

2025-2050

Oklahoma Long Range Transportation Plan

Stakeholder Committee Meeting #2
April 29, 2025



OKLAHOMA
Transportation



Agenda

1. Introductions
2. Needs Assessment
3. Baseline Revenue Forecast
4. Goals and Objectives Exercise

Attendees

1. Thaddeus Babb, ODOT
2. Joe Brutsche, ODOT
3. Laura Chaney, ODOT
4. Sam Coldiron, ODOT
5. Jason Giebler, ODOT
6. Sarah McElroy, ODOT
7. Eric Rose, ODOT
8. Jared Schwennesen, ODOT
9. David Yarbrough, Tulsa Ports
10. Jon Chiappe, OK Dpt. Of Commerce
11. Rob Endicott, Cherokee Nation
12. Kyle Henry, RTPo, SODA
13. Jim Newport, OK Trucking Association
14. David Yarbrough, Tulsa Ports
15. Lynda Ozan, OK Historical Preservation
16. Thomas Dow, INCOG
17. John Sharp, ACOG
18. Alex Couch, ODOT
19. Bart Vleugels, ODOT
20. Bobby Parkinson, ODOT
21. Colten Snelling, ODOT
22. Devon Westbrook, ODOT
23. Eddie Machuca, ODOT
24. Gwen Johnson, ODOT
25. Johnathan Stone, Lawton MPO
26. Lauren Wood, ACOG
27. Matt VanAuken, ODOT
28. Melissa Davis, ODOT
29. Oliver Skimbo, KEDDO & SORTPO
30. Robert Rival, ODOT
31. Steven Gauthé, ODOT
32. Taylor Massey, CTMPO
33. Tegan Malone, Bike Oklahoma
34. Viplav Reddy, FHWA OK
35. Z. Warrior, Bike Oklahoma
36. Brock Spencer, NODA



Consultant Team

1. Jeff Carroll, High Street
2. Erin Dean, High Street
3. Matt Hawkins, High Street
4. David Streb, Poe and Associates
5. John Bowman, Poe and Associates
6. Robyn Arthur, HNTB
7. Carolyn Taylor, Jones PR



Needs Assessment

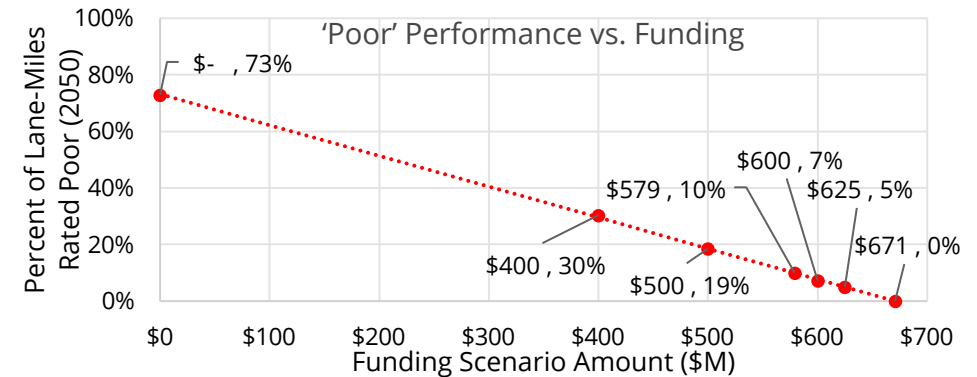
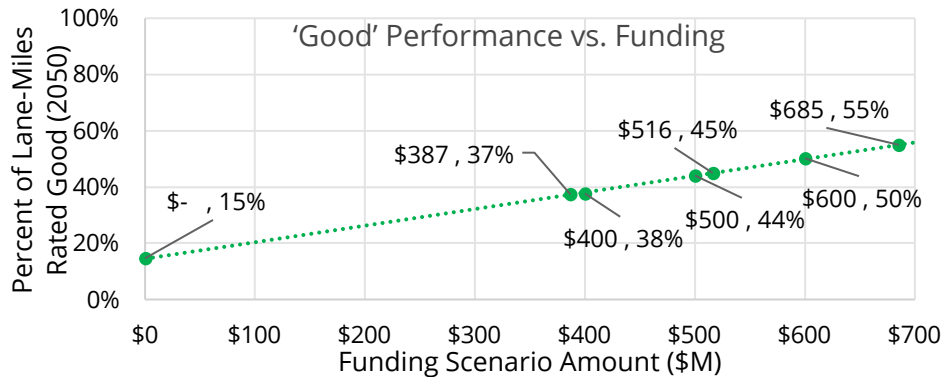


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Pavement

- Needs analysis conducted on 30,473 State Highway System (SHS) pavement lane-miles
- The dTIMS asset management software was used to forecast system pavement conditions in 2050 for a 'no build' (\$0M/yr) and three 'build' scenarios: \$400M/yr, \$500M/yr, and \$600M/yr in constant 2024 USD – each with a 50/50 capital to preservation allocation split.
- Identify the minimum spending needed to achieve 50% or better 'good' lane miles and 7% or lower 'poor' lane-miles in 2050.



'Poor' Target	'Good' Target	Minimum Annual Investment (2024 USD)
≤7%	≥50%	\$600M



Bridge

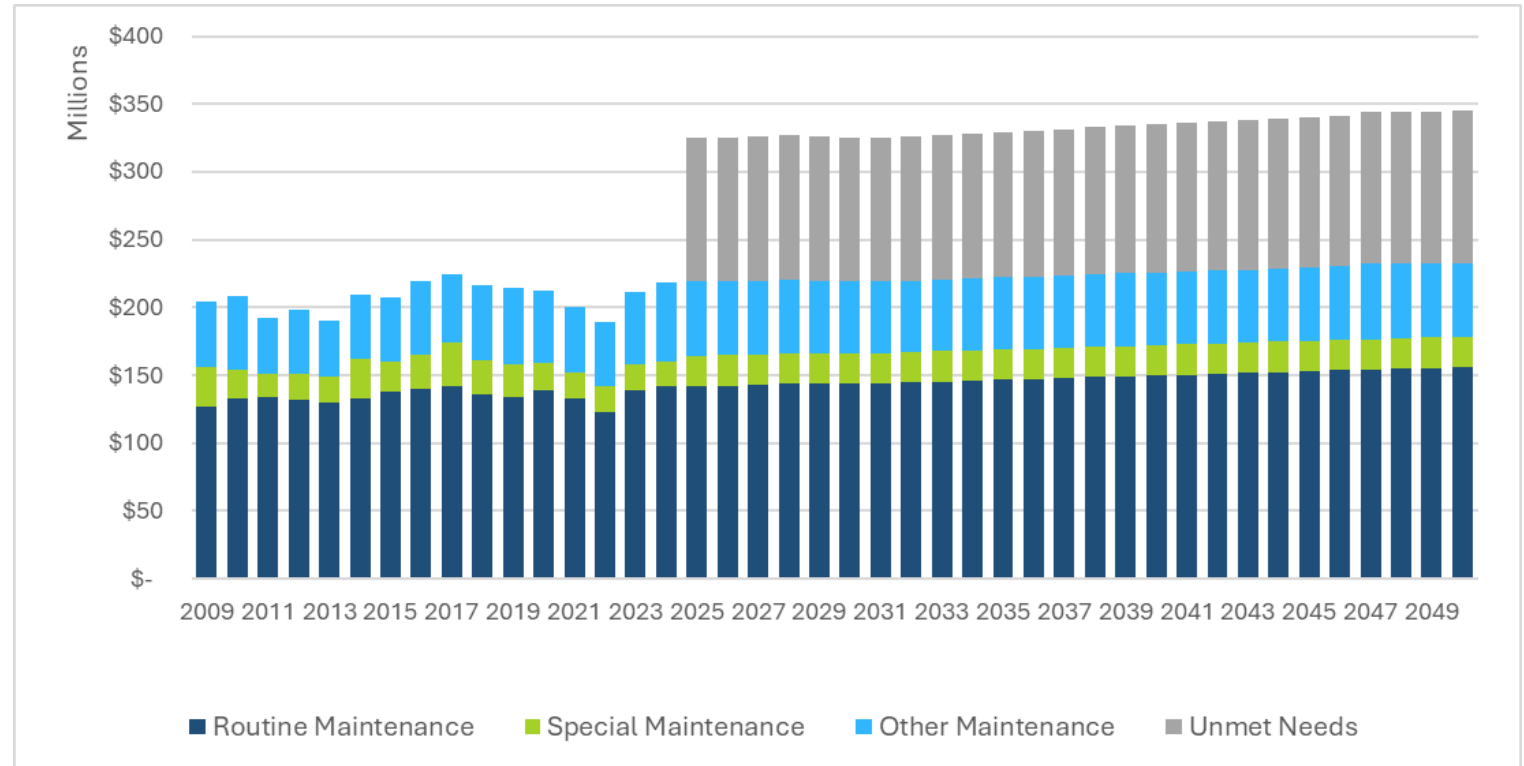
- Needs analysis examined all 6,751 SHS bridges of which 2,614 are on the NHS
- AASHTOWare BrM asset management software was used to forecast future bridge state-of-repair at different investment levels.
- Identify the minimum annual investment needed to achieve the desired state-of-repair – using the federal definition
 - 1% or lower ‘poor’ bridge deck area – consistent with the Rebuilding Oklahoma Access and Driver Safety (ROADS) fund’s target and
 - 40% or higher ‘good’ bridge deck area – per the current NHS target in ODOT’s transportation asset management plan

‘Poor’ Target	‘Good’ Target	Minimum Annual Investment (2024 USD)
≤1%	≥40%	\$235M



Maintenance

- ODOT has spent \$207 million per year on maintenance, including routine maintenance, special maintenance, and other maintenance
- ODOT staff and consulting engineers estimate that unmet needs are 48% of current spending
- Total needs are \$8.7 billion, or an annual average of \$333 million.



Interchange

- Interchanges divided into 2 categories: simple and complex
- Upgrade cost, number of projects estimated by ODOT engineers
- ROW acquisition and utility relocation included as a percentage of construction cost

Interchange Needs Summary (millions of 2024 dollars)

Category	Unit cost of upgrade	# of upgrades	ROW/Utility Cost Share	2025-2050 Cumulative	Annual Average Need
Simple	\$35	50	15%	\$2,012.50	\$77.40
Complex	\$450	10	25%	\$5,625.00	\$216.35
TOTAL				\$7,637.50	\$293.75

Safety

- Safety improvements divided into 5 categories
- Required number of each project estimated by ODOT engineers
- Some projects will share costs with other agencies; only ODOT share included
- Roadway departure category includes addition of paved shoulders, resulting in needs much higher than current spending (\$57M/year)

Safety Needs Summary (millions of 2024 dollars)

Category	Total Cost
Intersections	\$708.30
Roadway Departure	\$9,367.58
Active Transportation	\$8.00
Data & Analysis	\$21.44
Human Behavior	\$20.50
Grand Total	\$10,125.81
Annual Average	\$389.45



Intelligent Transportation Systems

Includes ongoing operations:

- Traffic Operations Center
- Software and data contracts
- Roadside Assistance
- Snowplow Tracking

And expansion needs:

- Statewide fiber expansion
- Statewide RWIS deployment
- V2I implementation
- New cameras and DMSs

Categories and cost estimates provided by ODOT engineers

ITS Needs Summary (millions of 2024 dollars)

Category	2025-2050 Cumulative	Annual Average Need
Operations	\$121.0	\$4.8
Expansion	\$99.5	\$4.0
TOTAL	\$220.5	\$8.8

Weigh Stations & Ports of Entry

- Currently operating 5 ports of entry (POE), 7 weigh stations, and 2 virtual weigh stations
- Maintenance and operations costs for each location are determined by type and age of facility
- Construction costs included for 5 planned upgrades and 4 proposed new facilities
- System overhead is an additional annual expense based on total number of facilities
- Ongoing “technology refresh” to purchase new computers, cameras, and other equipment is a flat annual expense

WS/POE Needs Summary (millions of 2024 dollars)

Category	2025-2050 Cumulative Need	Annual Average Need
Ports of Entry	\$11.5	\$0.4
Weigh Stations	\$4.9	\$0.2
Virtual Weigh Stations	\$0.3	\$0.0
System Overhead	\$72.2	\$2.8
Technology Refresh	\$20.8	\$0.8
Construction	\$99.0	\$3.8
TOTAL	\$208.5	\$8.0



Rest Areas

- ODOT operates 5 rest areas and 5 welcome centers
- No plans to open or close any
- Historical spending data provided by ODOT, used to calculate needs

Rest Area Needs Summary (2024 dollars)

Facility	Unit Price	Count	Total Annual Cost (\$millions)	2025-2050 Needs (\$millions)
Welcome Center	\$240,000	5	\$1.2	\$31.2
Rest Area	\$58,000	5	\$0.3	\$7.5
Total			\$1.5	\$38.7

Freight Rail

- Railroad operators are responsible for most freight rail upgrades
- ODOT worked with carriers to compile list of needed improvements through 2050, and estimated costs where available
- For some projects, especially on class I railroads, carriers did not provide cost estimates
- ODOT spends an average of \$8.7 million per year from federal and state sources on railway-highway grade crossings

Freight Rail Needs Summary (2024 dollars)

Category	2025-2050 Need	Share of Total
Class I	\$ 358,700,000	59.7%
Class III	\$ 220,869,063	36.8%
Other	\$ 21,000,000	3.5%
Total	\$ 600,569,063	100%



Passenger Rail

- Current spending supports operation of existing Heartland Flyer (HF) service
- Needs assessment includes 4 proposed additional services:
 - Additional daily Heartland Flyer service
 - New HF station in Thackerville
 - HF extension to Newton, KS
 - New route from Oklahoma City to Tulsa
- Includes capital costs of upgrade/installation and annual operation costs for each service

Passenger Rail Needs Summary (millions of 2024 dollars)

Item	Start Year	Cumulative Operational Need	Capital Needs	Total Need (2025-2050)
Existing Heartland Flyer Service	2025	\$147.6	\$40.0	\$187.6
Second Daily Heartland Flyer Service	2030	\$122.1	\$40.0	\$162.1
New Thackerville Station	2030	--	\$5.0	\$5.0
Heartland Flyer Extension to Newton, KS	2030	\$122.1	\$280.0	\$402.1
Oklahoma City to Tulsa Service	2030	\$62.8	\$1,292.0	\$1,354.8
TOTAL		\$454.7	\$1,657.0	\$2,111.7
ANNUAL AVERAGE		\$17.5	\$63.7	\$81.2



Public Transportation

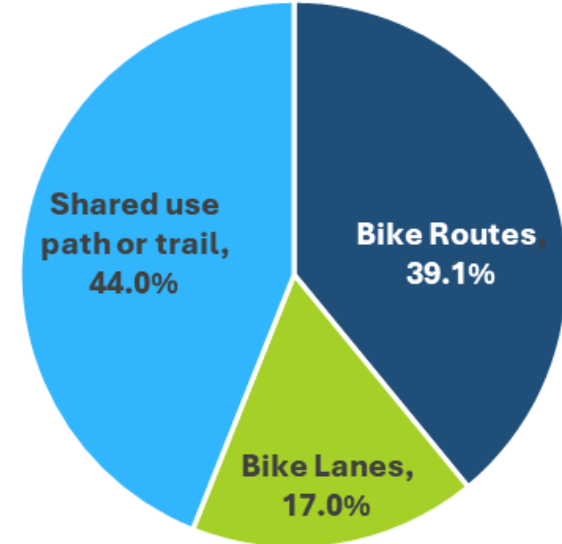
- Mostly funded by federal and local sources; state funding is a small share
- Need calculated using projections from Oklahoma Public Transit Policy Plan

Oklahoma Transit Needs (millions of 2024 dollars)

	Current Spending	Unmet Needs	Total Need
Annual Average	\$125.0	\$149.3	\$274.4
2025-2050 Cumulative	\$3,250.6	\$3,882.7	\$7,133.3

Bicycle & Pedestrian

- Bike and pedestrian needs are estimated by combining mileage and cost estimates from MPO plans with TAP requests from non-MPO areas
- ACOG and INCOG have plans to construct over 1,000 miles of bike and pedestrian infrastructure each
- The total cost of all planned projects is over \$90 million per year

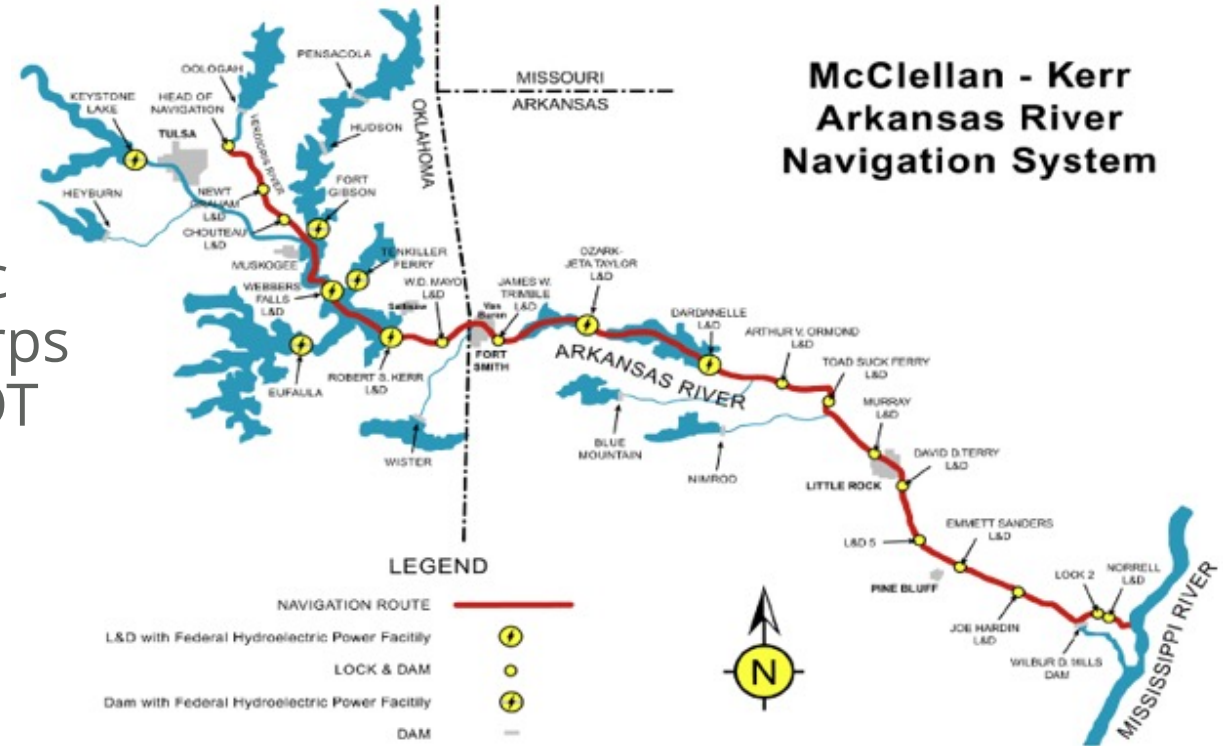


Planned non-motorized MPO projects by type



Ports & Waterways

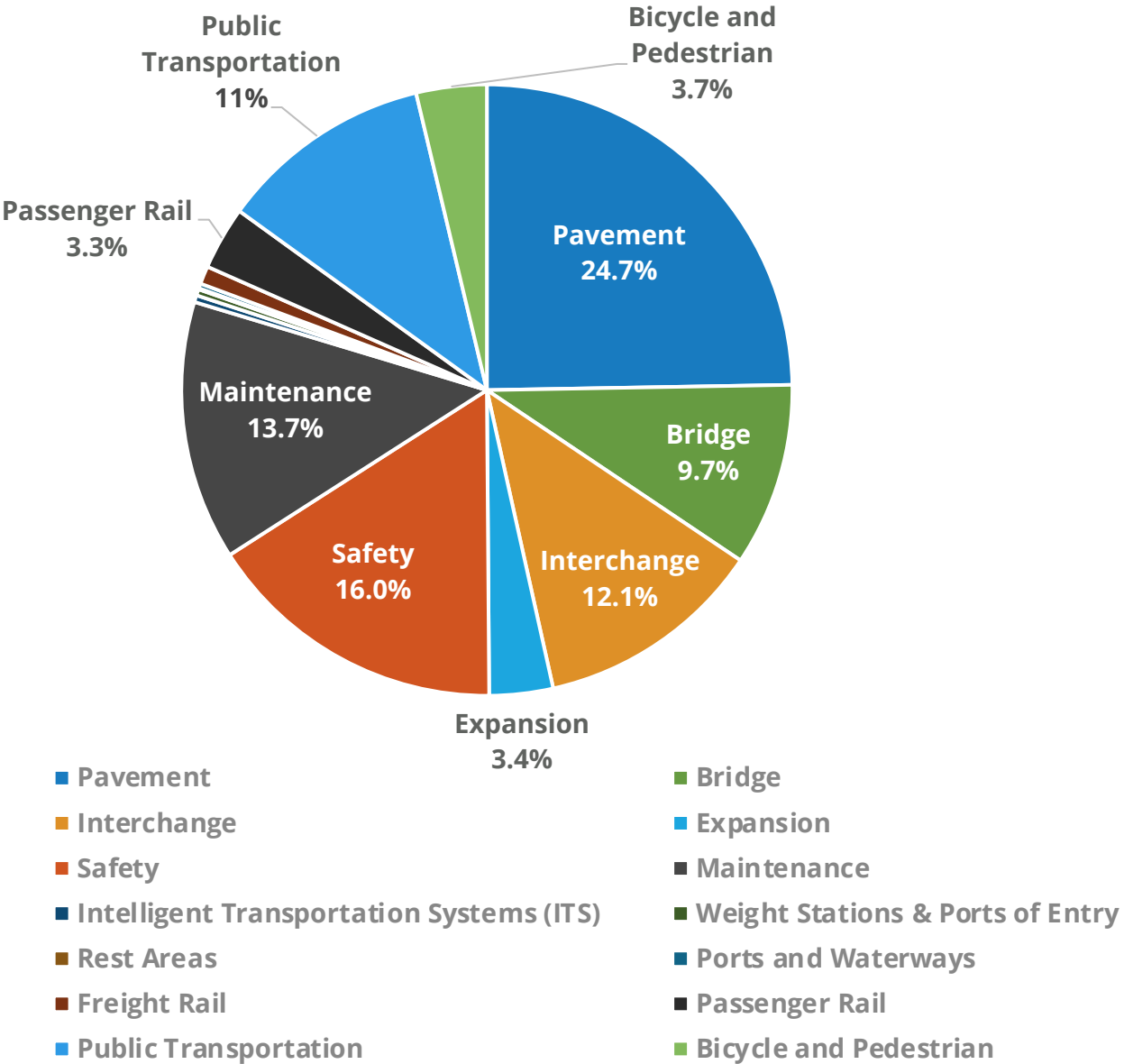
- The McClellan-Kerr Arkansas River Navigation System (MKARNS) is a vital inland waterway in Eastern Oklahoma
- Almost all spending comes from public and private ports and the US Army Corps of Engineers (USACE), rather than ODOT
- The estimated cost to meet the maintenance and capacity expansion needs for ports is \$159 million
- The USACE also has an MKARNS investment strategy to replace all critical components for an estimated \$3.6 billion across both Oklahoma and Arkansas



Total Needs

Total ODOT Needs (millions of 2024 dollars)

Category	Average Annual Need	Cumulative (2025-2050) Need
Pavement	\$600.0	\$15,600.0
Bridge	\$235.0	\$6,110.0
Maintenance	\$333.1	\$8,662.4
Expansion	\$81.7	\$2,125.3
Interchanges	\$293.8	\$7,637.5
Safety	\$389.5	\$10,125.8
ITS	\$8.8	\$229.3
Weigh Stations/POEs	\$8.0	\$208.5
Rest Areas	\$1.5	\$38.7
State Highway System Needs Total	\$1,951.4	\$50,737.5
Freight Rail	\$23.1	\$600.6
Passenger Rail	\$81.3	\$2,111.7
Public Transportation	\$274.4	\$7,133.3
Bicycle/Pedestrian	\$90.5	\$2,351.7
Ports and Waterways	\$6.1	\$159.4
Other Modal Needs Total	\$475.4	\$12,356.7
Needs Grand Total	\$2,426.8	\$63,094.2



Revenue Projection



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Overview

- Projections account for all major sources of ODOT funding
 - Fuel taxes
 - Income taxes
 - Motor Vehicle taxes
 - Federal apportionments
- Based on real world transportation data, trends, and current laws

Assumptions

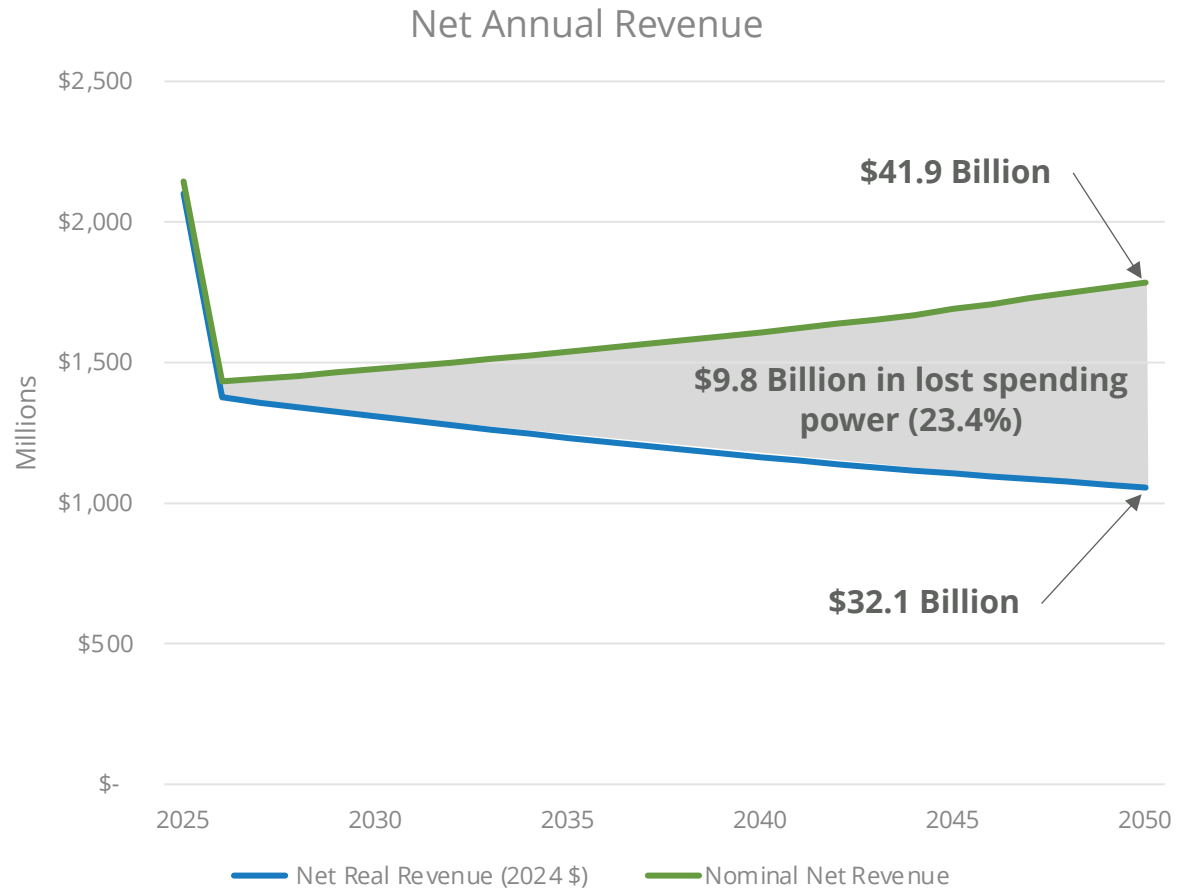
- Future growth determined by assumption variables
- Flexibility makes it easy to explore a variety of future trends
- Baseline values selected to represent conservative, realistic scenario

Variable	Baseline Value
Federal Appropriations	
FTA annual growth	2%
FHWA annual growth	2%
Driving Behavior	
%Annual growth in passenger vehicle VMT	0.40%
%Annual growth in commercial vehicle VMT	1.11%
Passenger Fleet Composition	
Annual change in EV share of vehicle sales	1%
Annual change in HEV share of vehicle sales	3%
Annual change in PHEV share of vehicle sales	2%
Annual Growth in Registrations	0.89%
Annual Passenger Fleet Turnover	8.23%
Passenger Fleet Fuel Economy (Annual Growth)	
Gas	1%
Diesel	1%
Electric	2%
Hybrid	2%
Plug-in Hybrid	2%
Commercial Fleet Dynamics	
CMV Fleet Growth	0.89%
CMV Fleet Turnover	8.23%
Annual increase in CMV MPG	2%
Annual change in EV share of CMV sales	1%



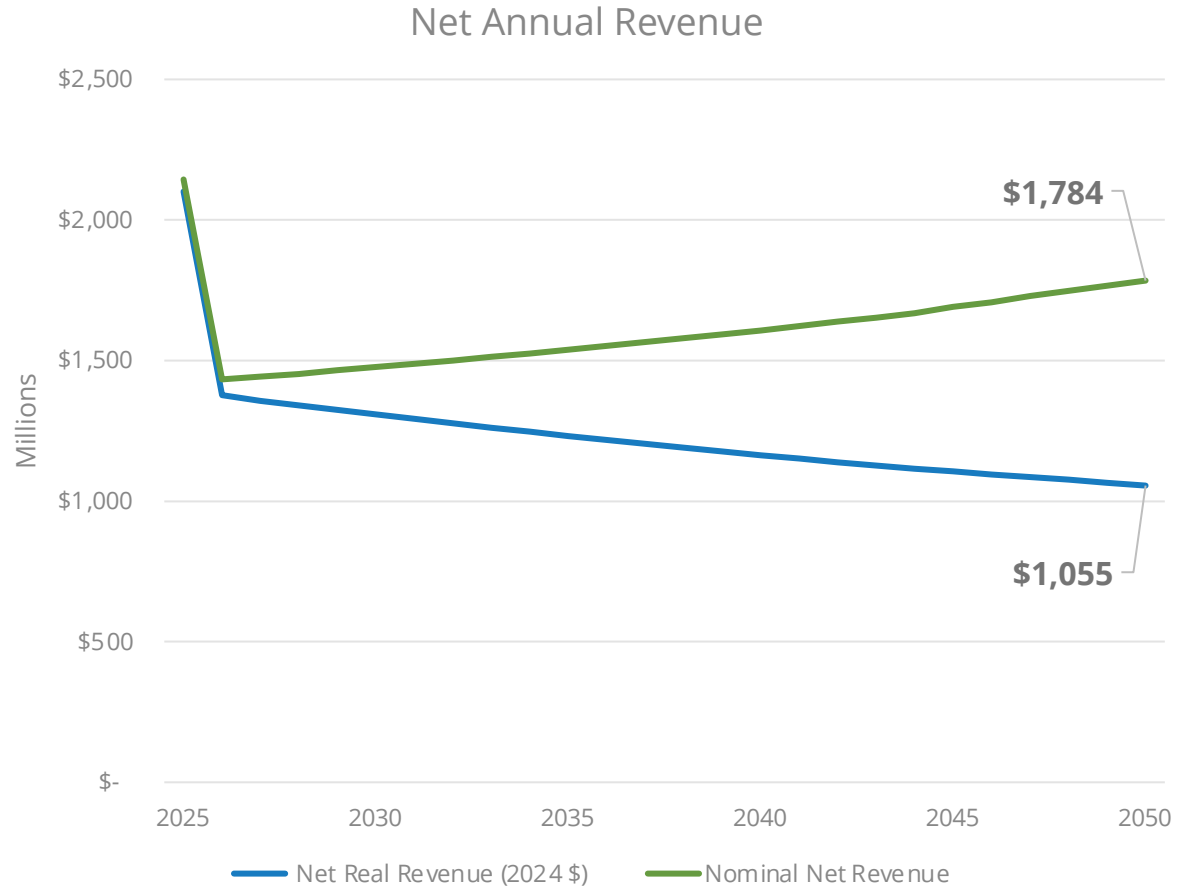
Net Revenue

- Forecast accounts for select fixed expenses
- Debt service
 - \$66 million annual average
- Administrative Costs
 - \$245 million in 2025
 - Increasing annually with inflation
- Cumulative (nominal) deductions: \$10 billion
- Annual inflation assumed to be 2%



Net Revenue

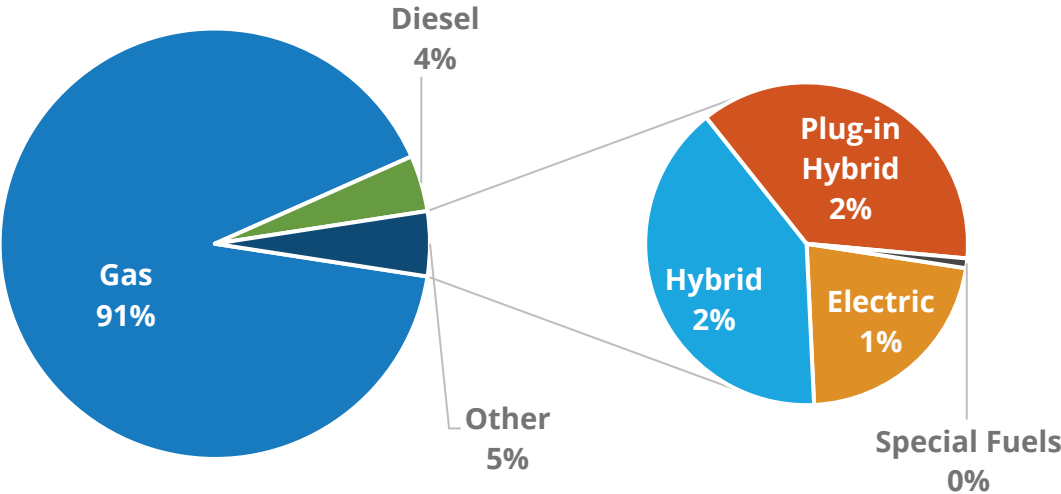
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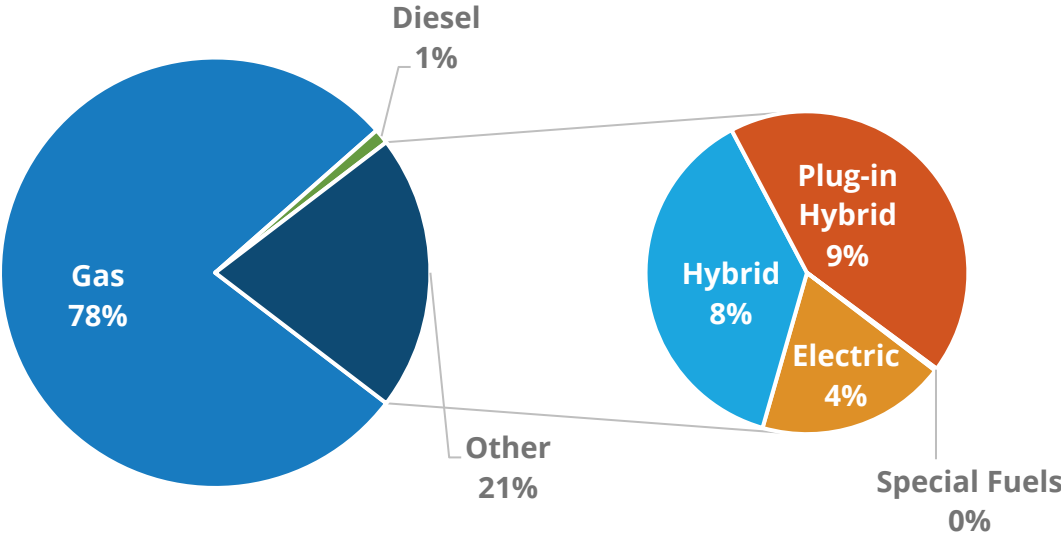
Fleet Dynamics

Passenger Vehicle Registrations

2025

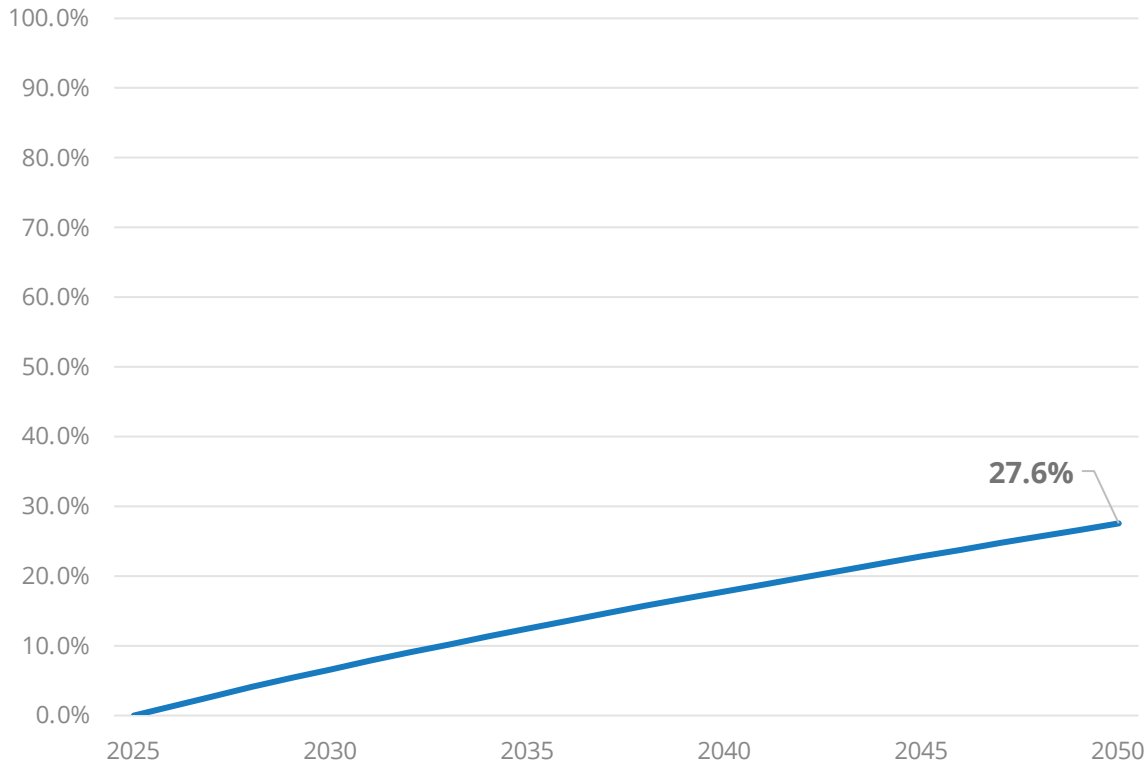


2050

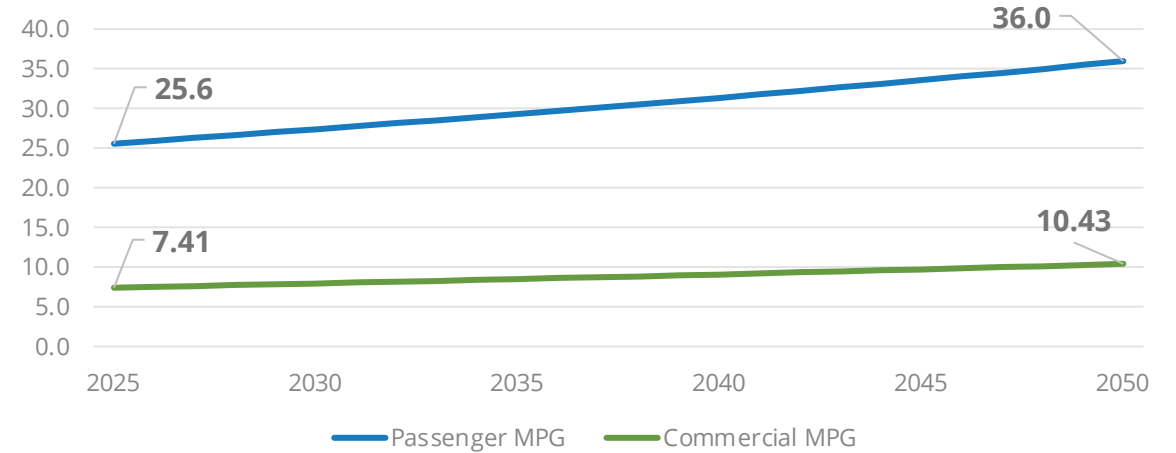


Fuel Tax Erosion

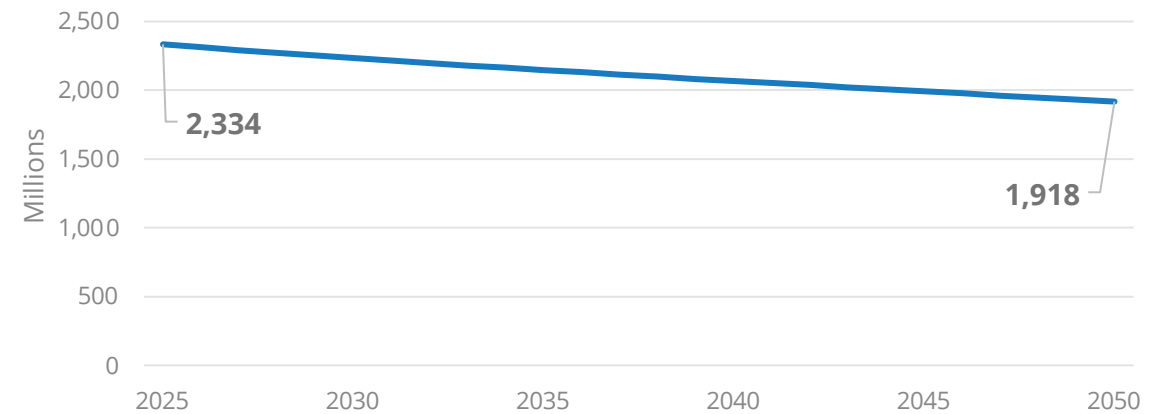
Fuel Tax Erosion vs. 2025 Baseline
(%Decrease in Fuel Tax Revenue per VMT)



Fleet fuel economy (MPG)



Annual Taxable Gallons of Fuel Consumed



3. Objectives



Strategic Direction

Goals are **broad, long-term priorities and aspirations** for transportation in Oklahoma



Goals

2050 goals were discussed at the previous stakeholder meeting; feedback was incorporated and final goals approved in February:

- **Safety and Security:** Ensure a safe and secure transportation system for all users
- **Infrastructure Preservation:** Preserve and maintain Oklahoma's transportation system in good condition
- **Mobility and Accessibility:** Proactively engage local communities to ensure access for all users of the transportation system and increase travel options
- **Economic Vitality:** Provide an efficient and well-connected transportation system to support a healthy and competitive Oklahoma economy
- **Operations and Management:** Promote efficient, collaborative, and transparent operations to fund and deliver maximum system performance
- **Environment and Quality of Life:** Minimize and mitigate transportation-related impacts to natural environments, cultural resources, and public health
- **Resiliency and Reliability:** Ensure the reliability of movement for people and goods by enhancing the resiliency and adaptability of the transportation system



Next Step – Confirm Objectives

Objectives are **specific, measurable** achievements that **support the advancement of the goals**

Recommendations

- Seeking your feedback on initial set of recommended objectives
- These recommendations were compiled from:
 - Comprehensive review of existing plans
 - Public survey responses



Safety and Security: Ensure a safe and secure transportation system for all users.

Draft Objectives

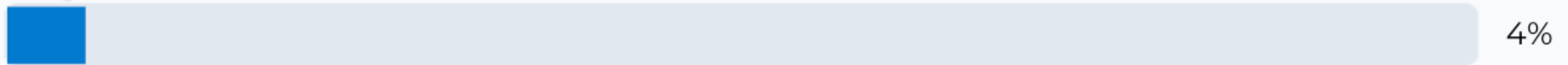
- Reduce traffic-related fatalities and serious injuries sustained on Oklahoma's multimodal transportation system.
- Enhance design and use of technology, enforce work zone safety, and maintain infrastructure to reduce crashes.
- Advocate for increased seat belt usage.
- Improve transportation security and emergency preparedness, response, and recovery.

The proposed objectives will help Oklahoma work toward the Safety and Security goal

Agree



Disagree



How would you add to or change the proposed Safety and Security objectives?

- NA
- More roundabouts
- Implement proven safety countermeasures
- Oklahoma is top ten in number of bicycling fatalities on the roadways. We need strong goals to address
- Context sensitive design criteria
- Bring in teen driving schools as your front of the line educators of Oklahomas newest drivers
- Reduce speeds on some segments that have high crash rates.
- Target distracted driving
- Reduce fatalities by 50% in 10 years.
- increase seatbelt usage instead of just advocate
- I would include an objective to make it a goal to increase road safety for all users - specifically with regards to utilizing active transportation.
- "Advocate for increased seat belt usage" is a little vague.
- No change to objectives
- More up to date crash data.
- No change
- Enforcement
- Objectives not specific enough.

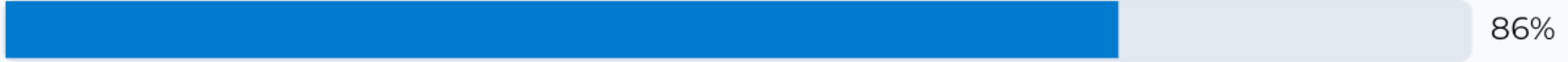
Infrastructure Preservation: Preserve and maintain Oklahoma's transportation system in good condition

Draft Objectives

- Maintain the condition of the State's bridges and roadways.
- Improve and maintain the condition of public transit vehicles, equipment, and facilities.
- Maintain the state-owned freight rail system.
- Ensure the ongoing maintenance of current transportation infrastructure to extend its lifespan and effectively meet travel needs.

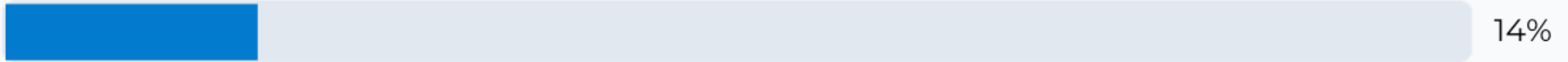
The proposed objectives will help Oklahoma work toward the Infrastructure Preservation goal

Agree



86%

Disagree



14%

How would you add to or change the proposed Infrastructure Preservation objectives?

- #1 implies that they are maintaining the condition: what if that condition is poor?!
- Support efforts to secure funding for preservation and maintenance of federally funded transportation networks, such as marine highways.
- Account for growth of # of vehicles
- As population growth continues to move to the more urban areas, help develop a robust plan/goal for more active transportation to preserve infrastructure and better meet community needs
- Improve and maintain the condition for VRUs
- Call out maintenance of signs with infrastructure.
- What about city and county roads and bridges?
- Utilize extra funding for system preservation.
- No Change
- No change

Mobility and Accessibility: Proactively engage local communities to ensure access for all users of the transportation system and increase travel options

Draft Objectives

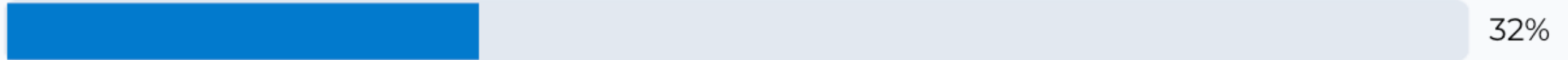
- Facilitate improved access to the statewide multimodal transportation system for all users.
- Facilitate better multimodal connectivity for people and goods within and beyond Oklahoma's borders.
- Promote access to jobs and services by expanding transportation choices for people in both urban and rural regions.

The proposed objectives will help Oklahoma work toward the Mobility and Accessibility goal

Agree



Disagree



How would you add to or change the proposed Mobility and Accessibility objectives?

- Lacking the engagement component
- Transportation systems CONNECT places. 50% of all trips are shorter than 3 miles. This is perfectly scaled for walking and biking. But, we are investing disproportionately in saving minutes for the 1% of trips that are statewide in length.
- Secure adequate levels of funding to match all federal funds received.
- Accurate measurement of actual needs vs. cost, and prioritization
- Specifically mention regional transit systems
- Objective regarding transit funding/economic vitality
- An objective needs to be added as to how we will engage communities.
- A public education piece needs to be developed/coordinated between stakeholders.
- More specific

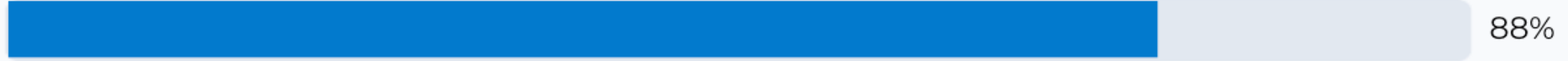
Economic Vitality: Provide an efficient and well-connected transportation system to support a healthy and competitive Oklahoma economy

Draft Objectives

- Support the existing and future transportation system by aligning improvements with local plans.
- Improve connections between different types of transportation and places of interest.
- Enhance intermodal transportation connections to improve the efficiency of freight movement.

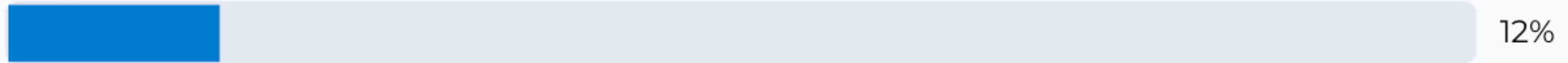
The proposed objectives will help Oklahoma work toward the Economic Vitality goal

Agree



88%

Disagree



12%

How would you add to or change the proposed Economic Vitality objectives?

- Ensure high-wide facilities throughout the state.
- Eliminate barriers when bridges are spaced 15 + miles apart
- The economy is driven by commerce. This lends focus to the 3rd objective.
- Identity needs of communities to cater multimodal services to the need
- Seek out rural plans and/or help develop them. Insuring viability of connectivity throughout the state.
- Support improvements in high growth areas.
- Better promote our states Multi-Modal capabilities to attract new businesses and residents.
- Love the inclusion of local plans, perhaps also include mentioning local agencies.
- This comes back to complete streets.
- Support connections not just between but also AT places of interest
- What local plans?

Operations and Management: Promote efficient, collaborative, and transparent operations to fund and deliver maximum system performance

Draft Objectives

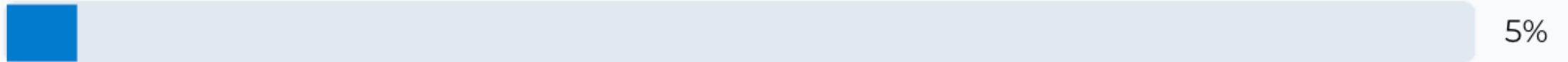
- Strategically design and adapt transportation infrastructure and technology for new or changing traffic conditions.
- Improve freight-related highway infrastructure capacity.
- Capitalize on federal funding and finance programs to aid investment in the transportation system.
- Increase collaboration with external stakeholders to improve transparency in decision-making and identify potential opportunities to leverage resources.
- Enhance efficiency by ensuring a higher percentage of activities are delivered on time and within budget.

The proposed objectives will help Oklahoma work toward the Operations and Management goal

Agree



Disagree



How would you add to or change the proposed Operations and Management objectives?

- How are you accounting for the unknown at the federal level especially when you outline taking advantage of federal financing?
- I dispersed federal Recreational Trails Program funding is currently rolled to ODOT. Add a goal that those funds could be used to support active transportation needs
- No change. These are strong objectives.
- Increase collaboration is great especially with community's or regions that are willing to participate.
- Incorporate future technology, flexibility
- No Change

Environment and Quality of Life: Minimize and mitigate transportation-related impacts to natural environments, cultural resources, and public health

Draft Objectives

- Minimize and mitigate transportation-related impacts to cultural and historic resources.
- Minimize and mitigate transportation-related impacts to wetlands, vulnerable ecosystems, and threatened and endangered species.
- Minimize and mitigate impacts of storm water runoff related to surface transportation.
- Promote use of alternative fuels.
- Support initiatives that maintain good air quality.

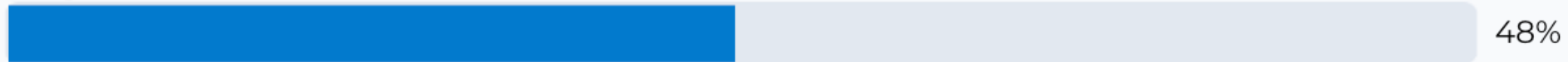
The proposed objectives will help Oklahoma work toward the Environment and Quality of Life goal

Agree



52%

Disagree



48%

How would you add to or change the proposed Environment and Quality of Life objectives?

- Minimize and mitigate are weak words; does not demonstrate a commitment.
- Analyze how the network currently impacts quality of life in small communities
- Stricter measures may need to be taking in our rural areas to protect wildlife.
- Discuss transport of air pollution from other states
- With such a large percentage of GHG coming from mobile sources, how does highway widening support this unless we assume EVs take over the fleet sooner than realistic
- Include environmental BMP's on city's performing utility work along odot row.
- Ensure proper planning of transportation projects to consider environmental constraints early and adjust accordingly.
- Minimize to the extent feasible.
- Metro area AQ issues.
- Active transportation in coordination with public health goals
- Specifically mention climate change initiatives
- ODOT's mission is to meet transportation infrastructure needs, not promote particular fuel sources.
- Inclusion of sound, light, and sky pollution. Sky pollution is billboards and massive signage.
- Current objectives are too generic. How will this be done?
- Promote active transportation

Resiliency and Reliability: Ensure the reliability of movement for people and goods by enhancing the resiliency and adaptability of the transportation system

Draft Objectives

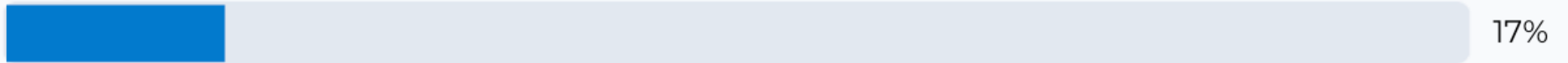
- Improve travel time reliability for the movement of people and goods.
- Enhance transportation operations to meet travel needs in response to extreme weather events and other environmental conditions.
- Improve the resiliency of the existing and new transportation infrastructure assets.

The proposed objectives will help Oklahoma work toward the Resiliency and Reliability goal

Agree



Disagree



How would you add to or change the proposed Resiliency and Reliability objectives?

- The objectives as written suggest a direction but not a destination.
- Include active transportation
- A good objective would be to coordinate local and state emergency management plans as a lot of our communities most impactful projected disasters are from rail accidents or hazardous materials in transit by other means.
- Alternate routes.
- Incorporate more ITS
- Research and use more advanced building materials.
- I don't think there is any significant travel time reliability issues except resulting from crashes and construction in OK.
- Address limited crossings of major obstacles (rivers, highways)
- Resiliency ???
- No Change
- The 3rd objective is just repeating the goal

What else would you add or change about the proposed objectives?

- Connection between land use and transportation.
- Any connection to our aviation industry? Most of our counties have at least 1 rural airport.
- Correlation shown between increased walk and bike ability and the reduced traffic and wear on our roadways.
- More active transportation. It enhances safety, supports infrastructure longevity and congestion mitigation. Active transportation contributes to economic development and it advances public health and environmental sustainability
- Need to make sure the objectives for each goal state specific ways the goal can be achieved.

Thank You!