

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 1,254 bridges.
- Over the life of the IJJA, Colorado will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Colorado currently has access to \$90.0 million of that total, and has committed \$23.8 million towards 25 projects as of June 2023.
- Of the 8,954 bridges in the state, 437, or 4.9 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 466 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	540	466,778	6,452,373	22	26,355	226,000
Other principal arterial	604	323,105	3,495,566	18	5,517	65,447
Minor arterial	693	277,194	1,557,584	51	16,146	140,127
Major collector	696	232,723	1,028,276	41	8,029	43,368
Minor collector	828	199,995	632,167	51	8,050	24,540
Local	1,982	365,087	1,257,166	128	28,656	189,127
Urban Bridges						
Interstate	567	888,414	33,113,374	27	27,329	1,308,532
Freeway/expressway	433	596,925	14,911,178	11	21,354	382,250
Other principal arterial	581	713,518	12,174,066	22	25,566	426,305
Minor arterial	577	409,703	6,579,332	20	13,048	196,765
Collector	520	312,721	3,649,275	19	8,807	110,588
Local	933	395,714	3,412,927	27	7,536	95,479
Total	8,954	5,181,877	88,263,280	437	196,392	3,208,528

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	252	\$246.1	1,849,249	114,349
Widening & rehabilitation	250	\$234.1	3,250,536	156,788
Rehabilitation	384	\$306.9	2,968,447	200,738
Deck rehabilitation/replacement	38	\$50.5	531,699	34,362
Other work	330	\$303.3	3,589,620	204,687
Total	1,254	\$1,140.9	12,189,551	710,924

Top Most Traveled Structurally Deficient Bridges in Colorado

County	Year Built	Daily Crossings	Type of Bridge	Location
Denver	1971	128,000	Urban Interstate	I 225 ML over Goldsmith Gulch
Denver	1989	107,500	Urban freeway/expressway	Ramp to I 25 NBnd over US 6 MI
Jefferson	1972	101,000	Urban freeway/expressway	US 6 ML over SH 121 MI
Jefferson	1967	92,000	Urban Interstate	I 70 ML over Harlan Street
Larimer	1941	77,000	Urban Interstate	I 25 Service Rd over Draw Sr
Denver	1962	60,000	Urban freeway/expressway	SH 35 ML over Sand Creek
Jefferson	1967	57,000	Urban Interstate	I 70 ML WBnd over SH 391 MI
Jefferson	1967	57,000	Urban Interstate	I 70 ML EBnd over SH 391 MI
Jefferson	1968	56,000	Urban Interstate	I 70 ML WBnd over SH 72 MI
Adams	1969	48,500	Urban Interstate	I 270 ML WBnd over SH 265 MI, UP RR, BNSF RR

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.