

Virginia Congressional District 9

- Of the 3,482 bridges in the counties of this district, 125, or 3.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 147 bridges classified as structurally deficient in 2020.
- Repairs are needed on 1,603 bridges in the district, which will cost an estimated \$2.1 billion.
- This compares to 1,604 bridges that needed work in 2020.
- The state has committed \$28.7 million in IIJA bridge formula funds to support 17 projects in the District.



in the nation in # of structurally deficient bridges

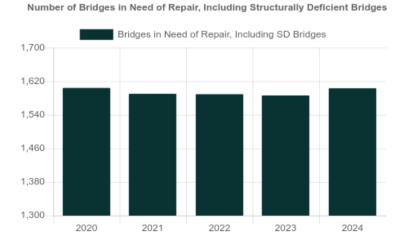
1. Iowa 4,544

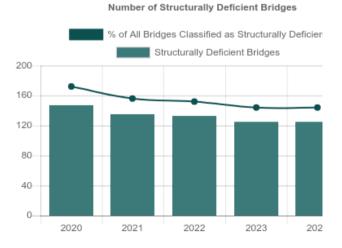
25. Alabama 543

26. Virginia 478

27. Massachusetts 470

44 Compared to 42 in 2023				
in the nation in % of structurally				
deficient bridge deck area				
1. Rhode Island	14.0%			
43. Oregon	3.0%			
44. Virginia	3.0%			
45. Delaware	3.0%			





Top Most Traveled Structurally Deficient Bridges in Virginia

County	Year Built	Daily Crossings	Type of Bridge	Location
Salem	1940	19,916	Urban other principal arterial	Route 11 over Appersn Dr O Roanoke Rv
Smyth	1962	16,486	Rural Interstate	Interstate 81 NBL over M. Fork Holston River
Bland	1974	15,519	Rural Interstate	I-77 NBL over Rte 606
Smyth	1962	15,197	Rural Interstate	Interstate 81 SBL over M. Fork Holston River
Salem	1949	14,974	Urban other principal arterial	Route 11 over Colorado St O Ns Rwy @
Lee	1975	9,292	Rural arterial	Route 23 SBL over Norfork&Southern Railway
Pulaski	1936	7,544	Urban other principal arterial	Route 11 over Sproules Run
Pulaski	1961	7,467	Urban collector	Route 99 over Peak Creek
Wise	1976	5,711	Rural arterial	Bull Run Road over Ns Railway
Montgomery	1936	5,240	Urban minor arterial	Route 0111 over Walnut Branch
Bristol	1930	5,234	Urban other principal arterial	M.L.K. Jr. Blvd. over Beaver Creek
Alleghany	1964	5,229	Urban collector	Lowmoor Selma Road over I-64 & Rtes 60 & 220
Bristol	1918	4,775	Urban collector	Mary Street over Ns Railway
Patrick	1941	4,266	Rural minor arterial	So Main St/Rte 8 over Mayo River
Washington	1932	3,734	Rural minor arterial	Lee Highway over Hall Creek
Covington	1950	2,969	Urban collector	Rayon Dr over Jackson River
Bristol	1929	2,930	Urban minor arterial	Goodson Street over Beaver Creek
Tazewell	1923	2,703	Rural minor arterial	Fairground Road over Clinch River
Norton	1932	2,431	Urban local road	Main Avenue SW over Benges Branch
Tazewell	1950	2,310	Urban minor arterial	Front Street over Clinch River
Bristol	1925	2,299	Urban minor arterial	Piedmont Ave. over Beaver Creek
Patrick	1930	2,255	Rural arterial	Jeb Stuart Hwy/58 over Dan River
Smyth	1969	2,013	Urban local road	Bear Creek Road over Ns Railway
Buchanan	1966	1,973	Rural major collector	Old Rocklick Rd. over Levisa River
Tazewell	1952	1,938	Urban minor arterial	Route 806 over Coal Creek

Bridge Inventory: Virginia

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	139	133,886	2,096,750	3	2,313	47,202
Rural arterial	193	180,809	1,122,081	5	2,419	19,396
Rural minor arterial	236	129,499	847,244	5	1,574	13,430
Rural major collector	495	142,700	557,757	16	4,824	11,867
Rural minor collector	441	84,461	252,048	13	1,367	4,988
Rural local road	1,187	155,306	254,593	57	7,485	9,742
Urban Interstate	181	169,139	4,034,644	0	0	0
Urban freeway/expressway	76	89,284	1,179,459	0	0	0
Urban other principal arterial	82	74,565	942,510	4	2,415	47,668
Urban minor arterial	125	104,533	1,003,356	5	6,568	14,717
Urban collector	163	67,242	486,836	8	3,476	24,803
Urban local road	164	36,553	163,144	9	2,266	9,541
Total	3,482	1,367,976	12,940,422	125	34,708	203,354

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	477	\$638	1,081,729	122,911
Widening & rehabilitation	64	\$76	283,240	21,352
Rehabilitation	820	\$974	3,625,409	272,511
Deck rehabilitation/replacement	13	\$10	23,653	2,938
Other structural work	229	\$407	991,030	113,976
Total	1,603	\$2,106	6,005,061	533,688

About the data:

Data includes information for the following area(s): Alleghany County, Bland County, Buchanan County, Carroll County, Craig County, Dickenson County, Floyd County, Giles County, Grayson County, Henry County, Lee County, Montgomery County, Patrick County, Pulaski County, Roanoke County, Russell County, Scott County, Smyth County, Tazewell County, Washington County, Wise County, Bristol city, Covington city, Galax city, Martinsville city, Norton city, Radford city, Salem city

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.