National Bridge Inventory: Connecticut

- The state has identified needed repairs on 414 bridges.
- This compares to 438 bridges that needed work in 2020.
- Over the life of the IIJA, Connecticut will receive a total of $605.8 million in bridge formula funds, which will help make needed repairs.
- Connecticut currently has access to $363.5 million of that total, and has committed $164.7 million towards 31 projects as of June 2024.
- Of the 4,365 bridges in the state, 206, or 4.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 248 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 6.2 percent of total deck area on all structures.

36

Compared to 34 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	19.0%
35. Ohio	5.0%
36. Connecticut	5.0%
37. Oregon	5.0%

40

Compared to 40 in 2023

in the nation in # of structurally deficient bridges

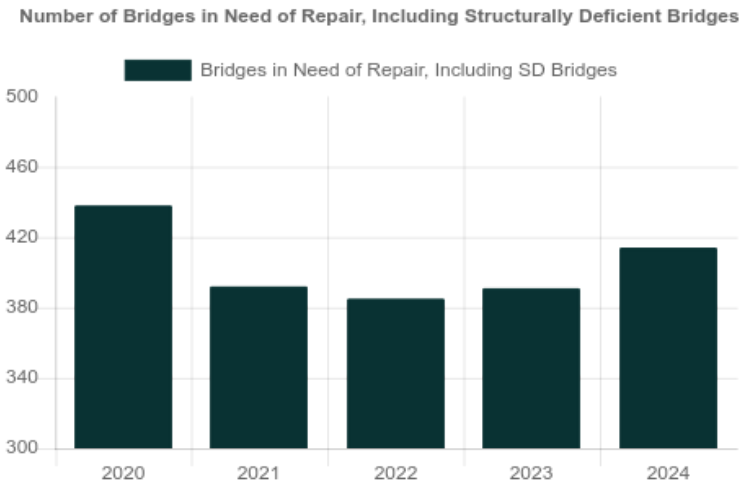
1. Iowa	4,544
39. Idaho	226
40. Connecticut	206
41. Wyoming	204

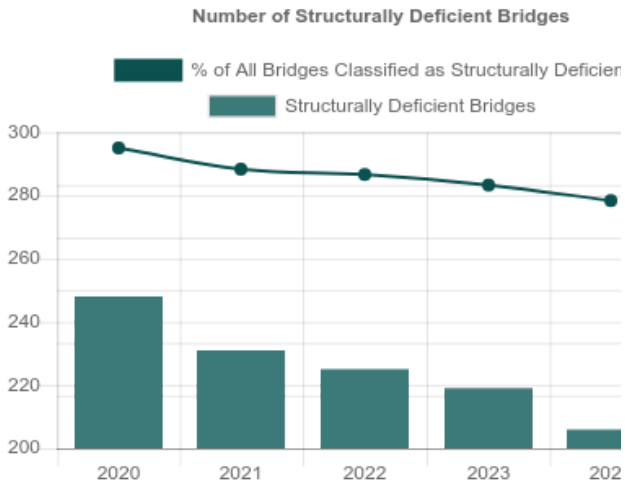
18

Compared to 15 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
17. Alaska	6.0%
18. Connecticut	6.0%
19. New Jersey	6.0%





Top Most Traveled Structurally Deficient Bridges in Connecticut

County	Year Built	Daily Crossings	Type of Bridge	Location
New Haven	1956	121,500	Urban Interstate	Interstate-95 over Metro North Railroad
Fairfield	1958	115,000	Urban Interstate	Interstate-95 over Mill Plain Road
Fairfield	1957	110,000	Urban Interstate	Interstate-95 over Route 33
Hartford	1962	74,600	Urban freeway/expressway	Route 2 over Hockanum River
Hartford	1967	68,900	Urban Interstate	Interstate-84 WB over Hamilton Street
New Haven	1967	63,000	Urban Interstate	Interstate-84 EB over I-84WB,Rte8,Naugatuck Rv
Middlesex	1950	59,600	Urban freeway/expressway	Route 9 over P&W Railroad & Union St
New London	1958	59,100	Urban Interstate	Interstate-95 over Route 161
Hartford	1964	50,700	Urban Interstate	Interstate-91 SB over Csorr, SR 598WB & Tr803
New London	1943	42,600	Urban Interstate	Interstate 95 Nort over Thames Rv,RR,Local Roads
Hartford	1942	42,200	Urban freeway/expressway	Route 15 & U.S. 5 over P&W RR & Hartford Ave
Fairfield	1968	35,050	Urban Interstate	Interstate 684 NB over Byram River
New Haven	1946	33,700	Urban freeway/expressway	Route 15 NB over Quinnipiac River
New Haven	1967	33,600	Urban Interstate	Interstate 84 WB over Rte 8, Naug Riv, M-N RR
New London	1958	31,500	Urban Interstate	Interstate-395 over Bishop Crossing Rd
Hartford	1943	31,000	Urban freeway/expressway	Route 15 over Mc Mullen Avenue
New Haven	1966	30,400	Urban freeway/expressway	Route 8 Northbound over Route 8 SB & Local Roads
Middlesex	1938	29,600	Urban other principal arterial	Route 66 over Conn River Rte 9 P&W RR
New Haven	1966	27,600	Urban freeway/expressway	Route 8 Southbound over Naugatuck Rv-Local Roads
New London	1964	27,500	Urban Interstate	Interstate-95 SB over Route 12
New Haven	1971	23,200	Urban freeway/expressway	Route 40 SB over Amtrak Railroad
Fairfield	1950	20,500	Urban other principal arterial	US Route 1 over West River
New Haven	1972	20,500	Urban freeway/expressway	Route 40 NB over CSX RR, Quinnipiac River
Hartford	1942	18,550	Urban other principal arterial	Route 15 SB over Route 314 - Berlin Tnpk.
New Haven	1971	17,900	Urban minor arterial	Route 162 over Turtle Creek

Bridge Inventory: Connecticut

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	78	115,570	2,192,100	0	0	0
Rural arterial	124	68,985	1,603,030	2	1,743	16,600
Rural minor arterial	95	34,981	548,200	3	2,250	17,800
Rural major collector	244	66,850	782,478	11	2,250	24,388
Rural minor collector	83	18,583	103,716	4	263	3,768
Rural local road	506	85,749	287,476	44	5,082	19,377
Urban Interstate	748	1,388,526	41,337,147	19	99,197	814,550
Urban freeway/expressway	562	604,619	17,085,133	14	34,995	402,700
Urban other principal arterial	339	284,277	4,769,763	9	26,687	129,746
Urban minor arterial	501	329,209	4,630,378	20	15,027	189,486
Urban collector	459	222,885	2,088,313	32	12,532	149,382
Urban local road	626	191,414	1,176,712	48	11,870	74,319
Total	4,365	3,411,647	76,604,446	206	211,896	1,842,116

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	134	$722	1,219,260	84,793
Widening & rehabilitation	6	$93	227,770	15,642
Rehabilitation	245	$2,457	3,304,385	419,577
Deck rehabilitation/replacement	3	$11	19,174	2,019
Other structural work	26	$128	208,195	23,426
Total	414	$3,411	4,978,784	545,457

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.