

National Bridge Inventory: Alaska

- The state has identified needed repairs on 284 bridges.
- This compares to 301 bridges that needed work in 2020.
- Over the life of the IIJA, Alaska will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Alaska currently has access to \$135.0 million of that total, and has committed \$44.2 million towards 10 projects as of June 2024.
- Of the 1,685 bridges in the state, 133, 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 141 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 6.4 percent of total deck area on all structures.

16					
Compared to 15 in 2023					
in the nation in % of					
structurally deficient					
bridges					
1. Iowa	19.0%				
15. Nebraska	8.0%				
16. Alaska	8.0%				

17. Oklahoma

44
Compared to 44 in 2023
in the nation in # of
structurally deficient
bridges

1. Iowa	4,544
43. New Mexico	182
44. Alaska	133
45. Rhode Island	119

17 Compared to 13 in 2023 in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
16. New Hampshire	6.0%
17. Alaska	6.0%
18. Connecticut	6.0%

Number of Bridges in Need of Repair, Including Structurally Deficient Bridges

8.0%



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Alaska

County	Year Built	Daily Crossings	Type of Bridge	Location
Ketchikan Gateway	1955	14,046	Urban minor arterial	South Tongass Hwy over Water St Viaduct
Ketchikan Gateway	1957	11,900	Urban minor arterial	South Tongass Hwy over Hoadley Creek
Ketchikan Gateway	1975	5,250	Urban minor arterial	North Tongass Hwy over Ward Creek
Fairbanks North Star	1953	4,130	Urban minor arterial	Minnie Street over Noyes Slough (Minnie St)
Kenai Peninsula	1959	3,490	Rural arterial	Sterling Highway over South Fork Anchor River
Kodiak Island	1980	2,790	Rural major collector	Rezanof Drive over Sargent Creek
Fairbanks North Star	1960	2,600	Urban collector	Aurora Drive over Noyes Slough (Aurora)
Ketchikan Gateway	1957	2,512	Urban local road	Park/Harris St over Ketchikan Creek
Kenai Peninsula	1969	1,830	Rural minor collector	Funny River Road over Funny River
Kodiak Island	1980	1,770	Rural major collector	Rezanof Drive over Russian River
Matanuska-Susitna	1961	1,580	Rural Interstate	Glenn Highway over Kings River
Not Available	1985	1,200	Rural major collector	Craig/Klawock/Holl over Crab Creek Culvert
Not Available	1954	1,110	Rural major collector	Copper River Hwy over Eyak River
Not Available	1976	1,020	Rural major collector	Gustavus Airport R over Salmon River
Not Available	1980	947	Rural arterial	Marine Hwy Route over Skagway Ferry Terminal
Matanuska-Susitna	1971	940	Rural Interstate	Parks Highway over Hardage Creek
Denali	1963	910	Rural Interstate	Parks Highway over Nenana River at Rex
Not Available	1974	880	Rural Interstate	Richardson Highway over Gulkana River
Kenai Peninsula	1960	500	Rural local road	Fourth Avenue over Seward Lagoon
Yakutat	1961	457	Rural local road	Irr:Ocean Cape Rd over Ankau Slough
Not Available	1936	440	Rural local road	Point Whitshed Rd over Heney Creek
Not Available	1979	336	Rural local road	91 mile Loop over Little Tok River
Southeast Fairbanks	1958	280	Rural minor arterial	Richardson Highway over Upper Miller Creek
Southeast Fairbanks	1958	280	Rural minor arterial	Richardson Highway over Castner Creek
Southeast Fairbanks	1952	240	Rural minor arterial	Richardson Highway over Bear Creek

Bridge Inventory: Alaska

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	167	172,820	517,972	6	10,808	4,670
Rural arterial	105	61,097	107,321	3	917	4,547
Rural minor arterial	72	31,709	65,790	5	1,243	1,160
Rural major collector	218	117,930	106,715	14	9,089	8,595
Rural minor collector	119	37,443	35,238	11	1,643	2,577
Rural local road	741	108,090	34,335	81	15,888	2,729
Urban Interstate	40	35,461	659,807	0	0	0
Urban freeway/expressway	0	0	0	0	0	0
Urban other principal arterial	66	103,920	833,626	0	0	0
Urban minor arterial	46	67,051	331,803	4	9,317	35,326
Urban collector	44	26,092	91,857	1	333	2,600
Urban local road	67	27,112	33,375	8	1,200	2,872
Total	1,685	788,725	2,817,839	133	50,437	65,076

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	26	\$35	303	5,358
Widening & rehabilitation	0	\$0	0	0
Rehabilitation	118	\$205	64,949	46,089
Deck rehabilitation/replacement	1	\$0	10	69
Other structural work	139	\$117	22,689	26,371
Total	284	\$358	87,951	77,887

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.