

# "Building Pathways for our Future" MAYES COUNTY LONG RANGE TRANSPORTATION PLAN 2019 – 2040



#### PRODUCED BY:

# Grand Gateway Regional Transportation Planning Organization

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

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# **Mayes County**

# **Long Range Transportation Plan**

2019 - 2040

Prepared by:

# **Grand Gateway Regional Transportation Planning Organization**

In cooperation with:

Cherokee Nation

Cities and Towns within Mayes County

City of Pryor

Grand Gateway Economic Development Association

Grand Gateway RTPO Technical Committee & Policy Board

United Keetoowah Band of Cherokee Indians

Oklahoma Department of Transportation

Oklahoma Workforce Development Board

Pelivan Transit

Mayes County Commissioners, Planners, and Staff

Mid-America Industrial Park/OOWA

Mayes County LRTP Steering/Working Group

U.S. Census Bureau, Midwest Region

The 2040 Long Range Transportation Plan (LRTP) was developed through a cooperative effort among GGRTPO member jurisdictions and the Oklahoma Department of Transportation (ODOT).

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#### **GGRTPO MISSION AND VISION**

A mission and vision was adopted by GGRTPO for the purpose of planning for a sustainable regional transportation system.

A mission statement is a statement which is used as a way of communicating the purpose of the organization. A vision statement tends to be an aspirational description of what an organization would like to achieve or accomplish in the mid-term or long-term future. Together, these statements are intended to serve as clear guides for choosing current and future courses of action.

#### Mission

To coordinate the development of a safe and efficient transportation system through cohesive planning and innovative funding pursuits with transportation stakeholders for improvements that will enable people to improve their quality of life in northeastern Oklahoma.

#### Vision

A safe and efficient multi-modal transportation system in northeastern Oklahoma that enables people and commerce to thrive in their communities.

"Building Pathways to our Future"

Grand Gateway RTPO

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## **EXECUTIVE SUMMARY**

Transportation is fundamental to all aspects of community life. A healthy community and economy must have a transportation system that is stable, with sufficient funding for preservation, maintenance and needed improvement of all modes over time. Economic development, access to goods and services, housing, jobs, the economy and natural resource management are all dependent upon the transportation system. Together, these factors determine the quality of life in a community.

The purpose of the transportation system is to move people and goods in the safest and most efficient manner. Transportation must effectively allow individuals to conduct their personal lives, and provide for the efficient movement of goods to markets to support the county's economic vitality.

#### **FUNDING**

The primary challenge to improving transportation in Mayes County is to secure adequate funding. The current level of federal, state and local funds will be inadequate to ensure long term maintenance of roads, rail, and transit. For that reason, it will be necessary to find additional funding in order to maintain or improve current service levels and accommodate the needs of the residential and business communities over the period of this Long Range Transportation Plan (LRTP).

#### **SUSTAINABILITY**

Long-term sustainability and resilience in transportation are needed to ensure that people and the economy can continue to function in the event of disaster or unpredictable future conditions.

#### **6000**

The Mayes County 2040 Long Range Transportation Plan (LRTP) is the fifth transportation plan with a focus on municipalities and unincorporated portions of Northeast, Oklahoma.

The LRTP identifies existing and projected transportation improvement needs and includes an assessment of the various modes of travel, issues, trends and challenges that may influence transportation in Mayes County over the next few decades.

This LRTP was developed through a cooperative effort among GGRTPO, the member jurisdictions and the Oklahoma Department of Transportation (ODOT).

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Near-total reliance on a single mode of transportation may be an insufficient foundation for a secure and healthy community.

"Sustainability" goals of the Long-Range Transportation Plan include maintenance and preservation of the current system, enhanced economic vitality, improved mobility, connectivity,

safety and security. Preservation, rehabilitation and enhanced access to rail are perceived as necessary to both economic goals and long term community resilience.

#### LRTP UPDATES

The transportation policies and projects recommended in the LRTP are intended to be implemented over the next two decades. Over the period of the LRTP, it will be necessary to update the demographics, refine the policies and continue data collection and analysis. A comprehensive update should occur every five (5) years.

#### DEMOGRAPHIC AND EMPLOYMENT DATA

The Decennial Census has long been the accepted standard for demographic planning analysis. Due to the length of time since the 2010 Census, changes in Census Bureau practices, and the limitations of the data collected, we must increasingly rely on American Community Survey (ACS) data products published by the Census Bureau at one, three and five year intervals; in this case the 2013-2017 ACS data was utilized.

Other Census products were employed in this report for analytic purposes, including Traffic Analysis Zone (TAZ) data from Census Transportation Planning Products (CTPP), which sometimes carry a different date. An additional source of employment data was the Northeast Oklahoma Workforce Development Board (NEWDB). The NEWDB publications offer helpful labor force assessments and commute patterns. The Cherokee Nation was also a source for this data.

Therefore, while all the data comes together to present a comprehensive picture of the demographic and employment situation in Mayes County, the reader may find occasional variances.

#### A POLICY AND PROJECT PLAN

Many of the transportation safety and access needs identified by the community will need time to conduct studies and secure funding to address their concerns. However, some safety concerns were already included in the Oklahoma Department of Transportation (ODOT) 8-Year Plan.

Identified projects include; safety issues throughout the county, intersection improvements, integration of bicycle and pedestrian signage with road projects, safe access, driving surface quality, modernization of crosswalks and studies to be conducted. A listing of proposed projects is included below.

# IDENTIFIED PROJECT LOCATIONS (NO PARTICULAR ORDER)

Community Comment	Problem	State Road
Iron Post Road	Safety Issues	SH-82 & E590 Road
Snake Creek Road	Safety Issues	SH-82 & SE583 Road
Intersection E 580	Safety Issues	SH-82 & E580 Road
Old Dump Road	Safety Issues	SH-82 & E570 Road
Sam's Corner	Safety Issues	US-412 & S437 Road
Indian Springs Road	Safety Issues	SH-82 & NE 4448 Road
Strang Road	Safety Issues	SH-82 & 410 Road
Intersection Strang & True Roads	Safety Issues	435 Road & 420 Road
49 <sup>th</sup> Street	Safety Issues	B/T Oakwood Drive & S. Elliot
Carbide & True Roads Intersection	SafetyIssues	SH-20 & S435
Widening, Drainage & Asphalt	Safety Issues	Clarks Lane S. of SH-20

Table 1

# CHAPTER 1: INTRODUCTION; KEY ISSUES & GOALS

#### **BACKGROUND INFORMATION**

## REGIONAL TRANSPORTATION PLANNING ORGANIZATION

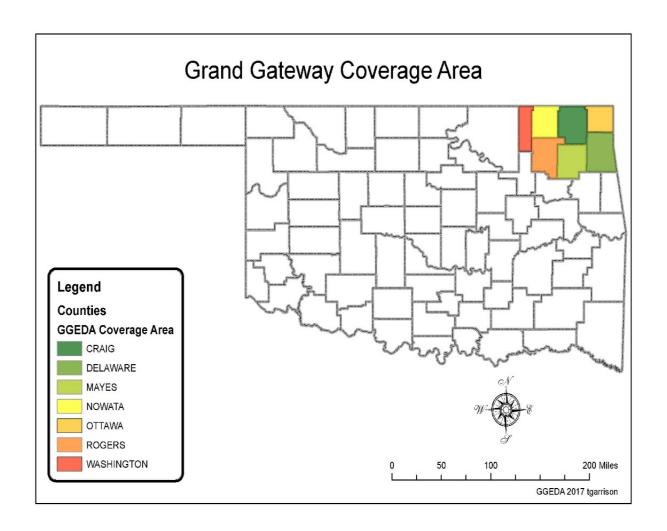
In June of 2006, Rural Planning Organizations of America (RPO America) was established. Rural Transportation Planning Organizations facilitate local involvement in the statewide transportation planning process at the regional level, provide technical assistance to local governments, and assist with public involvement in the planning process and other tasks. Congress recognized the new national organization as "dedicated to improving the planning and development of America's rural transportation network." The group supports the coordination, management, and planning of national rural transportation systems, as well as the linking of rural community economic development initiatives with state and local transportation programs.

The Oklahoma Department of Transportation worked with the Federal Highway Administration to allocate a portion of the federal State Planning & Research (SPR) funding to the Oklahoma Association of Regional Councils (OARC) to fund rural transportation planning projects. The participating Regional Councils of Governments are Central Oklahoma Economic Development District (COEDD), Northern Oklahoma Development Authority (NODA), South Western Oklahoma Development Authority (SWODA), Association of South Central Oklahoma Governments (ASCOG) and Grand Gateway Economic Development Association (GGEDA). ODOT began contracting directly with the Regional Councils in Federal Fiscal Year (FFY) 2018.

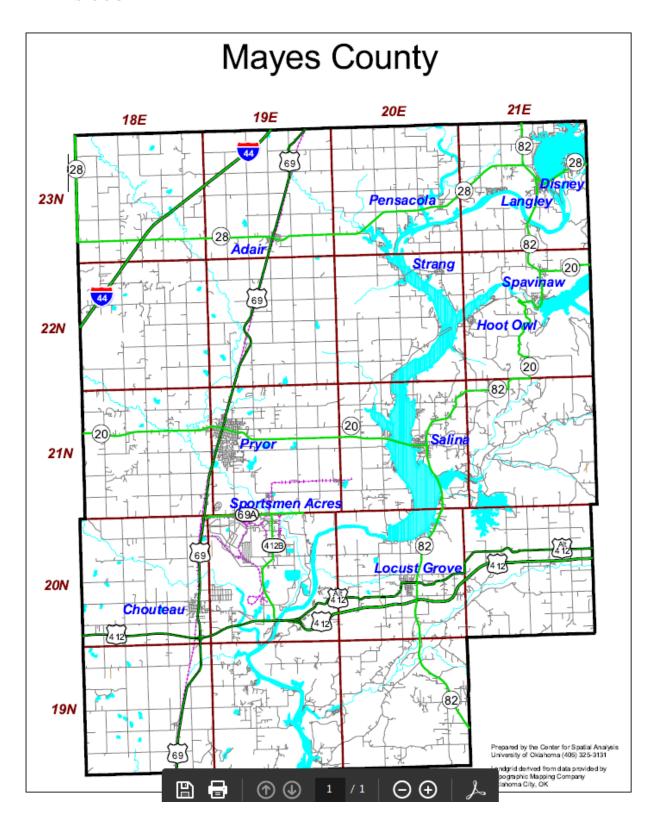
On August 11, 2016, GGEDA's Board of Directors created the Grand Gateway Regional Transportation Planning Organization (GGRTPO) by Resolution #2016-12. The GGEDA/GGRTPO Region is composed of a seven county area, and includes Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, and Washington Counties (Map 1). The GGRTPO will develop a regional transportation plan that will include the seven counties in the GGEDA region as Phase 1 of the ODOT RTPO Planning Program. Future coordination with the Eastern Oklahoma Development District (EODD) in Phase 2 may include providing the same services to their seven counties in the EODD Region which will then comprise a fourteen (14) county Northeast Oklahoma Regional Transportation Planning Organization (NEORTPO) Region in the State of Oklahoma. The GGRTPO region is predominately rural, with the majority of the population being within the incorporated cities of Bartlesville, Claremore, Grove, Miami, Nowata, Pryor, and Vinita in their respective counties.

The development of this Long Range Transportation Plan (LRTP) provides an opportunity for the community to identify priorities for Mayes County in context of the greater GGRTPO region.

A Resolution (Appendix A), Chart of Acronyms (Appendix B), and a List of Definitions (Appendix C) can be found in the Appendices section for references.







#### PURPOSE OF THE PLAN

The Mayes County Long Range Transportation Plan (LRTP) may be used to assist the community in focusing limited transportation funds on projects that provide the best return on investments; by developing realistic goals based on analysis of data and input from the

community; and as a data tool for grant applications to seek funding toward the projects. By establishing the year 2040 as the planning horizon, the community is looking toward long range strategies to accommodate their transportation needs over a significant period.

The transportation plan will provide a guide for the development of a safer, more efficient transportation network among population centers through both long-term transportation system

#### **USE THE LRTP WHEN:**

PUBLIC REPAIRS ARE PLANNED, OR NEW DEVELOPMENT IS PROPOSED

- **✓** Guiding Policy
- ✓ Project List
- ✓ Grant applications

objectives and short-term implementation of policies and projects. Realistic assessment of short range steps toward long range goals will support local fiscal planning and provide for long term coordination with state or federally funded transportation projects within the County.

#### FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation Act, or "FAST Act." It is the first law enacted in over ten years that provides long-term funding certainty for surface transportation, meaning States and local governments can move forward with critical transportation projects, like new highways and transit lines, with the confidence that they will have a Federal partner over the long term. More information about the FAST Act is available in Appendix 1.

#### **REQUIREMENTS**

The LRTP has been developed by GGRTPO in cooperation with the federal, tribal, state, county, and member governments, ODOT, FHWA and FTA. Federal requirements have been incorporated into the Mayes County LRTP, some of which are reproduced within this plan.

The transportation plan must:

- ✓ Address at least a twenty year planning horizon
- ✓ Include a financial plan that demonstrates the consistency of proposed transportation investments with sources of revenue already available

#### PLANNING FACTORS

The plan is intended to address the ten planning factors required by federal law, 23 CFR 450.306, for the transportation planning process listed below:

#### PLANNING FACTORS 23CFR 450.306

# PLANNING FACTORS TO BE ADDRESSED IN NONMETROPOLITAN, METROPOLITAN AND STATEWIDE TRANSPORTATION PLANNING:

- 1. Support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially by 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 development patterns.
- 6. Enhance the integration and connectivity of the transportation system across and between modes, people and freight.
- 7. Promote efficient system management and operation.
- 8. Emphasize the preservation of the existing transportation system.
- 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
- 10. Enhance travel and tourism.

#### Table 2

#### KEY ISSUES, TRENDS AND CHALLENGES

During the public participation process, the Mayes County community identified key issues, trends and challenges that have an impact on the function of the transportation system.

#### CONCERNS OF THE COMMUNITY

Comments received during the public participation survey indicate that the high volume of trucks traveling through Pryor causes traffic congestion, delays, noise, and was the highest commented concern by the public in the survey results. Other concerns included train volume, intersection improvements due to high volume of traffic accidents, maintenance needs for roads and bridges, needing to protect the environment, connections to US and State highways, shoulder additions to roads, pedestrian sidewalks needed, improvements to traffic lights synchronization, and more bicycle trails.

#### **TOP ISSUES**

- ✓ Funding limitation. Revenues continue to be limited to meet transportation system needs, while costs increase, especially for: county road maintenance, public transit, city street and sidewalk maintenance, preservation and improvement, bridge rehabilitation or reconstruction
- ✓ Need for improved safety:
  - o High traffic collision rates at many intersections
  - o Railroad crossings improvements throughout the county
  - o Multiple lane improvements for truck traffic on US 69
  - o Wider shoulders for bicyclists using highways with rumble strips
  - o Lack of Pedestrian sidewalks for many disabled individuals in loading areas
- ✓ The Mayes County Master Trails Plan should be fully implemented
- ✓ An additional High/Wide Heavy Haul Route is needed in eastern Oklahoma running south to Texas.

#### **TRENDS**

- ✓ Gradual population increase
- ✓ An increase in the proportion of residents over age 65 is projected
- ✓ Residents commuting to Tulsa for medical, shopping, and social needs
- ✓ Decay of existing infrastructure among all modes of transportation
- ✓ Increased Tribal influence on development and transportation in Oklahoma
- ✓ Increased demands in freight movement via rail, trucking, and waterway
- ✓ A national and regional economic shift towards increased demand for recreational travel amenities: Trails, sidewalks, bike racks, bike lanes

- ✓ FHWA policy has placed greater emphasis on improving transportation for "traditionally under-served" population groups such as:
  - Non-drivers of any age, including the elderly, low-wage workers and zero-vehicle households
  - o Bicycle and pedestrian users of the system

#### **FUNDING**

The primary challenge identified by this study is funding of all aspects of the transportation system. Revenue has fallen behind the investment needed to preserve and maintain the current system, therefore, additional funding will be needed to keep people and goods moving effectively over the next two decades. Increases in the proportion of the population over age 65 can be expected to result in additional demand for public transit. Regional railways offer an alternative to trucked freight and reduce the wear on vulnerable state and county roads. Funding for increased transit, maintenance and preservation of the existing roads, bridges and rail infrastructure must be the top priority of the long range plan.

The financial assessment is intended to summarize typical federal, state and local transportation funding sources in Oklahoma.

Funding for highway improvements in Oklahoma comes primarily from two sources – the Federal Highway Trust Fund and state funds. Oklahoma's primary sources of funding for road and bridge construction and maintenance are derived from fuel taxes and motor vehicle tax. Taxes are collected by the Oklahoma Tax Commission. Taxes are imposed on all gasoline, diesel, and special fuel sales statewide.

In 1923, Oklahoma enacted its first State-level excise tax on motor fuels. The latest increase became effective on July 1, 2018 and the tax is 19 cents per gallon for gasoline and diesel. In addition, counties

raise their own revenue sources to supplement state and federal funding through local option sales taxes. Mayes County collects a 1.375% excise (sales) tax, the proceeds of which are deposited to the county general fund. .375% of the tax is allocated to maintenance, repair and improvement of county roads and bridges.

The Oklahoma House of Representatives passed HB1176 in a special session in the summer of 2006. Funding began 7/1/07 and phased in over three years to 15% of the Motor Vehicle

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General maintenance and repairs are the primary responsibility in the annual budget and are necessary to keep the costs as low as possible. According to the American Association of State Highway and **Transportation Officials** (AASHTO), every \$1 spent to keep a road in good condition avoids \$6-\$14 needed later to rebuild the same road once it has deteriorated. Collections Tax. An additional increase of 5% was added in 2010. Funding is divided evenly between ODOT's eight divisions. All projects must be let through ODOT.

20% of the Motor Vehicle fees equated to more than 136 million dollars in federal fiscal year 2015. The County Improvements for Roads and Bridges (CIRB) fund was capped at \$120 million per year in 2016. Over the past several legislative sessions more than \$150 million has been removed from the CIRB funds to help balance the state's budget.

#### **FEDERAL**

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. The FAST Act, signed into law in July 2012, is the federal transportation legislation that identifies specific funding programs.

In Fiscal Year 2016 The Oklahoma Department of Transportation (ODOT) provided \$26 million of Surface Transportation Program (STP) federal funds to the County Highway System. These STP funds may provide up to 80 percent of the construction costs of these projects. Counties fund the remaining 20 percent match for construction costs, plus the costs for engineering, right of way and utility relocation through local sources or state County Road and Bridge Improvement funds (CRBI/CIRB). Counties also receive road and bridge funding from the federal government, channeled through the state. In addition, counties raise their own revenue sources to supplement state and federal funding through local option sales taxes. Appendix 2 identifies transportation funding categories identified in the US DOT MAP-21 and the FAST Act.

#### STATE

Funding for highway improvements in Oklahoma comes primarily from two sources – the Federal Highway Trust Fund and state funds. The latest increase became effective July 1, 2018 and the tax is currently 19 cents per gallon for gasoline and diesel. Oklahoma's primary sources of funding for road and bridge construction and maintenance are derived from fuel taxes and motor vehicle tax.

#### ODOT – COMMITTED IMPROVEMENTS

Major transportation improvement projects scheduled by ODOT are construction projects such as new or replacement roads and bridges, and do not include maintenance projects. The ODOT Eight (8) Year Plan groups projects according to anticipated State and Federal fund categories.

Most funding in recent years has necessarily been allocated to bridges. See Appendix 12 for the itemized table of projects funded on the 8-year plan.

#### CIRB - COUNTY IMPROVEMENTS, ROADS AND BRIDGES

With the passage of House Bill 1176 in the summer of 2006, a new section of law was codified in the Oklahoma Statutes as Section 507 of Title 69. This law created the County Improvements for Roads and Bridges (CIRB) program, a revolving fund. The apportionment for CIRB from the Motor Vehicle Tax has increased from five percent (5%) in SFY 2008 to 20 percent as of the beginning of SFY 2015.

Funding provided to county roads is estimated to be an amount not to exceed \$120 million based on current legislation. The funds are directed to be equally distributed by the Department's eight (8) Transportation Commission Districts and administered by the Department through the utilization of a Transportation Commission-approved five (5) year construction work plan for projects on the county road system.

The five year CIRB plan is developed through careful coordination with the County Commissioners along with the respective Circuit Engineering Districts (CED). Mayes County is located within District one (1). Projects included in the CIRB plan are the highest priority, most critical projects as identified and validated by the cooperative project recommendation, selection and approval process. See Appendix 13 for a table of projects scheduled on the CIRB.

### TRANSPORTATION ALTERNATIVES PROGRAM (TAP)

The Transportation Alternatives Program (TAP) was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century Act (MAP-21) and is codified at 23 U.S.C. sections 213(b), and 101(a)(29). Section 1122 provides for the reservation of funds apportioned to a state under Section 104(b) of Title 23 to carry out the TAP. The national total reserved for the TAP is equal to two percent (2%) of the total amount authorized from the Account of the Highway Trust Fund for Federal-aid highways each fiscal year (23 U.S.C. 213(a)).

The TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation, enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate system routes or other divided highways. TAP primarily funds bicycle and pedestrian infrastructure. Pedestrians include those operating motorized mobility scooters or wheelchairs. In 2016 the City of Pryor received TAP funding for the Mayes County Master Trails Plan. In 2019 the Town of Chouteau received Tap funding.

#### **COUNTY**

The main funding program for county roads and bridges is the County Highway Fund, which consists of revenues from the state taxes on gasoline and diesel fuels as well as motor vehicle registration fees and a portion of the state gross production tax on oil and gas in the case of counties that have oil and gas production. A county's apportionment is based on several formulas that use proportional shares of each factor as it relates to the total statewide county totals. Counties that have oil and natural gas production receive a portion of the five percent (5%) 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.

Funds collected by the Oklahoma Tax Commission (OTC) for transportation projects are distributed directly to the counties. Revenues collected specifically for the CIRB category are from state gasoline and diesel tax, special fuel tax and state production tax on oil. Appendix 2 includes the CIRB for ODOT Division 8, of which Mayes County is a part.

#### TRIBAL TRANSPORTATION PROGRAM (TTP)

Recognized tribal governments receive federal transportation funds and may also designate local funds for transportation projects. The Tribal Transportation Program (TTP) is the largest program in the Office of Federal Lands Highway. Established in 23 U.S.C. 202 to address the transportation needs of Tribal governments throughout the United States Congressional FAST ACT that has stipulated the following annual allocations:

FY-2016 - \$465 million FY-2017 - \$475 million FY-2018 - \$485 million FY-2019 - \$495 million FY-2020 - \$505 million

These allocations will be utilized to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, and Alaska Native Village communities. A prime objective of the TTP is to contribute to the economic development, self-determination, and employment of Indians and Native Americans.

These funds are used for the construction of access roads, intersection improvements and other initiatives to improve transportation options that benefit tribal members and the general public. Under the FAST Act, up to 3% (up to \$14 million) of TTP funds are available each year for improving deficient bridges.

#### TRANSIT FUNDING

Federal, state and local funding is limited and performance based. This restricts the type and capacity of service that can be provided. Section 5310 Transportation for Elderly Persons and Persons with Disabilities, Section 5311, Rural Transportation Assistance Program, Section 5311 c, Tribal Transportation Program, and State of Oklahoma Revolving Fund are the primary sources of funding for the public transit system in Mayes County.

The Oklahoma Department of Transportation is responsible for the administration of the Section 5310 program, established in 1975 as a discretionary capital assistance program. In cases where public transit was inadequate or inappropriate, the program awarded grants to private non-profit organizations to serve the transportation needs of elderly persons and disabled individuals. The Section 5311 program is the Federal Transit Administration (FTA) Non-Urbanized Area Formula Grant Program. The FTA annually allocates apportioned Section 5311 funds to the governor of each state to provide funding for public transportation projects serving areas that are outside of an urban boundary with a population of 50,000 or less. Funds may be used for capital, operating, planning or technical assistance projects. No restrictions regarding age or physical disability are placed on those who may want to use the services offered. With these funds the mobility needs of rural transit users can be supported and enhanced. Section 5311 Program grants are intended to provide access to employment, education and health care, shopping and recreation. Eligible local recipients of the Section 5311 program funds include local public bodies and agencies thereof, nonprofit organizations, and tribes.

The Federal Transit Administration (FTA) administers the Section 5311 c Tribal Transportation Program directly to tribal governments. The Cherokee Nation contracts with Pelivan Transit for tribal transportation services as well as the Northeast Oklahoma Tribal Transportation Consortium under the Eastern Shawnee Tribe of Oklahoma as primary of a nine tribe consortium that consists of the following tribes: Eastern Shawnee, Miami, Modoc, Ottawa, Peoria, Quapaw, Seneca-Cayuga, Shawnee, and Wyandotte. Pelivan Transit provides transit services to all people through a variety of funding sources.

Pelivan Transit is a rural public transportation program operating under the Grand Gateway EDA. Funding sources for this program consists of the following: FTA Section 5311 Rural Transportation Grant, Northeast Oklahoma Tribal Transportation Consortium and Cherokee Nation Tribal Transportation, OKDHS Section 5310 and Temporary Assistance for Needy Families Program, Grand Lake Mental Health Clinics and numerous other agencies, State of Oklahoma Revolving Fund, subsidies from municipalities, revenues from the Flexible Fuel Vehicle Maintenance operation and fares from the general public riders. Fees collected from passengers represent a minor contribution to funding operating costs.

#### RAIL FUNDING

Funding for Rail infrastructure may be provided through Federal, State, Tribal, Local or Private Investment and shipping fees.

#### ADDITIONAL INFORMATION – FUNDING TRANSPORTATION

Funding sources are typically combined at various levels of government: city, county, regional, state and federal, as well as cooperative agreements with educational institutions such as technical schools, colleges and universities.

Projects must generally be identified in the local TSP and the statewide State Transportation Improvement Plan (STIP) to qualify for state or federal funding. As a result, it is always better for transit providers to have projects on the STIP lists so that they can be in the queue should funds become available. Funding for transit projects has been, and will continue to be, a challenge due to the volatility of grant appropriations and unstable transit funding. Potential federal, state and local funding opportunities are constantly changing, and it is important for a community to stay well informed about annual opportunities for transit.

FTA provides training for transit agencies seeking federal funding, maneuvering through federal funding requirements, and project management training. Upcoming training events are listed on the FTA Region websites.

Typically, federal funding grants require:

Public Involvement – The public must be involved in the process of identifying alternatives and selecting the final plans for any transit facility.

Local Matching Funds – The percentage of local match is usually 10-20 percent. The local match may be provided as dedicated project funds or staff time, assuming that neither the matching funds nor the funds to pay wages come from a federal revenue source.

#### MAINTENANCE AND PRESERVATION

#### **County Roads**

The persistent challenge to the county road system is the cost of road maintenance; the daily costs of keeping more than 1,126 miles of roadway and signage in good condition. Source: Association of County Commissioners of Oklahoma (ACCO) 2019.

#### Sidewalks and Pedestrian Safety

Sidewalks and proper crosswalks throughout the region are absent or in a state of disrepair. The lack of safe paths to shopping, school and recreation is a common safety issue. Some Mayes

County towns and cities have made efforts to improve pedestrian conditions. These efforts should be continued and supported in every population center.

#### Rail

The Union Pacific Railroad is the only Class 1 railway operating through Mayes County (UP). Rail freight is expected to increase by 2040 which is projected to be over capacity within the next 20 years. The Tulsa Port of Catoosa operation also includes a rail operation for the industries at the Port as well as barge shipments to the Gulf of Mexico for international trade. Future freight movement growth through the MKARNS waterway would provide relief to the anticipated rail freight demands in Mayes County.

The following paragraph is excerpted from the Federal Highway Administration document titled "Planning for Transportation in Rural Areas," and is relevant to Mayes County's connections to the regional and national economy:

"Business decisions by rail companies have resulted in the abandonment of many rural branch lines. The result has been loss of rail freight service to these areas and increased trucking on the rural road system to compensate for this loss. Increased trucking on rural roads ultimately increases road maintenance needs and reduces the financial capability of the rural area and state to keep the roads in adequate condition. (FHWA PTRA, 2001)"

The reader is directed to the 2013 Oklahoma Rail Infrastructure Report Card; the 2012 Oklahoma Statewide Freight and Passenger Rail Plan; current FHWA and ODOT policy, and other print and web resources.

#### **DEMOGRAPHICS AND TRENDS**

As of the 2010 United States Census, there were 41,259 people residing in Mayes County. 67.1% were White, 22.1% Native American, 0.7% Black or African American, 0.4% Asian, 0.1% Pacific Islander, and 9.6 % of two or more races. 3.7% were Hispanic or Latino (of any race).

#### Stable Population and Economy

Mayes County is forecast to have a moderate increase in population over time. According to the public survey conducted in Mayes County, most people work within 30 miles of home but may travel over 30 miles to shop and seek medical services in nearby Tulsa.

#### Aging

The projected number of people over age 65 in 2040, is expected to grow. In 2018, Mayes County was home to more than 41,107 people. Of these, about 18.4 percent were over age 65. The US Administration on Aging (AoA) Report projected that by 2030, the over-65 group will

make up 24% of the population in the state (AoA, 2014). If the balance holds true, Mayes County may expect an aging population in excess of 24% of population by 2040.

#### **Cultural Trends and Perceptions**

"Quality of life" is an economic issue that impacts the long-term social and fiscal health of a community. The availability of preferred educational, recreational and transportation options has a direct impact on where individuals choose to invest valuable business and family resources. Continuing efforts to develop the county as a great place to live and work is a fundamental component of economic attraction, as is the physical appearance of the visible infrastructure.

#### OTHER CHALLENGES THAT WERE IDENTIFIED BY THIS STUDY:

- Lack of funding in the rural areas for public transit limits accessibility at affordable fares.
- Commuter park and ride interest was expressed for workers commuting to the Tulsa Metropolitan Area.
- Shuttle services to several casinos and entertainment venues during evenings and weekends was requested.
- Intercity connections for college students commuting from Mayes County to Owasso, Claremore and Tulsa.
- Pedestrian sidewalks and walkable environments for many towns in Mayes County are needed.

#### GOALS, OBJECTIVES AND POLICIES

The LRTP includes goals, objectives and policies to assist Mayes County in the planning and prioritization of transportation system investments.

#### **GOALS**

The goals of the LRTP were developed from meetings held with the general public, key stakeholders, Survey, Mayes County LRTP Working Group (Steering Committee), Technical Committee members, and Policy Board members and are based on the current planning guidelines published by the primary funding agencies – the Federal Highway Administration (FHWA), and the Oklahoma Department of Transportation (ODOT).

#### **OBJECTIVES**

Objectives are specific, quantifiable steps towards the realization of community goals. Objectives should be *Specific and Measurable* and are more focused; typically more tangible statements related to attaining the set goals.

#### **POLICIES**

Policy statements and Action steps provide guidance for decisions that will help attain these goals and objectives. They are *Attainable and Relevant* in the twenty-year *Time* frame. Policies included in the plan were developed in coordination with member governments; partner agencies; technical committee and policy board members.

#### MAYES COUNTY GOALS

Goals for the Mayes County LRTP were developed from comments received from the public and a composition of work plans with Mayes County Commissioners, City and County Planners, Transportation Stakeholders, and ODOT. They are based on the ten planning factors required by federal law 23 CFR 450.306 for the transportation planning process. Table 3 identifies the goal categories for the LRTP. The full text of the goals, objectives and strategies developed for this plan are outlined below.

#### **GOAL CATEGORIES**

Maximize Access to     Funding	Provide a sound financial basis for the Transportation system
2. Prioritize Maintenance and Preservation	Maintain and preserve existing infrastructure and services
3. Enhance Economic Vitality	Maintain and enhance movement of freight and other economic development activities; Improve quality of life
4. Improve Accessibility, Mobility and Connectivity	Improve accessibility and mobility of people and freight; Improve regional connectivity and continuity of roads, sidewalks, bike routes and rail
5. Increase Safety and Security	Ensure high standards of safety in the transportation system, improve resilience for personal and economic security

Table 3

#### **GOALS AND OBJECTIVES**

#### GOAL 1- MAXIMIZE FINANCE & FUNDING

GOAL STATEMENT: A fiscally balanced and sustainable transportation system

#### **OBJECTIVES**

- A. Consistent regional applications for all available transportation opportunities maximizes annual funding.
- B. Local agencies, municipalities, tribal governments, state officials and private interests effectively collaborate in the pursuit and funding of transportation improvements.
- C. Expansion of transportation modes that utilize private funding or have a higher proportion of user-borne costs, such as private roads and rail; fees for service.
- D. Utilization of Grand Gateway Community Development Foundation, a 501 (c)(3) tax exempt public charity organization designed for community development which includes the transportation system.

# GOAL 2 – PRIORITIZE MAINTENANCE AND PRESERVATION OF EXISTING INFRASTRUCTURE

GOAL STATEMENT: Preservation and maintenance of all components of the existing system will be prioritized over new construction to serve residential and commercial development within the region.

#### **OBJECTIVES**

- A. The current transportation system is sustained and maintained by stable funding.
- B. Regional pavements are preserved through growth of intermodal freight (rail and port).
- C. New development is directed to appropriate roads and infrastructure.
- D. Private companies with heavy truck traffic contribute to maintenance of vulnerable county roads.

#### GOAL 3 - ENHANCE ECONOMIC VITALITY

GOAL STATEMENT: An integrated, multimodal transportation system promotes quality of life and economic development opportunities through enhancing the economic competitiveness of the region by improving access to jobs, education services, encouraging healthy neighborhoods and supporting business access to markets.

#### **OBJECTIVES:**

A. Economic development is coordinated with strategic transportation investments.

- B. Employers have assurance that the labor force has reliable transportation options.
- C. Reliable access to shopping and services is realistic for all residents.
- D. Retail customers using all modes of travel.
- E. Develop annual revenue sources dedicated to low cost transportation improvements.

#### GOAL 4 - IMPROVE ACCESSIBILITY, MOBILITY, CONNECTIVITY

GOAL STATEMENT: Improve accessibility and mobility for Mayes County's citizens and freight; Ensure regional connectivity; Support multiple modes of transportation

#### **OBJECTIVES**

- A. Funding is balanced among modes to ensure sustainable mobility solutions.
- B. Highway improvements coordinated with airport, bicycle/pedestrian, freight, transit, and rail projects according to the policies of ODOT.
- C. Reliable access to the transportation system is ensured for ADA compliance.
- D. Transit is an easier access option of travel for the unincorporated (rural) populace.
- E. Dedicated Bike and "Share the Road" routes are indicated with signage for improved regional mobility.
- F. Park-and-ride lots are developed in locations where potential vanpools for commuters warrants.
- G. Planning efforts result in continuous bikeways throughout the multi-county region.
- H. Right of way (ROW) areas are preserved for transportation purposes; including abandoned, existing and future road and railroad corridors.

#### GOAL 5 - INCREASE SAFETY & SECURITY

GOAL STATEMENT: *Safety:* All modes of transportation will provide transportation opportunities that are safe. *Security:* Identify and protect critical transportation infrastructure from both natural hazards and human threats; incorporate strategies for improved resilience.

#### **OBJECTIVES:**

- A. Areas with higher collision rates are monitored and improvements are implemented.
- B. Structurally deficient bridges are prioritized for repair or replacement.
- C. Local site development standards address safety for all legal road users.
- D. Bicyclists have improved safety in rural areas.
- E. Persons using handicap mobility vehicles have off road access to common destinations.
- F. Crosswalks have appropriate signage and visibility.
- G. A transportation system which is sustainable and resilient supporting long term needs.
- H. Improved modal options to reduce reliance on single-occupancy vehicles.

# CHAPTER 2: CURRENT CONDITIONS, NEEDS, AND FUNDED IMPROVEMENTS

This chapter provides an assessment of current conditions that relate to transportation in Mayes County. Data and information included in this chapter were obtained from county, state and federal agencies or institutions.

#### **MAYES COUNTY**

According to the U.S. Census Bureau, the county has a total area of 655.39 square miles. Population is 63.0 persons per square mile.

#### **ENVIRONMENTAL FACTORS**

With every project, care must be taken to ensure minimal environmental impacts. The purpose of this section is to provide an initial consideration of important environmental features and resources in Mayes County.

Identification of important environmental resources will provide agencies and officials, involved with addressing the transportation issues the information necessary to afford protection or to minimize impact to environmental resources as required by the National Environmental Policy Act (NEPA), and other State and Federal laws, rules and regulations.

As individual projects or transportation improvements are advanced from this Plan, detailed environmental impact assessments will be required for any projects using federal funds, and in many cases, also any using state funds. The environmental information collected and mapped here provides for an understanding and awareness of some important features and resources early in the planning process. In this way, the protection of these resources, either through avoidance or minimization of impact, can be more fully considered as an integral part of plan and project development.

Environmental factors that need to be routinely considered in transportation planning include, but are not limited to, the following: Physical geography, Ecological Regions, Cross Timbers, Endangered Species, Ecology, Lakes, and Watersheds.

#### **Places**

The twelve (12) communities in Mayes County are Adair, Chouteau, Disney, Grand Lake Towne, Langley, Locust Grove, Pensacola, Pryor Creek, Salina, Spavinaw, Sportsmen Acres and Strang.

Population	2010	2018	Change
Adair	790	818	
Chouteau	2,097	2,089	
Disney	311	307	
Grand Lake Towne	74	71	
Langley	819	824	
Locust Grove	1,423	1,403	
Pensacola	125	125	
Pryor Creek	9,539	9,411	
Salina	1,396	1,397	
Spavinaw	437	433	
Sportsmen Acres	322	308	
Strang	89	90	

Table 4

# POPULATION

The twentieth century was a time of growth for Mayes County. See Table below:

Year	Population
1910	13,596
1930	17,883
1940	21,668
1950	19,743
1960	20,073
1970	23,302
1980	32,261
1990	33,366
2000	38,369
2010	41,259

Table 5

#### REGISTERED MOTOR VEHICLES

In Mayes County the 2018 number of registered vehicles averages less than one vehicle per person (.77%). However, that figure includes commercial vehicles and households with more than one vehicle. County-wide, about 5.12% of households in the county have no vehicle. An average household size is 2.575 persons. US Census ACS 2017, OTC Annual Vehicle Registration Report, 2018.

Table 6

Motor Vehicle registrations			
Year	2017	2018	
Auto	28,004	27,014	
Comm Truck	1,154	1,067	
Truck Tractor	135	112	
Farm Truck	1,537	1,451	
Motorcycles	1,599	1,472	
Utility Vehicles	158	130	
Tax Exempt	141	127	
Total	32,728	31,373	
2017 ACS pop	40,929		
Vehic/Pop	0.77		
Occ Housing	15,730		
Units			
Persons per Hhd	2.575		



There were 805 households in the county with no vehicle.

At an average household size of 2.575 persons, that means about

2,073 people have no transportation at home

Us Census ACS 2017



#### PROJECTED NUMBER OF VEHICLES 2040

If population trends and the rate of vehicle ownership as a percentage of population (0.77 vehicles per person) continue at the same rate as the last few decades by 2040 we may see an additional 9,400 vehicles on the roads traveling in Mayes County. A gradual increase in

population would also generate additional revenue from fuel taxes and other vehicle fees that fund road maintenance in Mayes County, although it is not likely to be statistically significant.

#### Projected registered vehicles 2040:

2010 figure (41,259 pop X 0.77 = 31,769 vehicles)

2040 figure (53,572 pop X 0.77 = 41,250 vehicles)

Sources: US Census 2010 and Oklahoma Dept. of Commerce

#### ZERO-VEHICLE HOUSEHOLDS

About 5.12% of households in the county have no vehicle. The southwest corner of the County has the highest percentage of zero-vehicle households.

See the Zero-Vehicle Households Map in Appendix 5 for more information.

#### TRAFFIC ANALYSIS ZONES (TAZ)

The Traffic Analysis Zone (TAZ) is used to produce Census Transportation Planning Products (CTPP). TAZ data are based on the 2010 US Census and are designed to allow planning agencies access to specific data for transportation system analysis and creation of geographic information layers suitable for planning purposes.

GGRTPO uses Traffic Analysis Zone (TAZ) boundaries in analysis of socio-economic data. Geographically, the Census study area was subdivided into thirty-two (32) Census Tracts. (See Appendix 6/7). One of the tasks of this planning effort was to create more detailed TAZ, based on census block data for the rural areas of the state. Census data is organized by County, Census Tracts, Block Groups and the smallest units, Tabulation blocks. 135 TAZ were created based on block data, each with populations numbering 200 to 600 people. See the Maps in Appendix 7 for more information.

#### MAJOR EMPLOYERS

Mayes County is home to Mid-America Industrial Park with over 80 companies and nearly 23,000 employees in the labor force. There are 785 employers in Mayes County according to the US Census QuickFacts. The primary mode of transportation for shipping products into the national economy is by truck, however rail and waterway shipments are also an integral part of the Mayes County operations.

Mayes County is part of the Northeast Workforce Development Board (NEWDB) and operates under the federal Workforce Innovation and Opportunity Act. Most major employers are located in the MAIP or near the City of Pryor Creek. The NEWDB monitors job data for seven counties: Craig, Delaware, Ottawa, Mayes, Nowata, Rogers, and Washington counties.

#### COMMUTER STATISTICS

According to the Oklahoma Department of Commerce, there are a small number of people who commute to work. Approximately 29% of the Northeastern Oklahoma Region residents commute outside the region. Mayes County experienced the third highest percentage of workers who live and work in the same county, 64%. Mayes County has 29% of the Northeastern Region's area population. Much of the Northeastern Region's area is rural. See Appendix 8 Tables, Charts and Maps for more information.



### **Mayes County Major Employers**

- Grand River Dam Authority 264
- Orchids Paper Products Company 267
- Pryor School System 250
- DuPont 235
- RAE Corporation 200
- Google 400
- Northeast Technology Centers 200
   119 full-time employees
   81 part-time employees
- WalMart 250
- Alliance Health / Pryor 190
- SYGMA 190
- City of Pryor (with Municipal Utility Board) -150

Table 7 - (Northeast OK Workforce, 2019); (Pryor Area Chamber of Commerce, 2019)

#### COUNTY AND COMMUNITY DEVELOPMENT

Changing land uses affect the flow of traffic throughout the community. Over recent decades, most residential and industrial growth has occurred in and near incorporated municipalities. This is a preferred development strategy which efficiently utilizes existing infrastructure.

## PHYSICAL DEVELOPMENT CONSTRAINTS, DEVELOPMENT CONDITIONS AND PATTERNS

There are various factors that can affect whether a site is appropriate for development. Some of these conditions may include the location of water and sewer infrastructure, existing roads buildings and, land ownership and tribal jurisdictions, legally established rights of way, floodplains, wetland areas, habitats or regulations.

#### ENVIRONMENTAL FEATURES

Mayes County is home to environmental features and natural resources which influence the transportation system. Rivers, streams and waterways meander throughout Mayes County. Protection of these and other resources must be an integral part of early project development, as required by the National Environmental Policy Act (NEPA), and other State and Federal laws.

The county has a gentle topography. This rolling topography, together with the presence of numerous streams and rivers, influenced the number of small county bridges that were originally built; many of which are now in need of rehabilitation and replacement.

#### MULTI-USE TRAILS, BIKEWAYS AND PEDESTRIAN WALKWAYS

Building a connected network of bicycle and walking facilities in Mayes County will foster a more balanced transportation system among all modes of travel. Bicycling and walking is no longer viewed as just recreational as it is also becoming a means of transportation for work, and other travel needs for its participants.

The Mayes County LRTP has included the bicycle and pedestrian planning process through public involvement with local groups via a survey, public meetings, and telephone outreach.



Trails Master Plan

#### MAYES COUNTY TRAILS MASTER PLAN

The Mayes County Trails Master Plan offers recommendations for improving community access to outdoor resources by building a network of off-road multi-use paved trails and on-street bicycle facilities. The purpose the Master Plan is to address the trail needs of community residents related to recreation, transportation, and economic pursuits. The plan addresses policies, programs, and physical improvements that should be implemented to improve access to recreation resources and improve transportation efficiency throughout the communities in Mayes County. It identifies corridors throughout and around Mayes County that should be developed in the next 15 years. The Trails Master Plan was developed by Mayes County in association with a steering committee of citizens, a trail planning consultant, local governments, and residents of the area. It responds to specific needs that were defined by residents through a series of public workshops. The Master Plan identifies the following roads which need to be widened, drainage addressed and asphalted: 9<sup>th</sup> Street going east of Pryor High School; 520 Road between South Elliot Street and Walmart; Old Airport Road; 510 Road and 433 Road.

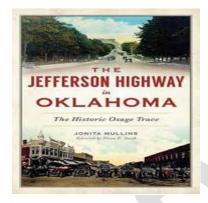
#### PUBLIC TRANSIT

Low population densities in the county and the distances between activity centers complicate the delivery of public transportation in rural areas. There are activity generators including workplace, shopping or medical destinations, which produce concentrations of transit need, where at least one end of a trip is concentrated enough that public transit may be feasible. The challenge is to establish stable funding, design efficient routes and schedule service such that the trip is attractive to the workers.

Pelivan Transit provides demand-response transit service for people of all ages. Pelivan currently provides transit services in Mayes County.

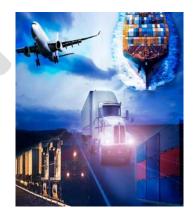
#### **HIGHWAYS**

Mayes County has US-69, SH-28, SH-82, US-412, I-44 and SH-20 passing through its boundaries. There are asphalt, brick, chip seal, concrete, dirt, gravel, and unimproved roads throughout the county. See Appendix 9 for a variety of maps of highway information such as mileage of each road type within the county, the locations of different types of roads as well as road projects proposed for future improvements within Mayes County. Two-lane and no-shoulder roads within the county are also identified as locations for future improvements. The historical Jefferson Highway also runs through Mayes County.



#### OKLAHOMA DEPARTMENT OF TRANSPORTATION, DIVISION 8

The development of the Construction Work Plan begins with Field Engineers at ODOT who are guided by their knowledge of the transportation needs and priorities in their respective Divisions. Mayes County is in ODOT's Division 8 region. ODOT works with area transportation stakeholders and elected officials to maintain an understanding of the condition of the roads and bridges in their areas of responsibility. In addition, other key Department Divisions collect and analyze transportation data factoring the fell



Divisions collect and analyze transportation data factoring the following general characteristics as applicable and listed in no particular order:

- surface condition
- bridge condition
- geometrics (vertical and horizontal alignment)
- average annual daily traffic (AADT)
- percentage of truck traffic
- accident history
- local, regional and national traffic patterns

capacity

(ODOT Construction Work Plan 2019)

#### MAYES COUNTY HIGHWAY INTERCHANGES

US-69 runs north and south through the western half of Mayes County. It enters/exits at the Wagoner and Craig County Lines. It intersects with SH-20 in Pryor. It also intersects with SH-28 in Adair. SH-82 runs north and south through the eastern half of Mayes County. It enter/exits at the Cherokee and Craig County Lines. It intersects with US-412 at the southern limits of Locust Grove. It also intersects with SH-28 in Langley. SH-20 runs east and west through the middle of Mayes County. It enters/exits at the Rogers and Delaware County Lines. It intersects with US-69 in Pryor. It also intersects with SH-82 in Salina and SH-28 in Langley. SH-28 runs east and west through the northern part of Mayes County. It enters/exits at the Rogers and Delaware County Lines. It intersects with I-44 approximately six miles west of Adair. It also intersects with US-69 in Adair and SH-82 in Langley. I-44 runs through the northwest part of the county from approximately EW044 road at the Rogers County Line and intersects with SH-28 approximately six miles west of Adair before exiting into Craig County. US-412 runs east and west through the southern part of Mayes County. It enters/exits at the Rogers and Delaware County Lines. It intersects with US-69 at the southern limits of Chouteau. It also intersects with SH-82 at the southern limits of Locust Grove.

#### **FREIGHT**

Reliable freight transportation enables connection between business and markets in Mayes County, Oklahoma, the United States and the World economy.

The Oklahoma Department of Transportation analyzes freight flows in, through, and into and out of the State of Oklahoma. Freight flows reflect the most recent year for which consistent and comprehensive data are accessible for each freight mode. This report describes freight flows on major highways and the freight rail network in Oklahoma.

A summary of freight facts impacting Mayes County and northeastern Oklahoma are as follows:

- A total of 680.7 million tons, or 68% of all the state's freight traffic, flows through Oklahoma.
- The Union Pacific Railroad (UP) transports 33 to 60 million tons and Burlington Northern Santa Fe (BNSF) Railroad transports 21 to 32 million tons of freight volume per year. These volumes are currently below capacity.

- The number of trains are expected to double over the next 25 years. Rail flows to, from, and within northeastern Oklahoma are expected to see strong growth as well, boosted by gains in exports from the Tulsa area to Arkansas and Missouri.
- By 2040, the annual freight volumes for the Union Pacific will be above capacity and the BNSF will be near capacity.
- Most of Oklahoma's freight, 64.6% of total tonnage, is transported by truck.
- Products most commonly transported by commercial motor vehicles in Oklahoma include coal, crude petroleum, cereal grains, gravel, and fertilizer. Agriculture, along with the energy industry, powers much of Oklahoma's economy.
- An improved Oversize/Overweight Permit System was developed in 2011 to enable an online registration process. This improvement resulted in an improved turnaround time factor from 24 hours to a mere five minutes for the issuance of a permit to the trucking entity. This positive impact has resulted in over 10,000 more permit issuances per year since its inception.
- ODOT has successfully reduced the number of structurally deficient bridges statewide from 1,168 in 2004 to 185 in 2017. Their goal is to reduce the proportion to less than 1% by 2020 and are currently on track to achieve that goal.

There are issues and opportunities that have been identified that directly affects freight movement in Mayes County:

- Mayes County is situated in the northeastern corner of Oklahoma and illegally loaded or operated trucks have an adverse impact on the roadways due to a lack of Ports of Entry from Kansas and Missouri.
- 2. There is only one viable mapped route through Oklahoma for Oversize/Overweight trucks to travel north and south in route to or from Texas. A study is needed to develop an additional route through eastern Oklahoma in a north/south direction.
- 3. Clean Fuel stations are needed for an alternative fuel option of CNG or LNG for trucks and commuters.

Oklahoma has the opportunity to capitalize on its geographic and economic position regarding freight with the following needs being addressed:

- Emphasize improvements to the major truck freight corridors
- Promote development of transload and/or major intermodal freight facilities with rail, waterways, and trucking industries.
- Encourage the railroad industry to upgrade and/or expand the freight rail infrastructure. Railroads can help manage the high increases in freight expected in the years ahead.

Source: ODOT's Freight and Goods Movement publication, November 2016. See the Map in Appendix 10 for the Airports/Rail locations in Mayes County.



An oversized shipment unloading at Tulsa Port of Catoosa enroute to the Gulf of Mexico via MKARNS

#### RAIL

#### UNION PACIFIC RAILROAD

Union Pacific Railroad is the principal operating company of Union Pacific Corporation (NYSE: UNP). One of America's most recognized companies, Union Pacific Railroad connects 23 states in the western two-thirds of the country by rail, providing a critical link in the global supply chain. The railroad's diversified business mix is classified into its Agricultural Products, Energy, Industrial and Premium business groups. Union Pacific serves many of the fastest-growing U.S. population centers, operates from all major West Coast and Gulf Coast ports to eastern gateways, connects with Canada's rail systems and is the only railroad serving all six major Mexico gateways. Union Pacific provides value to its roughly 10,000 customers by delivering products in a safe, reliable, fuel-efficient and environmentally responsible manner.

The Missouri, Kansas and Texas Railroad was built in 1871–72, and was joined later by the Missouri, Oklahoma and Gulf Railway, whose "Golden Spike" was driven at Strang in February 1913. The Missouri-Kansas-Texas Railroad was purchased by the Missouri Pacific Railroad Company (MoPac), a subsidiary of the Union Pacific Railroad in 1988. By that time, the century-old company served six mid-western states with more than 3,377 miles of track. Today, it continues to operate as part of the Union Pacific Railroad system.

Oklahoma enacted a \$100 million crossing upgrade project to ensure the safety of travelers statewide. The state's investment could add or update railroad crossings at more than 300 locations.

The investment will add enhanced enforcement measures - such as electronic crossing arms and flashing lights - to a number of passive grade crossings. As part of the program, Union Pacific will pick up the cost of maintaining the new crossings.

Through hard work and successful partnerships, the number of grade crossing collisions on U.S. passenger and freight railroads has fallen 80 percent since 1980.

Sources: legendsofamerica.com; Oklahoma Historical Society; www.up.com

#### **AVIATION**

According to the Federal Aviation Administration, the following Airports/Airparks/Heliports are registered for aviation operations in Mayes County:

Grand Isle Airport - OK18 Adair, Oklahoma Facility Usage: Private

Grandcraft Landing Strip Airport - OK30

Langley, Oklahoma Facility Usage: Private

Cedar Crest Heliport - 3OK3 Locust Grove, Oklahoma Facility Usage: Private

Integris Mayes County Medical Center Heliport - 70K3

Pryor, Oklahoma Facility Usage: Private

Longs Airport North Airport - OK21

Pryor, Oklahoma Facility Usage: Private

Mid-America Industrial Airport - H71

Pryor, Oklahoma Facility Usage: Public

Whittaker Army Heliport - OK84

Pryor, Oklahoma Facility Usage: Private



#### **PUBLIC SAFETY ISSUES**

Transportation safety issues are based on a variety of factors, many of which cannot be addressed by local transportation system planning, but are under ODOT jurisdiction. ODOT has collected extensive data and identifies sites for improvements annually to improve safety conditions throughout the State.

#### **MAYES COUNTY COLLISIONS 2013-2017**

The ODOT data found in the Tables in Appendix 11 depicts Mayes County Collision data from 2013 through 2017. There were a total of 2772 reported vehicle accidents of all types over the 5 year period. While the number of total collisions per year has remained relatively level, the number of fatalities has increased.

During the study period, an average of more than two percent (>2%) of Mayes County accidents resulted in death. A total of 61 fatal accidents resulting in 68 deaths. About 1% of all accidents statewide result in fatality. Out of 2,772 vehicle accidents 1,103 people were injured, and 1,608 collisions caused property damage only. See the Tables and Map in Appendix 11 for more details of traffic collisions in Mayes County.

#### **CAUSES**

The primary cause was fixed objects (28.2%) followed by rear-ended accidents (18.8%), and angle turning (13.7%). The majority of collisions involved multi-vehicles (67.0%), occurred in dry conditions (80.6%) and during the mid-morning/afternoon (36.8%) with clear conditions (57.9%). The majority of the accidents occurred on Friday (17.1%). Bridges were the highest locations and work zones were second. Most accidents were caused by driver's error.

#### PEDESTRIAN AND BICYCLE

Of total collisions over the five (5) year period, 5 persons were killed in 26 pedestrian accidents. Four (4) vehicle accidents involved bicyclists – with no fatalities in those accidents.

#### DETERIORATING PAVEMENTS AND DEFICIENT BRIDGES

The Oklahoma DOT has assigned County roads an average score of 110 on the International Roughness Index (2014), a measure of the pavement performance standards for good and acceptable ride. A score below 95 is in the good category.

State transportation infrastructure investment did not increase between 1985 and 2005. According to the 2014 Update on Oklahoma Bridges and Highways published by ODOT, in 2005 highway pavements were deteriorating at a rate beyond the available funding to repair, let alone reconstruct, and more than 1,500 of Oklahoma highway bridges were *structurally deficient* or *functionally obsolete* (see Appendix C; Definitions).

The Oklahoma Legislature enacted legislation to begin to correct the problem. ODOT initiated a goal to have near zero structurally deficient bridges in Oklahoma by 2020, and has replaced or rehabilitated more than 1,000 bridges since January 2006. All such bridges on State highways are targeted for repair and replacement by the Oklahoma DOT over the next eight years. Therefore, much of the annual funding for road repairs and improvements in the ODOT 8-year Plan (2017-2024) is necessarily dedicated to bridge work. See Appendix 12 for scheduled improvements projects in the ODOT 8-year Plan and Appendix 13 for the CIRB projects.

#### **BRIDGES**

Aging bridges are scattered throughout the county. Structurally compromised bridges may be weight restricted. Some bridges may be structurally sound, but have narrow road beds which are considered functionally obsolete by modern standards.

The National Bridge Inventory tracks all bridges that are more than 20 feet long. The NBI database records more than 200 bridges in Mayes County. As of July 3, 2018 seventy-eight (78) are considered deficient or obsolete, most constructed during the 1920's and 1930's. Source: Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS. See Appendix 13 for CIRB projects scheduled for improvements (2018-2022).

#### STRUCTURALLY DEFICIENT; FUNCTIONALLY OBSOLETE

Fifty-seven (57) of Mayes County bridges are structurally deficient and twenty-one (21) are functionally obsolete; which can have a negative impact – not only on public resources and safety – but also on the development potential of properties in the county.

A bridge is classified as structurally deficient if the deck, superstructure, substructure, or culvert is rated in "poor" condition. A bridge can also be classified as structurally deficient if its load

carrying capacity is significantly below current design standards, or if a waterway frequently overtops the bridge during floods.

Functionally Deficient bridges have lane widths, shoulder widths, or vertical clearances that are not fully functional to serve current traffic demand. While it is not unsafe for all vehicles, older design features cannot adequately accommodate modern traffic volumes or vehicle sizes and weights.



In some cases, weight limits on county bridges may be too low to safely support Fire response vehicles, resulting in a situation where trucks may have to be indirectly routed in a fire emergency.

In the event of fire in a location that is not readily accessible to a fully loaded water tanker, water may have to be shuttled across the bridge.

8003

Table 8

Mayes County Bridges	on the NBI	
Number of Bridges	# Structurally Deficient	# Functionally Obsolete
200+	57	21



# CHAPTER 3: FUTURE CONDITIONS, NEEDS, & PLANNED IMPROVEMENTS

#### POPULATION AND EMPLOYMENT PROJECTIONS

US Census data indicate total population is expected to remain stable or slightly growing. Other demographic factors remain stable.

#### **AGING POPULATION**

The percentage of people in the general population in Mayes County from birth to adult age 59 is projected to have a slight decline whereas adults age 60 and older will have a slight increase by 2020. (US Census ACS 2016).

#### EMPLOYMENT PROJECTION

The Economic Research and Analysis Division of the Oklahoma Employment Security Commission projects from 2014 to 2024 that total payroll employment will grow 8.7 percent over the decade, adding 153,870 jobs to the state's economy. The manufacturing industry is projected to lead, adding 11,460 jobs almost all of which are anticipated to be in machinery manufacturing (5,980 jobs) and fabricated metals manufacturing (4,370 jobs). Employment growth in construction (10,540 jobs) and natural resources (mining) (9,600 jobs) will also grow.

#### PROJECTED GROWTH AREAS AND NEW HOUSING

Residential, commercial and industrial growth is projected to continue to be concentrated in and near the Cities of Bartlesville and Dewey. Some smaller communities have set aside areas that are appropriate for Industrial Park use for future economic development. Each of these towns include housing developments. Senior and Low-income housing units would contribute to the vitality of these communities and meet the needs of retired residents. The Ramona/Ochelata areas may experience substantial population growth with economic development currently underway and more planned during the next five years.

#### HIGHWAY IMPROVEMENTS

Improvements planned for state roads in the county include upgrade of two-lane roads. ODOT has targeted specific 2-lane roads for the addition of shoulders, to improve safety on these roads.

A map illustrating the location of these roads may be found in Appendix 9. Additional Maps

can also be found in this section and project lists for planned construction projects can be reviewed in Appendices 12 and 13.

## BICYCLE AND PEDESTRIAN ROUTES

Pedestrian improvements have been initiated in the City of Bartlesville. The City of Bartlesville was awarded a TAP grant in 2016 for construction of sidewalks. Anecdotally, the



incidence of bicyclists on both paved and gravel roads is increasing, consistent with national trends. There are a few marked Bike routes in the County and the development of a Washington County Master Trails Plan is needed.

Sources: ODOT TAP Project Awards, August 1, 2016 Transportation Commission.

#### PUBLIC TRANSPORTATION

Cimmaron Transit provides public transit services in the City of Bartlesville.

More funding sources would enable expanded services to the rural communities with lower fares, and commuter park and ride arrangements. Transit systems may also encounter increased operational demand as the aging and low-income populations continue to grow.

#### RAIL IMPROVEMENTS

According to the 2010–2035 Oklahoma Statewide Intermodal Plan, rail demand is expected to grow at a 0.9 percent annual rate from 2015 to 2035, with the largest growth occurring on the Class I network in the center of the State. The viability of the existing SKOL services connecting Washington County to the National Class I system, may support the economic desirability of local long-term rail improvements connecting freight to the national system.

- Burlington Northern Santa Fe Railway BNSF 1,475 miles across Oklahoma
- Union Pacific UP 921 miles across Oklahoma
- Tulsa Port of Catoosa 20 miles in Rogers County
- 3,599 miles of rail runs across Oklahoma

Rail Freight traffic is projected to experience significant growth over the next few decades. The number of trains on some corridors is expected to double over the next 25 years, and the largest growth in freight traffic per day is expected on the BNSF line in the northern part of the state.

Rail flows to, from, and within northeastern Oklahoma are expected to see strong growth as well, boosted by gains in exports from the Tulsa area to Arkansas and Missouri. (ODOT)

With the sale of the Sooner Sub rail line, ODOT currently has an initiative to improve safety at railroad crossings statewide with the proceeds of the sale. The addition of flashing light signals and crossing gate arms at many crossings has improved the safety conditions as a result of this program. (ODOT)

Projected increases in rail freight will influence the preservation, maintenance and restoration of the regional rail infrastructure. Because public funding for transportation is so limited, it may be necessary to use jurisdictional collaboration and private funding to stabilize and improve local railways.

#### PROJECTED FREIGHT ROUTES

The Federal Highway Administration's Office of Freight Management and Operations projects Oklahoma freight tonnage to, from, within and through the state on all transportation modes to increase about 1.3% per year over the 2015 to 2035 forecast period.

Highway freight tonnage is expected to increase its share of total freight tonnage from 51 percent in 2007 to 57 percent in 2035, driven mainly by strong growth in imports and exports. The State's growth in exports is expected to be concentrated in agricultural products, durable goods, and live animals. Freight tonnage is also expected to grow fastest in areas of the State outside of the Oklahoma City and Tulsa Metropolitan Areas.

Annual truck traffic in Oklahoma on I-35, I-40, and I-44 is projected to grow at a 1.6-percent annual pace over the 2015 to 2035 forecast period. By 2035, roughly 13,000 and 14,500 trucks per day are expected to use I-35 and I-40, respectively, throughout the State; and 8,500 trucks are expected to use I-44. This compares with roughly 8,500, 9,500 and 5,300 vehicles in 2007. These forecasts further indicate an increase in truck traffic on the smaller highways that connect with the interstate network as well (ODOT NHS, 2010).

#### FUNDED TRANSPORTATION PROJECTS

Funded improvements are projects that have ODOT and local funding commitments through the year 2024. Projects included in the ODOT 8-year Construction Plan that are scheduled beyond a 3 or 4 year time frame are subject to occasional reordering of priorities and funding has not been committed to those projects. See Appendices 12 and 13 for the ODOT 8-Year Plan and CIRB Plan for Mayes County with Project Lists to address current and future planning needs.

### **CHAPTER 4: FINANCIAL SUMMARY**

## FUNDING FOR PROJECTS AND RECOMMENDATIONS OF THE LRTP

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. Instability in gas and oil revenues collected by the State has contributed to the challenge of consistent investment in road surface maintenance and preservation. Modern roads and bridges must be wider and carry more freight than the original design of a road, and therefore rehabilitation or replacement becomes increasingly expensive.

Limited budgets and a focus on repairing structurally deficient bridges have diverted funds from pavement maintenance. The number of structurally deficient highway bridges peaked at 1,168 in 2004. Due to increased state funding since 2006, bridges were replaced at such a rate that by the end of the 2017 inspection season that number had dropped to 185.

Therefore, coordination among federal, local, regional and statewide agencies in the development of transportation initiatives will be necessary in order to accomplish needed improvements. New sources of revenue may be required to meet gaps in services.

#### NON-MOTORIZED TRANSPORTATION

The Transportation Alternatives Program (TAP) was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century Act (MAP-21). TAP provides funding for programs and projects defined as transportation alternatives, primarily bicycle and pedestrian infrastructure.

#### TRIBAL TRANSPORTATION PROJECTS AND FUNDING

Recognized tribal governments receive federal transportation funds and may also designate local funds for transportation projects. Municipal and Tribal governments throughout the GGRTPO region have been successful in working together to achieve implementation of critical transportation improvements. The (TTP) Tribal Transportation Program is the largest program in the Office of Federal Lands Highway. TTP is intended to address transportation needs of Tribal governments throughout the United States. Mayes County is mostly within the Cherokee Nation's tribal jurisdictional area which is shared with the United Keetoowah Band of Cherokee Indians. See Appendix 19 Maps and Chart for more information.

#### CHEROKEE NATION



ROAD 2400 & 4020 – WASHINGTON COUNTY

## CHEROKEE NATION LONG RANGE TRANSPORTATION PLAN AND HIGHWAY SAFETY PLAN

The Cherokee Nation's Long-Range Transportation Plan (Cherokee Nation's LRTP) is the result of a multi-phase planning process designed to establish a long-range plan to set direction for the development of roadway systems, serving Cherokees, where they live, work and play within the Cherokee Nation.

Planning and programming roadway systems for the Cherokee Nation is complex due to the multiple state, county, and municipal governmental jurisdictions involved, and requires adherence to the Nation's guiding principles related to working together within our environment in order to achieve the desired outcomes. The Cherokee Nation's LRTP specifically establishes goals and policies related to working together with the roadway planning and development processes of other jurisdictions.

One of the key issues from their study indicated that a greater portion of Cherokees live in remote rural areas where travel to employment, goods, and services, medical and community facilities, and recreation is at great distances and where road conditions tend to be the worst.

Their financial and capacity analysis indicated:

- a. The Tribe's road construction program and the County Commissioners' road and bridge programs, combined, have severe resource limitations;
- b. The Tribe's roadway planning, programming, and administrative activities are limited by current funding levels;

- c. The Tribal Transportation Program (TTP) (formerly Indian Reservation Roads), which originated under the Federal Lands Highway program, is the primary source of road improvement funding for the Cherokee Nation and was designed to serve Indian Trust and Restricted lands and communities where the majority of residents are Indian:
- d. Federal policy limits the number of Cherokee roads eligible for the Tribal Transportation Facility (TTF) Inventory;
- e. Only \$6 million of the federal transportation dollars the State receives each year is available for rural road improvements;
- f. Anticipated increases in population, housing, and employment over the next 20 years will continue to place both physical and financial demands on the major and minor transportation systems within the Cherokee Nation;
- g. Indians residing in urban areas of the Cherokee Nation are benefiting from transportation systems that are already in place and brought about by a multitude of road improvement resources generated through the federal government, sales taxes, bond issues, etc.

One of the Roadway Planning and Programming Goals is to ensure adequate internal and external movement of the Nations' people, goods and services, the tribe should adopt, rely on, work within the framework of, and attempt to impact the State of Oklahoma's Long-Range Transportation Plan. The Washington County Long Range Transportation Plan is a part of the State's planning process and will ultimately become a part of the statewide plan.

There are currently 60.2 miles in Washington County as a part of the Cherokee Nation's Tribal Transportation Facility Inventory (total 3,229 miles) for public roadways spread throughout the Nation's land base. See Appendix 17/18 for a Chart of BIA Inventory of Roads in Washington County.

Most of these roadways are maintained by the county commissioners while the rest are either maintained by the state or the tribe itself; primarily tribal roads running through trust lands and tribal facilities. The Nation receives federal funding each fiscal year from the Tribal Transportation Program (TTP) to improve roads on this inventory, which is based on a scoring system of roadway attributes such as population, condition, safety, and a number of other factors.

The Cherokee Nation Highway Safety Plan (2016) was created to comply with the highway safety statutes of the Federal Highway Administration (FHWA) for the planning and development of future highway safety projects. It is also intended to build up existing safety management components employed by ODOT's roadway project rating system and to facilitate the inclusion of additional highway safety information into the planning process.

Highway safety planning is the mechanism used by governmental agencies to institute policies and programs that will reduce the number of highway fatalities, vehicle crashes, and exposure

to hazardous situations for the traveling public. Active coordination and participation are keys to success. Therefore, the Department of Transportation and the Oklahoma Highway Safety Office work in concert with the Cherokee Nation and all Transportation Stakeholders in Oklahoma to address safety concerns derived from statistical information and reporting by multiple agencies to improve safety conditions in Oklahoma's transportation system.

The Cherokee Nation's Highway Safety Plan identified several issues and opportunities related to the transportation system within their 14 county (including Washington County) tribal jurisdictional review. Some of the following issues and opportunities were identified in the Cherokee Nation's Highway Safety Plan:

- 1. The Cherokee Nation exists within the boundary of the State of Oklahoma but has separate and distinct jurisdiction over Indians and Indian lands.
- 2. Highway safety activities such as education, enforcement, and emergency services fall outside of the funding responsibility and administrative jurisdiction of the Nation's Department of Transportation.
- 3. The Nation's Tribal Transportation Facility Inventory is principally a rural roadway network.
- 4. A high percentage of Cherokees live in remote rural areas or towns or cities with populations of 5,000 or less.
- 5. Population statistics indicate that Cherokees are younger in age than the general population resulting in a greater number of entry level Cherokee drivers on the roadways.
- 6. While a car, truck, or van is the primary means for accessing jobs, a greater percentage of Cherokees either carpool or use public transportation compared to other races.
- 7. Cherokees accessing jobs, healthcare, and basic necessities have to travel great distances where road conditions tend to be worst.
- 8. The rural two-lane is the principle highway utilized by Cherokees, many of which have no shoulders on the roads.
- 9. There is not enough funding to build the entire highway system to desired safety standards.
- 10. The amount of funding spent on highway safety educational activities is far lower than highway enforcement spending.
- 11. State applications and awards for law enforcement assistance appear to be low in counties of the Cherokee Nation.
- 12. The percentage of alcohol and speed-related fatalities occurs in rural areas of the Cherokee Nation where law enforcement is at its weakest point.
- 13. Advance notice of tribal facility closures during inclement weather generally occur the date of the event.

Sources: Cherokee Nation's Long-Range Transportation Plan March 2017 and Highway Infrastructure Safety Plan 2016.

### **CHAPTER 5: PUBLIC PARTICIPATION**

Public involvement is an integral part of the transportation planning process and is also a federal requirement, continued as part of the legislation Fixing America's Surface Transportation Act, or "FAST Act." The Mayes County Long Range Transportation Plan (LRTP) is the product of comprehensive study of data, community meetings, public surveys and planning research. Together, these efforts provided an opportunity for local stakeholders to assess the existing transportation system, consider needs, trends and alternatives, and identify specific priorities for the county and region in the context of sound planning principles.

We include an assessment of the relative concentrations of identified populations such as low-income and zero-vehicle households. Proposed construction projects must be evaluated to determine if they have disproportional adverse effects on vulnerable populations. This concept is known as Environmental Justice.

#### PUBLIC PARTICIPATION PLAN

GGRTPO is proactive in its efforts to communicate effectively with the public and has adopted a Public Participation Plan (PPP) to ensure that local transportation planning provides opportunities for the public to take an active role in the decision-making process and complies with the federal requirement for public involvement and participation.

#### **METHODS**

As part of the PPP, public meetings were held and newspaper press releases were issued for public outreach, to involve interested parties in the early stages of the plan development. Notices of public meetings for the LRTP were posted in accordance with Oklahoma Open Meetings Law After the draft LRTP was developed, GGRTPO hosted additional public meetings and provided a notice of availability for a 30-day public comment period. The final draft LRTP was presented to the GGRTPO Technical Committee for review and comment prior to recommendation to the GGRTPO Policy Board for adoption. Contact the GGRTPO office or website for the full version of the PPP. See Appendix 22 for the Public Comments notice.

#### **SURVEYS**

To receive public comments by survey, we issued a press release, posted notices, published the survey on GGRTPO website, provided paper copies to local interest groups and distributed them throughout Mayes County through community representatives of the GGRTPO. Surveys were collected from the public between November 1, 2017 and March 31, 2018. 156 surveys were returned and tabulated. See Appendix 19 for summary of responses and public comments.

#### NARRATIVE SURVEY RESULTS

Three top concerns were identified during the process of public involvement. They are: Safety, Maintenance of infrastructure, and Economic Vitality. Providing a smooth driving surface was the most important concern. Maintenance of bridges and adding shoulders were also considered important for state and county roads, and city street systems. Expanded transit and safer pedestrian routes and crosswalks are needed to access work, schools and shopping. Economic vitality and transportation are viewed as mutually dependent. Signage is perceived to be lacking or in need of repair. There are few existing accommodations for bicycle travel.

Priority in funding transportation projects ranked as follows:

- 1. Improves Safety
- 2. Supports Economic Development
- 3. Improve Pedestrian Walkways
- 4. Reduces Congestion
- 5. Bicycle Lanes or Facilities
- 6. Pollution-Air Quality/Reduces Energy Consumption
- 7. Improve Travel Choices
- 8. Improve Freight Movement
- 9. Improve Air Traffic Options
- 10. Transit

Some comments included: The need for additional or repaired sidewalks and crosswalks.

Funding in economic development ranked schools most important, followed by manufacturing and medical facilities/hospitals.



#### **ENVIRONMENTAL JUSTICE**

Public involvement in development of the Plan must comply with Presidential Executive Order 12898, Environmental Justice. The Federal Highway Administration (FHWA) also follows federal policy to ensure federally funded activities (including planning, through implementation) do not have a disproportionate adverse effect on disadvantaged populations.

Poverty rates as defined by the U.S. Census Bureau, were identified in Mayes County. About 17.2% of the population are living below the poverty line. The LRTP process identified additional environmental justice (EJ) populations through a comparison of the racial and ethnic composition of the county by Census area. A greater percentage of minority populations do seem to be correlated with higher density of poverty in the county.

### CHAPTER 6: THE TRANSPORTATION PLAN

The recommendations of projects, plans, policies and studies were developed as a result of the review of demographics, growth, activity generators, transportation infrastructure, survey information and comments of the community. Research is included in the plan that will provide information and data to support achievement of the goals. The goals, objectives, and recommendations of this plan can be used as guidelines for improvement to the county and region's multimodal transportation system over a long period of time. With regard to federally funded projects, the Mayes County LRTP is fiscally balanced in that the total project costs do not exceed the anticipated Federal funds. This assumes that Congress, at a minimum, will fund the most conservative of the Federal reauthorization bills each cycle.

The goals and objectives in Chapter 1 of the Mayes County LRTP suggest strategies which consistently applied, can be expected to bring the community vision to fruition. Those activities and policies have been organized into a Table for handy reference below. The entire plan has been summarized into a comprehensive reference Table shown in Appendix 20, The Transportation Plan.

GGRTPO will continue to monitor potential funding sources as they become available, or as projects become eligible. Over the life of the LRTP, Mayes County and GGRTPO will expand on this effort by identifying additional projects that are needed in the county and potential funding sources for those projects.

#### COMMENTS SUMMARY

The LRTP goals, objectives, policy and project suggestions are based on public comments. The largest number of comments indicated a need for adding shoulders to two-lane roads and highways, safety concerns at intersections, surface maintenance and preservation of roads and bridges and improved transit services. Specific locations were noted where safety was a concern.

Many of these locations are on state highways. Those comments were prioritized into projects and were included in Table 1.

#### COMMUNITY SURVEY PROJECT RECOMMENDATIONS

There were several projects that were identified by the community during the planning process. Many comments indicated a need for increased preservation and maintenance of existing road and street surfaces throughout the county, and especially in small towns. Other projects suggested were crosswalks to improve safety near schools and pedestrian improvements throughout the county. Improved bicycle safety was of interest to the public.

Projects recommended in the LRTP are shown in Table 1 of Chapter 1. Potential funding may come from a single source or multiple sources. Sources could include funding from entities such as FHWA, ODOT, DOC, EDA, USDA, REAP, CDBG, Industrial Access, Lake Access, the Transportation Alternative Program (TAP) or the Tribal Transportation Program (TTP), and local governments. Additional sources of project support such as private investments, non-governmental grants and others not listed may also be available. Successful projects are often the result of collaborative funding strategies.

#### STRATEGIES FOR IMPLEMENTATION: POLICY

Reference Policy Table 9:
Goal 1 Funding
1.1
1.2
1.3
Goal 2 Preservation & Maintenance
2.1
2.2
2.3
Goal 3 Economic Vitality
3.1

3.2	
Goal 4 Accessibility; Mobility; Connectivity	
4.1	
4.2	
4.3	
Goal 5 Safety& Security	
5.1	
5.2	
5.3	

## STRATEGIES FOR IMPLEMENTATION: ACTIVITY & PROJECTS

Project Activity Table 10:

Goal 1 Funding		
A.1.1	Monitor and apply for all available transportation grant opportunities each year	
A.1.2	Engage in long term Fiscal Planning to balance long-term transportation needs with sustainable solutions	
A.1.3	Explore and implement alternative funding opportunities used in other jurisdictions	
Goal 2 Preservation & Maintenance		
A.2.1	Identify preferred development corridors and plan for preservation; Map	
A.2.2	Evaluate and post weight limits on roads	
A.2.3	Develop long-term strategies in coordination with waste disposal and oil field companies to fund	
Goal 3 Economic Vitality		
A.3.1	Publish a County map showing the location of existing infrastructure appropriate for residential and industrial development	

A.3.2 Develop a prioritized plan for sidewalks and bicycle routes A.3.3 Encourage Tourism with highway signage; earmark revenue for transportation Goal 4 Accessibility; Mobility; Connectivity A.4.1 Identify and minimize transportation barriers for non-drivers A.4.2 Designate specific areas as Park-and-Ride lots for commuters A.4.3 Develop a proposed Bike route map with a focus on regional connectivity A.4.4 Add signage to direct Bike and Pedestrian travelers to preferred routes A.4.5 Plan and implement walkways and bike facilities in small town areas A.4.6 Evaluate existing town sidewalks and pursue rehabilitation A.4.7 Appoint an individual to act as a Railroad contact to improve industrial access to rail and facilitate the mobility of freight Goal 5 Safety & Security A.5.1 Prioritize bridge improvements where weight limits are too low for emergency vehicle response; A.5.2 Map appropriate routes for tanker response according to bridge sufficiency ratings A.5.3Improved signage: alert motor vehicles to watch for bikes on the road Evaluate and prioritize crosswalks for improvement A.5.4 A.5.5 Place rumble strips appropriately for enhanced safety between motorized vehicles and bikes using the shoulder in accordance with FHWA standards

Use signage to alert motorists to the possible presence of bicycles on the road

Evaluate and prioritize underpasses and overpasses for low-cost improvements for non-

Incorporate sustainability and resiliency into transportation system projects to mitigate

A.5.6

A.5.7

A.5.8

motor vehicle travel safety

the economic impacts of unpredictable events

THE MAYES COUNTY LRTP 2040 IS ORGANIZED IN A SUMMARY REFERENCE TABLE FORMAT WITH POLICY AND ACTION STEPS SHOWN TOGETHER WITH THE GOALS AND OBJECTIVES FOR THE CONVENIENCE OF THE READER.

The GGRTPO Staff appreciates the invaluable contributions offered by the citizens of Mayes County in the development of this comprehensive Transportation policy plan.

