

National Bridge Inventory: New Hampshire

- The state has identified needed repairs on 2,491 bridges.
- This compares to 2,462 bridges that needed work in 2020.
- Over the life of the IIJA, New Hampshire will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- New Hampshire currently has access to \$135.0 million of that total, and has committed \$12.4 million towards 4 projects as of June 2024.
- Of the 2,542 bridges in the state, 191, or 7.5 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 215 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 6.4 percent of total deck area on all structures.

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18 Compared to 18 in 2023 in the nation in % of structurally deficient bridges					
1. Iowa	19.0%				
17. Oklahoma	8.0%				
18. New Hampshire	8.0%				
19. Kentucky	7.0%				

42
Compared to 43 in 2023
in the nation in # of
structurally deficient
bridges
. Iowa 4,544

1.1000	4,544
41. Wyoming	204
42. New Hampshire	191

16 Compared to 17 in 2023 in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%		
15. California	7.0%		
16. New Hampshire	6.0%		
17. Alaska	6.0%		

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



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in New Hampshire

County	Year Built	Daily Crossings	Type of Bridge	Location
Merrimack	1959	46,769	Urban Interstate	I-89 over South Street
Hillsborough	1956	45,069	Urban Interstate	I-293,Fee Tpk over Stark Way
Merrimack	1958	44,531	Urban Interstate	I-393,US 4,US202 over I-93
Merrimack	1958	44,531	Urban minor arterial	US202 over NHRR, Constitution Av.
Hillsborough	1954	43,368	Urban freeway/expressway	Fee Tpk SB over Pennichuck Brook
Merrimack	1980	39,922	Urban Interstate	I-393,US 4,US202 over Fort Eddy Rd
Hillsborough	1923	23,677	Urban other principal arterial	US 3,NH 3A over I-293,NH 3A,CSX,Merr R
Hillsborough	1956	23,559	Urban Interstate	I-293,NH 3A,Tpk N over Black Brook
Merrimack	1966	23,188	Urban minor arterial	Nh 9(Loudon Road) over Merrimack River
Strafford	1957	23,076	Urban freeway/expressway	Nh 16,Sp Tpk SB over Cocheco River
Grafton	1966	22,282	Urban Interstate	I-89 NB over US 4,NH 10
Strafford	1957	22,053	Urban freeway/expressway	Nh 16,Sp Tpk NB over Cocheco River
Grafton	1966	196621,851Urban InterstateI-89 NB over Connecticut River,		I-89 NB over Connecticut River,Necrr
Strafford	1957	21,665	Urban freeway/expressway	Nh 16,Sp Tpk NB over Nh108,CSX(Abd)
Hillsborough	1956	21,510	Urban Interstate	I-293,NH 3A,Tpk S over Black Brook
Grafton	1966	20,851	Urban Interstate	I-89 SB over Connecticut River,Necrr
Strafford	1957	20,752	Urban freeway/expressway	Nh 16,Sp Tpk SB over Nh108,CSX(Abd)
Merrimack	1959	19,873	Rural Interstate	I-89 SB over Turkey Pond
Merrimack	1959	19,523	Rural Interstate	I-89 NB over Turkey Pond
Hillsborough	1958	18,347	Rural arterial	US202,Nh101 over Contoocook River
Rockingham	1936	16,112	Urban other principal arterial	US 1 over CSX(Abd)
Rockingham	1935	15,098	Urban other principal arterial	US 1 over CSX
Hillsborough	1933	14,709	Urban minor arterial	US 3 over Baboosic Brook
Strafford	1951	14,083	Urban other principal arterial	Nh125 over Isinglass River
Hillsborough	1970	12,854	Urban other principal arterial	Salmon Street EB over Merrimack R,CSX,Rd,Ramp

Bridge Inventory: New Hampshire

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	188	105,866	1,701,553	2	2,547	39,396
Rural arterial	133	59,432	1,415,552	4	1,289	39,428
Rural minor arterial	158	60,394	730,809	10	2,561	31,096
Rural major collector	210	72,902	633,053	25	12,358	77,672
Rural minor collector	177	34,550	227,174	11	4,232	14,728
Rural local road	853	110,212	284,352	87	9,740	35,133
Urban Interstate	183	223,464	5,433,990	9	9,770	286,344
Urban freeway/expressway	84	131,600	2,545,702	5	4,732	130,914
Urban other principal arterial	114	151,002	1,754,435	6	11,091	93,191
Urban minor arterial	138	103,669	1,442,132	15	12,912	189,002
Urban collector	133	62,845	649,141	6	1,695	23,190
Urban local road	171	44,800	236,684	11	1,629	8,040
Total	2,542	1,160,734	17,054,577	191	74,556	968,134

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	2,477	\$6,884	17,039,926	1,154,827
Widening & rehabilitation	0	\$0	0	0
Rehabilitation	8	\$5	345	771
Deck rehabilitation/replacement	1	\$1	50	180
Other structural work	5	\$15	11,061	2,324
Total	2,491	\$6,905	17,051,382	1,158,102

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.