American Road & Transportation Builders Association

Oregon
State Bridge Profile

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 1,953 bridges.
- Over the life of the IIJA, Oregon will receive a total of $288.4 million in bridge formula funds, which will help make needed repairs.
- Oregon currently has access to $115.4 million of that total, and has committed $1.4 million towards 2 projects as of June 2023.
- Of the 8,292 bridges in the state, 401, or 4.8 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 426 bridges classified as structurally deficient in 2019.

Bridge Inventory

Type of Bridge	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	363	440,323	5,610,734	1	1,242	12,054
Other principal arterial	714	620,759	4,024,676	9	7,117	66,889
Minor arterial	505	318,431	2,022,969	8	4,959	30,823
Major collector	1,384	549,277	2,394,558	73	25,520	87,953
Minor collector	933	232,742	582,643	56	9,923	24,525
Local	2,644	453,959	601,772	187	28,942	29,914
Urban Bridges						
Interstate	306	924,043	13,215,000	1	14,881	57,550
Freeway/expressway	75	151,332	2,832,551	0	0	0
Other principal arterial	354	612,843	7,057,351	17	32,855	210,219
Minor arterial	442	494,177	7,437,364	28	28,058	268,093
Collector	357	213,836	3,949,119	15	7,181	49,835
Local	215	108,185	1,183,556	6	8,049	8,835
Total	**8,292**	**5,119,908**	**50,912,292**	**401**	**168,727**	**846,690**

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	285	$815.1	1,182,569	197,156
Widening & rehabilitation	1,108	$3,693.9	13,390,185	1,225,485
Rehabilitation	229	$268.3	286,106	98,723
Deck rehabilitation/replacement	4	$2.2	1,510	941
Other work	327	$148.3	17,324	64,021
Total	**1,953**	**$4,927.8**	**14,877,694**	**1,586,326**

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Top Most Traveled Structurally Deficient Bridges in Oregon

County	Year Built	Daily Crossings	Type of Bridge	Location
Multnomah	1916	57,550	Urban Interstate	Hwy 1 NB over Columbia River
Multnomah	1958	55,335	Urban minor arterial	Morrison St over Willamette River
Lane	1961	37,889	Urban minor arterial	Centennial Blvd. over I-5 (Hwy 1)
Multnomah	1913	30,388	Urban other principal arterial	NW Broadway Ramp over Broadway St Conn
Washington	1981	19,471	Urban minor arterial	Allen Blvd over Hwy 144
Multnomah	1968	19,379	Urban other principal arterial	Columbia Blvd over B-79 X N. Columbia Way
Clackamas	1940	17,911	Urban other principal arterial	OR 99E (Hwy 81) over Partial Viaduct
Lane	1965	17,868	Urban minor arterial	Goodpasture IS Rd over FAU 1335 Delta Highway
Lincoln	1934	17,391	Urban other principal arterial	US101 (Hwy 9) over Yaquina Bay
Lane	1973	15,804	Urban other principal arterial	Hwy 69 over Willow Creek

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on February 1, 2023. Note that specific conditions on bridges may have changed because of recent work or updated inspections.

Effective January 1, 2018, FHWA changed the definition of structurally deficient as part of the final rule on highway and bridge performance measures, published May 20, 2017 pursuant to the 2012 surface transportation law Moving Ahead for Progress in the 21st Century Act (MAP-21). Two measures that were previously used to classify bridges as structurally deficient are no longer used. This includes bridges where the overall structural evaluation was rated in poor or worse condition, or where the adequacy of waterway openings was insufficient.

The new definition limits the classification to bridges where one of the key structural elements—the deck, superstructure, substructure or culverts, are rated in poor or worse condition. During inspection, the conditions of a variety of bridge elements are rated on a scale of 0 (failed condition) to 9 (excellent condition). A rating of 4 is considered "poor" condition.

Cost estimates have been derived by ARTBA, based on 2020 and average bridge replacement costs for structures on and off the National Highway System, published by FHWA. Bridge rehabilitation costs are estimated to be 68 percent of replacement costs. A bridge is considered to need repair if the structure has identified repairs as part of the NBI, a repair cost estimate is supplied by the bridge owner or the bridge is classified as structurally deficient. Please note that for a few states, the number of bridges needing to be repaired can vary significantly from year to year, and reflects the data entered by the state.

Bridges are classified by FHWA into types based on the functional classification of the roadway on the bridge. Interstates comprise routes officially designated by the Secretary of Transportation. Other principal arterials serve major centers of urban areas or provide mobility through rural areas. Freeways and expressways have directional lanes generally separated by a physical barrier, and access/egress points generally limited to on- and off-ramps. Minor arterials serve smaller areas and are used for trips of moderate length. Collectors funnel traffic from local roads to the arterial network; major collectors have higher speed limits and traffic volumes and are longer in length and spaced at greater intervals, while minor collectors are shorter and provide service to smaller communities. Local roads do not carry through traffic and are intended for short distance travel.