

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 138 bridges.
- Over the life of the IIJA, Utah will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Utah currently has access to \$90.0 million of that total, and has committed \$9.7 million towards 12 projects as of June 2023.
- Of the 3,109 bridges in the state, 75, or 2.4 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 66 bridges classified as structurally deficient in 2019.

Bridge Inventory

	All Bridges			Structurally Deficient Bridges		
Type of Bridge	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	414	272,616	5,822,680	1	6,243	10,313
Other principal arterial	179	109,626	1,424,335	0	0	0
Minor arterial	144	51,201	326,473	2	623	2,336
Major collector	300	90,513	392,622	8	1,363	5,941
Minor collector	149	32,677	149,002	7	802	2,058
Local	534	91,297	221,370	32	2,826	5,013
Urban Bridges						
Interstate	471	640,545	40,086,613	3	1,874	117,192
Freeway/expressway	68	78,631	1,912,651	1	3,463	87,931
Other principal arterial	278	330,437	6,138,077	2	4,166	32,284
Minor arterial	168	169,358	1,912,425	5	1,437	72,457
Collector	205	100,562	940,025	7	5,161	51,410
Local	199	59,298	466,547	7	1,827	13,006
Total	3,109	2,026,760	59,792,820	75	29,785	399,941

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	26	\$55.7	619,930	15,430
Widening & rehabilitation	1	\$0.9	3,000	263
Rehabilitation	91	\$102.9	437,472	35,890
Deck rehabilitation/replacement	2	\$0.3	350	80
Other work	18	\$8.4	1,345	2,417
Total	138	\$168.2	1,062,097	54,080



Top Most Traveled Structurally Deficient Bridges in Utah

County	Year Built	Daily Crossings	Type of Bridge	Location	
Salt Lake	1964	90,775	Urban Interstate	I-80 (SR-80) WBL over 20 East Street	
Salt Lake	1980	87,931	Urban freeway/expressway	SR-201,(21 S.St) over 32 West St. Int. X-Rd.	
Salt Lake	1979	23,677	Urban minor arterial	106 So over East Jordan Canal	
Salt Lake	1980	18,661	Urban other principal arterial	SR-172 (56 W St) over I-80 (SR-80) EBL & ; W	
Weber	1967	18,512	Urban Interstate	I-84 (SR-84) WBL over 44 South Street	
Salt Lake	1936	18,276	Urban minor arterial	Highland Drive over Big Cottonwood Creek	
Salt Lake	1965	14,993	Urban minor arterial	650 North Street over Jordan River	
Salt Lake	1980	14,979	Urban collector	3 East Street over Mill Creek	
Washington	1998	13,851	Urban collector	Foremaster Drive over Rim Rock Wash	
Salt Lake	1966	13,623	Urban other principal arterial	SR-186,Foothill Dr over I-80 (SR-80) EBL and WB	

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.

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, <u>published</u> by <u>FHWA</u>. 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.

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.