

## Highlights from FHWA's 2021 National Bridge Inventory Data

- Of the 25,737 bridges in the state, 1,493, or 5.8 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 1,395 bridges classified as structurally deficient in 2017.
- 165 of the structurally deficient bridges are on the Interstate Highway System. A total of 68.1 percent of the structurally deficient bridges are not on the National Highway System, which includes the Interstate and other key roads linking major airports, ports, rail and truck terminals.
- 553 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 1,698 bridges at an estimated cost of \$11.7 billion.

## 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	1,206	1,326,928	30,417,631	82	85,995	1,790,025
Other principal arterial	1,410	1,296,812	22,034,016	72	85,083	917,266
Minor arterial	1,471	1,029,832	7,461,877	67	71,141	316,869
Major collector	2,196	1,039,836	5,647,038	168	112,711	394,205
Minor collector	1,225	415,828	1,393,708	110	31,441	110,306
Local	4,084	1,068,509	3,125,261	359	74,854	173,671
<b>Urban Bridges</b>						
Interstate	2,626	7,967,812	273,802,017	83	219,398	7,867,760
Freeway/expressway	3,102	6,956,765	212,793,781	92	530,606	5,518,239
Other principal arterial	2,540	3,807,479	61,751,060	148	299,920	3,916,907
Minor arterial	2,607	3,131,923	37,577,141	153	199,278	2,177,612
Collector	1,429	976,321	8,901,106	67	35,301	408,664
Local	1,841	1,107,475	8,349,439	92	43,376	316,265
<b>Total</b>	<b>25,737</b>	<b>30,125,520</b>	<b>673,254,080</b>	<b>1,493</b>	<b>1,789,105</b>	<b>23,907,788</b>

## Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	477	\$3,625.5	3,178,475	350,816
Widening & rehabilitation	3	\$4.2	3,600	341
Rehabilitation	1,048	\$7,412.3	20,958,275	1,557,448
Deck rehabilitation/replacement	7	\$10.5	240	859
Other work	163	\$615.3	271,760	51,770
<b>Total</b>	<b>1,698</b>	<b>\$11,667.7</b>	<b>24,412,350</b>	<b>1,961,233</b>

## Top Most Traveled Structurally Deficient Bridges in California

County	Year Built	Daily Crossings	Type of Bridge	Location
Los Angeles	1959	293,000	Urban freeway/expressway	U.S. Highway 101 over Kester Ave
Los Angeles	1948	258,000	Urban Interstate	Interstate 5 over Marietta Street
Los Angeles	1967	240,000	Urban freeway/expressway	State Route 134 over Pacific Ave
Los Angeles	1967	231,000	Urban freeway/expressway	State Route 60 over Wilcox Avenue
Orange	1976	229,000	Urban freeway/expressway	State Route 57 over BNSF Ry, Amtrak, Metrolink
Los Angeles	1955	220,000	Urban Interstate	Interstate 710 over Los Angeles River
Solano	1932	202,000	Urban Interstate	Interstate 80 over Suisun Creek
Solano	1951	202,000	Urban Interstate	Interstate 80 over Dan Wilson Creek
Alameda	1961	201,000	Urban Interstate	Route 580 over Piedmont, Broadway, Rich
San Diego	1971	199,000	Urban Interstate	Interstate 805 over Telegraph Canyon Drain

**About the data:** Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on January 3, 2022. 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.