Bridge Condition

Bridge Condition: Percent of state highway bridges that are not "distressed"

Our strategy

The current ODOT bridge preservation strategy was developed when the Bridge Program began repaying OTIA III bonds in response to reduced funding, but also in recognition of the significant number of bridges reaching the end of their service life over the next several decades. ODOT developed a unique measure only used in Oregon to reflect our aging bridge population and the specific types of bridges constructed here over time. Bridges "not distressed" means the bridges have not been identified by the Oregon Bridge Management System as having freight mobility, deterioration, safety or serviceability needs and have not been rated as Structurally Deficient based on the Federal Highway Administration criteria. The Bridge Program adopted seven strategies which include: protecting high-value coastal, historic, major river crossings and border structures; using practical design and funding only basic bridge rehabilitation projects and rare replacements; giving priority to maintaining the highest priority freight corridors; developing a bridge preventive maintenance program; continuing to raise awareness to the lack of seismic preparation; addressing significant structural problems on all bridges to protect public safety; and monitoring the health of bridges.

About the target

The target for "not distressed" bridges is established by assessing the impact of program funding targets approved by the Oregon Transportation Commission, deterioration rates of our aging structures and considering the historic performance of the Bridge Program in addressing needs in twelve categories.

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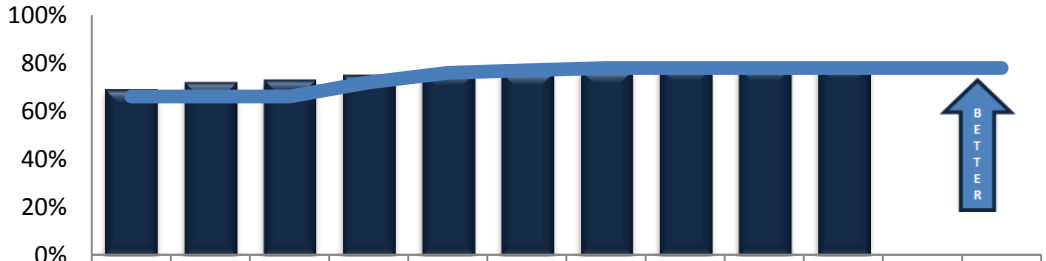

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Actual	69%	72%	73%	75%	76%	76%	77%	78%	78%	79%		
Goal	66%	66%	66%	72%	76%	77%	78%	78%	78%	78%	78%	78%

Fact

Based on ODOT Bridge Preservation Strategy and funding levels, an average of three state highway bridges are replaced each year. At that replacement rate (about 0.1% of our system per year), a bridge designed to last 75 to 100 years will have to last more than 900 years on average.

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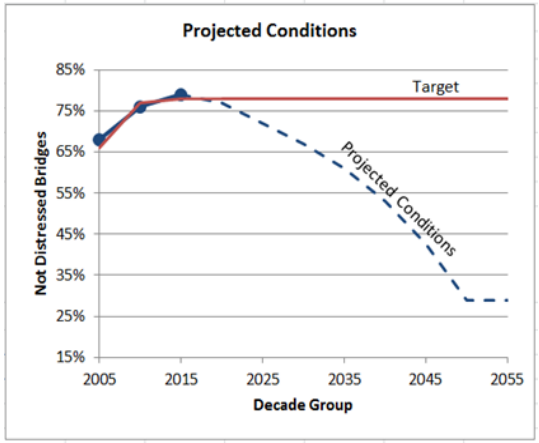
Bridge Condition, cont.

How we are doing and how we compare

The improvement in the percent "not distressed" measure since 2007 is largely due to the OTIA III State Bridge Delivery Program which included the repair of 122 bridges and replacement of 149 bridges. While we have been able to meet and maintain the bridge performance measure for the last three years at the State Bridge Program funding level, we expect to see a decline in the near future due to the age and deteriorated condition of Oregon bridges. Current federal measures are Structurally Deficient and Functionally Obsolete. Oregon ranks near the bottom at 43 (based on square feet of deck) for National Highway System bridges, while neighboring Idaho ranks 16 and Washington state ranks 46. Oregon's low ranking is primarily due to the number of Functionally Obsolete bridges. Idaho and Washington rankings can be expected to improve due to revenue generated from 2015 State transportation funding initiatives.



New Federal measures have been proposed as required in MAP-21 to be Percentage of NHS bridges in "poor" condition and percentage of NHS bridges in "good" condition. For these measures, Oregon ranks high with a low number of NHS "poor" bridges, but also ranks low with a relatively low number of NHS "good" bridges.

Factors affecting results and what needs to be done

Oregon has moved quickly in getting bridge repair and replacement projects under way on high priority freight corridors. As a result of planned bridge construction through 2018, including OTIA III and special federal funding over the past decade, fewer distressed bridges are expected through 2020. After a relatively flat period, bridge conditions are expected to decline gradually and then at an increasing rate. Reductions in Bridge Program funding will hinder the effort to keep pace with the rate of deterioration of Oregon's bridges, especially the large group of bridges that are one point away, on a ten point scale, from becoming structurally deficient. A sustainable bridge program includes bridges in various conditions with planned maintenance, preservation, and replacements for bridges that have reached the end of their service life. Based on ODOT Bridge Preservation Strategy and funding levels, an average of three state highway bridges are replaced each year. At that replacement rate — about 0.1 percent of our system per year — a bridge designed to last 75 to 100 years will have to last more than 900 years on average.

About the data

Each state reports bridge condition for bridges included in the National Bridge Inventory, using standard criteria which are established by FHWA. The FHWA does not report data based on ownership, but does report deficient bridge data for all National Highway System bridges within states.

Contact information

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Data source

A snapshot of the bridge inventory is taken each April. Data in the snapshot is consistent with the annual NBI submittal required by FHWA. The snapshot provides a convenient and consistent reference point each year.