

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

- Of the 7,339 bridges in the counties of this district, 65, or 0.9 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 102 bridges classified as structurally deficient in 2019.
- Repairs are needed on 1,364 bridges in the district, which will cost an estimated \$2.5 billion.
- This compares to 1,471 bridges that needed work in 2019.
- The state has committed \$3.0 million in IJA bridge formula funds to support 2 projects in the District.

### Bridge Inventory

Type of Bridge	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
<b>Rural Bridges</b>						
Interstate	884	467,800	15,853,171	7	12,601	116,264
Other principal arterial	835	542,354	7,856,341	4	2,860	23,618
Minor arterial	596	230,674	2,751,569	7	2,405	9,368
Major collector	840	379,138	2,300,012	8	3,657	12,226
Minor collector	280	95,576	432,375	8	4,623	5,313
Local	676	202,869	686,371	24	4,824	5,589
<b>Urban Bridges</b>						
Interstate	288	602,225	17,504,022	0	0	0
Freeway/expressway	451	1,103,145	27,408,285	0	0	0
Other principal arterial	686	778,264	16,502,987	1	2,126	34,003
Minor arterial	645	711,366	10,746,406	2	10,014	43,527
Collector	428	315,989	2,817,459	1	61	660
Local	730	260,989	2,040,577	3	488	4,308
<b>Total</b>	<b>7,339</b>	<b>5,690,388</b>	<b>106,899,575</b>	<b>65</b>	<b>43,659</b>	<b>254,876</b>

### Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,001	\$1,856.6	19,647,962	595,071
Widening & rehabilitation	143	\$131.2	3,348,717	63,229
Rehabilitation	128	\$295.6	2,279,420	137,677
Deck rehabilitation/replacement	15	\$29.4	198,737	14,161
Other work	77	\$208.1	3,287,202	95,215
<b>Total</b>	<b>1,364</b>	<b>\$2,520.8</b>	<b>28,762,038</b>	<b>905,353</b>

### Top Most Traveled Structurally Deficient Bridges in this District

County	Year Built	Daily Crossings	Type of Bridge	Location
Pima	1966	38,365	Urban minor arterial	22nd Street over SPRR; Aviation Hwy
Maricopa	1976	34,003	Urban other principal arterial	Shea Boulevard over Indian Bend Wash
Mohave	1964	27,997	Rural Interstate	I 15 over Virgin River
Mohave	1967	21,051	Rural Interstate	I 15 over Virgin River
Mohave	1973	20,007	Rural Interstate	I 15; SB over Virgin River
Mohave	1972	20,007	Rural Interstate	I 15; NB over Virgin River
Navajo	1969	13,297	Rural Interstate	I-40 WB over SB 40
Apache	1964	8,418	Rural Interstate	IRR I 40; WB over Window Rock Rd
Pinal	1929	7,553	Rural arterial	US 60 over Waterfall Canyon
Pinal	1949	6,929	Rural arterial	US 60 over Queen Creek

Data includes information for the following area(s): Apache County, Coconino County, Gila County, Graham County, Greenlee County, Maricopa County, Mohave County, Navajo County, Pima County, Pinal County, Yavapai County

**About the data:** Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on July 3, 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.