

National Bridge Inventory: South Carolina

- The state has identified needed repairs on 1,995 bridges.
- This compares to 1,617 bridges that needed work in 2020.
- Over the life of the IIJA, South Carolina will receive a total of \$296.2 million in bridge formula funds, which will help make needed repairs.
- South Carolina currently has access to \$177.7 million of that total, and has committed \$104.2 million towards 30 projects as of June 2024.
- Of the 9,490 bridges in the state, 586, or 6.2 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 745 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 5.1 percent of total deck area on all structures.

25

Compared to 28 in 2023

in the nation in % of structurally deficient bridges

| | |
|--------------------|-------|
| 1. Iowa | 19.0% |
| 24. Wyoming | 7.0% |
| 25. South Carolina | 6.0% |
| 26. Mississippi | 6.0% |

24

Compared to 25 in 2023

in the nation in # of structurally deficient bridges

| | |
|--------------------|-------|
| 1. Iowa | 4,544 |
| 23. Minnesota | 601 |
| 24. South Carolina | 586 |
| 25. Alabama | 543 |

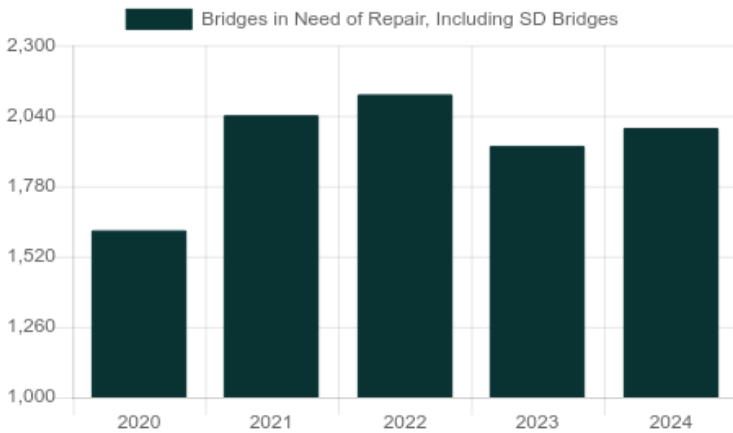
26

Compared to 24 in 2023

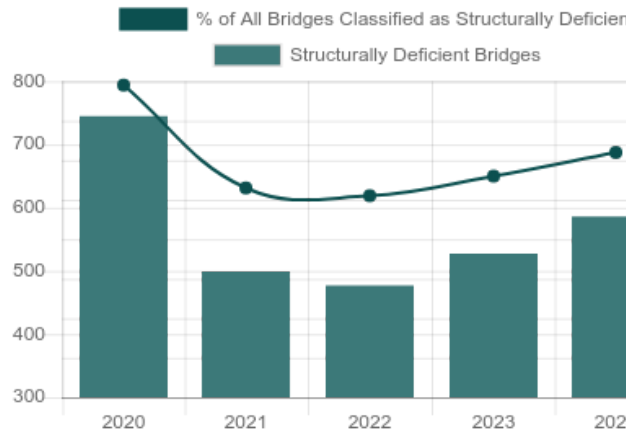
in the nation in % of structurally deficient bridge deck area

| | |
|--------------------|-------|
| 1. Rhode Island | 14.0% |
| 25. Kentucky | 5.0% |
| 26. South Carolina | 5.0% |
| 27. Minnesota | 5.0% |

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



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in South Carolina

| County | Year Built | Daily Crossings | Type of Bridge | Location |
|-------------|------------|-----------------|--------------------------------|-----------------------------------|
| Greenville | 1960 | 124,000 | Urban Interstate | I-85 over Trib Laurel Crk |
| Charleston | 1963 | 87,800 | Urban Interstate | I-26 over RR CSXt |
| Horry | 1958 | 54,000 | Urban other principal arterial | US 501 Byp over Waccamaw River |
| Horry | 1958 | 54,000 | Urban other principal arterial | US 501 Byp over U.S.701 |
| Greenville | 1939 | 45,000 | Urban other principal arterial | US 29 over Enoree River |
| Greenville | 1939 | 45,000 | Urban other principal arterial | US 29 over Mountain Creek |
| Greenville | 1934 | 39,300 | Urban other principal arterial | US 276 over P and N RR. |
| Horry | 1948 | 36,700 | Urban other principal arterial | US 501 over Crabtree Swamp |
| Charleston | 1961 | 36,400 | Urban other principal arterial | US 17 NB over Ashley River |
| Richland | 1976 | 36,350 | Urban Interstate | I-77 SB over US 21 |
| Charleston | 1947 | 35,700 | Urban other principal arterial | SC 703 over Shem Creek |
| Greenville | 1960 | 35,400 | Urban other principal arterial | US 29 over C-23-75/60736071 |
| Sumter | 1967 | 35,000 | Rural Interstate | I-95 over Hope Swamp |
| Greenville | 1968 | 29,100 | Urban other principal arterial | US 123 over L-3199/Reedy River |
| Beaufort | 1956 | 28,700 | Urban other principal arterial | US 278 EB over Mackay Creek |
| Lexington | 1965 | 28,100 | Urban other principal arterial | US 1 over I-20 |
| Berkeley | 1944 | 27,600 | Rural arterial | US 52/US 17 Alt over Cooper River |
| Spartanburg | 1958 | 26,900 | Urban minor arterial | SC 9 over SC 85 |
| Horry | 1948 | 25,700 | Rural arterial | US 501 over Chinners Swamp |
| Georgetown | 1966 | 25,200 | Rural arterial | US 17 over Waccamaw River |
| Lexington | 1976 | 25,200 | Urban freeway/expressway | SC 12 over Congaree River |
| Spartanburg | 1959 | 23,850 | Urban Interstate | I-26 WB over SC 85 |
| Spartanburg | 1959 | 23,850 | Urban Interstate | I-26 EB over SC 85 |
| Florence | 1938 | 23,200 | Urban other principal arterial | US 52 over Jefferies Creek |
| Newberry | 1960 | 22,150 | Rural Interstate | I-26 WB over Indian Creek |

Bridge Inventory: South Carolina

| 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 | 348 | 465,076 | 8,774,425 | 9 | 13,094 | 200,600 |
| Rural arterial | 479 | 828,756 | 3,483,089 | 28 | 61,128 | 258,200 |
| Rural minor arterial | 745 | 783,626 | 3,366,142 | 51 | 38,244 | 199,050 |
| Rural major collector | 2,127 | 850,479 | 2,919,580 | 138 | 52,064 | 177,500 |
| Rural minor collector | 445 | 117,172 | 166,175 | 24 | 5,530 | 9,500 |
| Rural local road | 2,599 | 580,056 | 772,643 | 175 | 29,694 | 43,172 |
| Urban Interstate | 398 | 1,169,697 | 15,037,200 | 8 | 13,569 | 339,650 |
| Urban freeway/expressway | 108 | 283,366 | 1,988,789 | 3 | 19,510 | 51,600 |
| Urban other principal arterial | 401 | 989,264 | 8,535,921 | 26 | 63,741 | 624,950 |
| Urban minor arterial | 548 | 692,208 | 6,460,100 | 44 | 48,240 | 426,350 |
| Urban collector | 604 | 301,108 | 2,847,800 | 37 | 19,423 | 167,450 |
| Urban local road | 688 | 200,992 | 705,755 | 43 | 8,844 | 31,425 |
| Total | 9,490 | 7,261,802 | 55,057,619 | 586 | 373,081 | 2,529,447 |

Proposed Bridge Work

| Type of Work | Number of Bridges | Cost to Repair (in millions) | Daily Crossings | Area of Bridges (sq. meters) |
|---------------------------------|-------------------|------------------------------|-------------------|------------------------------|
| Bridge replacement | 958 | \$1,527 | 4,647,328 | 777,135 |
| Widening & rehabilitation | 794 | \$1,068 | 6,967,736 | 799,003 |
| Rehabilitation | 230 | \$249 | 1,235,775 | 192,261 |
| Deck rehabilitation/replacement | 0 | \$0 | 0 | 0 |
| Other structural work | 13 | \$12 | 21,385 | 11,149 |
| Total | 1,995 | \$2,857 | 12,872,224 | 1,779,547 |

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.
