

2020 – 2045 Oklahoma Long Range Transportation Plan

Chapter 1: Introduction

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1. INTRODUCTION

The Oklahoma Department of Transportation (ODOT) in collaboration with statewide modal stakeholders, developed the 2045 Long Range Transportation Plan (LRTP). The 2045 LRTP is a policy document that will guide 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:

2045 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.

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The primary purpose of the 2045 LRTP is to provide strategic direction for the development of the Oklahoma multimodal transportation system. The 2040 LRTP was adopted by the Oklahoma Transportation Commission in 2015, and the following were addressed in the developing of 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; and
- Updated the multimodal policies and strategies.



1.1. HIGHLIGHTS SINCE THE 2040 LRTP

Since the adoption of the 2040 LRTP in 2015, ODOT and its partners have made progress in several areas. The following provides highlights from 2016 to 2019.

In 2016:

- Due to the \$1.3 billion budget shortfall facing the State of Oklahoma, ODOT stepped forward to be part of the solution to help balance the fiscal year 2017 state budget. In the final budget agreement, \$367 million in cuts were made to state transportation, with the legislature authorizing ODOT to sell \$200 million in bonds to partially offset some of the reductions.
- Completed an intensive, year-long study of how best to respond to earthquakes and began implementing a new inspection policy.
- The U.S. Department of Transportation announced a \$62 million Advancements in Shipping and Transportation for the Long-Term Achievements of National Efficiencies (FASTLANE) grant to help fund an ODOT project to upgrade four miles of US-69/75 from Calera to Durant in Bryan County.
- Continued major progress on addressing the state's structurally deficient highway bridges. Thanks to increased state funding in the last decade, the number of structurally deficient highway bridges was reduced from an all-time high of 1,168 bridges in 2004 down to 321 at the beginning of 2016.
- Began planting pollinator gardens and updated mowing practices in anticipation of the Memorandum of Agreement to designate I-35 as the Monarch Highway in partnership with the Federal Highway Administration and the Iowa, Kansas, Minnesota, Missouri, and Texas departments of transportation (DOT).

In 2017:

- Began installing centerline rumble strips on Oklahoma highways to cut down on crossover crashes.
- Implemented ShakeCast, a program created by the U.S. Geological Survey, to identify specific bridges for immediate inspection by comparing state bridge data with the severity of an earthquake's ground motions nearly in real time
- 40 construction projects totaling more than \$204 million were removed from the updated Eight-Year Construction Work Plan (CWP), and about 42 percent of all programmed projects were delayed at least one year due to the state budget crisis.
- Oklahoma led the nation in eliminating structurally deficient bridges. Oklahoma has addressed 2,458 structurally deficient highway and local bridges in the last decade.



In 2018:

- A major bipartisan effort to reverse decades of underfunding for transportation in Oklahoma reached a critical milestone in 2018. The allocation of state income tax revenue to the Rebuilding Oklahoma Access and Driver Safety (ROADS) fund benefiting highway and bridge construction climbed to \$575 million for state fiscal year 2019, reaching the annual cap on the fund set in state law.
- Progress continued in 2018 on the Oklahoma Department of Transportation's No. 1
 performance measure as the number of structurally deficient bridges on the state
 highway system was further reduced to 155.
- Awarded a \$45 million federal Infrastructure For Rebuilding America (INFRA) grant toward improvements on I-44 west of the Arkansas River in Tulsa.
- Began installing half-mile makers along Oklahoma interstates as part of a safety initiative to help first responders.
- Identified performance measure targets for safety, infrastructure condition, and system reliability.
- The Federal Transit Administration (FTA) announced that three Oklahoma grants were included in the 139 projects receiving grant funding from the Buses and Bus Facilities Infrastructure Investment Program.
- The Oklahoma City Streetcar officially opened to passengers. It is operated by the City of Oklahoma City, is the state's first modern streetcar, and is funded through local sales taxes.
- ODOT developed the Oklahoma Freight Transportation Plan (OFTP) in order to provide a safe, reliable, and productive freight transportation system that will support the growing economy and population in the state.
- ODOT developed the Oklahoma State Rail Plan for the purpose of guiding the state's rail freight and passenger transportation planning activities and project development plans over the next 20 years.
- As the direct recipient of transit funding from the Federal Transit Administration (FTA), ODOT Transit Programs Division developed a Transit Asset Management Group Plan (Group TAMP) to document the statewide approach to transit asset management. The Group TAMP will improve the practices of Oklahoma's small transit providers as they operate and maintain their capital assets to ensure reliable and safe service delivery for transit riders across the state.

In 2019:



- Progress continued in 2019 on the Oklahoma Department of Transportation's No. 1
 performance measure as the number of structurally deficient bridges on the state's
 highway system was further reduced to 86.
- At the height of the flooding in 2019, a total of 150 separate highway closures due to high water or storm damage occurred in 38 counties, impacting all eight ODOT field districts. As many as 60 highways were closed at the same time, and damage estimates to highways and county roads topped \$20 million. Major routes like US-69, US-62, and US-64 were closed for weeks.
- Waterways traffic also came to a halt during the flooding, as the McClellan-Kerr Arkansas River Navigation System (MKARNS) water levels rose as much as 24 feet above normal in some areas.
- Governor Stitt signed House Bill 1365, which created the new Office of Mobility and Public Transit at ODOT to replace the old Transit Programs Division and transferred a federal program for transit services for the elderly and disabled from the Oklahoma Department of Human Services to ODOT.
- A new technique employed in 2019, Wet Night Reflective Grooved Striping, embeds striping into the pavement, better protecting it from the daily wear and tear of traffic, while also helping prevent the reflective beads from being scraped away by snowplows.
- ODOT developed it first Transportation Asset Management Plan (TAMP). The ODOT TAMP outlines a 10-year strategy for managing the state's pavements and bridges. The strategy includes setting goals and objectives, reporting the current conditions of assets, and projecting conditions 10 years into the future. The TAMP also details life cycle planning, presents a financial plan, and discusses how to manage risk. Taken together, these elements give Oklahoma a path towards transparent and efficient use of taxpayer dollars.
- ODOT updated its Strategic Highway Safety Plan (SHSP). The SHSP is a culmination of the joint efforts of many agencies involved in traffic safety in the state and sets the direction for safety efforts in Oklahoma.

1.2. ODOT'S RESPONSIBILITIES AND PARTNER AGENCIES

ODOT is responsible for the planning, design, construction, and maintenance of the state highway system and associated assets (rest areas, intelligent transportation systems, etc.) along the state highway system. The state-owned highway system is comprised of state number highway routes, US numbered route 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.



Oklahoma's geographic and demographic diversity means regions in the state are confronted with different transportation challenges and travel demands. The needs of metropolitan areas, such as Oklahoma City and Tulsa, to expand urban roadways or manage congested intersection operations may differ from rural Oklahoma's need to reduce roadway departure crashes or access rural transit. To address these regional transportation challenges, Oklahoma has eight transportation field districts, each managed by a district engineer who focuses on addressing their unique transportation needs and challenges.

While ODOT is primarily responsible for Oklahoma's (Interstate, US, and State) highway systems and assists with a variety of other modal programs, ODOT does not act alone in statewide transportation planning. Governmental entities – including federal and state agencies, metropolitan and regional transportation planning organizations (MPO and RTPO), transit agencies, tribal governments, and local jurisdictions – partner with ODOT in the planning process. Additionally, advocacy groups and industry organizations contribute to the planning process.

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 the Governor's designee for the administration of state and federal public transportation financial assistance programs for areas with a population under 50,000. ODOT is also responsible for administering the Transportation Alternatives Program funding.

1.2.1. METROPOLITAN PLANNING ORGANIZATION COORDINATION

Oklahoma's MPOs and RTPOs also develop long range transportation plans on a regular cycle. MPOs were established by the Federal-Aid Highway Act of 1973, and their boundaries are defined by U.S. Census Bureau urbanized areas. RTPOs were created following the 1991 passage of the Intermodal Surface Transportation Efficiency Act (ISTEA), which required states to establish a transportation planning process to serve areas beyond urbanized boundaries. In Oklahoma, RTPOs were established in 2011 and 2012. Preparation of the 2045 LRTP was coordinated with Oklahoma's four MPOs and two RTPOs through representation on the LRTP Advisory Committee. ODOT worked closely with the MPOs and RTPOs during the development of the 2045 LRTP and recognizes that each partner agency has unique regional transportation issues and challenges to address.

1.3. FEDERAL REQUIREMENTS



The 2045 LRTP addresses the statewide planning requirements under the federal surface transportation acts – Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act. MAP-21 created a streamlined, performance-based and multimodal program to address the many challenges facing the multimodal transportation system. These challenges include improving safety, maintaining infrastructure in a state of good repair, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. The FAST Act maintains a focus on safety, largely keeps the existing highway-related program structure, continues efforts to streamline project delivery, and creates a new dedicated source of federal dollars for freight projects. A key component of MAP-21 and The FAST Act is the requirement that states and MPOs establish performance measures within the national goal areas. The FAST Act requirements were reviewed to ensure that 2045 LRTP strategic elements are consistent with any updates to the national goals and performance measures.

Statewide transportation planning occurs within a framework of federal funding and requirements that states must meet to be eligible for funds. The most important of these requirements have been encapsulated in the Code of Federal Regulation's (CFR) section on "Statewide and Nonmetropolitan Transportation Planning and Programming" (23 CFR §§ 450.200 – 450.226). The Code of Federal Regulations encapsulates the rules promulgated by federal agencies to implement the authority of laws, including transportation-related laws passed by the U.S. Congress.

1.4. 2045 LONG RANGE TRANSPORTATION PLAN PROCESS

The 2045 LRTP planning process began in March 2019, and the plan will be completed in August 2020. The planning framework was designed to conform with the requirements set forth in the federal surface transportation law, as adopted under MAP-21 in 2012 and the FAST Act in 2015. Federal law requires that states create a plan that looks at least 20 years into the future. The plan must also be multimodal and prepared using input from stakeholders such as transportation providers, regional and local governments, non-government agencies, and the general public. **Figure 1-1** illustrates the planning process used to develop the 2045 LRTP.

The first step in the planning process was to update the 2040 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 2045 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 2045 LRTP vision, goals, and objectives as well as the emerging technology trends that will impact the multimodal transportation system.

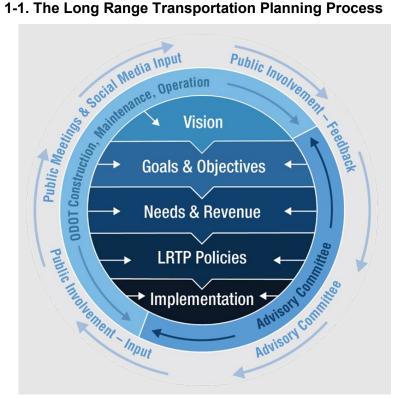


Figure 1-1. The Long Range Transportation Planning Process

1.5. COORDINATION WITH SHORT TERM TRANSPORTATION **PROGRAMS AND PLANS**

1.5.1. FAMILY OF PLANS

During the 2045 LRTP planning process, the Family of Plans was developed. The Family of Plans includes documents such as the Eight-Year CWP, the State Rail Plan, the State Transportation Improvement Program (STIP), TAMP, and regional long range transportation plans. Each of these plans is connected in some way to the 2045 LRTP. These plans were used to define existing and desired system performance, identify goals and objectives, identify future modal needs, and recommend policies and strategies to include in the 2045 LRTP.



Each of the plans share several common themes. Numerous plans focus on safety, the economy, multimodal connectivity, needs of the aging population, and system preservation. Many of the plans, from the State Freight Plan to MPO plans to tribal plans include lists of specific projects. Many of the plans also include discussion of new technology and its role in Oklahoma's transportation system.

1.5.2. EIGHT-YEAR CONSTRUCTION WORK PLAN (CWP)

The Eight-Year CWP contains capital improvement projects proposed for the state highway system, including bridge replacement or rehabilitation and highway improvements. ODOT's eight field district engineers lead the effort in developing this fiscally balanced work plan, in consultation with local officials and the communities they represent. The CWP is updated each fall. The Oklahoma Transportation Commission approves the final plan. The document's projects are consistent with the policies identified in the 2045 LRTP.

1.5.3. STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

The Statewide Transportation Improvement Program (STIP) identifies transportation projects expected to receive full funding and to take place over the four years following the STIP's release. The program identifies highway and transit projects planned for various areas of the state and it is updated every two years.

The STIP includes projects listed in the first four years of the CWP, as well as anticipated Transportation Improvement Projects (TIP) selected by MPOs in their respective regions. These regions include the Oklahoma City, Tulsa, Lawton, and Fort Smith metropolitan transportation planning areas.

This STIP includes projects funded through the Indian Reservation Roads Program and other Federal Lands Highway Programs. The STIP details the process for the County Improvements for Roads and Bridges (CIRB) Program, federal lands, and public involvement. The projects listed in the STIP are consistent with the policies of the 2045 LRTP, the MPO long range plans, and the tribal long range plans.