# National Bridge Inventory: Rhode Island

- The state has identified needed repairs on 776 bridges.
- This compares to 716 bridges that needed work in 2020.
- Over the life of the IIJA, Rhode Island will receive a total of $255.0 million in bridge formula funds, which will help make needed repairs.
- Rhode Island currently has access to $153.0 million of that total, and has committed $82.9 million towards 23 projects as of June 2024.
- Of the 783 bridges in the state, 119, or 15.2 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 148 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 14.1 percent of total deck area on all structures.

**5**

Compared to 4 in 2023

in the nation in % of structurally deficient bridges

| | |
|---|---|
| **1. Iowa** | **19.0%** |
| 4. Maine | 15.0% |
| 5. Rhode Island | 15.0% |
| 6. Puerto Rico | 14.0% |

**45**

Compared to 45 in 2023

in the nation in # of structurally deficient bridges

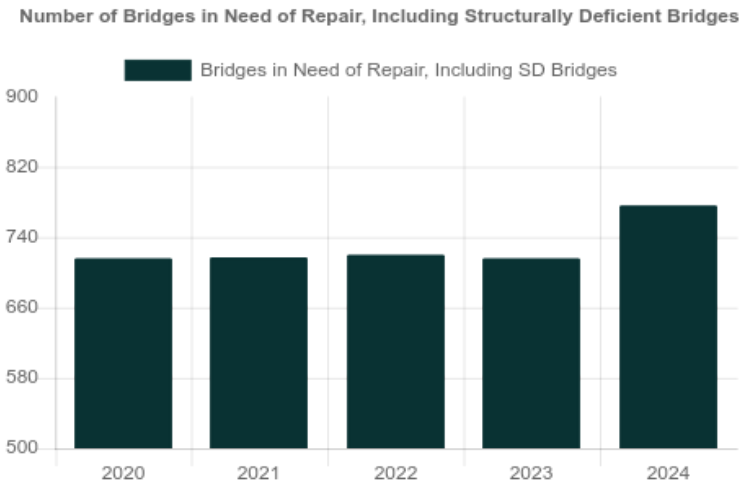
| | |
|---|---|
| **1. Iowa** | **4,544** |
| 44. Alaska | 133 |
| 45. Rhode Island | 119 |
| 46. Arizona | 99 |

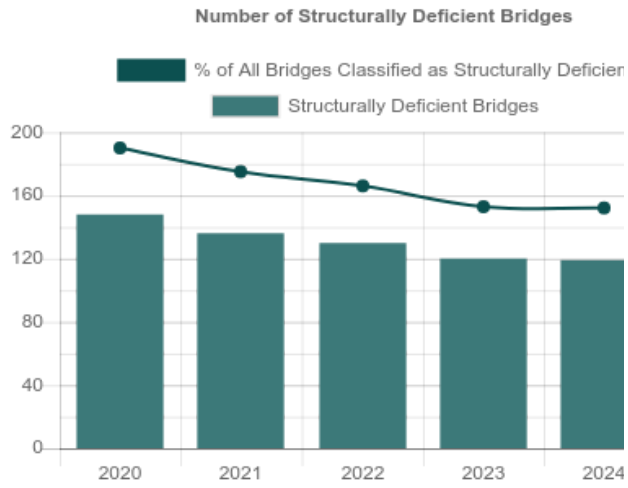
**1**

Compared to 1 in 2023

in the nation in % of structurally deficient bridge deck area

| | |
|---|---|
| 1. Rhode Island | 14.0% |
| 2. West Virginia | 13.0% |



## Top Most Traveled Structurally Deficient Bridges in Rhode Island

| County | Year Built | Daily Crossings | Type of Bridge | Location |
|---|---|---|---|---|
| Providence | 1963 | 156,790 | Urban Interstate | I-95 NB & SB over Thurbers Av |
| Kent | 1966 | 146,680 | Urban Interstate | I-95 NB & SB over Jefferson Blvd |
| Providence | 1964 | 139,026 | Urban Interstate | I-95 NB & SB over Narr Elec Co Siding |
| Providence | 1964 | 129,532 | Urban Interstate | I-95 NB & SB over Amtrak |
| Providence | 1965 | 129,532 | Urban Interstate | I-95 NB & SB over US 1 Elmwood Av |
| Providence | 1969 | 80,500 | Urban Interstate | I-195 WB over Seekonk River |
| Providence | 1957 | 69,109 | Urban freeway/expressway | RI 146 Ed Dowl Hwy over RI 15 Mineral Spring Av |
| Providence | 1957 | 65,800 | Urban freeway/expressway | RI 146 Ed Dowl Hwy over Branch Av |
| Providence | 1969 | 53,619 | Urban freeway/expressway | US 6 EB & WB over US 6A Hartford Av Ramp |
| Providence | 1965 | 47,871 | Urban other principal arterial | RI 37 EB & WB over RI 2 New London Av |
| Providence | 1956 | 47,393 | Urban freeway/expressway | RI 146 Ed Dowl Hwy over Cobble Hill Rd |
| Kent | 1963 | 47,277 | Urban freeway/expressway | RI 37 EB over Amtrak |
| Providence | 1956 | 47,208 | Urban freeway/expressway | RI 146 Ed Dowl Hwy over RI 246 Charles St |
| Washington | 1969 | 46,800 | Urban freeway/expressway | US 1 Tower Hill Rd over RI 138 |
| Kent | 1965 | 46,000 | Urban freeway/expressway | RI 37 EB & WB over US 1 Post Rd |
| Kent | 2006 | 34,118 | Urban other principal arterial | RI 113 Main Av over Amtrak |
| Providence | 1988 | 31,200 | Urban Interstate | Ramp Ad over Amtrak,Woon Rvr,Ramp Bd |
| Providence | 1972 | 31,112 | Urban minor arterial | Dean St over US 6 Harris Av & Amtrak |
| Providence | 1968 | 30,529 | Urban freeway/expressway | RI 37 EB & WB over Wash Sec Bike Path |
| Providence | 1968 | 30,528 | Urban freeway/expressway | RI 37 EB & WB over Cranston St |
| Providence | 1965 | 28,420 | Urban freeway/expressway | RI 10 Huntngtn Exp over US 1 Elmwood Av |
| Providence | 1969 | 27,992 | Urban Interstate | I-295 NB over RI 146 Eddie Dowling Hwy |
| Providence | 1968 | 27,900 | Urban freeway/expressway | RI 37 EB & WB over I-295 NB |
| Providence | 1969 | 27,900 | Urban freeway/expressway | RI 37 EB & WB over I-295 SB |
| Providence | 1965 | 26,754 | Urban freeway/expressway | RI 10 Huntngtn Exp over I-95 NB & SB, Amtrak |

## Bridge Inventory: Rhode Island

| 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 | 14 | 7,092 | 444,242 | 0 | 0 | 0 |
| Rural arterial | 16 | 6,310 | 128,590 | 1 | 200 | 5,534 |
| Rural minor arterial | 9 | 2,305 | 42,545 | 0 | 0 | 0 |
| Rural major collector | 22 | 6,828 | 74,644 | 3 | 1,042 | 3,661 |
| Rural minor collector | 22 | 4,873 | 18,828 | 1 | 318 | 513 |
| Rural local road | 32 | 3,687 | 9,682 | 10 | 1,053 | 2,561 |
| Urban Interstate | 129 | 209,444 | 7,393,410 | 13 | 32,986 | 925,869 |
| Urban freeway/expressway | 120 | 236,704 | 3,722,042 | 16 | 23,559 | 633,831 |
| Urban other principal arterial | 129 | 121,681 | 1,978,589 | 18 | 16,882 | 331,953 |
| Urban minor arterial | 144 | 100,857 | 1,493,009 | 25 | 18,491 | 273,234 |
| Urban collector | 87 | 41,518 | 374,274 | 20 | 10,011 | 57,179 |
| Urban local road | 59 | 18,177 | 87,707 | 12 | 2,299 | 20,843 |
| Total | 783 | 759,476 | 15,767,562 | 119 | 106,841 | 2,255,178 |

## Proposed Bridge Work

| Type of Work | Number of Bridges | Cost to Repair (in millions) | Daily Crossings | Area of Bridges (sq. meters) |
|---|---|---|---|---|
| Bridge replacement | 5 | $38 | 34,396 | 3,599 |
| Widening & rehabilitation | 0 | $0 | 0 | 0 |
| Rehabilitation | 708 | $3,597 | 14,342,944 | 646,978 |
| Deck rehabilitation/replacement | 0 | $0 | 0 | 0 |
| Other structural work | 63 | $562 | 1,262,799 | 105,337 |
| Total | 776 | $4,197 | 15,640,139 | 755,914 |

**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.