



OKLAHOMA **Transportation**

2020 – 2045 **Oklahoma Long Range Transportation Plan**

Chapter 10: Policies and Strategies

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Prepared by



Table of Contents

1.	INTRODUCTION	1
2.	HIGHWAYS AND BRIDGES.....	3
3.	FREIGHT RAIL.....	8
4.	PASSENGER RAIL.....	10
5.	PUBLIC TRANSPORTATION	12
6.	MULTIMODAL TRANSPORTATION.....	15
7.	ACTIVE TRANSPORTATION	19
8.	PORTS AND WATERWAYS	21

List of Tables

Table 2-1.	Highway and Bridge Policies and Strategies	4
Table 3-1.	Freight Rail Policies and Strategies	8
Table 4-1.	Passenger Rail Policies and Strategies	10
Table 5-1.	Public Transportation Policies and Strategies.....	13
Table 6-1.	Multimodal Policies and Strategies.....	16
Table 7-1.	Active Transportation Policies and Strategies	19
Table 8-1.	Ports and Waterways Policies and Strategies	21

1. INTRODUCTION

Oklahoma’s multimodal transportation system assets are the state’s largest capital investment. Most of the transportation system investments 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. For instance, technological advancements are changing rapidly, and this impacts how and where people commute to work and how goods are moved to and from markets. Technological advancements in CAVs, truck platooning, vehicle to infrastructure (V2I), MaaS, EVs, and many other areas will transform how people and goods move. Deploying fully connected and autonomous vehicles requires new technology and changes to highway infrastructure. Just as the U.S. and Oklahoma built the Interstate System in the 20th century, we must be prepared to adapt 21st century technology into Oklahoma’s transportation system in the coming years. For instance, the U.S. DOT has estimated that 20 percent of intersections may be V2I-capable in 2025 and 80 percent will be V2I capable by 2040. Emerging transportation technologies are advancing fast and will be adopted even faster. While we do not know all the answers on how this will impact the transportation system, the updated and new 2045 LRTP policies and strategies will help prepare ODOT and other modal agencies to plan, manage, and operate a 21st-century transportation system.

The policies and strategies from the 2040 LRTP were used as the foundation for updating and developing new 2045 LRTP policies and strategies. During the planning process, the Advisory Committee provided input on how the following emerging trends impact the development of the 2045 LRTP policies and strategies:

- Connected and autonomous vehicles (CAV)
- Cybersecurity
- Electric vehicles
- Severe weather impacts
- Mobility as a service (MaaS)
- Alternative freight movement and demand

The policies and strategies are organized into the following seven categories:

- Highways and bridges
- Freight rail
- Passenger rail

- Public transportation
- Multimodal transportation
- Active Transportation
- Ports and waterways

2. HIGHWAYS AND BRIDGES

Oklahoma has an extensive highway network, which positions the state system as a vital link in the national transportation network. With its location at the crossroads of America, interstates cross Oklahoma connecting east and west coasts as well as facilitating movements from the Gulf of Mexico and Texas to and from all points north. A number of US highways and state highways stretch across the state connecting its communities and commercial centers. Many of these statewide highways, highways designated as critical for national defense, and interstate, are classified as part of the National Highway System (NHS).

ODOT is responsible for maintaining the 12,254 centerline mile state highway system and over 6,700 bridges. ODOT's ITS program employs and maintains technologies that benefit the movement of people and freight, and ODOT is planning to expand its effort. ITS improvements over time will benefit Oklahoma transportation considerably; and support ODOT's efforts toward improving safety, infrastructure preservation, mobility, economic vitality, environmental responsibility, and efficient system management and operation. ODOT remains committed to ensuring the safety of the traveling public. ODOT continues to implement safety measures, such as implementing centerline rumble strips on two-lane highways and 685 miles of cable barrier on multi-lane divided highways in an effort to reduce crossover crashes.

Despite significant financial hardships for the State of Oklahoma in recent years that necessitated deferring full funding for all the department's programs, ODOT has managed to construct, maintain, and operate the state transportation system in a thoughtful, fiscally responsible manner. More recently in 2019, the ROADS Fund reached the level agreed upon in 2012 legislation, ushering in what is hoped to be a period of improved financial support for transportation in the state.

The policies and strategies listed in **Table 2-1** will help prepare ODOT and other modal agencies in managing and operating a 21st century transportation system.

Table 2-1. Highway and Bridge Policies and Strategies

<p>Reduce fatalities and serious injuries on Oklahoma highways through appropriate engineering solutions, systemic improvements, and educational policies. (Updated Policy)</p>
<ul style="list-style-type: none"> • Consider public-private programs to increase driver awareness of the safety benefits of existing and near-future in-vehicle technology, such as automatic emergency braking and lane departure warnings. (New) • Improve safety of roadway infrastructure and— <ul style="list-style-type: none"> ○ Add shoulders on portions of the state highway system that lack them or have deficient shoulders. (Updated) ○ Continue to apply appropriate safety countermeasures to targeted locations. (Updated) • Continue to implement approaches outlined in the Oklahoma Strategic Highway Safety Plan and address crash types exhibiting increases in fatalities, notably pedestrian fatalities and those involving other vulnerable roadway users. (Updated)
<p>Improve safety and bridge conditions by replacing or rehabilitating structurally deficient bridges on the state highway system and averting growth in the share of structurally deficient bridges. (Updated Policy)</p>
<ul style="list-style-type: none"> • Implement Bridge Management System (BMS) and use BMS to inform a schedule program for replacing or rehabilitating bridges on the state highway system that might otherwise become structurally deficient. (Updated) • Continue to identify, rehabilitate, and replace at risk and fracture-critical bridges. (Updated) • Continue to follow a programmatic approach to identify and address potential preservation issues on historic bridges, working collaboratively with community partners. (Updated)

Preserve and improve the condition of highways and bridges. (Existing Policy)

- Continue to invest in bridge preservation to achieve and maintain a share of state-system structurally deficient bridges no greater than 1 percent. (New).
- Continue to invest in pavement preservation and use the Pavement Management System to enhance conditions on the state highway system, particularly to increase the share of “good” pavement by 10 percent and meet state and federal performance targets. (Updated)
- Implement the regulations outlined in the MAP-21 and FAST Act as they pertain to performance measures and asset management. (Updated)

Identify, assess, and mitigate risks to highway assets. (New Policy)

- Monitor risks to bridges and highway assets, including pavement and bridges, via the risk management process documented in the TAMP (New)
- Collect data required for risk analysis, including collection of trends or forecasts related to seismic activity, extreme weather, and other risk categories identified in the TAMP. (New)
- Consider new design standards to mitigate the risk associated with damage to bridges due to vehicle strikes. (New)
- Lend ODOT’s expertise to local governments to model seismic risks to local bridges and update design standards if necessary. (New)
- Investigate the causes of past highway failures related to flooding and update design standards or hydraulic guidelines as needed. (New)

Improve operational performance of highways through operations management. (Updated Policy)

- Utilize operational strategies to reduce the impact of congestion-causing incidents on transportation systems. These include effective traffic incident management, traveler information systems, and technologies to manage safety in work zones. (Existing)
- Consider utilization of internet-based systems and emerging technologies for managing traveler information and user notifications. (Existing)
- Improve ITS communication and the use of variable highway message signs to inform motorists of congestion, bottlenecks, and work zones. (Existing)
- Develop a Transportation System Management and Operations (TSMO) Plan to guide ITS investment and improve efficiencies while minimizing cost. (New)
- Continue the use of ITS (e.g., variable message signs) to alert drivers of incidents, disruptions, and severe weather conditions. (New)

Improve commercial motor vehicle mobility and connectivity. (Updated Policy)

- Continue the use of Oklahoma Permitting and Routing Optimization System (OKiePROS) to provide assistance to oversize, overweight commercial motor vehicle users for making safe and efficient route choices. (Updated)
- Continue the use of and enhance Ports of Entry—technology-based commercial motor vehicle weight and credential screening stations located at major highway entry points to the state. (Existing)
- Monitor and manage congestion using ITS programs in cooperation with commercial vehicle industry and other stakeholders. (Existing)
- Make targeted investments on the National Highway System to accommodate traffic growth and truck routes and strengthen system safety and efficiency for truck operations. (Existing)
- Pursue opportunities to partner with private sector to provide for truck parking, including sharing information on parking locations and real-time availability. (Updated)
- Partner with the trucking industry to facilitate that adequate truck parking is available throughout the state. (New)
- Analyze truck travel time data to assist in decision making about freight related system improvements on the National Highway System. (Existing)

Support testing, development frameworks, trials, and appropriate implementation of new transportation technologies with potential to improve highway safety and/or mobility. (New Policy)

- Consider pilot programs for emerging transportation technology and identify preferred implementation strategies that address interactions between new and existing technology, and the application of lessons learned to future locations (New).
- Develop data sharing agreements with private companies providing transportation services to support operations management and project development. (New)
- Identify best practices on the collecting, storing, using, and sharing of data derived from emerging transportation technology. (New)
- Explore modifications to existing infrastructure to accommodate emerging transportation technologies. (New)
- Explore what is required to develop a fully integrated CAV system on clearly defined corridors (New)
- Investigate the use of emerging transportation technologies and explore their impact on operational and safety performance. (Updated)
- Consider policies related to communications technology (e.g., 5G, broadband) to support public-private implementation of emerging transportation technologies. (New)
- Coordinate with the Office of Management and Enterprise Services (OMES) to identify cyber and data security practices for ODOT platforms, particularly for data related to emerging transportation technologies. (New)

3. FREIGHT RAIL

Freight rail is vital in maintaining and improving both the state and national economies. Nearly three-quarters of all of the rail traffic in Oklahoma is through traffic, without an Oklahoma destination. The top weight commodity group transported by rail is coal, followed by nonmetallic minerals. Chemical products are the largest commodity group by value. Freight rail brings finished goods and raw materials to and from Oklahoma businesses, and moves material through and across the state. This system has proven valuable to the agricultural and energy industries.

Oklahoma shortline railroads provide critical connection to businesses across the state and play an important role in local economies. Freight rail safety will continue to be a priority with ODOT. Improvements to public highway-rail grade crossings in Oklahoma will continue to be included in the annual work program. The following policies and strategies listed in **Table 3-1** focus on strengthening the state’s rail system, recognizing the key national, regional, and state roles it plays in economic competitiveness and safety.

Table 3-1. Freight Rail Policies and Strategies

Improve rail operations and operational effectiveness by encouraging public-private partnerships. (Existing Policy)
<ul style="list-style-type: none"> • Support identification and elimination of bottlenecks both on main lines and classification yards (the multi-track facilities where freight cars are transferred from one engine to another based on their destination) by the use of Class I railroads. (Existing) • Support double tracking and signal/operations improvements to mitigate freight rail congestion and to meet projected increase in rail traffic. (Existing) • Maintain coordination between government agencies and Class I railroads. (Updated) • Support upgrades to Class III track and structures to permit use of 286,000-pound standard rail cars and larger, which in turn will support service and improve service efficiency. (Updated) • Develop options for statewide programs to target preservation and upgrading of Class III lines. (Existing)

Improve rail conditions, operations, and safety through continued support and refinement of the Oklahoma Statewide Freight and Passenger Rail Plan. (Updated Policy)

- Periodically, perform an analysis of Oklahoma’s rail network to identify future connectivity gaps based on changing freight patterns and the Oklahoma Freight and Passenger Rail Plan. (Updated)
- Evaluate the new rail crossing inventory with rail and highway traffic data and review accident exposure ratings using the Federal Railroad Administration (FRA) safety program. (Updated)
- Provide technical assistance to local communities planning to improve highway -rail grade crossing facilities, including crossing surfaces and signal devices. (Existing)
- Continue to evaluate the consolidation of public highway-rail grade crossings to further improve safety. (Existing)

Improve rail-highway-port connections to facilitate intermodal freight movement. (Existing Policy)

- Monitor and promote opportunities for development of intermodal and multimodal facilities in Oklahoma. (Updated)
- Support the development of intermodal freight corridors that connect major population centers with freight generators and international gateways. (Existing)
- Encourage industrial development near rail corridors to enhance intermodal freight movement. (Existing)

4. PASSENGER RAIL

Passenger rail is an efficient transport mode, but because of its high capital cost, dense corridors are often required to justify the investment. By connecting the largest of Oklahoma’s cities with rail connections to major population centers in adjacent states, the efficiencies of rail can be put to work. To gain the travel densities needed, local connections and other collector systems can be developed to serve less dense corridors and form a cohesive regional transportation system. Public sentiment about the existing passenger rail service in Oklahoma is positive and there is interest in expanding the passenger rail service. The following policies and strategies listed in **Table 4-1** endorse the continuation of passenger rail system and improving the intermodal connections in the state.

Table 4-1. Passenger Rail Policies and Strategies

Preserve and maintain existing service to provide people with multimodal options for intercity travel. (Existing Policy)
<ul style="list-style-type: none"> • Cooperate and coordinate with Amtrak, the Burlington Northern and Santa Fe Railway (BNSF), and the State of Kansas in evaluating potential passenger rail service by means of an Oklahoma City to Newton, Kansas, Amtrak route. To provide a direct link to Amtrak’s national system. (Updated) • Evaluate current ridership trends and train frequencies to improve the existing Amtrak passenger rail service. (Existing)
Improve passenger rail as a modal choice by improving travel time, safety, and reliability of the service. (Existing Policy)
<ul style="list-style-type: none"> • Proceed with planning activities to determine feasibility of passenger rail service between Oklahoma City and Newton, Kansas. (New) • Identify, develop, and secure funding that promotes and enhances passenger rail system investment. (Existing) • Evaluate the new rail crossing inventory with current rail and highway traffic data and review incident exposure ratings using the FRA safety program. (Updated) • Provide technical assistance to local communities planning to improve public highway-rail grade crossing facilities, including crossing surfaces and signal devices. (Updated) • Continue to evaluate the consolidation of public highway-rail grade crossings to further improve safety. (Existing)

Increase intermodal passenger travel choices by improved connections at passenger rail stations with intercity bus services, public transportation, and park- and-ride facilities.

(Existing Policy)

- Encourage expanded and improved connections to passenger rail stations from rural, tribal, and urban public transit, intercity buses, and airport terminals. (Existing)
- Coordinate schedules to provide better connections between local and regional public transportation systems and to provide seamless and convenient transportation throughout the state. (Existing)
- Evaluate the feasibility of a station stop at Thackerville, Oklahoma to serve the tourism market in the region. (New)

5. PUBLIC TRANSPORTATION

Recent state legislation, Oklahoma Statutes (O.S.) 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. This will allow ODOT to appropriately structure and suitably resource the efforts necessary to succeed in their charter. In response to the need for an Oklahoma Public Transit Policy Plan (OPTPP), ODOT has elected to select a consulting firm to assist in creating this plan which will be an all-inclusive plan addressing public transit systems in the state and reflecting the needs established in the 2018 Oklahoma Transit Needs Assessment. The Transit Plan efforts will involve obtaining stakeholder input and provide for future collaboration and coordination among all public transit agencies and systems in the state.

The 2045 LRTP avoids duplicating the transit plans' effort by reviewing services administered by ODOT before the 2019 legislation, evaluating existing LRTP policies for use in concert with the OPTPP, and relying on the findings of the OPTPP for specific future policies and strategies.

Oklahoma has twenty rural public transportation providers and five urban public transit providers. Oklahoma also has ten tribal transit providers that directly provide transit services and two tribal entities that elect to contract for service provisions by other transit providers.

Comments received through the 2045 LRTP public and stakeholder engagement indicated a desire for improved public transportation options across all three types of service and a desire for accessibility and service improvements in order to minimize traffic on the roadways throughout the state. The following policy and strategies focus on increasing public transportation options and bringing the systems' assets to a state of good repair. The policies and strategies listed in **Table 5-1** aim to fortify Oklahoma's existing transit services, while advancing service improvements and efficiencies in locations where current demand are unmet or underserved.

Table 5-1. Public Transportation Policies and Strategies

Improve public transportation system operations and performance by promoting coordination and connections statewide among rural, urban, tribal, and intercity bus services. (Updated Policy)
<ul style="list-style-type: none"> • Complete and implement the coordinated plans being developed by the Office of Mobility and Public Transit. (New) • Expand and improve connections between rural transit systems and tribal systems, intercity bus stops/terminals, urban transit system transfer points, airports, and Amtrak Heartland Flyer stops. (Existing) • Continue collaboration with stakeholders in development of an electronic database and mobility management system regarding the state’s transit service routes and locations. (Existing)
Support multiple modes of transportation connecting residential areas and employment locations, health services, and other activity centers. (Existing Policy)
<ul style="list-style-type: none"> • Encourage coordination between land use and transit planning, including pedestrian and bicycle connections to transit routes, practical transit stop locations, transit shelters, park-and-ride lots, access for elderly and disabled, and transit-oriented development. (Updated) • Promote benefits of agreements between rural transit systems and health and hospital systems, social service providers, and major employers to expand transit service options. (Updated) • Coordinate with health and human service agencies and others to expand paratransit services for special needs populations and individuals with disabilities. (Existing)
Protect Oklahoma’s investment in the public transportation system by seeking additional/dedicated funding. (Existing Policy)
<ul style="list-style-type: none"> • Encourage continued cooperation and collaboration among ODOT, the tribal transit agencies, and the urban transit systems and appear as one voice to the Oklahoma legislative delegation on Federal Transit Administration (FTA) funding requests. (Existing) • Promote development of dedicated transit funding sources beyond the existing Public Transportation Revolving Fund. (Existing) • Support metropolitan area transit, including passenger rail initiatives, regional transit authority (RTA) and dedicated transit funding. (Updated)

Develop a Statewide Public Transportation Plan that identifies and targets opportunities for strategic improvements to services. (Existing Policy)

- Complete and implement the Oklahoma Public Transit Policy Plan. (New)

6. MULTIMODAL TRANSPORTATION

Since the early 1990s, the U.S. DOT has focused on efforts to encourage communication and coordination among various transportation modes. Thus, use of the words ‘intermodal’ and ‘multimodal’ have become a larger part of the transportation planning vocabulary. For the purpose of 2045 LRTP, these terms are explained as follows:

- Multimodal transportation is considered when the passengers or goods have multiple options to travel modes from origin to destination, for example via one or more of automobile, bicycle, pedestrian, transit, air, water, or freight transportation modes. For example, on a multimodal street or highway, passengers may have the option to travel via automobile, bicycle, walking, or bus.
- Intermodal transportation is the movement of passengers or goods from origin to destination through the use of one or more transportation modes – automobile, bicycle, pedestrian, transit, air, water, or freight – sequentially. Locations where passengers or goods switch from one mode to another are typically called ‘intermodal facilities,’ ‘terminals,’ or ‘centers,’ although some intermodal connections are as simple as a bus stop or a parking lot.

Thus, this multimodal section addresses issues that overlap or affect several modes, as well as themes that are important to many modes. The following policies and strategies listed in **Table 6-1** reinforce the key role that Oklahoma’s transportation system plays with state and national economic competitiveness. The multimodal concepts acknowledge the importance of developing a diverse transportation system that offers the traveling public and businesses competitive, safe, convenient, affordable, and environmentally responsible transportation choices.

These multimodal policies and strategies focus on maintaining the system in a “state of good repair” while also recognizing the fiscal challenges facing the federal and state programs with current dedicated revenue sources inadequate to sustain current spending limits.

The 2045 LRTP focuses on connectivity and safety among all of the modes: highways to railroads to ports; pedestrian and bicycle paths to public transit, passenger rail, and airports to various destinations. Many linkages also promote more livable communities. The strategies also recognize the special role that the transportation system plays in times of natural disasters and national emergencies.

Table 6-1. Multimodal Policies and Strategies

<p>Protect Oklahoma’s investment in transportation by seeking to preserve and enhance current and/or new funding mechanisms for all modal systems. (Existing Policy)</p>
<ul style="list-style-type: none"> • Develop and maintain information on historical trends and provide this information to state government leaders and the Congressional Delegation to support their search for new funding sources for the transportation system. Continue to assist government leaders in determining appropriate transportation funding and improvements priorities. (Existing) • Explore various alternatives for funding the state’s surface transportation program, such as: securing increased percentage of state motor vehicle revenue, increasing diesel tax, increasing freight fees, considering a vehicle miles traveled fee, innovative tolling, and applying road use pricing of CAV systems. (Updated) • Provide information to state government leaders and Oklahoma’s Congressional Delegation to assist them in finding additional sources of funding for rural, urban, and tribal transit; passenger and freight rail service improvements; aviation improvements; and waterways improvements. (Existing) • Continue to work with sovereign Native American tribes and nations to leverage resources for transportation improvements. (Existing) • Cooperate and coordinate with local governments to research possible new funding partnerships for transportation projects of mutual interest. (Existing)
<p>Improve efficiency, economic vitality, and intermodal connectivity by following the goals, objectives, and strategies identified in the Oklahoma Freight Transportation Plan (Updated Policy)</p>
<ul style="list-style-type: none"> • Implement the multimodal freight strategies identified in the 2018-2022 Oklahoma Freight Transportation Plan. (Updated) • Collaborate with freight stakeholders and utilize latest technologies and data to address freight bottlenecks and prioritize investments to eliminate the bottlenecks. (Updated) • Support investments to improve linkages between the airports, highways, railways, and water systems. (Existing)

Enhance modal choice for people and provide favorable conditions for transit ridership growth by identifying and improving intermodal connection points for travel by public transportation, intercity bus, passenger rail, airport, walking, bicycling, and automobile. (Existing Policy)

- Identify gaps and opportunities in urban, tribal, and rural public transportation, intercity bus, passenger rail, airports, automobiles, and bicycle and pedestrian facilities and operations. (Existing)

Protect the environment by promoting clean fuel and energy conservation practices within ODOT and to the traveling public. (Existing Policy)

- Assess current ODOT practices in construction, maintenance, and agency operations to identify areas for potential energy conservation. This could include installing light emitting diode traffic signals, reducing roadside mowing, using warm-mix asphalt, and other measures. (Existing)
- Focus efforts to assist the traveling public in conserving fuel, such as developing efficient traffic operations, traffic signal optimization, and work zone design to minimize idling time, etc. (Existing)
- Improve air quality by reducing traffic congestion and bottlenecks that result in increased emissions. (Existing)
- Support the use of clean fuels by ODOT, other state agencies, and the public. (Existing)
- Prepare for future extreme weather impacts on transportation infrastructure through site and stressor identification and risk assessment. (New)
- Develop after-action reports with clear recommendations for improvement following extreme weather events. (New)

Improve and promote security across all transportation modes through adoption of emergency preparedness protocols for managing natural and man-made threats to human resources, transportation capital assets, and information. (Existing Policy)

- Contribute to the public's safety by coordinating with the Oklahoma Department of Emergency Management, the U.S. Departments of Homeland Security and Defense, and the U.S. DOT to plan for the restoration, and ensure the availability, of transportation services after a disaster and during times of national emergencies. (Existing)
- Improve the security and resilience of the transportation system, including highways, transit, rail, ports and marine, air cargo, and passenger aviation, through identification of "safety-critical" assets. (Existing)

- Develop alternate routes and transportation system redundancy to maintain mobility during emergencies or natural disasters. (Existing)
- Maintain and improve urban area program to remove debris and litter from drains, culverts, and roadsides to minimize roadway flooding. (Existing)

Develop a comprehensive performance management framework for ODOT. (Updated Policy)

- Strengthen working relationships with MPOs, the FHWA, Tribal Transportation Assistance Program (TTAP) members, and other planning partners through development of performance measures and performance targets. (New)
- Continue communications with the Transportation Asset Management (TAM) Committee to reevaluate performance targets and investment priorities to work toward targets. (New)
- Implement performance-based planning and decision-making through a data-driven approach to project selection and prioritization for the Eight Year Construction Work Plan tying decisions to performance targets. (New)
- Create an electronic performance measures dashboard as part of ODOT's website and update regularly. (Existing)

Leverage public/ private partnerships to understand the public's travel patterns and best educate the public on the development of new technology. (New Policy)

- Create public/private partnerships (with companies such as Uber, Lyft, Lime, and Bird.) to assist with sharing data about travel patterns. (New)
- Explore data collection and sharing options and opportunities to enhance ODOT's cybersecurity. (New)

7. ACTIVE TRANSPORTATION

ODOT is dedicated to supporting a safe and effective transportation system that provides multimodal opportunities for active transportation. Consisting of multi-use trails, bicycle routes, and sidewalks, an active transportation system provides for and promotes health and safety for users and benefits the environment and the economy. Offering access to multiple modes of transportation makes Oklahoma a better place to live and visit. Bicycle and pedestrian accommodations are supported by federal and state legislation, policies, and practices. ODOT ensures that all state and federally funded transportation projects are constructed in compliance with the Americans with Disabilities Act.

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 MPOs in considering infrastructure options; and it facilitates the inclusion of these features in projects when appropriate. It is estimated that in 2018 Oklahoma had approximately 520 miles of bicycle trails, multi-use bicycle and pedestrian trails, and/or designated bicycle lanes, based on information from ODOT Enhancement/TAP grants, MPOs, and local governments. The following policies and strategies listed in **Table 7-1** will help promote active transportation systems throughout Oklahoma.

Table 7-1. Active Transportation Policies and Strategies

Support bicycle and pedestrian modal choices and promote healthy affordable modes of transportation. (Existing Policy)
<ul style="list-style-type: none"> • Continue to pursue opportunities to bring state highways in small communities into compliance with the Americans with Disabilities Act. (Existing) • Incorporate bicycle facility design standards into the next version of the ODOT Roadway Design Manual. (Existing) • Develop a statewide bicycle plan that emphasizes safety and builds and expands upon the work of MPOs. (Existing)

Improve modal choices and safety by incorporating pedestrian and bicyclist facilities in accordance with approved design standards. (Existing Policy)

- Continue to provide pedestrian signals, warning beacons, signage, striping, and lighting at intersections of state routes with high-volume pedestrian crossings. (Existing)
- Support inclusion of bicycle and pedestrian facilities into new and renovated intermodal facilities and connection points, such as train depots and bus terminals. (Existing)
- Support efforts by local governments, public transit providers, passenger rail systems, and others to expand and improve bicycle ways and walkway connections. (Existing)
- Leverage local funding contributions and encourage bicycle and pedestrian improvements by private developers. (New)
- Assess and respond to needs for pedestrian and bicycle infrastructure on or adjacent to state highways concurrent with related highway improvements, and as a part of the project development process. (Existing)
- Inform bicycle/pedestrian community about coordinating with the state’s bicycle and pedestrian coordinator and about the public involvement process. (Existing)
- Improve curb access and parking options for all active transportation users. (New)

Promote and support public information outreach and education regarding safe and accessible transportation routes for bicyclists and pedestrians. (Existing Policy)

- Continue to educate communities about sidewalk and trail requirements associated with the Americans with Disabilities Act. (Existing)
- Promote statewide and local-area education programs to make transportation users aware of pedestrian and bicyclist rights and responsibilities. (Existing)
- Support efforts by health departments, educational facilities, and public safety agencies to provide bicycle and pedestrian safety lessons/workshops. (Existing)
- Encourage local communities that are planning or constructing new facilities for pedestrians and bicyclists to seek technical support from the state’s bicycle and pedestrian coordinator. (Existing)

Promote access to active transportation options statewide. (New Policy)

- Support efforts to expand access to active transportation (Lime, Bird, etc.) options in urban and rural areas. (New)

8. PORTS AND WATERWAYS

The MKARNS is Oklahoma's primary navigable waterway originating from the Tulsa Port of Catoosa and flowing southeast through Arkansas to the Mississippi River. The strength of Oklahoma's waterways sets the state apart from other areas by providing greater options for the shipping and distribution of goods. However, waterways often do not receive the necessary funding to maximize their use. The available funding has not kept pace with the demand over the years, and wear and tear continues on the locks that are now over 45 years old. Faced with decreased federal funding, there have been discussions regarding contributions from the stakeholders, not only with funds, but other shared resources including equipment, labor, and materials. The following policies and strategies listed in **Table 8-1** seek to strengthen the MKARNS's economic competitiveness and security.

Table 8-1. Ports and Waterways Policies and Strategies

Protect the investment in the MKARNS by seeking increased federal funding. (Updated Policy)
<ul style="list-style-type: none"> • Continue to work with federal and state officials to obtain funding for the maintenance of existing locks and dams as well as on-going critical needs. (Updated) • Continue to work with federal and state officials from Oklahoma and Arkansas to protect the confluence of the White and Arkansas Rivers. (Existing) • Continue to work with federal and state officials to authorize the deepening of the MKARNS channel. (Existing)
Enhance intermodal connectivity by targeting improvements to truck corridors and railroads that provide access to MKARNS ports. (Existing Policy)
<ul style="list-style-type: none"> • Work collaboratively with the ports and other stakeholders to address issues related to transporting "super" loads from the ports. This could include improvement to bridge structures and pavement on routes to accommodate the "super" loads. (Existing)
Facilitate modal choices for goods movement and provide a sustainable budget for marketing and development of Oklahoma ports and waterways. (Existing Policy)
<ul style="list-style-type: none"> • Seek partnerships with private-sector user groups, economic development associations, and other stakeholders to support promotion of the MKARNS channel. (Existing)