

Highlights from FHWA’s 2023 National Bridge Inventory Data

- The state has identified needed repairs on 1,929 bridges.
- Over the life of the IJJA, 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 \$118.5 million of that total, and has committed \$33.1 million towards 16 projects as of June 2023.
- Of the 9,481 bridges in the state, 527, or 5.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 795 bridges classified as structurally deficient in 2019.

Bridge Inventory

Type of Bridge	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	348	460,400	8,664,650	15	32,156	342,900
Other principal arterial	486	838,417	3,448,189	28	63,223	195,400
Minor arterial	744	769,754	3,341,217	49	51,889	189,400
Major collector	2,123	845,438	2,813,650	122	46,499	145,250
Minor collector	443	116,342	160,625	19	4,648	7,975
Local	2,598	578,800	740,539	154	26,141	35,920
Urban Bridges						
Interstate	397	1,156,312	14,782,010	8	13,192	335,900
Freeway/expressway	108	285,212	1,875,689	3	19,510	47,700
Other principal arterial	394	963,033	8,129,471	22	55,762	536,550
Minor arterial	549	696,471	6,341,670	38	43,814	358,950
Collector	603	300,340	2,621,250	34	17,529	141,800
Local	688	199,270	660,188	35	7,932	23,975
Total	9,481	7,209,790	53,579,148	527	382,294	2,361,720

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	989	\$1,708.8	4,593,135	791,220
Widening & rehabilitation	801	\$986.9	6,828,330	680,165
Rehabilitation	127	\$209.5	856,600	144,522
Deck rehabilitation/replacement				
Other work	12	\$14.7	22,275	11,038
Total	1,929	\$2,919.9	12,300,340	1,626,945

Top Most Traveled Structurally Deficient Bridges in South Carolina

County	Year Built	Daily Crossings	Type of Bridge	Location
Greenville	1960	118,900	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
Greenville	1939	45,000	Urban other principal arterial	US 29 over Mountain Creek
Greenville	1939	43,100	Urban other principal arterial	US 29 over Enoree River
Greenville	1934	38,400	Urban other principal arterial	US 276 over P and N RR.
Horry	1958	38,300	Urban other principal arterial	US 501 Byp over U.S.701
Charleston	1961	36,400	Urban other principal arterial	US 17 NB over Ashley River
Richland	1976	35,250	Urban Interstate	I-77 SB over US 21
Sumter	1967	34,300	Rural Interstate	I-95 over Hope Swamp

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on February 1, 2023. Note that specific conditions on bridges may have changed because 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 surface transportation law 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 2020 and 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.