

National Bridge Inventory: Washington

- The state has identified needed repairs on 7,376 bridges.
- This compares to 6,806 bridges that needed work in 2020.
- Over the life of the IIJA, Washington will receive a total of \$653.4 million in bridge formula funds, which will help make needed repairs.
- Washington currently has access to \$392.0 million of that total, and has committed \$100.2 million towards 53 projects as of June 2024.
- Of the 8,474 bridges in the state, 462, or 5.5 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 416 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 7.0 percent of total deck area on all structures.

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Compared to 29 in 2023

in the nation in % of
structurally deficient
bridges

1. Iowa	19.0%
28. California	6.0%
29. Washington	6.0%
30. Arkansas	5.0%

29

Compared to 27 in 2023

in the nation in # of
structurally deficient
bridges

1. Iowa	4,544
28. North Dakota	467
29. Washington	462
30. Colorado	432

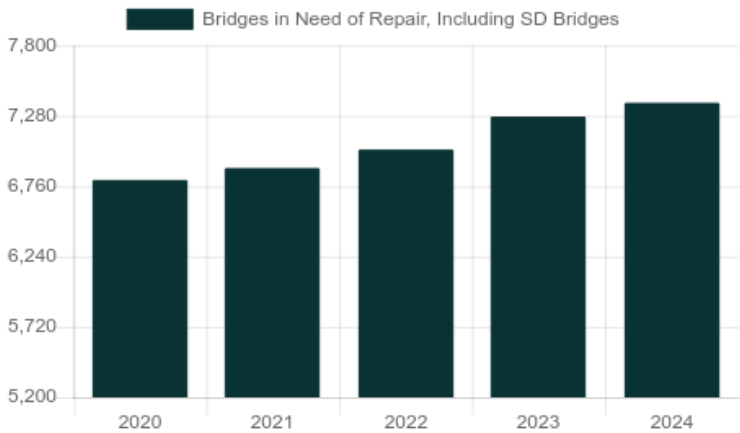
13

Compared to 12 in 2023

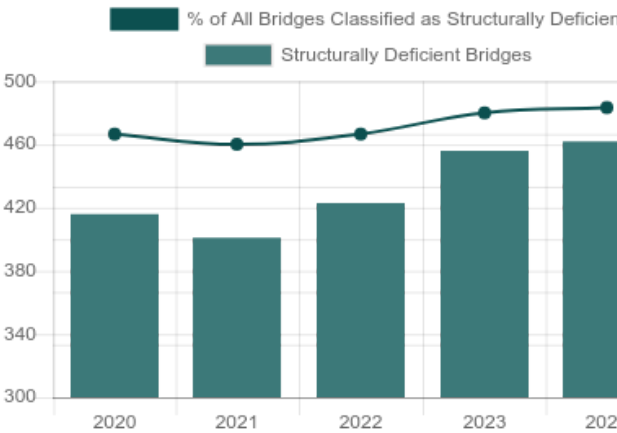
in the nation in % of structurally
deficient bridge deck area

1. Rhode Island	14.0%
12. Missouri	8.0%
13. Washington	7.0%
14. Pennsylvania	7.0%

Number of Bridges in Need of Repair, Including Structurally Deficient Bridges



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Washington

County	Year Built	Daily Crossings	Type of Bridge	Location
King	1966	95,134	Urban Interstate	I-5 over Lucile St
King	1940	68,450	Urban Interstate	I-90 over Mercer Slough
King	1970	68,450	Urban Interstate	I-90 over Mercer Sl
King	1940	63,053	Urban Interstate	Lacey V. Murrow Memorial Bridge
King	1967	59,986	Urban freeway/expressway	SR 167 over Cmstpp RR
Spokane	1958	45,696	Urban other principal arterial	Maple Street over Spokane River
Lewis	1953	41,665	Rural Interstate	I-5 over Lacamas Cr, Drews Pr Rd
Clark	1939	41,367	Rural Interstate	I-5 over E Fork Lewis River
Clark	1940	41,367	Rural Interstate	I-5 over Lewis River
King	1952	40,000	Urban other principal arterial	S Boeing Access Rd over Airport Way Bar Ramp
King	1930	36,000	Urban other principal arterial	Eastlake Ave NE over Portage Bay Pl E
King	1915	35,000	Urban other principal arterial	Eastlake Ave NE over Portage Bay
Kittitas	1969	34,348	Rural Interstate	I-90 over SR 906
King	1969	33,782	Rural Interstate	I-90 over SR 906 W-W Ramp
Cowlitz	1972	33,715	Urban Interstate	I-5 over Log Dump Rd & Bn Ry
King	1976	33,574	Urban Interstate	I-90 over E Fk Issaquah Creek
King	1976	33,470	Rural Interstate	I-90 over Game Crossing
Kittitas	1969	33,042	Rural Interstate	I-90 over Yellowstone Rd
King	1972	31,879	Urban other principal arterial	15th St Northwest over Upr
Pierce	1961	28,462	Urban other principal arterial	SR 99 (54th Ave E) over I-5, Ramps
Pierce	1934	28,423	Urban other principal arterial	SR 167 over BNSF RR
Yakima	1980	28,146	Rural Interstate	I-82 over Wastewater Number 3
King	1933	28,000	Urban other principal arterial	4th Ave S over Argo RR Yard
Pierce	1959	27,805	Urban other principal arterial	Gravelly Lake Dr over BNRR (Np)
King	1910	27,000	Urban other principal arterial	4th Ave S over Parking Garage

Bridge Inventory: Washington

Type of Bridge	Number of Bridges	Area of All Bridges (sq. meters)	Daily Crossings on All Bridges	Number of Structurally Deficient Bridges	Area of Structurally Deficient Bridges (sq. meters)	Daily Crossings on Structurally Deficient Bridges
Rural Interstate	283	348,530	5,212,181	40	53,686	684,269
Rural arterial	545	505,597	3,375,775	49	70,865	256,106
Rural minor arterial	332	226,034	1,378,128	29	22,889	100,936
Rural major collector	1,333	538,097	2,288,244	78	30,090	109,737
Rural minor collector	777	200,276	450,014	26	6,383	17,075
Rural local road	2,367	428,996	525,799	115	16,714	18,104
Urban Interstate	669	1,781,756	27,707,424	14	87,128	443,402
Urban freeway/expressway	508	1,336,181	13,421,948	16	60,015	302,293
Urban other principal arterial	513	862,686	9,562,375	33	95,446	608,779
Urban minor arterial	556	617,949	5,356,777	34	45,485	267,641
Urban collector	299	216,347	1,436,194	18	11,052	74,418
Urban local road	292	123,017	415,869	10	2,580	12,225
Total	8,474	7,185,465	71,130,728	462	502,334	2,894,985

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	2,620	\$3,597	6,731,410	1,065,389
Widening & rehabilitation	189	\$293	941,054	129,141
Rehabilitation	3,567	\$11,897	60,684,755	5,294,053
Deck rehabilitation/replacement	280	\$427	948,863	185,411
Other structural work	720	\$620	1,277,899	269,353
Total	7,376	\$16,834	70,583,981	6,943,346

About the data:

Data and cost estimates are from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on August 20, 2024. Note that specific conditions on bridges may have changed as a result 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 federal aid highway bill 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 2023 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.
