American Road & Transportation Builders Association

National Bridge Inventory: Alabama

- The state has identified needed repairs on 16,130 bridges.
- This compares to 16,065 bridges that needed work in 2020.
- Over the life of the IIJA, Alabama will receive a total of $225.0 million in bridge formula funds, which will help make needed repairs.
- Alabama currently has access to $135.0 million of that total, and has committed $114.4 million towards 23 projects as of June 2024.
- Of the 16,205 bridges in the state, 543, or 3.4 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 620 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 2.0 percent of total deck area on all structures.

43

Compared to 44 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	19.0%
42. Virginia	3.0%
43. Alabama	3.0%
44. Utah	3.0%

25

Compared to 24 in 2023

in the nation in # of structurally deficient bridges

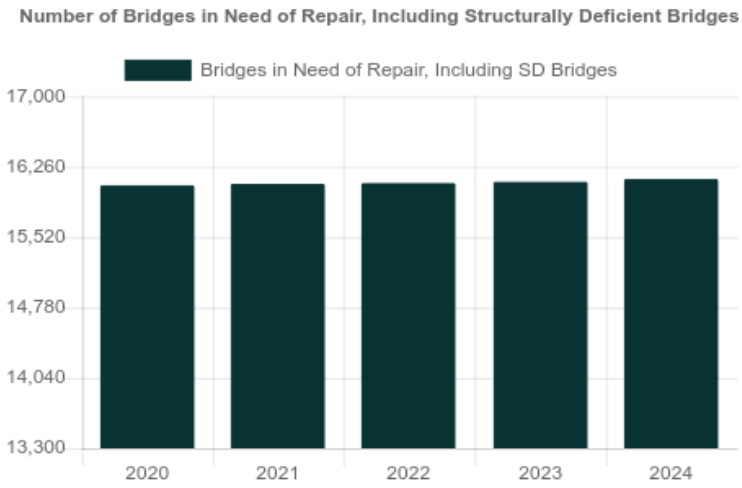
1. Iowa	4,544
24. South Carolina	586
25. Alabama	543
26. Virginia	478

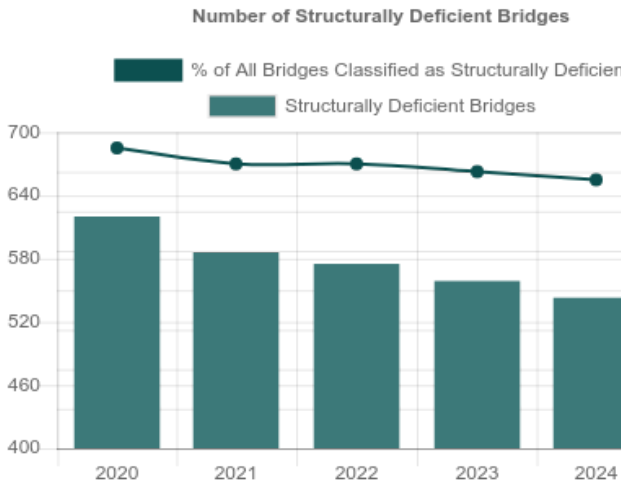
46

Compared to 48 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
45. Delaware	3.0%
46. Alabama	2.0%
47. Utah	2.0%





Top Most Traveled Structurally Deficient Bridges in Alabama

County	Year Built	Daily Crossings	Type of Bridge	Location
Montgomery	1969	104,310	Urban Interstate	I-85 over S Jackson St
Jefferson	1981	99,312	Urban Interstate	I - 459 South over Cahaba River
Montgomery	1970	83,530	Rural Interstate	In 85 over Union St
Jefferson	1968	41,990	Urban Interstate	I - 20/59 North over Aaron Aronov Drive
Jefferson	1968	41,990	Urban Interstate	I - 20/59 South over Arron Aronov Drive
Lee	1958	40,660	Urban Interstate	I-85 over Moores Mill Creek
Lee	1996	32,040	Urban freeway/expressway	US 280 over First Avenue
Baldwin	1968	31,822	Urban other principal arterial	US 98 over Fly Creek
Macon	1963	31,250	Rural Interstate	I85 over Branch
Shelby	1924	28,511	Urban other principal arterial	Al - 3 North over Peavine Ck * Acl RR
Montgomery	1926	20,900	Urban freeway/expressway	US 31 over drainage Canal
Jefferson	1955	19,500	Urban other principal arterial	Al - 5 (US 11) over Opossum Creek
Mobile	1964	19,384	Urban minor arterial	Mcgregor Ave over Eslava Creek
Madison	1968	19,100	Urban minor arterial	Sparkman Dr over Pinhook Creek
Montgomery	1965	16,060	Rural Interstate	I65 NBL over Pintlala Creek
Lowndes	1966	14,920	Rural Interstate	I65 SBL over Branch
Autauga	1957	14,890	Rural arterial	US 82 over Autauga Creek
Jefferson	1915	14,000	Urban local road	22nd Street over Morris Ave * RR
Mobile	1965	13,355	Urban minor arterial	US 90 WB over Tensaw/Spanish River
Conecuh	1960	13,163	Rural Interstate	I-65 NB over Sepulga River Relief
Jefferson	1910	13,000	Urban local road	22nd St over Rotary Trail Park
Jefferson	1915	13,000	Urban local road	21st Street over Morris Ave * RR
Jefferson	1945	12,820	Urban other principal arterial	Al - 150 over Lil Shades Ck
Madison	1969	11,800	Urban minor arterial	Wynn Dr over McDonald Creek
Coosa	1972	11,322	Rural arterial	SR 38 / US280 over Socapatoy Creek

Bridge Inventory: Alabama

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	652	1,170,061	15,429,368	7	6,551	180,093
Rural arterial	1,158	1,184,363	9,108,299	9	6,213	68,676
Rural minor arterial	1,502	1,011,810	5,166,208	14	73,359	36,877
Rural major collector	3,109	1,291,182	4,943,837	56	24,378	63,848
Rural minor collector	2,270	643,498	1,358,499	70	7,766	8,234
Rural local road	4,463	929,013	1,911,592	307	40,788	62,379
Urban Interstate	584	1,942,815	22,473,450	6	8,576	338,752
Urban freeway/expressway	87	191,408	1,880,791	2	1,001	52,940
Urban other principal arterial	573	805,589	11,279,854	7	5,598	116,538
Urban minor arterial	418	328,982	4,530,140	9	6,797	92,296
Urban collector	321	210,410	1,648,370	8	1,492	20,506
Urban local road	1,068	390,820	2,894,730	48	17,751	65,206
Total	16,205	10,099,954	82,625,138	543	200,269	1,106,345

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	4,411	$3,399	14,792,727	1,789,227
Widening & rehabilitation	564	$410	4,379,481	313,966
Rehabilitation	2,945	$4,038	27,349,873	3,042,334
Deck rehabilitation/replacement	11	$16	92,767	12,087
Other structural work	8,199	$6,366	35,833,948	4,906,526
Total	16,130	$14,229	82,448,796	10,064,140

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.