mature the

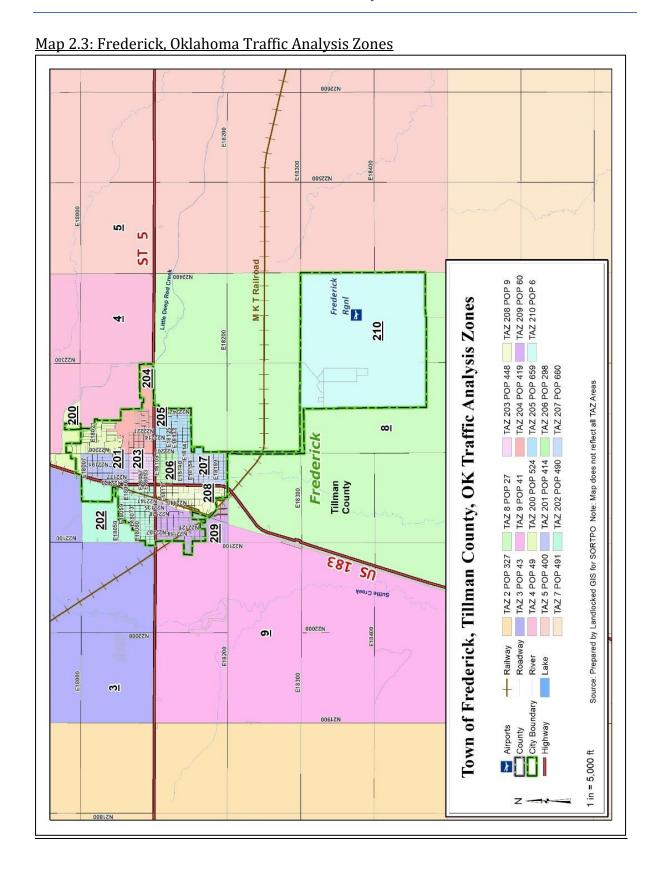
delineation of TAZ will allow acquisition of data that supports the transportation planning process. SORTPO staff developed TAZ boundaries based on county population as identified below:

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

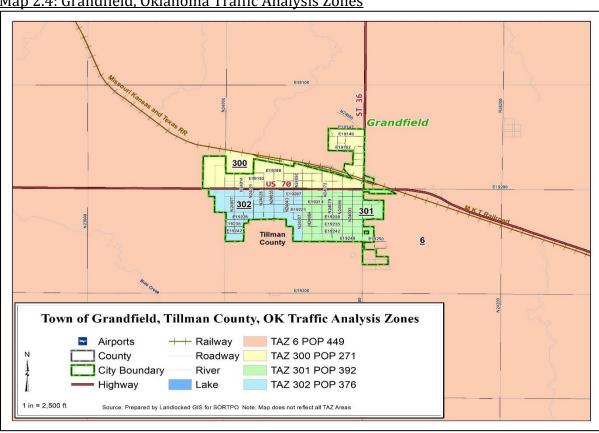
Geographically, the County and cities/towns were subdivided into twenty five (25) TAZ's and the socio-economic data (including population and employment) are summarized for each TAZ. Map 2.2 illustrates the revised TAZ boundaries for the county. TAZ maps were established for Ringling, Ryan and Waurika (Maps. 2.3 – 2.5) and the 2010 Census population of 7,986 and 2011-2015 ACS civilian employment of 2,672 were distributed into the TAZs. Appendix 2.8 provides information on the population and employment data by TAZ. TAZ numbers with population over 400 include: 5, 6, 7, 101, 200, 201, 202, 203, 204, 205, and 207. Largest concentrations of employment are found in TAZ numbers: 4, 5, 206, 207, and 208. The rural nature of the County requires the Plan development to 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 or town and County by TAZ are included in Appendix 2.9.



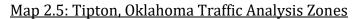
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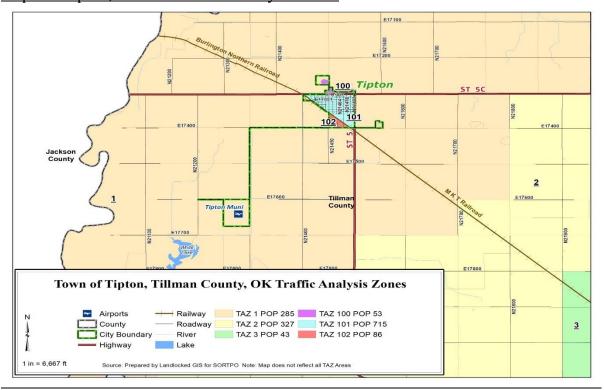


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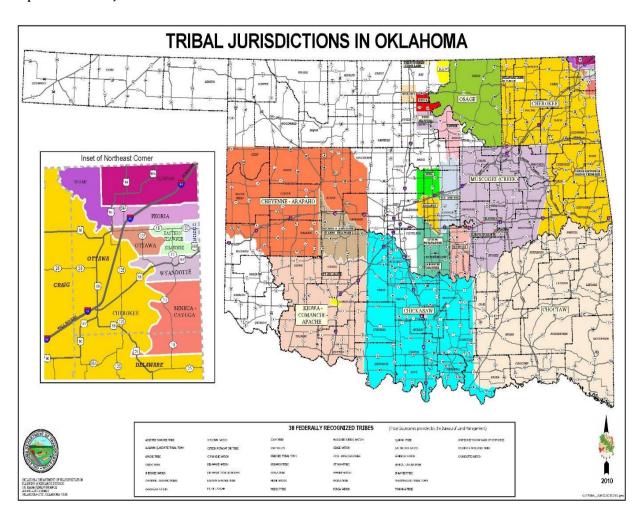
Map 2.4: Grandfield, Oklahoma Traffic Analysis Zones





Physical Development Constraints and Conditions

There are transportation facilities, land ownership, existing development and environmental features and other constraints that affect the growth of Tillman County. These constraints both physical and manmade have shaped and impacted the development of the county. Tillman County major constraints for development include: SH 5, SH 54, US 183, US 70, cities and towns, airport, Hackberry Flat Wildlife Management Area, large land ownership, rail lines and tribal land. Highways area a physical barrier splitting the county from the north to the south and east to west, the railroad runs diagonally from the northwest west to the southeast in the county. US 70 connects the southern half of the county east to I-44 in Cotton County. Map 2.1 illustrates the location of highways, cities towns, railroad and airport. Tribal land as identified on Map 2.7 illustrates sovereign land holdings.



Map 2.6: Tribal Jurisdictions in Oklahoma

Historic, Natural or Man Made Significant Features

Tillman County is home to environmental features natural and cultural resources which can influence the transportation system. 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), The University of Oklahoma's Geographic Information System (GIS) and other state and local agencies. There are many different types of environmentally sensitive areas and potential impacts to the natural and human environment that may be affected by various actions associated with the plan. These include (but are not necessarily limited to:

- Threatened and Endangered Species
- Wetlands
- Floodplains
- Surface and Ground Waters
- Stormwater Management and Erosion and Sediment Control
- Hazardous Materials
- Air Quality
- Historical/Cultural Resources
- Right-of-Way/Property Impacts, Including Impacts to Parks, Farmland and Neighborhoods
- 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 (Appendix 2.8). Most transportation capital and maintenance projects have the potential to affect natural and human-made resources in both positive and negative ways. Appendix 2.9 provides description of Tillman County 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 new 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 Tillman 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. An analysis of collision records collected and maintained by ODOT was performed for the calendar years 2012-2016. Between 2012-2016 there were 375 collisions with one fatality occurring on the roadways. The highest concentration of collisions occurred along US 183 and SH 5. Tables 2.2 and 2.3 provides information on total collisions and collisions by concentration and severity. Rear end collisions represented 23.1% of collisions. Other collision types were caused by fixed object (19.6%) and right angle (14.9%). Map 2.8 illustrates the location of collisions for the time 2012-2016. Appendices 2.10 and 2.11 provide supplemental information on collision data.

Table 2.2: Tillman County Collision Total, 2012-2016

	FAT	INCAP INJ	NON INCAP INJ	POSSIBLE INJURY	PROPERTY DAMAGE	TOTAL
Collisions	1	27	48	51	248	375
Persons	1	37	66	85	-	189

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

Table 2.3: Tillman County Collision Concentration, 2012-2016

CITY	INT-	CITY STREET	CITY STREET	SEV	NUM	RANK
	REL/	NAME/HWY	NAME/HWY	INDEX	COLLS	
Frederick	INTER	Gladstone Ave./ SH 5	15 St.	15	7	1
Frederick	INTER	10 St./US 183	Gladstone Ave. /	10	9	2
			SH 5			
		SH 5		8	3	3
		SH 5		7	2	4
		SH 36		7	2	5
Frederick	INTER	10 St./US 183	Grand Ave.	6	4	6
Frederick	INTER	10 St./US 183	Amethyst Ave.	6	3	7
		US 70		5	2	8

CITY	INT-	CITY STREET	CITY STREET	SEV	NUM	RANK
	REL/	NAME/HWY	NAME/HWY	INDEX	COLLS	
		US 183		5	2	9
		US 183		5	2	10
		SH 5	N. Fork Red	5	2	11
		SH 5		5	2	12
		SH 5		5	2	13
Frederick		13 St.	Minnie	5	2	14
	INTER		US 183	5	2	15
Davidson		Locust St.		5	1	16

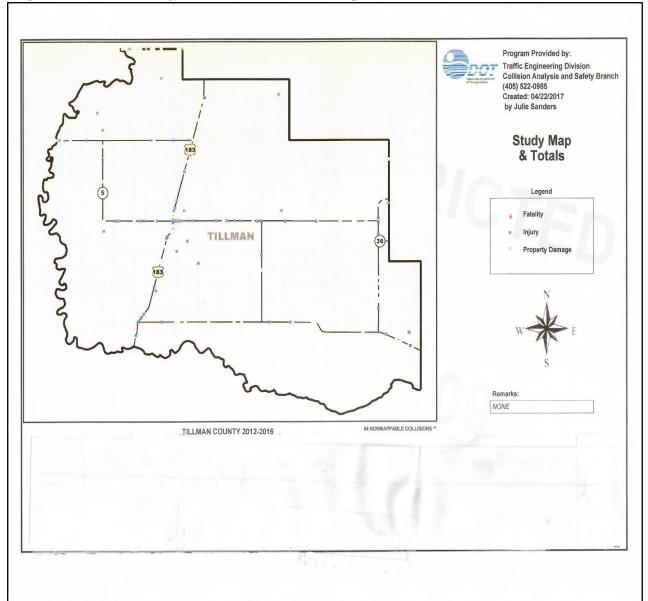
Source: ODOT Traffic Engineering Div. Collision Analysis and Safety Branch

Existing Road Network

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 2.7: Tillman County 2012 - 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 Tillman 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.

Tillman County bridge inventory includes one On System and three hundred (300) 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 2013. Between 2010 – 2016 ten bridges were replaced or constructed. County bridges (off system) with a sufficiency rating of 60 to 79 total fifteen (15) and bridges with a sufficiency rating of 59 or less total ninety-six (96). Appendices 2.18 and Appendices 2.19 includes the On and Off-System bridges for Tillman 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 Tillman County which if developed can assist in prioritization of maintenance and scheduling upgrade.

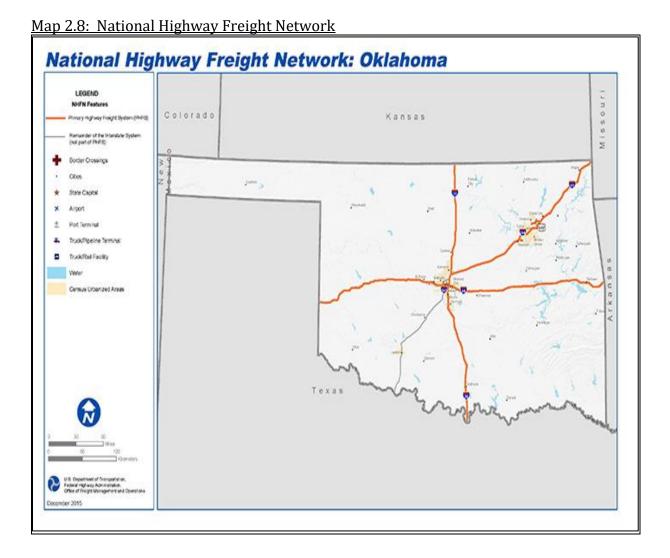
Freight System

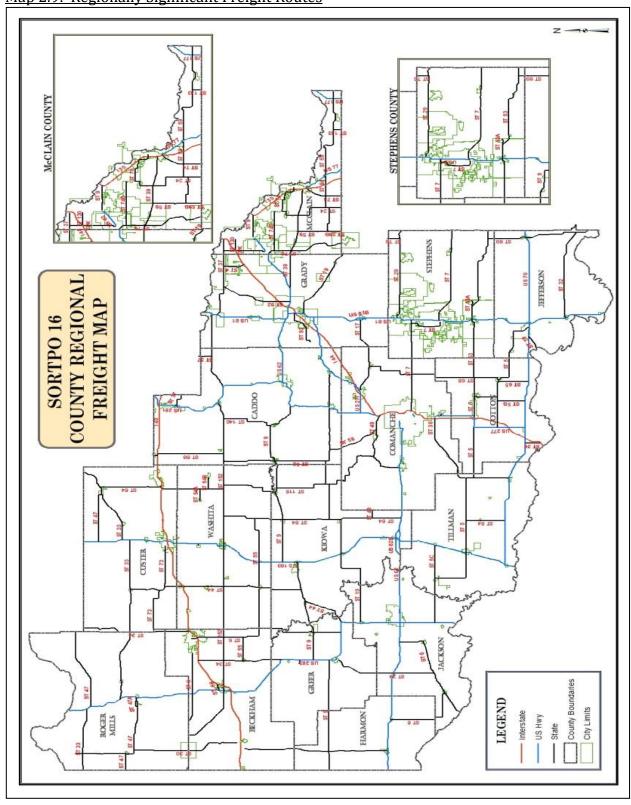
The Fixing America's Surface Transportation Act (FAST Act) repealed both the Primary Freight Network and National Freight Network and directed the FHWA Administrator to establish a National Highway Freight Network (NHFN), additional information on the NHFN can be found in Appendix 2.20. The FAST Act 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 2.8 The SORTPO Policy Board identified corridors listed in Table 2.4 and illustrated in Map 2.9 as significant statewide and regional highway freight corridors. Figure 2.5 illustrates the 2011 average daily long-haul truck volume and map 2.10 illustrates the Oklahoma 2014 High Volume Truck Corridors.

Table 2.4: Tillman County Significant Freight Corridors

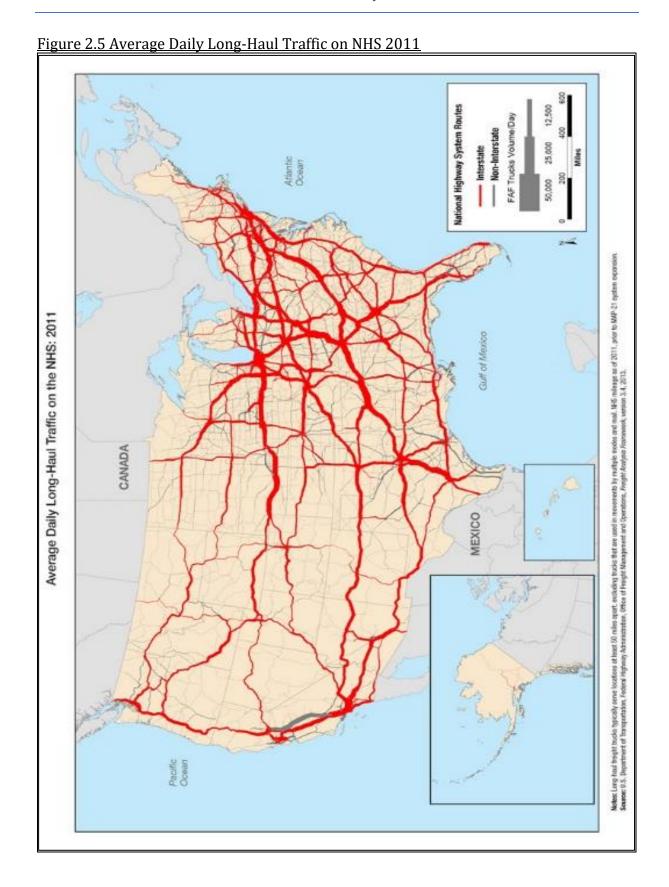
CITY/TOWN	LOCATION/DESCRIPTION
Frederick/Manitou	US 183 north and south
Frederick	ST 5 east and west
Davidson	US 70 east and west
County	Wichita, Tillman & Jackson Railway

Source: SORTPO

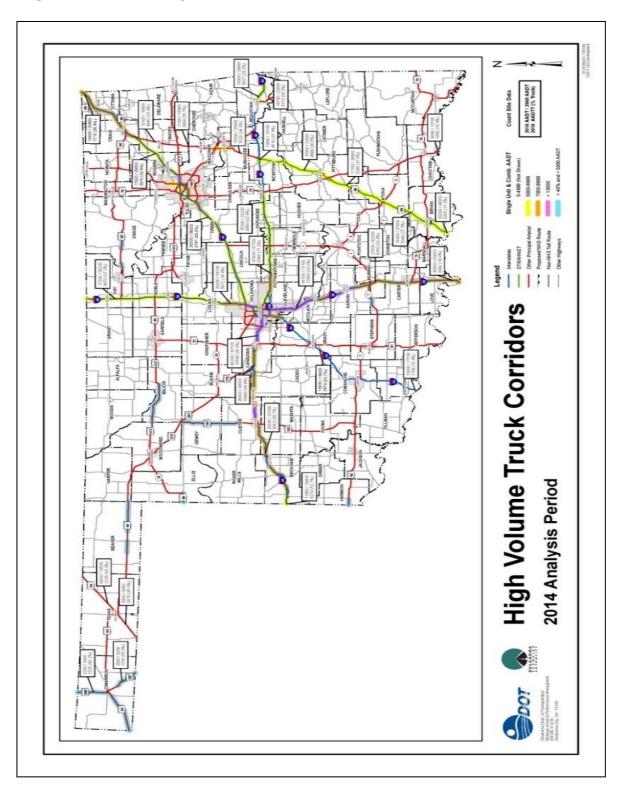




Map 2.9: Regionally Significant Freight Routes

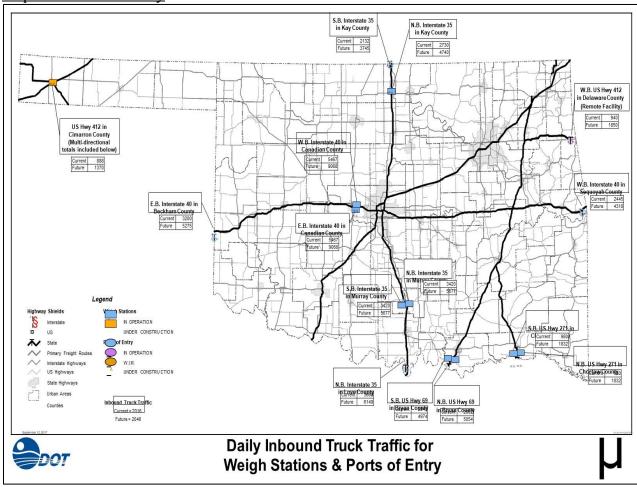


Map 2.10: Oklahoma High Volume Truck Corridors



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 2.11) are state-of-the-art facilities established as the mechanism to create a more controlled freight transportation environment on the highway system.





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),



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Union Pacific Railroad (UP), and Kansas City Southern Railway Co. (KCS).

Tillman County is served by three rail lines SLWC, WTJR and BNSF a Class I line. The rail lines are not operated on state-owned rail properties. GNBC serves Frederick in Tillman County as needed to handle outbound wheat and inbound feed and fertilizer. WTJR runs essentially as needed to Altus and Frederick.

Physically, the lightly traveled portion of GNBC's 19-mile Snyder-Frederick line in Tillman County has been maintained to FRA Class 2 standards. Laid with 90-pound jointed rail and including seven small bridges, it would require substantial investment to justify an increase in allowable gross weight from 268,000 to 286,000. In Tillman County, GNBC originated or terminated 457 carloads at Frederick, of which 321 were interchanged there with WTJR.

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 Programs (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.

<u>Public Transit</u>

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
- $\bullet \quad \text{the sponsor has limited financial capability to fund capital improvement projects.} \\$

The SORTPO area consists of twenty-two (22) general aviation airports identified in Table 2.5.

Table 2.5: SORPTO Public Airports

CITY	COUNTY	AIRPORT NAME	TYPE of AIRPORT	OWNER
Sayre	Beckham	Sayre Municipal	CA	Municipal

CITY	COUNTY	AIRPORT NAME	TYPE of AIRPORT	OWNER
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
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 Source: Oklahoma Aerona	Washita Utics Commission	Clinton/Sherman	RBA	Municipal

Source: Oklahoma Aeronautics Commission

Areas of Concern

Areas of concern were identified through surveys, holding public meetings and soliciting comments from stakeholders. Through the collective knowledge and experience of the members of the Transportation Technical Committee and Policy Board and the information obtained via public comment the data areas of concern were identified. These locations are shown in Table 2.6 The scope of the LRTP does not include solutions to the areas of concern.

Table 2.6: Tillman County Transportation Areas of Concern

CITY/TOWN	LOCATION	DESCRIPTION
Grandfield	East on SH 70	Low area flooding
Grandfield/Chattanooga	SH 36 2mi. South	No shoulder

CITY/TOWN	LOCATION	DESCRIPTION	
	SH 5		
Hollister	Hwy 54	No shoulder	
Manitou	US 5C	Bike trail to Lake Frederick	
Manitou	US 183	No one slows down though	
Manitou	05 105	intersection	
Frederick	3 mi. east SH 5	Flooding	
Frederick	SH 5 & Co. Rd.	High Traffic	
rrederick	N2230		
Frederick	Airport	High Traffic	
Frederick	US 183 to Manitou	Bike Trail to Lake Frederick	
Frederick	US 183 & SH 5	Hard turn for trucks	
Frederick	US 183 near HS	Flashing light faulty	
Davidson	US 183 4 mi. North	Flooding	
Frederick	Co. Rd. N2140 &	Heavy truck traffic (Dairy)	
rieuerick	E1810 east on SH 5	Heavy truck traffic (Dairy)	
Tipton	SH 5 3mi. South	Low area flooding	

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

Tillman County population and employment opportunities are highly dependent on the cyclical oil and gas industry and growth in Jackson County to the north. Recent changes in this oil and gas industry at the international, national and state level have reduced drilling activity in SORTPO's region, resulting in a decline in the region's population and employment. The State of Oklahoma's multiyear revenue failure due to the State's economy and a budget tied to the oil and gas industry means that all levels of government are negatively impacted. The impact of the State's budget was felt as recently as 2016 when the Oklahoma Department of Corrections consolidated 15 correctional work centers. Closing the work center in Tillman County as well as loss of contracts to hold prisoners for the State Department of Corrections has resulted in a loss of jobs, population and revenue.

With this information as well as knowledge of the decline in the oil and gas industry and limited new employment centers planned for Tillman County the 2040 population and employment projections show a decline. The SORTPO Transportation Policy Board recommends utilizing the 2012 State of the State Report's identifying Tillman County's 2040 population of 6,425. The civilian labor force projection was developed after reviewing the 2011-2015 ACS age distribution, employment by industry and number of employed. Civilian labor force projection is projected to be 2,784. The 2040 population projection of 6,524 and employment projection totaling 2,784 were distributed through the TAZs the challenge for distributing decline across the TAZ is challenging due to the

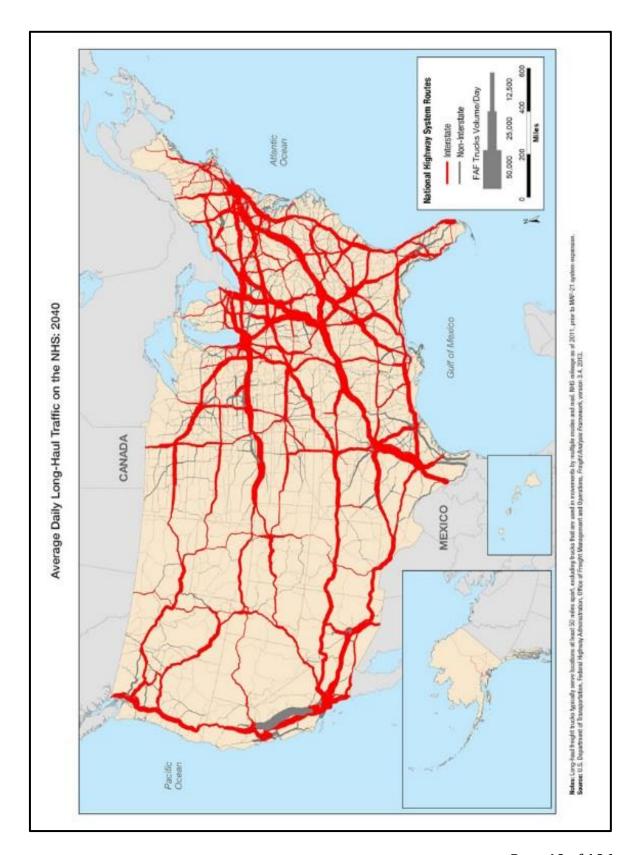
rural nature of the county and the very low population density. The assumption is made that the population and employment will be concentrated in Frederick and surrounding areas. Appendix 3.1 provides the Tillman County 2040 projected population and employment by TAZ.

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 SORTPO 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 Funding and 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, railroad 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 continues 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

	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Budget
State Transportation Fund	\$206,405,702	\$208,707,119	\$197,228,227	\$184,901,463
Motor Fuel Tax – HP Bridges	\$6,047,108	\$6,130,546	\$6,238,149	\$6,200,000
Income Tax	\$297,400,000	\$357,100,000	\$416,800,000	\$476,500,000
Total allocation	\$509,852,810	\$571,937,665	\$620,266,376	\$667,601,463
OTA Transfers	\$41,340,937	\$41,712,534	\$44,049,331	\$42,000,000

	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Budget
Total State Revenue	\$551,193,747	\$613,650,199	\$664,315,707	\$709,601,463
CIP Debt Service	\$11,526,973	\$11,358,296	\$0	\$0
ROADS Debt Service	\$32,367,490	\$35,971,788	\$42,599,529	\$36,434,743
Highways and Bridges	\$495,399,284	\$554,420,115	\$612,316,178	\$662,766,720
Lake & Industrial Access	\$5,000,000	\$5,000,000	\$2,500,000	\$3,500,000
Passenger Rail	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Public Transit	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Intermodal	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
Total Allocation	\$551,193,747	\$613,650,199	\$664,315,707	\$709,601,463

Source: 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 for 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.

<u>Local</u>

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: Tillman County Future Transportation Projects

CITY/TOWN	LOCATION	DESCRIPTION
Frederick	Downtown	ADA sidewalks
Tillman 1	District 1	Repairing damage from floods to roads and bridges
Tillman 2	District 2	Repairing damage from floods to roads and bridges

Source: SORTPO

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).

Tillman County's racial and ethnic composition according to the 2011-2015 ACS: White 74.3%, African American, 8.0%, American Indian 1.9% and Hispanic or Latino 24.4%. 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. Low income populations are defined by the FHWA for transportation planning purposes as families of four (4) with a household income that is below the poverty guidelines set by HHS. 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 were 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 RTPO were published in local newspapers and SORTPO website. Surveys were distributed throughout the County and were made available at 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 Tillman 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.

Transportation Projects

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).

<u>Table 5.1: Tillman County Transportation Projects</u>

GENERAL LOCATION	PROJECT YEAR	DESCRIPTION	FUNDING STATE / FEDERAL
Tillman County	2017- 2021	Develop a clearinghouse for regional data sets, such as pavement management systems and geographic information systems.	SPR/Local
Tillman County	2017- 2021	Conduct a freight assessment for the county.	SPR/Local
Tillman County	2017- 2021	Develop a system to collect and monitor changes in population, employment, and major employers by Traffic Analysis Zone (TAZ).	SPR/Local
Tillman County	2017- 2021	Develop data collection standards.	SPR/Local
Tillman County	2017- 2021	Establish procedures that enhance the consultation and coordination of transportation planning with local, regional, state and tribal government representatives.	SPR/Local
Tillman County	2017- 2021	Conduct speed study at intersection locations with high accident severity index and corridors with major attractors.	SPR/Local
TILLMAN RESURFACE	2017- 2021	SH-5 RESURFACE BEGIN 0.42 MI EAST of THE US-183 JCT AND EXTEND EAST	\$4,463,312
TILLMAN 29516(06) UTILITIES	2017- 2021	SH-5, OVER THE NORTH FORK of THE RED RIVER & O'FLOW, AT THE JACKSON C/L AND 0.3 MILE EAST. UT FOR 29516(04)	\$22,638
TILLMAN 29516(05) RIGHT of WAY	2017- 2021	SH-5, OVER THE NORTH FORK of THE RED RIVER & O'FLOW AT THE JACKSON C/L AND 0.3 MILE EAST. RW FOR 29516(04)	\$79,369
TILLMAN 294414(05) RIGHT of WAY	2017- 2021	US-70, BRIDGE AND APPROACHES OVER BOTTLE AND SUTTLE CREEKS LOCATED1.1 & 3.2 MILES EAST of THE US- 183 JCT. RW FOR 29514(04)	\$30,000
TILLMAN 29514(06) UTILITIES	2017- 2021	US-70, BRIDGE AND APPROACHES OVER BOTTLE AND SUTTLE CREEKS LOCATED1.1 & 3.2 MILES EAST of THE US- 183 JCT. UT FOR 29514(04)	\$25,327
TILLMAN 31061(09) UTILITIES	2017- 2021	SH-36 BRIDGE AND APPROACHES OVER A TRIB of LITTLE DEEP RED CREEK AND TWO BOX EXTENSIONS, LOCATED 3.2, 3.5,	\$109,000

GENERAL LOCATION	PROJECT YEAR	DESCRIPTION	FUNDING STATE / FEDERAL
		3.7 MI NORTH of US 70. RW FOR 31061(04)	
TILLMAN	2017-	SH-36 BRIDGE AND APPROACHES OVER A	\$109,000
31061(05)	2021	TRIB of LITTLE DEEP RED CREEK AND	
RIGHT of WAY		TWO BOX EXTENSIONS, LOCATED 3.2, 3.5,	
THENDAN	2017-	3.7 MI NORTH of US 70. RW FOR 31061(04)	¢0.064.500
TILLMAN 29516(04)	_	SH-5, OVER THE NORTH FORK of THE RED RIVER & THE RED RIVER OVERFLOW AT	\$9,864,500
BRIDGE &	2021	THE JACKSON C/L AND 0.3 MILE EAST.	
APPROACHES		THE PROBOTY OF ETHING 0.5 WHILE ENST.	
TILLMAN	2017-	US-70: BEGIN AT THE US-183 JCT & EXT	\$530,000
RESURFACE	2021	EAST 3.00 MILES	,
TILLMAN	2017-	US-70, OVER BOTTLE AND SUTTLE	\$3,617,000
29514(04)	2021	CREEKS, 1.1 & 3.2 MI EAST of US 183	,
BRIDGE &			
APPROACHES			
TILLMAN	2017-	US-70; BEGIN 0.21 MILES EAST of SH- 36,	\$954,653
RESURFACE	2021	EXTEND EAST 4.21 MILES	
TILLMAN	2017-	US-70; BEGIN 10.60 MILES EAST of US- 183,	\$2,943,196
RESURFACE	2021	EXTEND EAST 11.85 MILES	
TILLMAN	2017-	CO RD 71-08C, BEGIN 5.4 MI E. of Manitou	\$4,688,000
28689(04)	2021	EXTEND EAST 10.0 MI. (PHASE II)	
WIDEN &			
RESURFACE	2045	CO PD 54 000 PECIN 5 4 M F. CM .:	4262000
TILLMAN	2017-	CO RD 71-08C, BEGIN 5.4 MI E. of Manitou	\$260,000
28689(07) UTILITIES	2021	EXTEND EAST 10.0 MI. UT FOR 28689(04)	
TILLMAN	2017-	BRIDGE AND APPROACHES (NS-236) OVER	\$437,500
31137(04)	2021	OTTER CREEK LOW WATER CROSSING	Ψ107,000
BRIDGE &	2021		
APPROACHES			
TILLMAN	2017-	BRIDGE AND APPROACHES OVER BOTTLE	\$45,000
31154(05)	2021	CREEK LOCATED 1.4 MILES NORTH AND	
CONTRACT PE		1.0 MIL E EAST of Davidson	
(AS of		(ENGINEERING)	
10/1/2013) TILLMAN	2017-	DDIDCE AND ADDDOACHES (NS 245)	\$4E 000
30700(05)		BRIDGE AND APPROACHES (NS-245) OVER DEEP RED CREEK, LOCATED 9.0	\$45,000
CONTRACT PE	2021	MILES EAST AND 0.5 MILES SOUTH of	
(AS of		Loveland. (ENGINEERING)	
10/1/2013)			
TILLMAN	2017-	BRIDGE AND APPROACHES OVER BOTTLE	\$437,500
29366(04)		CREEK LOCATED 1.4 MILES NORTH AND	

GENERAL LOCATION	PROJECT YEAR	DESCRIPTION	FUNDING STATE / FEDERAL
BRIDGE & APPROACHES	2021	1.0 MIL E of Davidson	
TILLMAN 30700(04) BRIDGES & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (NS-245) OVER DEEP RED CREEK, LOCATED 9.0MILES EAST AND 0.5 MILES SOUTH of Loveland.	\$437,500
TILLMAN 32923(05) CONTRACT PE (AS of 10/1/2013)	2017- 2021	CO BR ON EW-196 OVER CURTIS CREEK, APPROX. 4.5 MI SOUTH AND 1.5 MI WEST of Grandfield. E196N239.5 (LOW WATER CROSSING) (PE FOR 32923(04))	\$45,000
TILLMAN 32923(04) BRIDGE & APPROACHES	2017- 2021	CO BR ON EW-196 OVER CURTIS CREEK, APPROX. 4.5 MI SOUTH AND 1.5 MI WEST of Grandfield. E196N239.5 (LOW WATER CROSSING)	\$437,500
TILLMAN 32923(04) BRIDGE & APPROACHES	2017- 2021	CO BR ON EW-196 OVER CURTIS CREEK, APPROX. 4.5 MI SOUTH AND 1.5 MI WEST of Grandfield. E196N239.5 (LOW WATER CROSSING)	\$525,000
TILLMAN RESURFACE	2017- 2021	SH-5 RESURFACE BEGIN 0.42 MI EAST of THE US-183 JCT AND EXTEND EAST	\$4,463,312
TILLMAN 29516(06) UTILITIES	2017- 2021	SH-5, OVER THE NORTH FORK of THE RED RIVER & O'FLOW, AT THE JACKSON C/L AND 0.3 MILE EAST. UT FOR 29516(04)	\$22,638
TILLMAN 29516(05) RIGHT of WAY	2017- 2021	SH-5, OVER THE NORTH FORK of THE RED RIVER & O'FLOW THE JACKSON C/L AND 0.3 MILE EAST. RW FOR 29516(04)	\$79,369
TILLMAN 294414(05) RIGHT of WAY	2017- 2021	US-70, BRIDGE AND APPROACHES OVER BOTTLE AND SUTTLE CREEKS LOCATED1.1 & 3.2 MILES EAST of THE US- 183 JCT. RW FOR 29514(04)	\$30,000
TILLMAN 29514(06) UTILITIES	2017- 2021	US-70, BRIDGE AND APPROACHES OVER BOTTLE AND SUTTLE CREEKS LOCATED1.1 & 3.2 MILES EAST of THE US- 183 JCT. UT FOR 29514(04)	\$25,327
TILLMAN 31061(09) UTILITIES	2017- 2021	SH-36 BRIDGE AND APPROACHES OVER A TRIB of LITTLE DEEP RED CREEK AND TWO BOX EXTENSIONS, LOCATED 3.2, 3.5, 3.7 MI NORTH of US 70. RW FOR 31061(04)	\$109,000
TILLMAN 31061(05)	2017- 2021	SH-36 BRIDGE AND APPROACHES OVER A TRIB of LITTLE DEEP RED CREEK AND	\$109,000

GENERAL LOCATION	PROJECT YEAR	DESCRIPTION	FUNDING STATE / FEDERAL
RIGHT of WAY		TWO BOX EXTENSIONS, LOCATED 3.2, 3.5, 3.7 MI NORTH of US 70. RW FOR 31061(04)	
TILLMAN 29516(04) BRIDGE & APPROACHES	2017- 2021	SH-5, OVER THE NORTH FORK of THE RED RIVER & THE RED RIVER OVERFLOW AT THE JACKSON C/L AND 0.3 MILE EAST.	\$9,864,500
TILLMAN RESURFACE	2017- 2021	US-70: BEGIN AT THE US-183 JCT & EXT EAST 3.00 MILES	\$530,000
TILLMAN 29514(04) BRIDGE & APPROACHES	2017- 2021	US-70, OVER BOTTLE AND SUTTLE CREEKS, 1.1 & 3.2 MI EAST of US 183	\$3,617,000
TILLMAN RESURFACE	2017- 2021	US-70; BEGIN 0.21 MILES EAST of SH- 36, EXTEND EAST 4.21 MILES	\$954,653
TILLMAN CIRB-171c (127) RB BRIDGE & APPROACHES	2017- 2021	CO RD 71-08(BASELINE RD) & HORSE & JACK CREEKS, 7 & 8 MI WEST of THE COTTON C/L ON 7108C	\$4,000,000
TILLMAN CIRB-171C (127) RB BRIDGES AND APPROACHES	2017- 2021	CO RD 71-08(BASELINE RD) & HORSE & JACK CREEKS, 7 & 8 MI WEST of THE COTTON C/L ON 7108C	\$4,000,000
TILLMAN J3- 1154(004) CI BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES OVER BOTTLE CREEK LOCATED 1.4 MILES NORTH AND 1.0 MIL E EAST of Davidson	\$472,500
TILLMAN STP- 271D (013) CI BRIDGE & APPROACHES	2017- 2021	CO RD(EW-178) OVER TRIB TO DEADMAN CREEK APPROX 5.0 MILE SOUTH & 5.2 MILE EAST of Manitou	\$437,500
TILLMAN J3- 0069(005) RB CONTRACT P.E.	2017- 2021	BRIDGE AND APPROACHES CROSSTOWN BEAMS OVER OTTER CR. E165N222.8 PE FOR 3006904	\$60,000
TILLMAN J3- 0700(004) CI BRIDGE & APPROACHES	2017- 2021	BRIDGE AND APPROACHES (NS-245) OVER DEEP RED CREEK, LOCATED 9.0 MILES EAST AND 0.5 MILES SOUTH of Loveland.	\$472,500

GENERAL LOCATION	PROJECT YEAR	DESCRIPTION	FUNDING STATE / FEDERAL
Tillman County	2022 – 2026	Develop procedures to identify and collect traffic count data at specific locations within the county.	SPR/Local
Tillman 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
Tillman County	2022 – 2026	Identify the locations of major employment centers, including existing and proposed developments and identify types of transportation available.	SPR/Local
Tillman County	2022 - 2026	Working with area employers and stakeholders develop a database and map identifying transportation needs.	SPR/Local
Tillman County	2022 - 2026	Develop database and mapping to identify the County's underrepresented	SPR/Local
Tillman County	2027- 2031	Develop a regional map that identifies tourism destinations and regionally significant facilities.	SPR/Local
Tillman County	2027- 2031	Collect and routinely analyze safety and security data by mode and severity to identify changes and trends.	SPR/Local
Tillman County	2027- 2031	Develop a regional map that identifies tourism destinations and regionally significant facilities.	SPR/Local
Tillman County	2032- 2036	Collect and routinely analyze safety and security data by mode and severity to identify changes and trends.	SPR/LOCAL
Tillman County	2032- 2036	Conduct study at intersection locations with high accident severity index and corridors with major attractors.	SPR/LOCAL
Tillman County	2037- 2040	Collect and routinely analyze safety and security data by mode and severity to identify changes and trends.	SPR/LOCAL
Tillman County	2037- 2040	Conduct study at intersection locations with high accident severity index and corridors with major attractors.	SPR/LOCAL

Source: ODOT, SORTPO

<u>Acronyms</u>

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

El 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

ICT 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

2040 Tillman County LRTP

STRAHNET Strategic Highway Network

SWODA South Western Oklahoma Development Authority

TAP Transportation Alternate Program

United States

TAZ Traffic Analysis Zone

UP Union Pacific

US

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 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 U.S. This system was designed to contain the follow subcategories:

- A. Interstate- The current interstate system retained its separate identity within the NHS along with specific provisions to add mileage to the existing Interstate subsystem.
- B. Other Principal Arterials- These routes include highways in rural and urban areas which provide access between an arterial route and a major port, airport, public transportation facility or other intermodal transportation facility.
- C. Intermodal Connecting Links- These are highways that connect NHS routes to major ports, 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 socioeconomic 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

Mike Brown

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

 $\textbf{WHEREAS,} \ \ \text{regional transportation planning is encouraged by legislation of the Federal Highway Administration, and}$

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 8th day of November, 2016

John Schaufele, Chairman

ATTEST:

John Dee Butchee, Secretary

<u>Appendix C: Performance Measures</u>

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 Department of Transportations and Metropolitan Planning Organizations (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 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.

2015-2040 LRTP Goals	Recommended Performance Measure		
Safe and Secure Travel	 Reduction in traffic related fatalities and serious injuries Rate and number of traffic fatalities annually on all Oklahoma public roads Rate and number of traffic-related serious injuries annually on all Oklahoma public roads 		
Infrastructure	Bridge Condition – Number of structurally deficient		
Preservation	bridges		
	 Preservation of Pavement – Good/fair/poor condition index for NHS highways 		
Economic Vitality	Freight Movement		
	 Annual freight tonnage/value for truck, rail, and barge modes Measure of freight travel time reliability and/or speed 		
	 Congestion 		
	 Travel time-based measure(s) of congestion 		
Mobility Choice, Connectivity and Accessibility	 Public Transit- Annual rural transit vehicle revenue miles Passenger Rail - Annual ridership and on-time 		
	performance for Amtrak Heartland Flyer		
Environmental Responsibility	 Clean fuels and improved air quality - Clean fuels as a share of ODOT's total fleet fuel use in gasoline gallon equivalents Reduce roadway flooding and support improved water quality - Quantity of Litter/Debris (cubic yards or other 		
Course Oldshaws Donathus (Tr	measure of weight and volume) cleared from storm drains/culverts/roadsides		

Source: Oklahoma Department of Transportation

Appendix 2: Current Conditions

Appendix 2.1: Tillman County Socio Economic Data, 2011-2015 ACS

	Estimate	Margin	Percent
		of Error	
<u>SEX AND AGE</u>			
Total population	7,715	****	7,715
Male	3,953	+/-66	51.2%
Female	3,762	+/-66	48.8%
Under 5 years	474	+/-35	6.1%
5 to 9 years	451	+/-82	5.8%
10 to 14 years	630	+/-99	8.2%
15 to 19 years	490	+/-75	6.4%
20 to 24 years	443	+/-70	5.7%
25 to 34 years	966	+/-77	12.5%
35 to 44 years	792	+/-46	10.3%
45 to 54 years	1,060	+/-42	13.7%
55 to 59 years	482	+/-74	6.2%
60 to 64 years	542	+/-73	7.0%
65 to 74 years	762	+/-39	9.9%
75 to 84 years	438	+/-59	5.7%
85 years and over	185	+/-51	2.4%
Median age (years)	40.5	+/-0.5	(X)
18 years and over	5,829	****	75.6%
21 years and over	5,610	+/-67	72.7%
62 years and over	1,704	+/-59	22.1%
65 years and over	1,385	+/-37	18.0%
Race			
Total population	7,715	****	7,715
White	5,734	+/-138	74.3%
Black or African American	614	+/-62	8.0%
American Indian and Alaska Native	147	+/-51	1.9%
Hispanic or Latino (of any race)	1,885	****	24.4%

Appendix 2.2: Tillman County Housing Units, 2011-2015 ACS

	Occupied housing Owner-occupied			Renter-occupied		
	units		housing units		housing units	
	Estimate	Margin	Estimate	Margin	Estimate	Margin
		of Error		of Error		of Error
Occupied housing units	3,057	+/-119	2,234	+/-125	823	+/-146
UNITS IN STRUCTURE						
1, detached	89.8%	+/-2.4	91.8%	+/-2.3	84.4%	+/-5.8
1, attached	1.3%	+/-0.7	1.5%	+/-0.8	0.9%	+/-1.1
2 apartments	1.2%	+/-0.8	0.0%	+/-0.9	4.5%	+/-2.9
3 or 4 apartments	0.9%	+/-0.7	0.0%	+/-0.9	3.4%	+/-2.5
5 to 9 apartments	1.1%	+/-1.2	0.0%	+/-0.9	4.0%	+/-4.2
10 or more apartments	0.5%	+/-0.6	0.0%	+/-0.9	1.8%	+/-2.1
Mobile home or other type	5.2%	+/-1.4	6.7%	+/-2.1	1.0%	+/-1.0
of housing						
VEHICLES AVAILABLE						
No vehicle available	5.9%	+/-1.7	3.2%	+/-1.2	13.2%	+/-5.0
1 vehicle available	33.0%	+/-4.2	26.1%	+/-3.8	51.9%	+/-9.6
2 vehicles available	43.4%	+/-4.4	48.2%	+/-4.7	30.6%	+/-8.0
3 or more vehicles	17.6%	+/-2.9	22.5%	+/-3.6	4.3%	+/-2.9
available						

Source: 2011-2015 ACS American Factfinder

Appendix 2.3: Tillman County Educational Attainment, 2011-2015 ACS

	Total		
Subject	Estimate	Margin of	
		Error	
Population 25 years and over	5,227	+/-54	
Less than 9th grade	532	+/-76	
9th to 12th grade, no diploma	695	+/-113	
High school graduate (includes equivalency)	1,872	+/-168	
Some college, no degree	1,002	+/-120	
Associate's degree	251	+/-57	
Bachelor's degree	621	+/-109	
Graduate or professional degree	254	+/-67	

Source: 2011-2015 ACS American Factfinder

Appendix 2.4: Tillman County Employment Status and Commute to Work 2011-2015 ACS

Appendix 2.4: Thinian County Employment Su	ESTIMATE	MARGIN of	PERCENT
	ESTIMATE	ERROR	PERCENT
P. 1		Emon	
Employment Status			
EMPLOYMENT STATUS			
Population 16 years and over	6,080	+/-60	6,080
In labor force	3,343	+/-177	55.0%
Civilian labor force	3,333	+/-178	54.8%
Employed	3,098	+/-185	51.0%
Unemployed	235	+/-66	3.9%
Armed Forces	10	+/-13	0.2%
Not in labor force	2,737	+/-184	45.0%
Civilian labor force	3,333	+/-178	3,333
Commuting to Work			
Workers 16 years and over	3,022	+/-181	3,022
Car, truck, or van drove alone	2,448	+/-195	81.0%
Car, truck, or van carpooled	311	+/-82	10.3%
Public transportation (excluding	10	+/-14	0.3%
taxicab)			
Walked	82	+/-51	2.7%
Other means	40	+/-28	1.3%
Worked at home	131	+/-62	4.3%
Mean travel time to work (minutes)	19.2	+/-1.7	X

Source: 2011-2015 ACS American Factfinder

Appendix 2.5: Tillman County Means of Transportation, 2011-2015 ACS

	Total		
Subject	Estimate	Margin of	
		Error	
Workers 16 years and over	3,022	+/-181	
Means of Transportation to Work			
Car, truck, or van	91.3%	+/-2.5	
Drove alone	81.0%	+/-3.3	
Carpooled	10.3%	+/-2.7	
In 2-person carpool	8.2%	+/-2.5	
In 3-person carpool	0.9%	+/-0.6	
In 4-or-more person carpool	1.2%	+/-0.8	
Workers per car, truck, or van	1.07	+/-0.02	
Public transportation (excluding taxicab)	0.3%	+/-0.5	
Walked	2.7%	+/-1.7	
Bicycle	0.4%	+/-0.6	
Taxicab, motorcycle, or other means	0.9%	+/-0.7	
Worked at home	4.3%	+/-2.0	

Total		
Subject	Estimate	Margin of Error
Workers 16 years and over who did not work at home	2,891	+/-183
Time Leaving Home to Go To Work		
12:00 a.m. to 4:59 a.m.	5.6%	+/-2.1
5:00 a.m. to 5:29 a.m.	2.7%	+/-1.3
5:30 a.m. to 5:59 a.m.	3.2%	+/-1.3
6:00 a.m. to 6:29 a.m.	7.3%	+/-2.3
6:30 a.m. to 6:59 a.m.	10.9%	+/-2.5
7:00 a.m. to 7:29 a.m.	14.7%	+/-3.4
7:30 a.m. to 7:59 a.m.	19.7%	+/-3.5
8:00 a.m. to 8:29 a.m.	7.6%	+/-2.7
8:30 a.m. to 8:59 a.m.	4.4%	+/-1.4
9:00 a.m. to 11:59 p.m.	24.0%	+/-3.5
Travel Time To Work		
Less than 10 minutes	40.0%	+/-4.5
10 to 14 minutes	14.5%	+/-3.7
15 to 19 minutes	9.9%	+/-2.5
20 to 24 minutes	6.5%	+/-1.8
25 to 29 minutes	2.5%	+/-1.2
30 to 34 minutes	8.5%	+/-2.3
35 to 44 minutes	4.3%	+/-1.6
45 to 59 minutes	6.3%	+/-1.9
60 or more minutes	7.5%	+/-2.1
Mean travel time to work (minutes)	19.2	+/-1.7
Vehicles Available		
Workers 16 years and over in households	3,019	+/-176
No vehicle available	3.4%	+/-1.8
1 vehicle available	23.6%	+/-5.0
2 vehicles available	47.2%	+/-5.5
3 or more vehicles available	25.8%	+/-4.9

Source: 2011-2015 ACS American Factfinder

Appendix 2.6: Tillman County Population and Employment by TAZ

AMEND #1 TAZ NO.	2010 POPULATION	2011-2015 EMPLOYMENT
1	285	125
2	327	120
3	43	144
4	49	185
5	400	150
6	449	125
7	491	135
8	27	15
9	41	45
100	53	118
101	715	147
102	86	102
200	524	45
201	414	95
202	490	75
203	448	105
204	419	94
205	659	55
206	298	285
207	660	235
208	9	485
209	60	60
300	271	99
301	392	95
302	376	118

Source: SORTPO

Appendix 2.7: Tillman County Major Employers 2016 by TAZ

BUSINESS / INDUSTRY NAME	STREET ADDRESS			TAZ
			EMPLOYEES	
Central Grade School	201 W. Grand St.	Davidson	10-19	7
Davidson Elementary School	218 S. 7th St.	Davidson	20-49	7
Davidson Fire Dept	401 S. Main St.	Davidson	10-19	7
Davidson School District	521 E. Gladstone Ave.	Davidson	10-19	7
Henniges Automotive	500 S Main St.	Davidson	20-49	7
Juvenile Center	500 S Main St.	Davidson	20-49	7
Lomah Dairy	County Road NS 291	Davidson	10-19	7
Ambulance Service	105 N Main St.	Frederick	5-9	208
Aspire Home Care	300 S 17th St.	Frederick	5-9	202
BancFirst	200 N. Main St.	Frederick	20-49	206
BancFirst	201 S. Main St.	Frederick	5-9	208
Box Inc	1500 N Main St.	Frederick	5-9	201
Cassidy Grain Co	111 N 11th St.	Frederick	10-19	208
Clayco Warehouse & Supply	4th St. & ASt.er St.	Frederick	10-19	208
Cold Front Express	105 N. Main St.	Frederick	10-19	208
Community Action	610 S Main St.	Frederick	10-19	207
Development				
Dollar General	914 S. Main St.	Frederick	5-9	208
El Sancho Mexican Restaurant	1001 S. Main St.	Frederick	5-9	208
Family Dollar	221 S. Main St.	Frederick	10-19	201
Family Medical Clinic	319 E. Josephine	Frederick	10-19	201
Frederick Elementary School	520 E. Mimulus Ave.	Frederick	20-49	201
Frederick Fire Dept.	120 S. Main St.	Frederick	10-19	208
Frederick Head Start	321 W Dahlia Ave.	Frederick	10-19	209
Frederick High School	312 N. 15th St.	Frederick	20-49	205
Frederick Junction Sub Station	314 N Main St.	Frederick	20-49	203
Frederick Middle School	100 S. 12th St.	Frederick	20-49	206
Friendship Baptist Church	201 E. Grand Ave.	Frederick	10-19	206
Great Plains Technology Ctr	Industrial Park	Frederick	10-19	204
NAPA Auto Parts	503 S. Main St.	Frederick	5-9	208
Pizza Hut	618 S. Main St.	Frederick	20-49	207
Prather Brown Elementary	213 S 13th St.	Frederick	50-99	206
Quality Implement Co	401 S. Main St.	Frederick	20-49	208
Red River Transportation Dept	618 S Main St	Frederick	5-9	206
Sonic	500 S. Main St.	Frederick	10-19	207
Subway	800 S. Main St.	Frederick	10-19	207
Tillman County Jail	1200 S. Main St.	Frederick	10-19	207

BUSINESS / INDUSTRY NAME	STREET ADDRESS	CITY	2016 # EMPLOYEES	TAZ
Tillman Producers Co-Op	21757 County Road EW 185	Frederick	10-19	7
Tillman Producers Co-Op	218 S. 7th St.	Frederick	20-49	209
Tillman Producers Co-Op	405 S. 7th St.	Frederick	10-19	208
Tongs Restaurant	715 S. Main St.	Frederick	10-19	208
United Super Market	315 N. Main St.	Frederick	20-49	202
United Super Market	700 E. Gladstone Ave.	Frederick	10-19	205
US Post Office	120 E. Grand Ave.	Frederick	5-9	206
Vanderlann Dairy	County Street 1800	Frederick	10-19	202
Western Hull Sacking	21757 Cunty Road EW 185	Frederick	5-9	7
Cooperative Services	101 S. Bridge St.	Grandfield	5-9	300
Farmers Coop	223 N. Main St.	Grandfield	5-9	300
Fikes Pharmacy	101 E. 2nd St.	Grandfield	1-4	301
First State Bank	120 E. 1st. St.	Grandfield	5-9	301
Grandfield City Hall	223 S. Main St.	Grandfield	5-9	301
Grandfield Elementary School	416 S. Main St.	Grandfield	20-49	302
Grandfield High School	811 W. 3rd St.	Grandfield	20-49	302
Grandfield Police Dept	223 S Main St.	Grandfield	20-49	300
Grandfield Volunteer Fire Dept	222 S Main St.	Grandfield	10-19	300
Kwik Sak	419 W. 1st. St.	Grandfield	5-9	302
Oklahoma Natural Gas Co	103 W 3rd St.	Grandfield	10-19	301
Orr Gray Gish Funeral Home	202 S. 2nd St.	Grandfield	20-49	301
The General Store	201 W. 1st St.	Grandfield	5-9	300
Variety Care Health Center	201 1st. St.	Grandfield	5-9	301
Cassidy Grain Co	Highway 54	Hollister	10-19	5
Frederick Fire Dept	1000 S Broadway	Tipton	20-49	101
Southwest Rural Elect Assn Inc	700 N. Broadway St.	Tipton	20-49	100
Tillman County Barn District	222 E. Frederick St.	Tipton	20-49	100
Tipton Children's Home	1000 N Broadway St.	Tipton	20-49	100
Tipton City Hall	114 N. Broadway	Tipton	5-9	101
Tipton Health Center	106 W. Main St.	Tipton	5-9	101
Tipton Public Schools	1000 S Broadway St.	Tipton	50-99	102
Allsups	301 N. Main St.	Frederick	10-19	202
City Hall	200 W. Grand Ave.	Frederick	10-19	206
Memorial Nursing Center	319 E. Josephine	Frederick	20-49	201
ODOT	915 N. 11th St.	Frederick	10-19	201

Source: SORTPO, Oklahoma Employment Securities Commission

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 steams 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 Tillman 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 historicorprehistoricinformation. 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: Tillman County Environmental Features

DESCRIPTION	LOCATION
Grandfield Downton Historic District	Grandfield
Humphreys Drugstore Building	Grandfield
J.D. Laney House	Frederick
Ramona Theater	Frederick
Rock Island Depot	Grandfield
Tillman County Bank of Grandfield	Grandfield
Tillman County Courthouse	Frederick

Source: National Register of Historic Places

Appendix 2.10: Tillman County Type of Collision Total, 2012-2016

TYPE of COLLISION	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)	-	9	15	24	6.4
Head-On (front-to-front)	1	-	-	1	0.3
Right Angle (front-to-side)	-	22	14	36	9.6
Angle Turning	-	8	19	27	7.2
Other Angle	-	2	1	3	0.8
Sideswipe Same Direction	-	-	2	2	0.5
Sideswipe Opposite Direction	-	1	4	5	1.3
Fixed Object	-	39	49	88	23.5
Pedestrian	-	1	-	1	0.3
Pedal Cycle	-	-	-	-	-
Animal	-	7	46	53	14.1
Overturn/Rollover	-	31	29	60	16.0
Vehicle-Train	-	-	-	-	-
Other Single Vehicle Crash	-	-	6	6	1.6
Other	-	6	63	69	18.4
Total	1	126	248	375	100
Percent	0.3	33.6	66.1	100	

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

Appendix 2.11: Tillman County Collision Vehicles by Vehicle Type, Total, 2012-2016

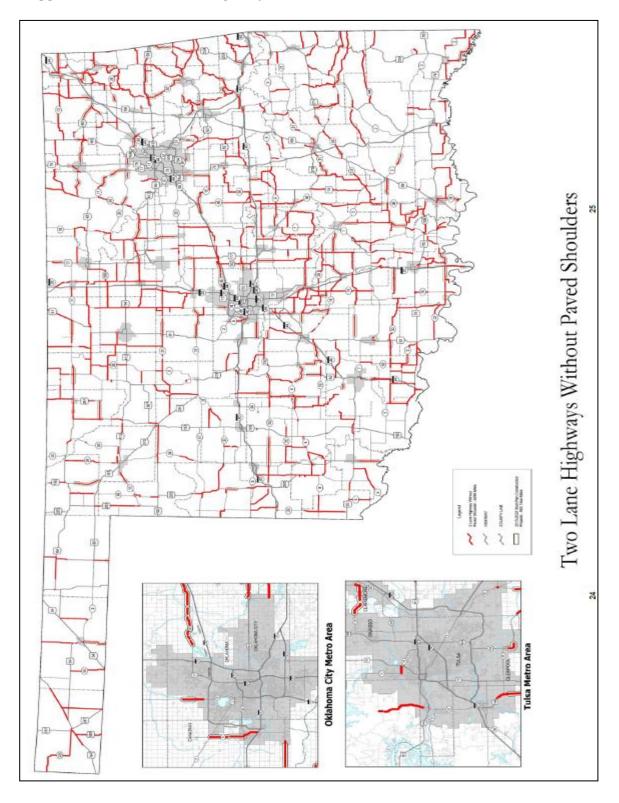
VEHICLE TYPE	FAT	INJ*	PD	ТОТ	PCT
Passenger Vehicle-2 Door	-	14	81	95	17.5
Passenger Vehicle-4 Door	1	5	93	144	26.6
Passenger Vehicle-Convertible	-	3	19	22	4.1
Pickup Truck	-	42	113	155	28.6
Single-Unit Truck (2 axles)	-	-	1	1	0.2
Single-Unit Truck (3 or more axles)	-	-	1	1	0.2
School Bus	-	-	-	-	-
Truck/Trailer	-	-	2	3	0.4

^{*}Include incapacitating, non-incapacitating and possible injuries.

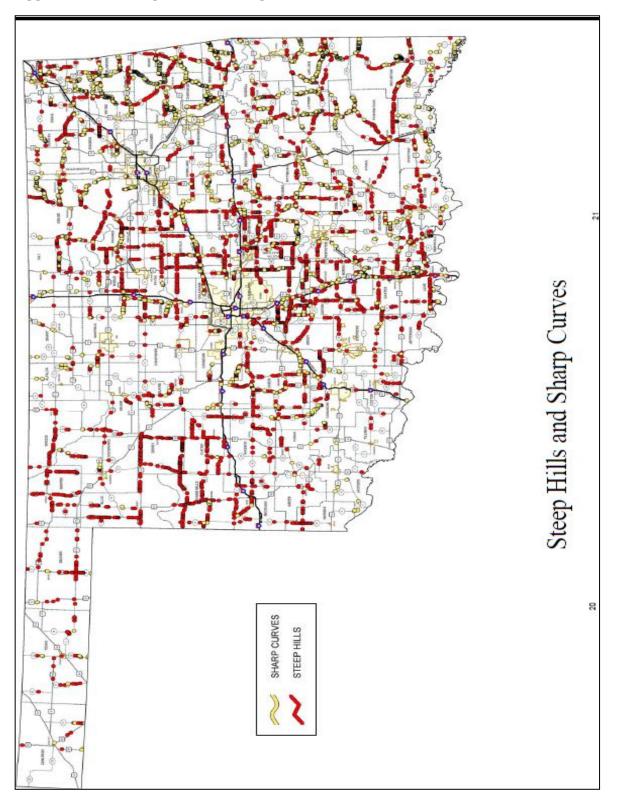
VEHICLE TYPE	FAT	INJ*	PD	TOT	PCT
Truck-Tractor (bobtail)	-	-	-	-	-
Truck-Tractor/Semi-Trailer	-	1	14	15	2.8
Truck-Tractor/Double	-	-	1	1	0.2
Bus/Large Van (9-15 seats)	-	-	-	-	-
Bus (16+ seats)	-	-	1	1	0.2
Motorcycle	-	3	1	4	0.7
Motor Scooter/Moped	-	-	-	-	-
Motor Home	-	-	-	-	-
Farm Machinery	-	-	-	-	-
ATV	-	3		3	0.6
Sport Utility Vehicle (SUV)	-	19	45	64	11.8
Passenger Van	-	-	4	4	0.7
Truck More Than 10,000 lbs.	-	-	-	-	-
Van (10,000 lbs. or less)	-	2	2	4	0.7
Other	-	5	21	26	4.8
Total	1	142	399	542	100
Percent	0.2	26.2	73.6	100	

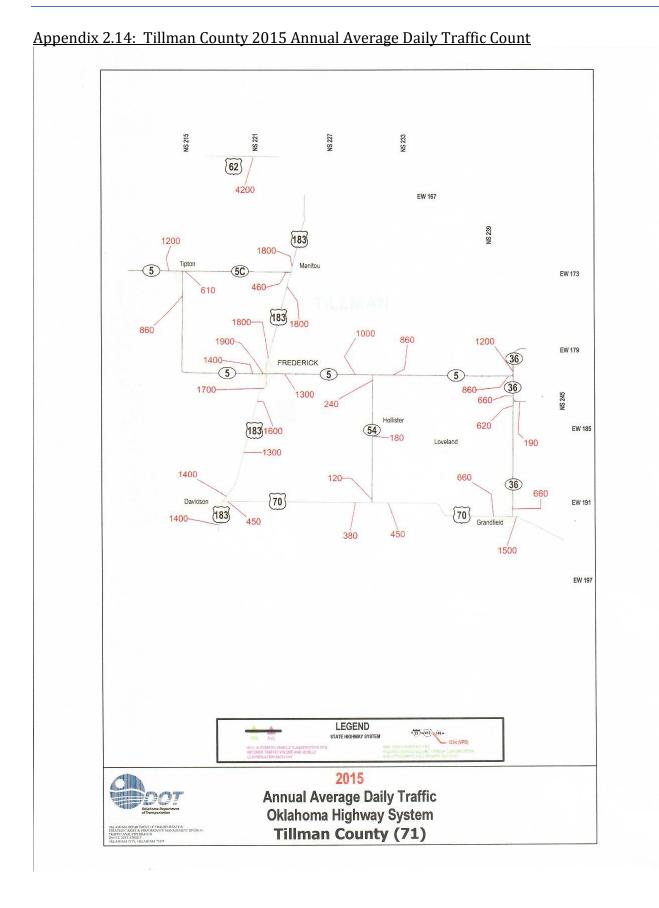
Source: ODOT Traffic Engineering Div. Collision Analysis and Safety Branch *Include incapacitating, non-incapacitating and possible injuries

Appendix 2.12: Two Lane Highways Without Paved Shoulders



Appendix 2.13: Steep Hills and Sharp Curves





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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.

<u>Rural Principal Arterial</u> - 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.

<u>Rural Minor Arterial</u> - 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.

<u>Rural Major Collector</u> - 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.

<u>Rural Minor Collector</u> - 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.

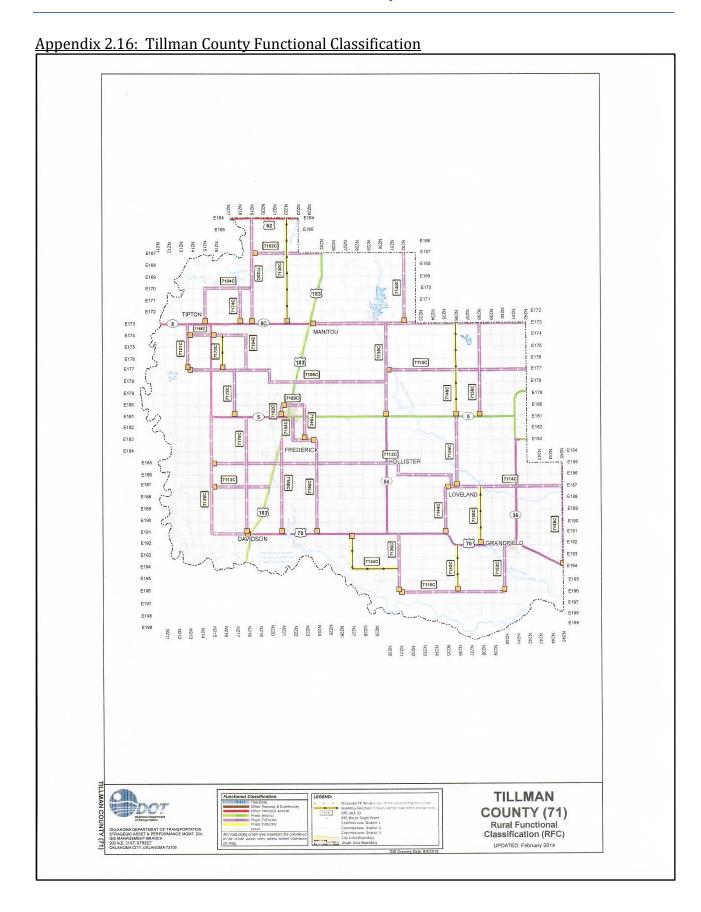
LOS B: Describes a condition with stable traffic flow with a high degree of choice to select speed and operating conditions, but with some influence from other drivers. Operating capacity can be measured as less than fifty percent (50%) of capacity.

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.

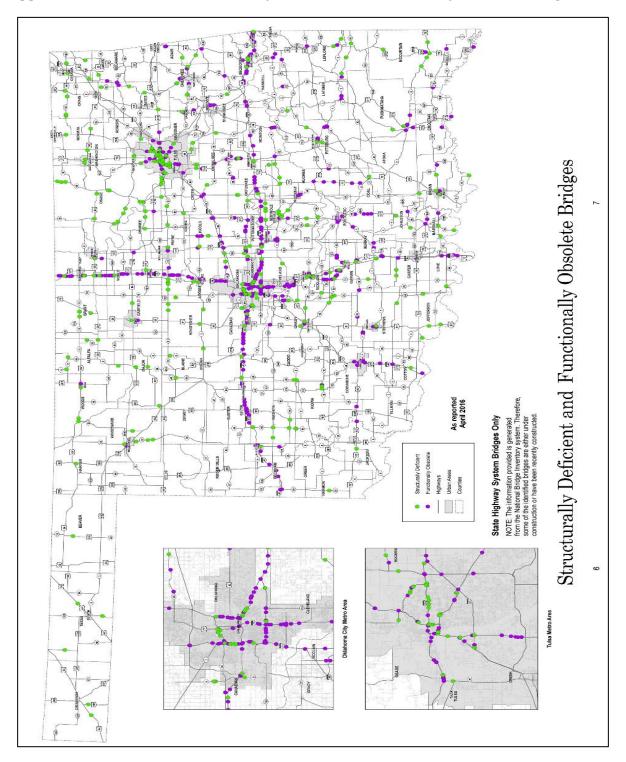
LOS D: Describes high density flow in which speed and freedom to maneuver is severely restricted even though flow remains stable. LOS D is considered acceptable during short periods of time and is often used in large urban areas. Operating capacity can be measured as less than seventy percent (70%) to 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 2.17: Oklahoma Structurally Deficient and Functionally Obsolete Bridges



Appendix 2.18: Tillman County On System Bridges with Sufficiency Rate

			SUFFICIENCY	YEAR	ADT	ADT
FACILITY	FEATURE_IN	LOCATION	RATE	BUILT	TOTAL	YEAR
US 70	Bottle Cr.	1 E JCT U.S. 183	-1	1901	-1	-1

Source: ODOT

Appendix 2.19: Tillman County Off System Bridges

Appendix 2.19: Tillman County Off Sy		YEAR	ADT	ADT	
LOCATION	SUFFICIENCY	BUILT	TOTAL	YEAR	OWNER
4. S 4. W of Hollister	34	1950	24	1999	County
5.2 MI E S Hollister	39	1930	30	1999	County
1.2 MI N Loveland	18.6	1920	50	2002	County
2.7N 2.7W of Grandfield	38	1920	40	2002	County
5.4 MI E S Hollister	36	1940	30	1999	County
.8 MI N US 70	58.6	1940	30	2004	County
4.0 S 9.5 E Manitou	39	1930	30	2004	County
0.5 S 0.1 W Hollister	47	1940	50	2004	County
2.8 N 5. W of Hollister	98	1940	50	2009	County
4.0 E of Loveland	34.7	1980	100	1999	County
5.2 MI E S Hollister	97	1995	50	2015	County
5 MI W 4 MI N Manitou	99.9	1999	200	2015	County
6N 4.2W of Manitou	97	2013	30	2015	County
.8N of US 70	100	2006	30	2015	County
8.8 E .1 S of Davidson	97	1950	60	2015	County
1.2 MILES N Loveland	100	2000	100	2015	County
2.7N 2.7W of Grandfield	100	2003	100	2015	County
.5W of U.S. 183	100	2005	100	2015	County
4.0 MI S of Tipton	97	1951	100	2015	County
1.1 MI N SH 5	100	1982	100	2015	County
7.4 MI S Frederick	97	1982	100	2015	County
2.0 E 7.2 N Loveland	100	1982	100	2015	County
2 MI S 9 W Frederick	70.2	1941	24	2015	County
4S 9.5E of Manitou	100	2005	30	2015	County
.5S .1W of Hollister	97	2005	50	2015	County
1.8MI S Grandfield	97	1948	100	2015	County
6.5N 2.W of Manitou	99.9	1984	200	2015	County
4.0 S 2.0 W Tipton	100	1987	100	2015	County
4.0 E of Loveland	100	2000	100	2015	County
7.7S of Frederick	95.7	1998	100	2015	County
5W 2.8N of Hollister	100	2011	50	2015	County
0.5 S 2.7 W Hollister	100	1990	50	2015	County
6.5 E, 5.2 S of Manitou	100	1996	50	2015	County
9.1 MI E Manitou	82.9	1940	100	2015	County
1 MI S 6 W Frederick	98	1940	100	2015	County
6.8 E of Loveland	92.1	1940	100	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
1.3 MI E Manitou	95.7	1940	100	2015	County
4.6MI E Manitou	90.8	1940	200	2015	County
8.4 E of Loveland	93.1	1940	100	2015	County
4.3 MI E US 183	97	1938	50	2015	County
0.5 S 8.7 W Hollister	100	1938	50	2015	County
0.5 S 7.2 W Hollister	93.1	1938	50	2015	County
6.2 E of Loveland	93.1	1938	100	2015	County
4.9 MI. E. of Manitou	77.9	1940	200	2015	County
3E 1.7N of Loveland	65.3	2001	24	2015	County
7W of Cotton C/L	-1	1901	100	2014	County
7.N 2. W of Manitou	77.9	1936	200	2015	County
5.4N 2.W of Manitou	97	1936	100	2015	County
5. W 1.1 N of Hollister	97	1936	30	2015	County
0.3 MI E US 183	97	1936	75	2015	County
1 MI S US 70	96	1937	100	2015	County
3.0 MI E US 183	97	1937	75	2015	County
4.0 S 10.1 E Manitou	97	1937	30	2015	County
5.3 MI E US 183	97	1936	50	2015	County
8.8N 2.W of Manitou	52.9	1936	100	2015	County
6.5 E 5.6 S Manitou	97	1938	40	2015	County
6.8 MI S Frederick	97	1936	24	2015	County
8.0 E 1.3 N Manitou	97	1937	30	2015	County
2.3 MI N Loveland	97	1937	100	2015	County
.5 MI S US 70	31.9	1930	100	2010	County
6.0 N 4.2 W Manitou	38	1930	30	2011	County
4.2 E of Loveland R	33.9	1930	100	2010	County
9E .9S of Loveland	86	1920	24	2015	County
1.4N 6.2W of Chattanooga	97	1940	40	2015	County
4.0 S 6.0 W Grandfield	100	1990	60	2015	County
6.9 E of Loveland	92.1	1940	100	2015	County
10.5 MI W Frederick	91.1	1941	24	2015	County
6.0 N 2.1 W Manitou	100	1992	50	2015	County
.9 MI S Grandfield	96	1936	100	2015	County
1.2 E 2. S of Frederick	94.9	1937	200	2015	County
5 MI W 4 MI N Manitou	24.6	1938	200	1999	County
5. MI S & 5.8 E Manitou	86	1936	50	1999	County
7.7 MI S Frederick	95	1940	100	1999	County
4.0 S 13.5 E Manitou	31.8	1940	100	1999	County
0.5 S 9.9 W Hollister	41	1942	100	2004	County
6.8 MI E US 183	33.9	1940	50	2014	County
6.3 MI E US 183	71	1982	50	2015	County
0.5 MI W Loveland	100	1985	40	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
E1670N2290007	69.8	1989	50	2015	County
9E .5S of Loveland	26.3	1920	30	2015	County
.5W 3.5N of SH5/SH5C	-1	1901	100	2015	County
12.5 MI E of Manitou	40.5	1975	100	1999	County
1.1 W 1. S of Frederick	50.3	1950	100	1999	County
3.8N 1.3E of Grandfield	31.9	1950	100	1999	County
8.8N .3E of Grandfield	19.1	1950	100	1999	County
1.4 N 1.1 W of Davidson	43	1950	100	1999	County
3.4N 3.8W of Loveland	34.2	1950	100	1999	County
3.2 S 7.6 W of Frederick	40.9	1937	100	1999	County
3.1S 2.3E of Grandfield	27.4	1940	30	2011	County
1.5 W 1. S of Frederick	46.1	1930	100	1999	County
3.4 N 8.3 E of Davidson	37.9	1930	100	1999	County
2.9E 3.S of Manitou	31	1930	30	2002	County
6.9N 2.5E Loveland	26.1	1920	70	1999	County
1.S 4.2E of Loveland	24.2	1920	100	1999	County
2.6E 2.S of Manitou	24.5	1915	30	2002	County
3.9N 1.5W of Tipton	19	1920	100	1999	County
E1780N2390005	17.2	1925	100	1999	County
2.8N 4.7W of Chattanooga	24.4	1930	24	2008	County
4.6 N .5 W of Tipton	20.8	1913	100	1999	County
2.5N 1.8E of Hollister	31.9	1939	100	1999	County
2.S 3.2E of Grandfield	31.9	1930	50	1999	County
1.S 3.4E of Grandfield	19.1	1940	100	1999	County
1.4 E 1. N of Manitou	33.9	1935	100	1999	County
.6S 8.9E of Hollister	100	1993	60	1999	County
.4S 1.8W of Loveland	19.4	1950	24	1999	County
4.9N 2.8E of Loveland	39	1930	24	2004	County
3.4N 2.E of Tipton	19.5	1920	100	2005	County
6.9N 3.7E of Loveland	38.9	1993	70	2004	County
1.8N 1.E of Manitou	24.4	1920	30	2011	County
8.7N 2.8E of Tipton	31	1929	24	2008	County
4 E., .5 S. of Davidson	37	1988	30	2009	County
2.8S .3E of Grandfield	62.2	1930	50	2005	County
2.2E & 2N of Davidson	97	1996	100	2015	County
6E & 7.7S of Frederick	97	1997	50	2015	County
5.5W & 6S of Frederick	97	1995	75	2015	County
5.5W & 6S of Frederick	96.8	1995	75	2015	County
.9W of Loveland	97	1996	50	2015	County
2.S 3.2E of Grandfield	100	1999	50	2015	County
6.9N 2.5E of Loveland	97	1998	70	2015	County
3.1S 2.3E of Grandfield	100	2013	30	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
7N .5E of Grandfield	97	2012	100	2015	County
4N 2.1E of Manitou	97	2012	50	2015	County
1.8N 1E of Manitou	97	2013	30	2015	County
4.9N 2.8E of Loveland	97	2004	25	2015	County
.2E 1.2S of Loveland	100	2005	30	2015	County
4S 1.2E of Frederick	97	2005	100	2015	County
1.5 W 1. S of Frederick	100	2000	100	2015	County
1.1 W 1. S of Frederick	100	2000	100	2015	County
2.6E .5N of Hollister	100	2003	100	2015	County
2.6E 2S of Manitou	100	2003	100	2015	County
1.4W 1.7S of Tipton	80.2	2003	30	2015	County
2.9E 3S of Manitou	97	2003	30	2015	County
7.0 MI N-W Grandfield	76.7	1964	100	2015	County
.4 S 1.3 E of Frederick	96	1982	100	2015	County
5.S .9W of Grandfield	98	1982	50	2015	County
1. N 9.9 W of Frederick	55.5	1941	40	2015	County
3.9N 2.6E of Loveland	97	2003	24	2015	County
1.9N 2.3W of Loveland	100	2005	100	2015	County
3.4N 2E of Tipton	100	2006	100	2015	County
6.9N 3.7E of Loveland	81.8	2006	70	2015	County
.3 N 1.3 E of Frederick	96.9	1983	200	2015	County
6.4 N 5.2 W of Davidson	100	1986	40	2015	County
3.8 E .5 S of Davidson	95.4	1988	30	2015	County
2.8MI.S of Grandfield	100	2007	50	2015	County
2.9MI.N&0. 5MI.W Loveland	100	2008	30	2015	County
3N 1.7W of Grandfield	100	2015	30	2015	County
1E 2.7S of Grandfield	97	2013	100	2015	County
2.9N 3W of Hollister	97	1997	50	2015	County
1.4N 3.9E of Davidson	100	1997	100	2015	County
12.1MI.E Manitou	39.9	1940	50	2015	County
0.6M. S 3.2M. E of Loveland	83.5	2009	24	2015	County
1.6E 2.S of Manitou	100	1989	50	2015	County
4.0 W of Hollister	97	1990	50	2015	County
3.8E .5S of Davidson	97	2007	30	2015	County
1S 1.5W of Grandfield	97	2009	60	2015	County
4E, 5S of Davidson	100	2011	30	2015	County
2.8N 4.7W of Chattanooga	97	2010	24	2015	County
1.4 N 1.1 W of Davidson	100	1994	60	2015	County
1.S 3.4E of Grandfield	63.6	1995	50	2015	County
.6S 8.9E of Hollister	100	1993	60	2015	County
2.4 N. & 3.0 E. Hollister	100	1998	50	2015	County
1.3E & 0.7 S of Davidson	100	1996	50	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
.4S 1.8W of Loveland	93	1997	24	2015	County
2.9N .5W of Loveland	23.8	1920	30	2007	County
2.3 E .2 S of Frederick	92.1	1940	50	2015	County
4.7N 2.3E of Grandfield	32	1940	30	2015	County
2.E 1. S of Manitou	50.5	1940	30	2015	County
2.2 N .8 E of Davidson	93.1	1940	40	2015	County
2. N 10. W of Frederick	90.1	1940	24	2015	County
2.4 N 1.2 E of Davidson	93.1	1940	60	2015	County
1.4 N 1. E of Davidson	92.1	1940	30	2015	County
2.4 N 3.8 E of Davidson	93.1	1940	24	2015	County
1.0 S. & 9.5 W. Frederick	88.8	1941	60	2015	County
6.8E of US 183	100	2016	50	2015	County
.6S 3.2E of Loveland	19.4	1950	24	2007	County
1.5 S 6.8 W of Hollister	93.1	1939	30	2015	County
10.3 E 1.6 S of Davidson	97	1939	30	2015	County
1.1S 5.5E of Loveland	97	1939	30	2015	County
3.1 N 3. W of Hollister	93.1	1939	40	2015	County
2.6 N 4. 4 W of Hollister	66.1	1939	30	2015	County
4.N 5.2E of Loveland	92.1	1939	50	2015	County
3.N 3.1E of Manitou	66.1	1939	30	2015	County
2.5 N .9 W of Hollister	93.1	1939	50	2015	County
1.5N 1.E of Hollister	92.1	1939	60	2015	County
4.7S .2W of Tipton	95	1937	24	2008	County
7.3E 2.S of Manitou	97	1938	30	2015	County
3.S 6.2W of Grandfield	96	1938	40	2015	County
1.S .8W of Grandfield	97	1938	60	2015	County
.9 E 5. S of Frederick	97	1938	30	2015	County
6. S 3.7 W of Frederick	96	1938	50	2015	County
5.4 N 3. E of Davidson	97	1938	40	2015	County
4.4 N 4.6 E of Davidson	86	1938	40	2015	County
4.S 4.7E of Manitou	53	1938	30	2015	County
4.5N 3.4E of Hollister	93.1	1938	40	2015	County
3.S 6.1W of Grandfield	96	1938	40	2015	County
2.9 N 4. W of Hollister	82.1	1939	30	2015	County
2.9 S. & 2.0 W. Frederick	97	1938	50	2015	County
4.7W .8N of Chattanooga	97	1938	60	2015	County
7.9N 3.9W of Loveland	97	1938	60	2015	County
7.9N 4.3E of Loveland	97	1938	60	2015	County
9.9 E .2 N of Davidson	94.1	1938	30	2015	County
4.4 N 3.4 E of Davidson	97	1938	40	2015	County
2.6N 11.E of Hollister	92.1	1939	30	2015	County
.4 N 3. W of Hollister	93.1	1939	50	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
3.S .6W of Manitou	93.1	1939	30	2015	County
3.9N & 1.0E of Tipton	9.3	1910	24	2009	County
4.0S & 4.4 E of Manitou	97	1930	30	2015	County
1.S 3.5E of Grandfield	29.4	1930	50	2015	County
4.3N .7W of Grandfield	67.2	1930	25	2015	County
4.2 E 4.4 N of Davidson	97	1935	40	2015	County
.5W .1S of Manitou	97	1936	50	2015	County
.3 N 2. W of Hollister	97	1936	30	2015	County
4.N 2.1E of Manitou	38.9	1920	50	2010	County
7.9N .9E of Loveland	19.3	1937	30	2010	County
7.4 S & 5.4 W. Frederick	97	1936	40	2015	County
1.2 N 4.8 E of Davidson	96	1936	50	2015	County
.6 N 6.8 E of Davidson	97	1936	30	2015	County
1.7 W 1. S of Frederick	97	1936	100	2015	County
1.7 W 3. S of Frederick	97	1936	60	2015	County
1. N .9 E of Frederick	94.9	1936	200	2015	County
2.N 2.8E of Manitou	93.1	1937	30	2015	County
6S 1E of Frederick	53	1937	50	2015	County
5.8N 1.3W of Chattanooga	97	1938	50	2015	County
1.1S .5W of Manitou	93.1	1938	40	2015	County
4.8 W .5 N of Hollister	97	1936	60	2015	County
2.1E .5S of Hollister	97	1936	30	2015	County
2.2S 7.5E of Manitou	97	1938	30	2015	County
.6 E .5 N of Hollister	53	1936	60	2015	County
.4S .5E of Manitou	97	1937	50	2015	County
4.N .2W of Chattanooga	97	1937	100	2015	County
1.5S 5.3W of Hollister	80.1	1920	30	2015	County
5.5S .5W of Manitou	93.1	1937	30	2015	County
7. W 2.4 S of Hollister	97	1937	40	2015	County
2. S 7. W Frederick	97	1937	40	2015	County
1.1S 5.5E of Loveland	95	1937	30	2015	County
2.2S .5E of Manitou	66.6	1937	40	2015	County
4.7S .4W of Tipton	97	1937	40	2015	County
.1 S 1. W of Hollister	97	1937	30	2015	County
4.1 S 1. W of Hollister	97	1937	24	2015	County
3.5N 1.3E of Grandfield	19.4	1930	25	2010	County
3.8E 4.5N of Hollister	32	1940	24	2010	County
1.1NJ 2.E of Hollister	26.9	1950	30	2010	County
3.1N 1.3E of Grandfield	19.4	1950	25	2010	County
4N 5.8E of Manitou	83.2	1920	30	2015	County
5.N 8.1E of Manitou	35	1920	24	2015	County
5S 1.5W of Frederick	35	1920	24	2015	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
1. S 6.3 E of Frederick	97	1937	50	2015	County
5.1W 5.N of Manitou	25	1930	50	2015	County
2. N 2.4 E of Frederick	93.1	1930	30	2015	County
1.7 N 3.3 W of Frederick	93.1	1938	31	2015	County
0.7 S. & 2.5 W. Frederick	97	1938	60	2015	County
.5N 1.8W of Loveland	19.3	1950	30	2010	County
.4 S 3. W of Hollister	97	1939	50	2015	County
2.S .2E of Manitou	93.1	1939	30	2015	County
2.4 N 3. W of Hollister	93.1	1939	50	2015	County
5.2N 1.2E of Loveland	66.1	1940	30	2015	County
.1E 2S of Frederick	98.9	1940	400	2015	County
2.N .8E of Manitou	96	1940	100	2015	County
5.7W .8N of Chattanooga	82	1940	60	2015	County
3.4 E 3.1 S Manitou	100	1990	50	2015	County
2.1N .7W of Grandfield	93.1	1941	50	2015	County
3.N .8W of Grandfield	93.1	1941	60	2015	County
3.N .2E of Grandfield	92.1	1941	50	2015	County
4. N 2.8 E of Davidson	100	1991	60	2015	County
2. S & 6.6 E of Frederick	100	1993	100	2015	County
.9 W 2. S of Frederick	91.1	1925	60	2015	County
.1N .1E of Manitou	85.2	1930	50	2015	County
4.8N 3.7W of Chattanooga	34.9	1930	60	2014	County
4.4 N 3.2 W of Davidson	96	1936	40	2015	County
3.4 N 1. E of Davidson	97	1936	50	2015	County
3.N 1.7W of Grandfield	79.2	1981	30	2014	County
2.5E 1.S of Manitou	97	1938	30	2015	County
3.6E of Grandfield	26.9	1940	100	1999	County
N2280E1880008	19.1	1930	100	1999	County
1.4W 1.7S of Tipton	35	1940	30	2002	County
3.S 6.7W of Grandfield	30	1940	30	1999	County
2.6 E 1.4 N of Davidson	34.9	1940	100	1999	County
2.9 N 3. W of Hollister	41	1939	50	1999	County
1.4 N 3.9 E of Davidson	37.9	1940	100	1999	County
1.5N 8.6E of Hollister	23.4	1940	24	2002	County
N2390E1850003	88.1	2000	24	2002	County
6.9N 3.7E of Loveland	95	1993	70	1999	County
2.7 S & 1.4 W of Tipton	31.9	1930	30	1999	County
5.5N 1.3E of Grandfield	24.3	1960	100	1999	County
.9W of Loveland	35	1984	30	1999	County
1.8 S 1.3 E of Frederick	97	1983	100	1999	County
1.3 E & .7 S of Davidson	37	1987	30	1999	County
2.4 N 3. E Hollister	32.9	1982	50	1999	County

LOCATION	SUFFICIENCY	YEAR BUILT	ADT TOTAL	ADT YEAR	OWNER
3.8 E .1 S of Davidson	36	1930	30	2005	County
1.9N 3.2 W of Loveland	32	1950	30	2004	County
1.2S .2E of Loveland	39.8	1950	30	2004	County
2.6E .5N of Hollister	41.4	1960	30	2004	County
2.5N 3.4E of Hollister	21.4	1925	24	2015	County
3.4 N 4.3 E of Davidson	49.1	1938	40	2015	County
Manitou 2.5S3.8East	39	1939	30	2015	County
12.1E of Manitou	-1	1901	58	2013	County
12.4E of Manitou	-1	1901	58	2013	County
13.6E of Manitou	-1	1901	58	2013	County
4.3N .9W of Manitou	25.4	1915	24	2015	County
7.2N 2.W of Manitou	17.8	1920	24	2015	County

Source: ODOT

Appendix 2.20: 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.

Primary Highway Freight System (PHFS) Routes			
	START ROUTE No POINT	END POINT	LENGTH (MILES)
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

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

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

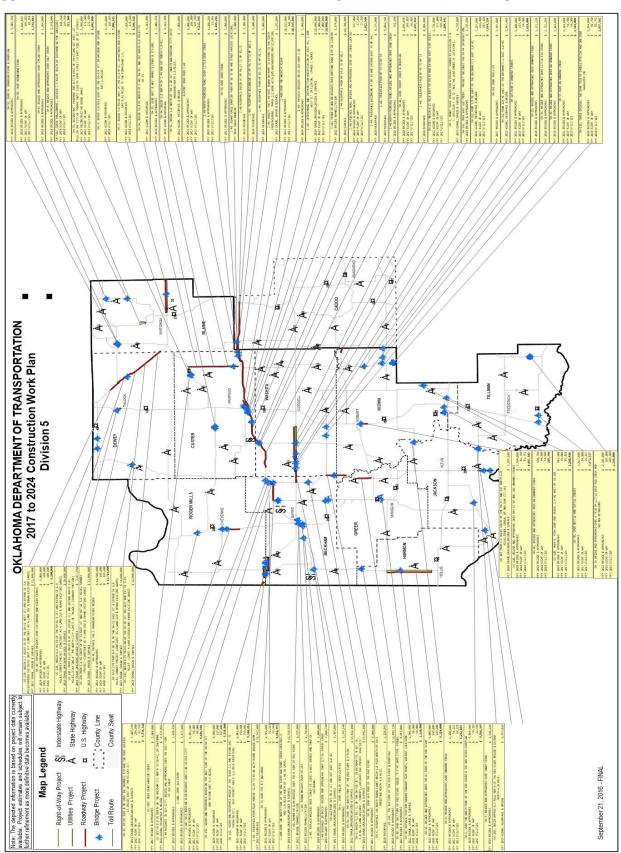
Appendix 3: Future Conditions

Appendix 3.1: Tillman County 2040 Population and Employment Projection by TAZ

TAZ NO.	2010 POPULATION	2040 PROJECTED POPULATION	2040 PROJECTED EMPLOYMENT
1	285	205	85
2	327	260	85
3	43	40	125
4	49	45	200
5	400	315	205
6	449	315	75
7	491	295	35
8	27	20	15
9	41	30	40
100	53	55	85
101	715	655	105
102	86	60	90
200	524	465	45
201	414	305	80
202	490	395	65
203	448	385	95
204	419	335	80
205	659	545	55
206	298	235	255
207	660	545	220
208	9	5	419
209	60	45	45
300	271	265	80
301	392	275	90
302	376	330	110

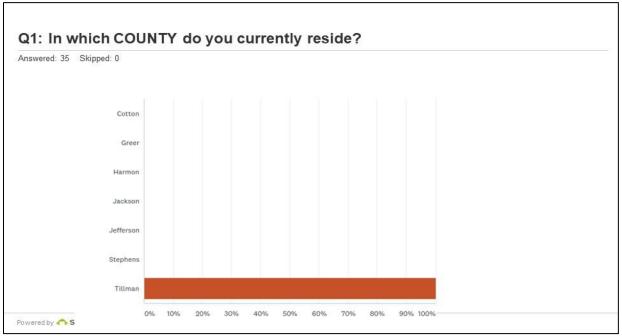
Source: SORTPO

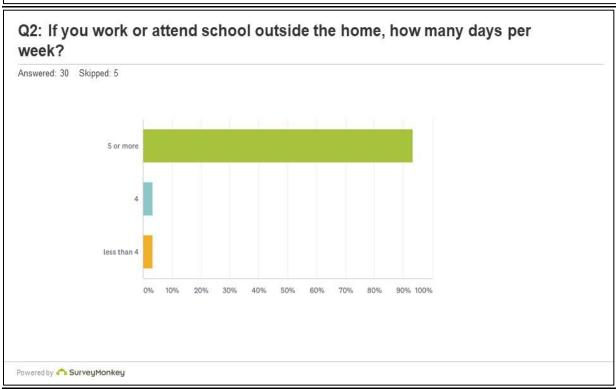
Appendix 3.2 ODOT 8 Year Construction Work Program FFY 2017-2024 Map

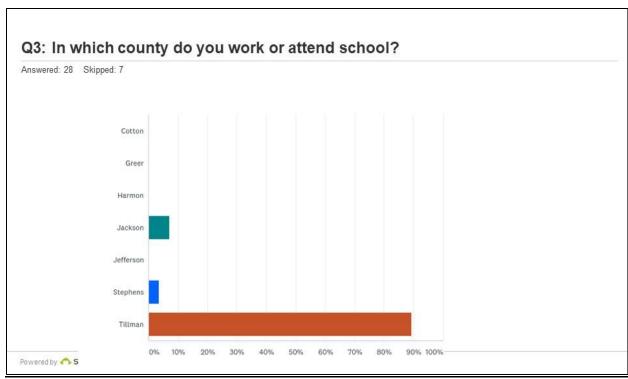


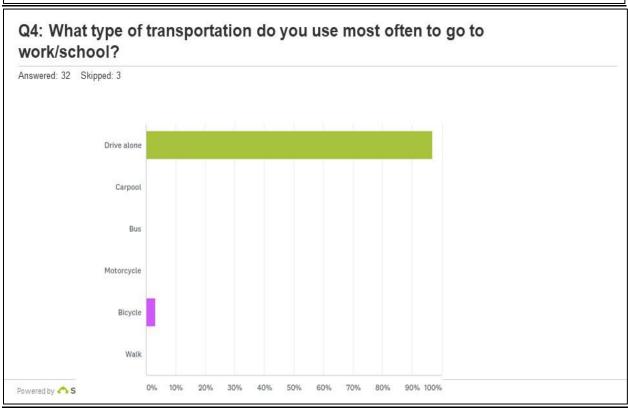
Appendix 4: Survey

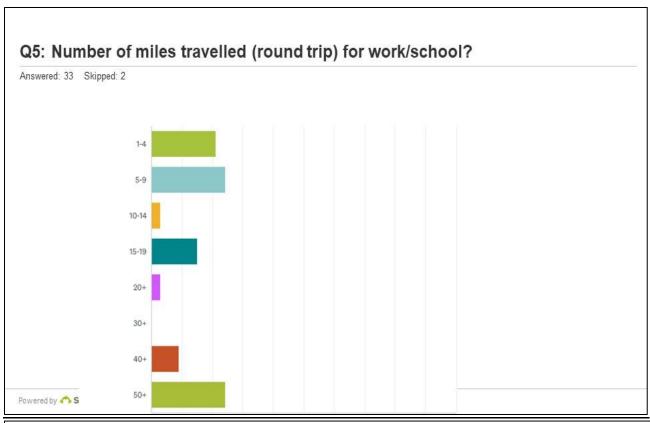
Appendix 4.1 Public Survey

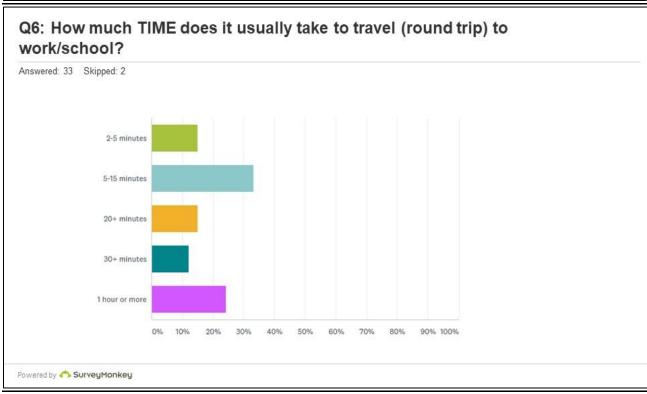


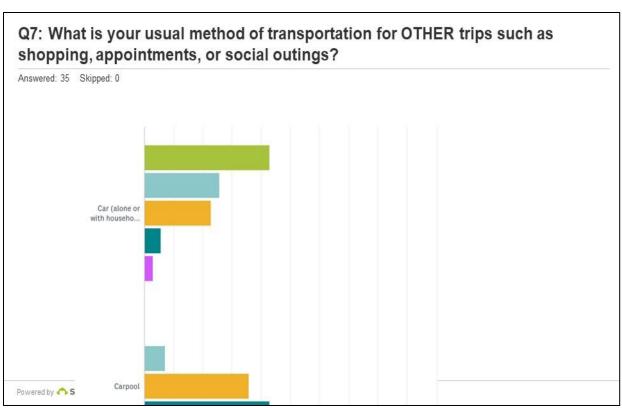


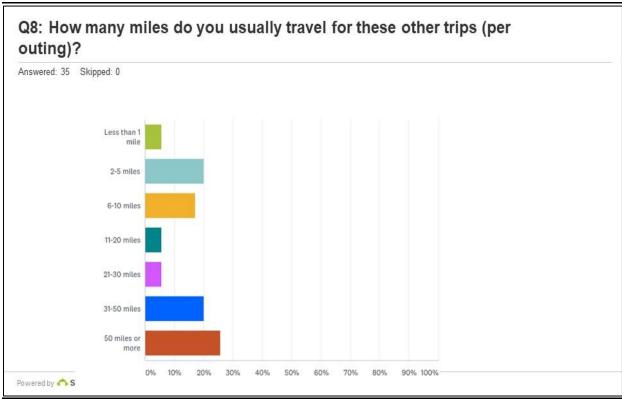


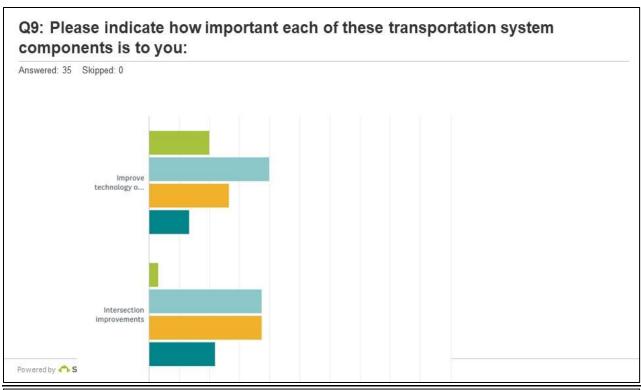


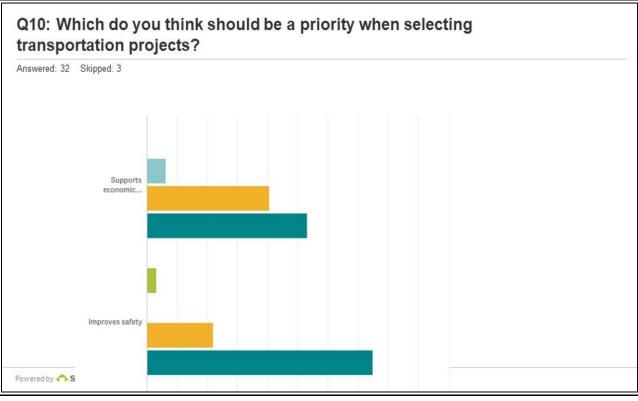




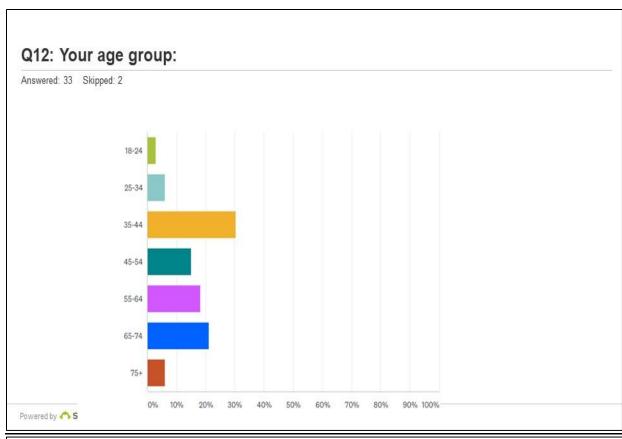


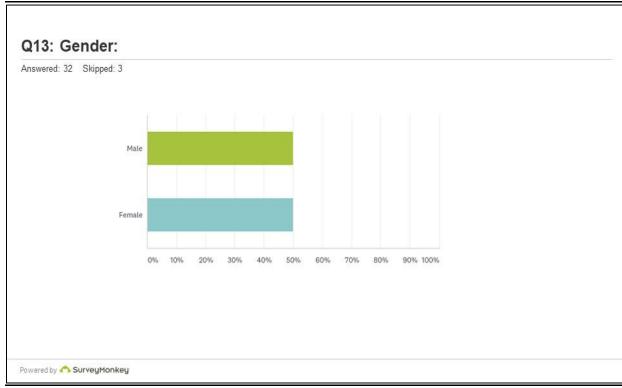


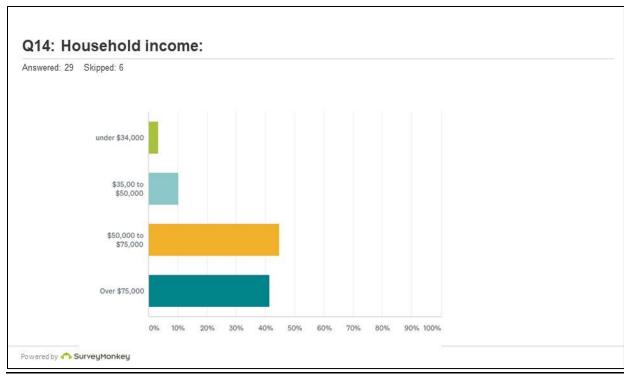


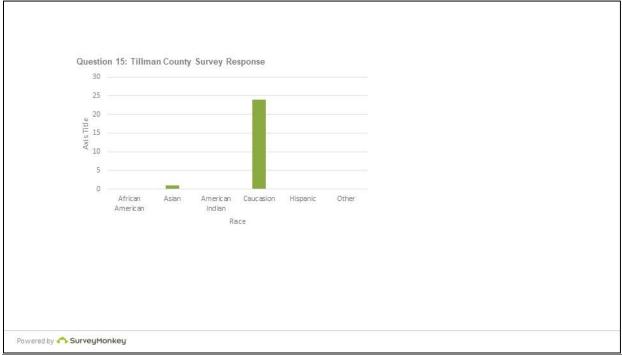


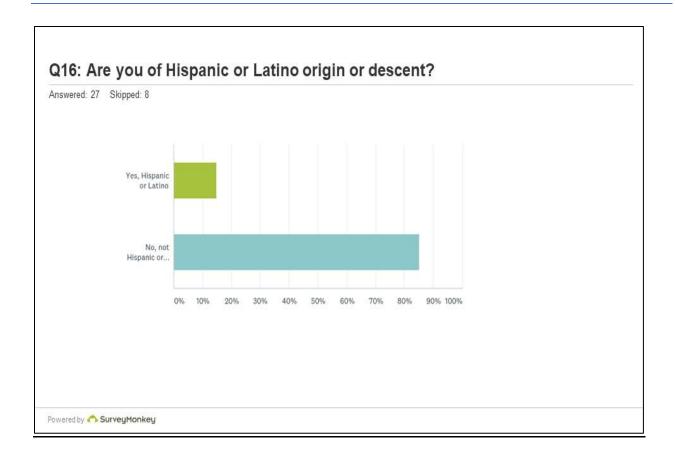












Appendix 4.2: Public Outreach

On February 15, 2017 a stakeholder's meeting was held at 2001 E. Gladstone, Great Plains Technology Center (Kiowa Tillman Campus), Frederick, OK. Prior to this meeting invitation were sent to local stakeholders.

SORTPO staff distributed a copy of the 2040 Tillman County LRTP to the following agencies: Tillman County Commissioners, City/Towns (Frederick, Grandfield, Tipton), 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 Tillman County LRTP was placed in the Frederick Press-Leader. The SORTPO Policy Board held a public hearing on November 30, 2017 to receive comments on the 2040 Tillman County LRTP prior to its' adoption.

Public outreach for Amendment #1 included placing the proposed amendment on the SORTPO Website, SORTPO Policy Board established a 30 day public review and comment period from January 28, 2019 – February 26, 2019.

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: 10:00 a.m.
Location: 2001 E. Gladstone, Great Plains Technology Center
(Kiowa Tillman Campus), Frederick, OK

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.

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Public Review and Comment Period

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

Agency	Contact Name	Comments
		No comments received.

<u>Public Review and Comments</u> **received for Amendment #1 beginning January 28, 2019 – February 26, 2019**

a. 2040 Tillman County Long Range Transportation Plan – no comments received.