

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 1,250 bridges.
- Over the life of the IIJA, Vermont will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Vermont currently has access to \$90.0 million of that total, and has committed \$49.2 million towards 24 projects as of June 2023.
- Of the 2,856 bridges in the state, 75, or 2.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 68 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	258	210,412	3,838,847	5	5,883	68,100
Other principal arterial	123	102,599	888,010	5	3,150	32,800
Minor arterial	298	140,789	1,246,156	6	4,586	25,100
Major collector	543	161,988	1,021,590	17	10,461	39,959
Minor collector	174	30,500	96,955	4	434	1,700
Local	1,254	153,465	293,523	31	4,608	7,508
Urban Bridges						
Interstate	56	60,660	1,613,090	2	5,626	39,290
Freeway/expressway	2	977	19,800	0	0	0
Other principal arterial	56	51,054	601,500	2	1,274	31,300
Minor arterial	13	7,102	56,526	0	0	0
Collector	44	20,910	151,338	2	1,417	13,203
Local	35	7,255	29,559	1	90	50
Total	2,856	947,710	9,856,894	75	37,529	259,010

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	254	\$402.8	303,116	76,661
Widening & rehabilitation	3	\$39.9	11,475	10,287
Rehabilitation	991	\$1,044.5	4,071,242	313,605
Deck rehabilitation/replacement	1	\$0.5	78	130
Other work	1	\$0.4	100	112
Total	1,250	\$1,488.2	4,386,011	400,795

Top Most Traveled Structurally Deficient Bridges in Vermont

County	Year Built	Daily Crossings	Type of Bridge	Location
Windsor	1966	20,105	Urban Interstate	I-89 NB over Connecticut River, Necrr
Windsor	1966	19,185	Urban Interstate	I-89 SB over Connecticut River, Necrr
Chittenden	1964	17,800	Urban other principal arterial	US 2 ML over I 89 under US 2
Orange	1970	16,700	Rural Interstate	I 089 ML over I 89 over Th No 1
Washington	1928	13,500	Urban other principal arterial	US 302 ML over Stevens Branch
Windham	1963	13,200	Rural Interstate	I 091 ML over I 91 over TH 1 Saxton
Windham	1963	13,200	Rural Interstate	I 091 ML over I 91 over TH 1 Saxton
Windsor	1968	12,500	Rural Interstate	I 091 ML over I 91 over VT 10A
Windsor	1968	12,500	Rural Interstate	I 091 ML over I 91 over VT 10A
Addison	1934	10,700	Rural minor arterial	VT 22A Alt over Otter 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.