



Long Range Transportation Plan

# 2020 • 2045



EXECUTIVE SUMMARY



**OKLAHOMA**  
Transportation

August 2020



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The Oklahoma Department of Transportation, with the help of many stakeholders, is pleased to share with you the 2020-2045 Long Range Transportation Plan (LRTP). The Department takes pride in its mission "to provide a safe, economical and effective transportation network for the people, commerce and communities of Oklahoma" and the 2020-2045 LRTP has been developed in this spirit.

In the spring of 2019, ODOT initiated the 2020-2045 LRTP, which incorporated public involvement including convening advisory committees, hosting an online public engagement survey, and sponsoring a project website throughout the planning process. We would like to thank the various agencies and organizations for their cooperation as well as Oklahomans throughout the state for their input in developing the 2020-2045 LRTP.

The 2020-2045 LRTP is a policy document that guides ODOT in the development, management and operation of the state's transportation system for the next 25 years. The department has completed the 2020-2045 LRTP to provide strategic guidance for our long term vision – provide a connected, multimodal transportation system that supports a thriving economy and improved quality of life for Oklahomans by providing for safe and efficient movement of people and goods. The Department strives to attain this vision by achieving the 2020-2045 LRTP goals:

- Safety and Security
- Infrastructure Preservation
- Mobility and Accessibility
- Economic Vitality
- Environmental Responsibility
- Efficient Intermodal System Management and Operation
- Fiscal Responsibility

The 2020-2045 LRTP includes policies and strategies to help ODOT achieve these goals in addition to performance measures to help report our progress and enhance accountability.

We are grateful for the assistance of our federal and local partners, including but not limited to the Federal Transit Administration, Federal Highway Administration, the U.S. Army Corps of Engineers, the metropolitan and rural planning organizations, rural, urban and tribal transit providers, cities, towns, counties, and tribes. The public service and financial commitment of these entities is a vital part of building and maintaining our state transportation infrastructure.

Thank you for your interest in the 2020-2045 LRTP. We invite you to remain engaged in shaping Oklahoma's transportation future.

**Tim J. Gatz**  
Secretary of Transportation & Executive Director



# 2020 » 2045





# Introduction of the Plan

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**The Oklahoma Department of Transportation (ODOT)**, in collaboration with statewide modal stakeholders, developed the 2045 Long Range Transportation Plan (LRTP). The federally required plan establishes transportation policies and priorities for the next 25 years for various modes of travel and commercial freight movement in the state including highway, passenger and freight rail, public transit, active transportation, ports and waterways, and airport access. The 2045 LRTP does not focus on specific projects like ODOT's Eight-year Construction Work Plan, but rather guides ODOT in the development, management, and operation of a safe and efficient transportation system for the next 25 years.

A vibrant multimodal transportation system is vital to Oklahoma's future economic viability and competitiveness. To meet this challenge, it is imperative to have a vision for Oklahoma's 21st century transportation system that will support user needs for improved safety, infrastructure conditions, and system reliability to drive statewide economic investments.

ODOT's mission is to provide a safe, economical, and effective transportation network for the people, commerce, and communities of Oklahoma. Such a system is required to deliver on the 2045 LRTP vision, which is to:

Provide a connected, multimodal transportation system that supports a thriving economy and improved quality of life for Oklahomans by providing for safe and efficient movement of people and goods.

The primary purpose of the Oklahoma LRTP is to provide strategic direction for the development of the Oklahoma multimodal transportation system. The 2040 LRTP was adopted by ODOT in 2015 and the following were addressed in developing the 2045 LRTP:

- Updated vision, goals, and objectives
- Aligned federal performance measures to the updated goals
- Described the existing multimodal transportation system
- Examined demographic, socioeconomic, and emerging technology trends
- Identified 25-year multimodal transportation system needs
- Projected 25-year federal, state, and local revenues
- Updated the multimodal policies and strategies

# Plan Development

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The first step in the planning process was to update the LRTP vision, which is intended to guide ODOT's decisions as it conducts the transportation planning, construction, and delivery process in the state. Next, the goals and objectives were updated based on input received from ODOT leadership, staff, and Advisory Committee members. Further, broader public feedback on priorities and values was gathered through an interactive online survey and public comment forums. The federal performance measures were then aligned with the goals and objectives to ensure a performance-based plan was developed.

During the technical analysis phase of the LRTP, future needs were identified for Oklahoma's multimodal transportation system based on analysis of data and trends. Federal, state, and local revenues were also projected to illustrate the amount of funding forecasted in comparison to the future transportation needs.

Based on the comprehensive LRTP planning process, the policies and implementation strategies were updated to address the LRTP vision, goals, and objectives as well as the emerging technology trends that will impact the multimodal transportation system.

- ▼ Kickoff & Visioning  
**Spring 2019**
- ▼ Examined Trends & Existing Conditions  
**Summer 2019**
- ▼ Public & Stakeholder Engagement  
**Summer 2019**
- ▼ Updated Vision, Goals, & Objectives  
**Fall 2019**
- ▼ Identified Modal Needs & Revenue  
**Winter 2020**
- ▼ Updated Policies & Strategies  
**Spring 2020**
- ▼ Draft LRTP  
**Spring 2020**
- ▼ Public & Stakeholder Engagement  
**Spring 2020**
- ▼ LRTP Adoption  
**Summer 2020**



# Transportation in Oklahoma

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**ODOT is responsible for the planning, design, construction, and maintenance of the state highway system and associated assets**, such as rest areas, ports of entry, weigh stations, and intelligent transportation systems. The state highway system is comprised of numbered state highway routes, US highways, and the Interstate Highway System. It includes 12,254 centerline miles of state highway and over 6,700 bridges. Additionally, ODOT oversees other state and federal programs directed to the county and city transportation systems.

ODOT also serves various roles related to railroads. ODOT administers the Federal Highway Administration's (FHWA) Grade Crossing Safety Program, manages Oklahoma's Heartland Flyer passenger rail service, serves as a liaison between ODOT and rail companies for ODOT projects involving rail property, and reviews federal funding opportunities to improve Oklahoma's rail systems. ODOT is an active partner in additional transportation functions that involve various federal and state agencies, local jurisdictions, and private businesses. Many public and private sector organizations must both fulfill their roles and collaborate with each other to address the state's transportation needs, such as:

- ▶ **Counties, Cities, Towns, and Councils of Government:** Responsible for major services that include building and maintaining transportation infrastructure such as public roads and bridges, active transportation pathways, and ports.
- ▶ **Federally Recognized Tribes and Nations:** Oversee tribal transportation infrastructure policy, roads, and transit programs as sovereign entities. There are 38 federally recognized tribes and nations in Oklahoma.
- ▶ **Public Port Authorities:** Operate one or more public terminals that provide a range of cargo transfers and storage along with land for industrial development. Oklahoma public ports include the Tulsa Port of Catoosa and Port of Muskogee that are located on the McClellan-Kerr Arkansas River Navigation System.
- ▶ **Public Transit Providers:** Provide public transit service, which includes 20 rural, 12 Tribal, and five urban entities in Oklahoma. These may be under sponsorship of a Community Action Program, Tribe, local government, or regional agency.
- ▶ **Intercity Passenger Travel Organizations:** Operate and/or has interests in passenger travel between cities. These include AMTRAK, Greyhound, Jefferson Bus Lines, and the Heartland Flyer Passenger Rail Coalition.
- ▶ **Railroad Companies:** Operate a railroad track or trains. Oklahoma has three Class I railroads and 20 Class III or short line railroads.

# 2020 » 2045

▶ “We believe that public input will help us better tailor the plan to address what is important to Oklahomans.”

Dawn Sullivan,  
ODOT Deputy Director



ADVISORY COMMITTEE BREAKOUT GROUPS



# Public & Stakeholder Engagement

ODOT recognizes the importance of understanding public beliefs, attitudes, and behaviors as they relate to Oklahoma’s future multimodal transportation system. Thus, public involvement and stakeholder outreach were a vital part of developing the 2020-2045 LRTP.

## Who we heard from

ODOT reached out at three different milestones across Oklahoma to get input from the general public as well as representatives of different modes of transportation, planning partners, businesses, highway patrol, and ODOT staff.

A comprehensive website, [www.oklongrangeplan.org](http://www.oklongrangeplan.org), was developed where the general public could learn more about the 2020-2045 LRTP and sign up for updates. There were more than 2,500 people in our database and 7,045 unique visitors to [www.oklongrangeplan.org](http://www.oklongrangeplan.org).

We received more than 4,800 responses from 75 of Oklahoma’s 77 counties. Input was provided through an interactive, online engagement tool, electronic surveys, a series of Advisory Committee meetings, outreach to planning partners and tribal representatives, and through ODOT social media channels. ODOT provided online tools in English, Spanish, and an option for the visually impaired.

Oklahomans ranked safety as their top transportation priority more than double that of system preservation, connectivity, mobility choices, and environmental responsibility. Oklahomans strongly agreed that the LRTP addresses urban and rural transportation needs, focuses on safety improvements as a top priority, and anticipates future transportation needs and funding opportunities. **ODOT also heard the following:**

➤ **77%**

Strongly disagreed or disagreed on keeping transportation costs the same even if that meant the condition of the system declines over time and no new facilities are built.

➤ **83%**

Strongly agreed or agreed that improving traffic operations through additional investments in technology and innovations will maximize the efficiency of the system.

➤ **84%**

Strongly agreed or agreed that it was important to improve existing highway pavement and bridge conditions even if they had to pay more.

➤ **56%**

Strongly agreed or agreed that expanding or reconstructing the transportation system was important, even if it means paying more.

## ► Our Vision

To provide a connected, multimodal transportation system that supports a thriving economy and improved quality of life for Oklahomans by providing for safe and efficient movement of people and goods.

# Goals & Performance Measures

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## Goals

The 2045 LRTP goals include revised versions of the six 2040 LRTP goals plus an additional goal addressing fiscal responsibility. This goal was added based on input from ODOT Executive Staff to reflect the national goal to reduce project delivery delays. As with the 2040 LRTP goals, the 2045 goals address and support all national performance goals identified in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act).

The full set of 2045 LRTP goals were developed using public, stakeholder, and ODOT input and refined through several rounds of feedback from ODOT Executive Staff. They are as follows:

- ▶ **Safety and Security** – Ensure a safe and secure transportation system for all users.
- ▶ **Infrastructure Preservation** – Preserve and maintain the condition of Oklahoma's multimodal transportation system in a state of good repair through risk-based, data-driven decision-making processes.
- ▶ **Mobility and Accessibility** – Facilitate the movement of people and goods, improve connectivity between regions and activity centers, and increase travel mode choices.
- ▶ **Economic Vitality** – Provide a reliable multimodal transportation system for people and goods that coordinates with land development patterns, strengthens communities, and supports a healthy and competitive Oklahoma economy.
- ▶ **Environmental Responsibility** – Minimize and mitigate transportation-related impacts to the natural and human environment.
- ▶ **Efficient Intermodal System Management and Operation** – Maximize system performance and operations.
- ▶ **Fiscal Responsibility** – Sustainably fund and efficiently deliver quality transportation projects while continuing to leverage additional resources in coordination with ODOT's partners.

## Performance Measures

Federal law requires states and Metropolitan Planning Organizations (MPOs) to establish performance measures that support the national goal areas. The measures and targets are intended to track progress in meeting performance goals, improve project decision-making, and help transportation agencies make the best use of public funds. The federal performance measures are aligned with objectives within the Safety and Security, Infrastructure Preservation, and Economic Vitality goal areas.

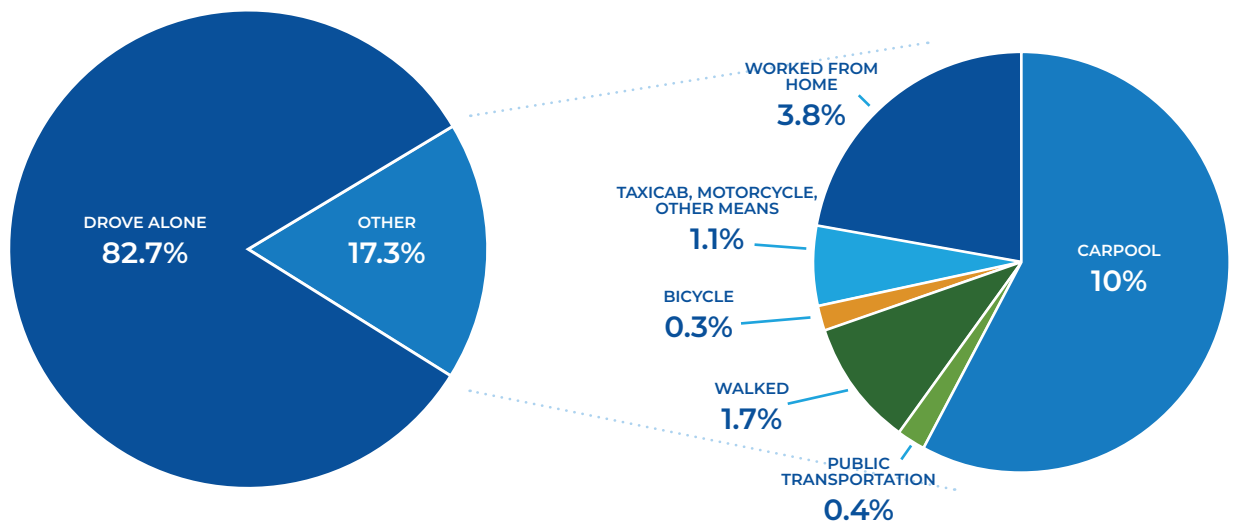
# Existing & Emerging Trends

▼ The population in Oklahoma in 2018 was **3.94 million** and by 2045, population in Oklahoma is projected to grow by 20 percent to **4.72 million**.

▼ Population of 65 years or older: 2018 = **630,400**

▼ Population of 65 years or older: 2045 = **755,200**

▼ **60 percent** of Oklahoma residents live in counties whose total land area accounts for less than 11 percent of the state's geographic area.

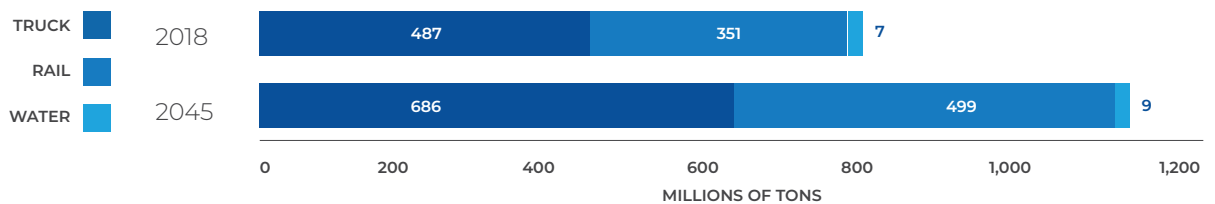


► The COVID-19 pandemic has dramatically affected commuting patterns. Commuting patterns are important to developing transportation plans and services and identifying multimodal transportation improvements. ODOT will continue to monitor how COVID-19 has impacted commute patterns as data becomes available.

### Travel times to work

- Less than 20 minutes = 52%
- 20 to 39 minutes = 35%
- 40 to 59 minutes = 7%
- 60 minutes or more = 5%

- ▶ **Over 81.7 million miles of travel** occur on the State Highway System on an average day throughout the State of Oklahoma.
- ▶ **More than 685 miles of cable barriers** have been placed across the State since 2007 at a cost of \$81 million.
- ▶ **According to the 2018 Strategic Highway Safety Plan**, the number of serious traffic injuries in the State has fallen an average of 2.7 percent per year over the last decade.
- ▶ **Freight tonnage in Oklahoma is projected to grow** for each mode, with over 40 percent growth in both truck and rail, and just under 30 percent for water from years 2018 to 2045.



- ▶ **In 2018, Electric Vehicles (EVs) accounted for only 0.35 percent of vehicle sales in Oklahoma**, with 2,683 vehicles sold. Since the first year of EV sales, a total of less than 5,000 EVs have been sold in Oklahoma placing the state 28th in the country for total EV sales.
- ▶ **Mobility as a Service (MaaS)** entails providing transportation options as a service to be utilized as an alternative to owning a private vehicle. Adoption of MaaS in Oklahoma, could have significant implications in the future of transportation offerings (e.g., rural mobility options) and infrastructure (e.g., dedicated areas for MaaS users). MaaS provides comprehensive transportation offerings to any individual to travel essentially anywhere.
- ▶ **During the 2019 legislative session, the Oklahoma Legislature passed Senate Bill 189 to create an exception for platooned trucks** in the state's Federal Trade Commission (FTC) law. This law change should allow more truckers to take advantage of platooning technology in order to reduce costs on their businesses. Connected and autonomous vehicles (CAVs) are comprised of two distinct sets of technology: Connected vehicle (CV) technology and autonomous vehicle (AV) technology. CVs are able to communicate with their surroundings, including other vehicles, infrastructure, or a connectivity-enabled device. AVs are vehicles that can take on all or part of the driving functions typically performed by humans. While these two technologies have individual benefits and challenges, the benefits of connectivity and automation are significantly greater when they are combined. The technologies that will allow for broad adoption of CAVs are still being developed as detailed in the following sections. Pace of adoption in Oklahoma, and in the US in general, heavily depends on how quickly the technology advances.

# Transportation Infrastructure

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- ▶ **ODOT is responsible for maintaining, operating, and improving all 12,254 centerline miles of the State Highway System (SHS).** Oklahoma has a total of 933 centerline miles of interstate, with ODOT responsible for 673 centerline miles and the remaining 260 centerline miles being the responsibility of the Oklahoma Turnpike Authority (OTA) as toll facilities.
- ▶ **With increased funding and strategic direction, the bridge condition in Oklahoma has dramatically improved,** reaching a new low of 86 structurally deficient bridges out of the total 6,794 bridges at the end of 2019.
- ▶ **Freight rail is a critical component of the transportation network in Oklahoma.** Each freight train eliminates or reduces the need for hundreds of trucks on Oklahoma roads. Currently operating in Oklahoma are three Class I operators – the Burlington Northern Santa Fe (BNSF), the Union Pacific (UP) and Kansas City Southern Railway (KCS) – along with 20 Class III operators. Together, the rail operations in Oklahoma carry just over 41 percent of the freight tonnage.
- ▶ **Marine Highway M40,** also known as the McClellan-Kerr Arkansas River Navigational System (MKARNS) provides Oklahoma with another mode of freight transportation. As the upper reaches of the 445-mile long waterway linked to the Mississippi River, Oklahoma's portion of the MKARNS consists of eight ports interspersed with five locks and dams. The 51 miles of waterway in Oklahoma provides a linkage for inbound and outbound goods movement to and from the Midwestern United States and the global economy.
- ▶ **Most of the multi-use trails, bicycle routes, and sidewalks** in Oklahoma are owned and maintained by partners of ODOT, including county and city governments. ODOT coordinates with local governments and applicable metropolitan planning organizations in considering infrastructure options and facilitates inclusion of these features in projects when appropriate.
- ▶ **The Heartland Flyer** is a daily passenger train that follows a 206-mile route from Oklahoma City, Oklahoma to Fort Worth, Texas. It is operated by Amtrak and funded by ODOT and TxDOT. The annual ridership on the Heartland Flyer in 2018 was 68,075.
- ▶ **Oklahoma is experiencing a renewed interest in transit.** Recent state legislation, Oklahoma Statute Title 69, Article 3, Section 322, has created the Office of Mobility and Public Transit at ODOT that will consolidate transit activities previously performed by a variety of agencies. Oklahoma has 20 rural transit operators located in small communities throughout the state, 12 Tribal Transit agencies, and five urban transit agencies.



# Transportation Needs

## ODOT State Highway System Needs 2020-2045 Plan, Cost Estimates in Million \$ (2019 dollars)

### Transportation Revenue & Gap - SHS

Revenue to address state highway system needs = \$26.4 billion  
SHS needs = \$33.4 billion

**Funding Gap = \$7.1 billion** ➔

State Highway System (SHS)	Total Estimated Cost
➤ Highways	\$18,339.72
Highway Pavement, including shoulders	\$17,538.63
Highway Expansion	\$801.09
➤ Bridges	\$2,720.00
➤ Interchanges	\$4,580.82
➤ Safety	\$1,255.91
➤ Maintenance	\$6,547.74
General Maintenance by Field Divisions	\$6,153.76
Intelligent Transportation Systems	\$281.93
Ports of Entry for Commercial Vehicles	\$64.10
Rest Areas	\$10.45
Weigh Stations	\$37.50
<b>Subtotal</b>	<b>\$33,445.19</b>

### Transportation Revenue & Gap - Partner-Sponsored Transportation Programs Non-SHS Transportation Systems & Programs

Revenue to address Partner-Sponsored Transportation Programs Non-SHS Transportation Systems & Programs = \$4.7 billion  
Partner-Sponsored Transportation Programs Non-SHS Transportation Systems & Programs needs = \$6.9 billion

**Funding Gap = \$2.2 billion** ➔

### Partner-Sponsored Transportation Programs

Non-SHS Transportation Systems & Programs	Total Estimated Cost
➤ Active Transportation	\$900.50
➤ Ports and Waterways	\$225.80
➤ Freight Rail	\$1,266.18
Class I and Class III Rail Roads	\$1,056.18
Rail - Highway Crossings	\$210.00
➤ Passenger Rail	\$261.99
➤ Public Transportation	\$4,288.90
Rural Transit	\$1,209.80
Urban Transit	\$2,737.80
Tribal Transit	\$341.30
<b>Subtotal</b>	<b>\$6,943.37</b>

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# Policies & Strategies

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Oklahoma's multimodal transportation system assets are the state's largest capital investment. Most of the transportation system assets were constructed over the last century and this investment has connected Oklahoma's cities and towns to local, regional, national, and global economies. Today, there are numerous emerging trends that will impact how we develop, manage, and operate our transportation systems. The policies and strategies strive to implement the 2045 LRTP goals and objectives and prepare ODOT to plan, manage, and operate a 21st Century multimodal transportation system.

- ▶ Oklahoma will experience population and employment growth in urban areas, and this is where Mobility as a Service (MaaS) can make a difference. MaaS provides various mobility options that are affordable, accessible, and timely.
- ▶ Oklahoma will experience growth in the number of residents 65 years of age and older. This will increase mobility needs for rural public transportation services and this is where Microtransit could improve everyday mobility. Microtransit operations bring mobility to under-served communities based on new technologies.
- ▶ Oklahoma will experience rapid growth in new technologies, such as connected and automated vehicles (CAVs) and this will transform how people and goods move.
- ▶ Oklahoma will experience significant growth in freight movement, and this will impact congestion and safety on highways, rail, and ports and waterways.
- ▶ Oklahoma will experience growth in the purchase of electric vehicles and while this will reduce auto emissions it will also reduce transportation revenue under current law.
- ▶ Oklahoma will experience more extreme weather events, and this will impact vulnerable transportation system areas.

# Policies & Strategies

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During the LRTP planning process, policies and strategies were developed to prepare ODOT and other partner agencies for the future. Implementing these policies and strategies will help ODOT meet its performance measure requirements and manage its transportation system and in turn improve safety, mobility, and accessibility for all users of Oklahoma's transportation system. Policies and strategies are identified for the following seven areas:

- Highways and Bridges
- Freight Rail
- Passenger Rail
- Public Transportation
- Multimodal Transportation
- Active Transportation
- Ports and Waterways





## Next Steps

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ODOT is striving for Oklahoma to be a “Top 10 State” in transportation. The 2045 LRTP provides a strategic multimodal transportation vision for Oklahoma and will assist ODOT in meeting its “Top 10” in transportation goal. The 2045 LRTP is a policy document and the strategic direction supports and aligns with the 2020-2027 Eight-year Construction Work Plan (CWP). Projects in the CWP address the 2045 LRTP goals and objectives, such as improving two-lane highways with deficient shoulders, improving pavement conditions, and reducing on-system structurally deficient bridges to less than 1 percent.

Implementing the 2045 LRTP policies and strategies will assist ODOT in meeting safety, infrastructure condition, and system reliability performance targets. ODOT’s transportation planning efforts, including target-setting, are coordinated with Oklahoma’s Metropolitan Planning Organizations (MPOs) in consultation with tribal governments and non-metropolitan area local offices responsible for transportation in the state.

ODOT does not act alone in statewide transportation planning. Governmental entities – including federal and state agencies, metropolitan and regional planning organizations, transit agencies, tribal governments, and local jurisdictions – partner with ODOT in the planning process. As partner agencies develop and update modal transportation plans, the 2045 LRTP goals, objectives, policies, and strategies provide strategic guidance to ensure their planning process aligns with the 2045 LRTP vision to:

- **Provide a connected, multimodal transportation system that supports a thriving economy and improved quality of life for Oklahomans by providing for safe and efficient movement of people and goods.**

For more information and to read the full plan visit: [www.oklongrangeplan.org](http://www.oklongrangeplan.org)



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