

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 16,102 bridges.
- 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 \$90.0 million of that total, and has committed \$87.3 million towards 20 projects as of June 2023.
- Of the 16,176 bridges in the state, 559, or 3.5 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 654 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	655	1,173,993	15,073,916	6	4,811	96,886
Other principal arterial	1,149	1,156,212	9,064,840	11	6,798	73,649
Minor arterial	1,510	1,030,236	5,212,738	12	3,259	29,821
Major collector	3,114	1,295,761	4,955,924	56	24,465	64,085
Minor collector	2,272	639,439	1,324,473	76	8,809	9,076
Local	4,457	923,521	1,854,761	314	40,787	64,605
Urban Bridges						
Interstate	583	1,939,656	22,163,262	8	7,621	302,432
Freeway/expressway	87	191,408	1,881,990	1	869	32,040
Other principal arterial	568	798,403	11,209,563	7	5,598	116,538
Minor arterial	412	322,574	4,490,937	10	6,879	98,632
Collector	317	203,855	1,633,986	9	1,750	26,931
Local	1,052	388,864	2,920,876	49	18,749	69,267
Total	16,176	10,063,923	81,787,264	559	130,395	983,962

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	4,455	\$3,234.1	14,700,131	1,795,606
Widening & rehabilitation	565	\$402.9	4,317,590	314,134
Rehabilitation	2,955	\$4,039.2	26,865,109	2,971,145
Deck rehabilitation/replacement	10	\$16.6	92,275	12,036
Other work	8,117	\$6,153.6	35,661,858	4,935,629
Total	16,102	\$13,846.3	81,636,963	10,028,549

Top Most Traveled Structurally Deficient Bridges in Alabama

County	Year Built	Daily Crossings	Type of Bridge	Location
Jefferson	1981	99,312	Urban Interstate	I - 459 South over Cahaba River
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	AI - 3 North over Peavine Ck * Acl RR
Lee	1959	23,680	Urban Interstate	I-85 over Long St
Lee	1959	23,680	Urban Interstate	I-85 over Norfolk Southern R/R

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.