American Road & Transportation Builders Association

National Bridge Inventory: Vermont

- The state has identified needed repairs on 1,256 bridges.
- This compares to 1,227 bridges that needed work in 2020.
- 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 $135.0 million of that total, and has committed $94.3 million towards 65 projects as of June 2024.
- Of the 2,862 bridges in the state, 83, or 2.9 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 66 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 3.7 percent of total deck area on all structures.

45

Compared to 45 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	19.0%
44. Utah	3.0%
45. Vermont	3.0%
46. Florida	3.0%

48

Compared to 48 in 2023

in the nation in # of structurally deficient bridges

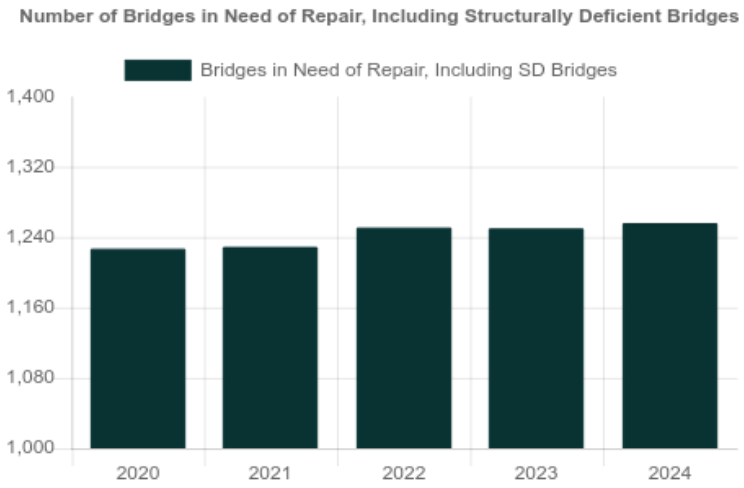
1. Iowa	4,544
47. Utah	91
48. Vermont	83
49. Hawaii	78

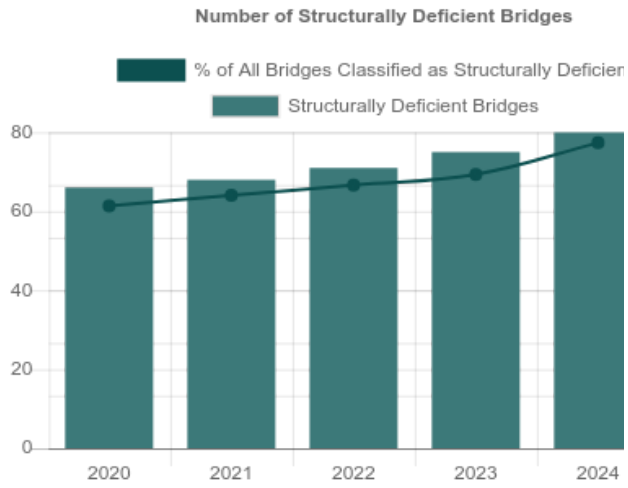
34

Compared to 33 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
33. New Mexico	4.0%
34. Vermont	4.0%
35. Colorado	4.0%





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
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
Rutland	1931	9,000	Rural arterial	US 7 ML over Furnace Brook
Windsor	1911	8,900	Rural arterial	US 4 ML over Ottauquechee River
Chittenden	1964	8,400	Rural major collector	US 2 ML over I 89 under US 2
Windham	1920	7,103	Urban collector	Nh119 over Connecticut River
Windham	1930	6,100	Urban collector	Bridge Street over Connecticut River
Windsor	1962	5,600	Rural arterial	VT 103 ML over Williams R. & Gmrr
Washington	1961	5,600	Rural major collector	US 2 ML over Little River
Orange	1939	5,000	Rural major collector	US 5 ML over Waits River
Windham	1934	4,400	Rural arterial	VT 9 ML over N. Br. Deerfield River
Washington	1926	4,200	Rural major collector	VT 012 ML over Dog River
Lamoille	1932	4,100	Rural minor arterial	VT 1 ML over Gihon River
Windham	1961	3,500	Rural major collector	VT 960 Spur over I 91 Under Putney Sh
Windsor	1927	3,100	Rural minor arterial	VT 011 ML over Mid. Br Williams River
Windsor	1866	2,655	Rural major collector	Cornish Toll Br Rd over Connecticut River
Orleans	1929	2,600	Rural minor arterial	VT 1 ML over East Branch Missisquoi
Windsor	1929	2,000	Rural local road	C26 over White River & Th98
Orange	1937	1,949	Rural major collector	East Thetford Road over Connecticut River

Bridge Inventory: Vermont

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	258	210,444	3,838,847	4	4,116	54,900
Rural arterial	123	102,688	888,010	4	2,923	27,900
Rural minor arterial	298	140,525	1,245,656	6	1,821	23,900
Rural major collector	545	162,403	1,023,650	19	11,364	42,449
Rural minor collector	175	30,586	97,125	5	1,419	2,510
Rural local road	1,257	153,979	294,423	40	5,244	8,648
Urban Interstate	56	60,660	1,613,090	2	5,626	39,290
Urban freeway/expressway	2	977	19,800	0	0	0
Urban other principal arterial	56	51,315	601,500	1	1,029	17,800
Urban minor arterial	13	7,102	56,526	0	0	0
Urban collector	44	21,118	151,338	2	1,417	13,203
Urban local road	35	7,255	29,559	0	0	0
Total	2,862	949,052	9,859,524	83	34,958	230,600

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	253	$450	301,831	76,359
Widening & rehabilitation	3	$40	11,475	10,287
Rehabilitation	997	$1,295	4,073,462	315,033
Deck rehabilitation/replacement	1	$1	78	130
Other structural work	2	$2	670	472
Total	1,256	$1,786	4,387,516	402,281

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.