



### 3. PERFORMANCE MEASURES

Performance management describes a wide framework in which leaders use measureable results to support decision-making, manage their organizations, and provide accountability. Performance measures use quantitative data to gauge ODOT’s effectiveness in fulfilling one or more major elements of its overall mission. For ODOT this includes focusing on the 2015-2040 LRTP goal topics:

- safe and secure travel;
- infrastructure preservation;
- mobility choice, connectivity, and accessibility;
- economic vitality;
- environmental responsibility; and
- efficient intermodal system management/operation.

Measuring performance at ODOT is being done in a manner that is consistent with MAP-21 requirements, the goals and objectives developed as part of the 2015-2040 LRTP, and the state’s performance management framework, which is described on OkStateStat.<sup>1</sup>

OkStateStat communicates the state’s progress in achieving strategic objectives within five statewide goal areas. It is a performance management approach that allows decision makers to better assess progress over time and to provide transparency to Oklahomans. The OkStateStat initiative emphasizes alignment of financial resources to state priorities and measurable objectives.

Regularly updated reports are a part of performance management and ODOT participates in providing information to the Infrastructure subset of the Safe and Secure Communities goal

area under the state’s performance management outline.

#### 3.1. PERFORMANCE MEASURES CONTEXT

ODOT developed performance measures, as part of the 2015-2040 LRTP, which were driven strongly by three overlapping factors:

1. **Existing State Performance Measures** and consistent reporting as part of that initiative.
2. **Federal Transportation Law Defines New State Planning Process and National Performance Measures Program Requirements** – MAP-21, the federal transportation law enacted in October of 2012, includes provisions that require FHWA to establish a performance-based planning process at the state level. The law indicates that State Long Range Transportation Plans should include a description of performance measures and targets used in assessing the transportation system, and a report on the condition and performance of the system in relation to meeting the targets.

MAP-21 also includes requirements for implementation of national transportation performance measures in the following areas:

- Pavement condition on the Interstate System and on the remainder of the National Highway System (NHS);
- Performance of the Interstate System and the remainder of the NHS;
- Bridge condition on the NHS;
- Fatalities and serious injuries --both number and rate per vehicle mile traveled--on all public roads;

- On-road mobile source emissions for locations using Congestion Mitigation and Air Quality funds;
- Traffic congestion on Interstate and non-Interstate NHS; and
- Freight movement on the Interstate System.

FHWA has issued two Notices of Proposed Rule Making (NPRMs) for safety (fatalities and serious injuries) and infrastructure condition (pavement and bridges). The third NPRM is scheduled for release later this year.

3. **Industry-wide Adoption of Performance Management Practices** – Over the last decade, state transportation agencies have increasingly incorporated performance measurement and management into their planning activities, seeking to improve performance in areas that matter to the public and stakeholders.

Together, these three factors have increased ODOT leadership’s interest in initiating a set of agency-wide performance measures; however, ODOT’s primary concern is to develop measures that are useful and support the transportation system development in Oklahoma.

### 3.2. PERFORMANCE MEASURE DEVELOPMENT

The performance measures were developed through the following multi-step process.

- **Initial ODOT Staff Consultations (March 2014)** – The 2015-2040 LRTP team and ODOT staff discussed the overall approach and expectations for developing performance measures as part of the 2015-2040 LRTP process. In addition, performance measures were discussed at a series of kick-off meetings with ODOT staff.
- **Public Outreach (May 2014)** – Public engagement meetings held around the state provided background information on the

purpose of the 2015-2040 LRTP, proposed goals, and the performance measure development process.

- **ODOT Managers Fact Finding (June/July 2014)** – ODOT Managers who were subject matter experts on specific topics assisted with defining performance measures.

Throughout the summer of 2014, ODOT provided perspectives on potential measures that aligned with each of the following goal areas: safe and secure travel; infrastructure preservation; mobility choice, connectivity, and accessibility; economic vitality; and environmental responsibility. A total of nine interviews were conducted with 15 staff related to the following disciplines:

- Pavement;
- Freight;
- Congestion/Traffic Operations;
- Environment;
- Bridges;
- Roadway Design;
- Safety;
- Transit and Rail;
- Project Management; and
- Clean Fuels.

### 3.3. PERFORMANCE MEASURE SELECTION CRITERIA

Selecting an effective set of measures constitutes the first phase for establishing a robust performance measurement program. The set of criteria used for choosing ODOT’s effective measures included the following:

- **Measures are Easy to Understand** – Good measures should be easy to understand and intuitive both to practitioners in the field and to a wider audience of stakeholders.
- **Measures are Relevant to Decision-Makers** – Good measures should help provide decision-makers with information that supports the choices and trade-offs they make on behalf of the public. This means data should be

strongly connected with goals and objectives in which decision-makers are interested.

- **Measures Minimize Additional Staff Burden** – Good measures should draw on existing data collection practices where possible, not reinvent them. The measures should ensure that any burdens imposed on staff to collect and report performance data are manageable, and that assignments are made with due consideration given to available resources.
- **Results are within ODOT’s Influence** – Good measures should track data that ODOT can influence via the array of policy, budgeting and programmatic tools at its disposal.
- **MAP-21 Consistency** – Measures developed as part of the 2015-2040 LRTP should support compliance with measures that FHWA is scheduled to announce in relation to MAP-21 implementation.

### 3.4. PERFORMANCE MEASURES

ODOT proposed one or two measures for each 2015-2040 LRTP goal, except for the system management and operation goal. While this goal is of importance to the 2015-2040 LRTP, it is more explicitly discussed in the agency’s operations-oriented plans developed at the Executive Level.

ODOT is continuing with the process of developing performance measures. As such, the preliminary identification of individual measures, rather than advanced steps for creating a program of performance management is presented in **Table 3-1**.<sup>2</sup>

These performance measures will inform decision makers involved in assessing and setting ODOT’s priorities on how well the Department’s goals and objectives are being met.

**Table 3-1. Comparison of 2015-2040 LRTP Goals and Performance Measures**

2015-2040 LRTP Goals	Recommended Performance Measures
Safe and Secure Travel	<ul style="list-style-type: none"> <li>• Reduction in traffic related fatalities and serious injuries               <ul style="list-style-type: none"> <li>– Rate and number of traffic fatalities annually on all Oklahoma public roads</li> <li>– Rate and number of traffic-related serious injuries annually on all Oklahoma public roads</li> </ul> </li> </ul>
Infrastructure Preservation	<ul style="list-style-type: none"> <li>• Bridge Condition – Number of structurally deficient bridges</li> <li>• Preservation of Pavement – Good/fair/poor condition index for NHS highways</li> </ul>
Economic Vitality	<ul style="list-style-type: none"> <li>• Freight Movement               <ul style="list-style-type: none"> <li>– Annual freight tonnage/value for truck, rail, and barge modes</li> <li>– Measure of freight travel time reliability and/or speed</li> </ul> </li> <li>• Congestion               <ul style="list-style-type: none"> <li>– Travel time-based measure(s) of congestion</li> </ul> </li> </ul>
Mobility Choice, Connectivity and Accessibility	<ul style="list-style-type: none"> <li>• Public Transit- Annual rural transit vehicle revenue miles</li> <li>• Passenger Rail - Annual ridership and on-time performance for Amtrak Heartland Flyer</li> </ul>
Environmental Responsibility	<ul style="list-style-type: none"> <li>• Clean fuels and improved air quality - Clean fuels as a share of ODOT’s total fleet fuel use in gasoline gallon equivalents</li> <li>• Reduce roadway flooding and support improved water quality - Quantity of Litter/Debris (cubic yards or other measure of weight and volume) cleared from storm drains/culverts/roadsides</li> </ul>

Source: Oklahoma Department of Transportation

### 3.5. ALIGNMENT OF PERFORMANCE MEASURES AND OKSTATESTAT REPORTING

The OKStateStat initiative covers two performance measures that relate to ODOT performance measures, and are compatible with the 2015-2040 LRTP performance measures described above. Following are targets identified by ODOT for inclusion on the OKStateStat site:

- **Structurally Deficient Bridges**<sup>3</sup> – Decrease the number of structurally deficient bridges from 556 in 2013 to 280 by 2017.
- **Road Conditions**<sup>4</sup> – Decrease the number of road lane miles in critical or inadequate condition from 3,862 in 2013 to 3,841 by 2017. The number of critical or inadequate miles decreases with improvements to curves, shoulders, and pavements.

The principal differences between the OKStateStat performance measures and the 2015-2040 LRTP performance measure recommendations are that the OKStateStat performance measures are highly focused and are for a set five-year period, while the 2015-2040 LRTP performance measures consider broader time horizons in some cases and include additional categories.

### 3.6. NEXT STEPS

ODOT has identified and recommended various performance measures through the development of the 2015-2040 LRTP. There is much work left to be done. ODOT's next effort is to identify how to measure, gather the necessary data, and analyze the data to finalize the recommended performance measures under development in **Table 3-1**. This effort will require a collaborative effort across ODOT, throughout the field divisions, and with Metropolitan Planning Organization (MPO) and other planning partners. For some performance measures, the effort is straight forward while others will take a concerted effort. ODOT will also continue to stay apprised of the

federal rule-making process for performance measures.

Addressing the recommended performance measures was among the criteria considered in identifying transportation needs for Oklahoma's transportation system (as discussed in **Chapter 9**) and in developing policy recommendations discussed in **Chapter 11**.

### 3.7. ENDNOTES

<sup>1</sup> [http://www.ok.gov/okstatestat/Safe\\_Citizens\\_ & Secure\\_Communities/index.html](http://www.ok.gov/okstatestat/Safe_Citizens_ & Secure_Communities/index.html)

<sup>2</sup> 2015-2040 LRTP Technical Memorandum Performance Measures.

<sup>3</sup> Bridges are commonly classified into three key component groupings identified as the substructure (columns, footings, pier caps, abutments), the superstructure (beams, girders, trusses) and the deck (driving surfaces, shoulders, sidewalks). A bridge is rated as structurally deficient if engineers observe significant defects or deterioration in one or more of these key components. A bridge that is classified as structurally deficient is not necessarily considered a hazardous driving situation. Bridges carry traffic over features such as other roads, rivers, lakes, and railroads. Any bridge that is structurally deficient represents a part of the transportation network that may have a detrimental impact on Oklahoma commerce, job creation, economic growth, and the safety of the traveling public.

<sup>4</sup> Each segment of highway has data collected on the features of the roadway and analyzed so that it can be rated. Highways are rated as adequate, tolerable, inadequate, or critical by considering pavement condition, alignment and various safety aspects. Deficient highways are those with either inadequate or critical ratings. A road lane mile is defined as one mile of road per lane. Deficient highways have the potential to adversely impact the safety of the traveling public and increase operating costs. Improvements to these highways could prevent property damage, personal injuries and tragic loss of life.