



Highlights from FHWA's 2018 National Bridge Inventory Data

- Of the 1,592 bridges in the state, 155, or 9.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 150 bridges classified as structurally deficient in 2014.
- 12 of the structurally deficient bridges are on the Interstate Highway System.
- 144 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 306 bridges at an estimated cost of \$148.7 million.
- This compares to 315 bridges that needed work in 2014.

Bridge Inventory

Type of Bridge ⁴	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	153	150,531	809,127	12	11,388	44,180
Other principal arterial	104	59,765	150,181	5	3,985	9,662
Minor arterial	67	29,367	77,297	3	919	1,096
Major collector	226	123,812	127,419	19	9,862	10,668
Minor collector	76	22,313	27,898	9	1,570	2,423
Local	713	106,713	41,087	86	14,287	1,517
Urban Bridges						
Interstate	46	41,670	1,223,307	0	0	0
Freeway/expressway	0	0	0	0	0	0
Other principal arterial	59	88,104	1,215,712	0	0	0
Minor arterial	52	77,353	444,806	5	10,493	47,823
Collector	46	26,673	103,979	5	1,533	5,011
Local	50	17,489	26,219	11	5,122	1,874
Total	1,592	743,788	4,247,032	155	59,158	124,254

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	69	\$79,064	32,375	21,091
Widening & rehabilitation	1	\$259	4,921	111
Rehabilitation	123	\$64,498	122,536	53,349
Deck rehabilitation/replacement	0	\$0	0	0
Other work	113	\$4,870	11,451	19,567
Total	306	\$148,691	171,283	94,118



Top Most Traveled Structurally Deficient Bridges in Alaska

County	Year Built	Daily Crossings	Type of Bridge	Location
Ketchikan Gateway	1957	15,147	Urban minor arterial	South Tongass Hwy over Hoadley Creek
Ketchikan Gateway	1955	12,481	Urban minor arterial	South Tongass Hwy over Water St Viaduct
Fairbanks North Star	1953	8,593	Urban minor arterial	Wendell Avenue over Chena River (Wendell)
Anchorage	1966	6,768	Rural Interstate	Seward Highway over Portage Creek No 1
Ketchikan Gateway	1975	6,277	Urban minor arterial	North Tongass Hwy over Ward Creek
Fairbanks North Star	1953	5,325	Urban minor arterial	Minnie Street over Noyes Slough (Minnie St)
Anchorage	1966	5,205	Rural Interstate	Seward Highway over Virgin Creek
Anchorage	1966	5,205	Rural Interstate	Seward Highway over Glacier Creek
Anchorage	1967	5,205	Rural Interstate	Seward Highway over Twenty mile River
Anchorage	1966	5,205	Rural Interstate	Seward Highway over Peterson Creek

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), released March 15, 2019. 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 2017 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.