

# **State Bridge Profile**

### Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 6,312 bridges.
- Over the life of the IIJA, Nebraska will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Nebraska currently has access to \$90.0 million of that total, and has committed \$9.3 million towards 25 projects as of June 2023.
- Of the 15,348 bridges in the state, 1,213, or 7.9 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,356 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	192	139,158	4,136,444	0	0	0
Other principal arterial	831	484,963	3,918,025	24	15,014	114,235
Minor arterial	1,268	470,506	2,233,450	41	32,972	75,035
Major collector	2,357	677,478	1,514,604	99	29,653	58,724
Minor collector	1,205	211,377	174,907	69	8,674	6,748
Local	8,528	1,134,915	564,053	947	90,720	34,692
Urban Bridges						
Interstate	135	373,703	10,653,010	2	2,607	65,590
Freeway/expressway	140	239,108	4,726,165	4	1,648	213,310
Other principal arterial	185	310,783	3,180,492	9	15,161	185,718
Minor arterial	194	216,802	2,152,161	9	8,586	68,875
Collector	106	80,221	626,293	4	2,524	20,070
Local	207	59,646	254,522	5	986	3,360
Total	15,348	4,398,662	34,134,124	1,213	208,545	846,357

#### **Proposed Bridge Work**

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	3,275	\$1,720.9	1,413,091	635,939
Widening & rehabilitation	2,793	\$1,435.1	5,449,128	842,969
Rehabilitation	192	\$103.2	445,701	56,724
Deck rehabilitation/replacement	6	\$10.5	83,321	6,554
Other work	46	\$116.2	833,314	76,917
Total	6,312	\$3,385.9	8,224,555	1,619,103

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### **Top Most Traveled Structurally Deficient Bridges in Nebraska**

County	Year Built	Daily Crossings	Type of Bridge	Location	
Douglas	1970	85,640	Urban freeway/expressway	US75 over J St	
Sarpy	1988	58,870	Urban freeway/expressway	US75 over Stream	
Sarpy	1989	38,095	Urban freeway/expressway	US75 over Betz Creek	
Douglas	1960	38,000	Urban other principal arterial	42nd St/FAU 5057 over UPRR 816-825-N	
Douglas	1960	38,000	Urban other principal arterial	42nd St/FAU 5057 over UPRR 191-593-U	
Lancaster	1960	32,795	Urban Interstate	SB-I180/US34 over I80	
Lancaster	1960	32,795	Urban Interstate	NB-I180/US34 over I80	
Sarpy	1995	30,705	Urban freeway/expressway	N370 over Papillion Creek Trib	
Douglas	1934	26,220	Urban other principal arterial	US6 over Saddle Creek Rd	
Douglas	1964	26,100	Urban other principal arterial	N38 over Big Papillion Creek	

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> <u>by 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.