American Road & Transportation Builders Association

Washington Congressional District 10

- Of the 810 bridges in the counties of this district, 28, or 3.5 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 21 bridges classified as structurally deficient in 2020.
- Repairs are needed on 764 bridges in the district, which will cost an estimated $2.0 billion.
- This compares to 744 bridges that needed work in 2020.
- The state has committed $209.0 thousand in IIJA bridge formula funds to support 1 project in the District.

29

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

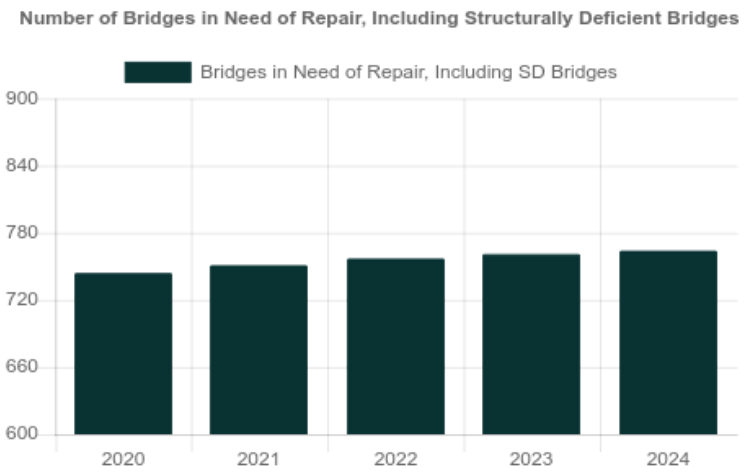
1. Iowa	4,544
28. North Dakota	467
29. Washington	462
30. Colorado	432

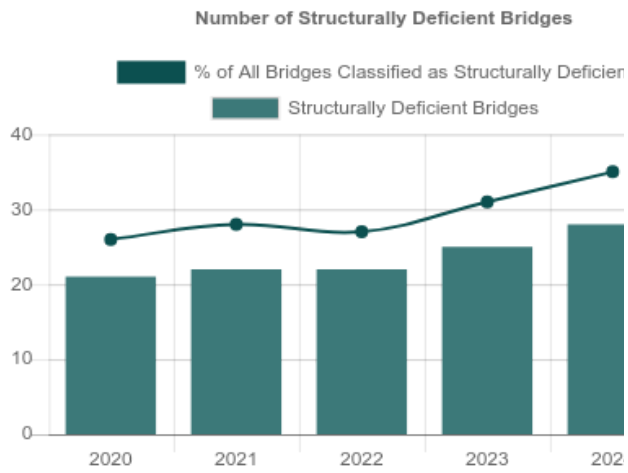
13

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%





Top Most Traveled Structurally Deficient Bridges in Washington

County	Year Built	Daily Crossings	Type of Bridge	Location
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
Pierce	1959	27,805	Urban other principal arterial	Gravelly Lake Dr over BNRR (Np)
Pierce	1936	23,196	Urban other principal arterial	SR 302 over Henderson Bay
Pierce	1973	19,549	Urban minor arterial	Portland Ave over Puyallup Ave Nprr
Mason	1973	17,635	Urban freeway/expressway	US 101 over Matlock Rd
Pierce	1925	15,256	Urban other principal arterial	Fish War Mem X-Ing over Railroad
Pierce	1925	15,255	Urban other principal arterial	Fish War Mem X-Ing over Puyallup River
Thurston	1956	13,767	Urban other principal arterial	Capitol Blvd over I-5, Ramp
Pierce	1957	11,876	Urban minor arterial	Steilacoom Dupont over I-5
Pierce	1956	9,533	Urban minor arterial	SR 162 over S Prairie Cr
Thurston	1957	6,801	Urban Interstate	Plum-N Ramp over Eastside St Se
Pierce	1954	5,525	Urban minor arterial	Fox Islnd Br Rd NW over Hale Passage
Pierce	1927	4,905	Urban minor arterial	Interlaaken Dr SW over Steilacoom Lake
Pierce	1937	4,700	Urban collector	East 34th Street over Pacific to A St
Pierce	1955	3,000	Urban local road	Barnes Blvd over Clover Creek
Pierce	1911	2,400	Urban minor arterial	State Route 509 over Puyallup Waterway RR
Pierce	1958	2,330	Urban minor arterial	Tacoma-Vashon Traf over Puget Sound
Mason	1969	2,155	Rural major collector	Harstine Bridge Rd over Pickering Passage
Pierce	1931	1,786	Rural local road	Sunrise Road over Fryingpan Creek
Mason	1995	1,050	Rural minor collector	Bear Ck / Dewatto over Tahuya River
Pierce	1954	900	Urban collector	Cramer Rd NW over Lockey Creek
Pierce	1950	200	Rural local road	Sequalitchew Road over Sequalitchew Creek
Mason	1958	191	Rural local road	Little Egypt Rd. over No. Fk. Goldsborough Ck.
Pierce	1958	100	Rural local road	Perimeter Road over Clover Creek

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	4	7,443	224,654	0	0	0
Rural arterial	32	13,720	287,621	0	0	0
Rural minor arterial	35	11,180	163,691	0	0	0
Rural major collector	98	45,840	241,098	1	4,066	2,155
Rural minor collector	51	14,829	45,911	1	70	1,050
Rural local road	141	29,085	75,433	6	1,061	2,364
Urban Interstate	82	188,924	4,053,110	1	179	6,801
Urban freeway/expressway	98	263,551	3,190,718	1	827	17,635
Urban other principal arterial	86	119,257	1,611,372	7	9,378	152,164
Urban minor arterial	97	102,937	993,247	7	15,470	56,118
Urban collector	46	39,667	205,998	2	1,649	5,600
Urban local road	40	13,944	40,764	2	308	3,001
Total	810	850,376	11,133,617	28	33,006	246,888

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	250	$430	1,116,718	127,394
Widening & rehabilitation	20	$40	206,535	17,601
Rehabilitation	382	$1,336	9,380,953	595,316
Deck rehabilitation/replacement	54	$124	251,557	53,933
Other structural work	58	$102	172,575	44,891
Total	764	$2,032	11,128,338	839,134

About the data:

Data includes information for the following area(s): Mason County, Pierce County, Thurston County

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.