

National Bridge Inventory: Ohio

- The state has identified needed repairs on 3,196 bridges.
- This compares to 3,263 bridges that needed work in 2020.
- Over the life of the IIJA, Ohio will receive a total of \$521.5 million in bridge formula funds, which will help make needed repairs.
- Ohio currently has access to \$312.9 million of that total, and has committed \$214.8 million towards 250 projects as of June 2024.
- Of the 26,729 bridges in the state, 1,267, or 4.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,377 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 3.5 percent of total deck area on all structures.



| 34. Colorado | 5.0% | | |
|-----------------|------|--|--|
| 35. Ohio | 5.0% | | |
| 36. Connecticut | 5.0% | | |

13

Compared to 13 in 2023

in the nation in # of structurally deficient bridges

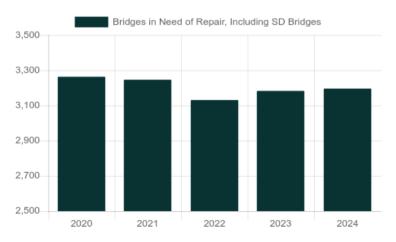
| 1. lowa | 4,544 | | |
|--------------|-------|--|--|
| 12. Michigan | 1,281 | | |
| 13. Ohio | 1,267 | | |
| 14. Nebraska | 1,217 | | |

36 Compared to 37 in 2023 ion in % of structural

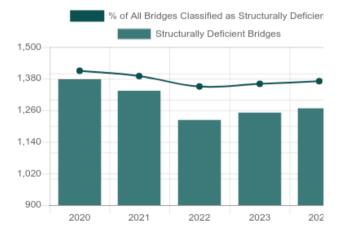
in the nation in % of structurally deficient bridge deck area

| 1. Rhode Island | 14.0% |
|-----------------|-------|
| 35. Colorado | 4.0% |
| 36. Ohio | 4.0% |
| 37. Oklahoma | 3.0% |

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



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Ohio

| County | Year Built | Daily Crossings | Type of Bridge | Location |
|----------|------------|-----------------|--------------------------------|--|
| Cuyahoga | 1971 | 142,337 | Urban Interstate | Ir 480 over Cr 8 (Lee Rd) |
| Cuyahoga | 1971 | 106,617 | Urban Interstate | Ir 90 over Rocky River Valley |
| Hamilton | 1960 | 91,244 | Urban Interstate | IR 75 over Tributary Mill Creek |
| Cuyahoga | 1980 | 77,220 | Urban Interstate | Ramp Es from I-480 over IR 480 Mainline |
| Cuyahoga | 1980 | 77,220 | Urban Interstate | Ramp SW from I-71 over IR 480 Mainline |
| Hamilton | 1965 | 67,075 | Urban Interstate | NB IR 75 over Mill Cr;Benson St;Nsrr;S |
| Franklin | 1975 | 61,022 | Urban Interstate | I-70 over IR 70W over Scioto River |
| Cuyahoga | 1962 | 59,893 | Urban Interstate | IR 77 over E 22 St |
| Cuyahoga | 1962 | 59,893 | Urban Interstate | IR 77 over E 14th St |
| Cuyahoga | 1962 | 59,893 | Urban Interstate | IR 77 over US-422 WB (Cuy-422-0125) |
| Hamilton | 1972 | 58,705 | Urban freeway/expressway | SR 562 over Ross Avenue;Csrr, Cr689 |
| Franklin | 1968 | 57,982 | Urban Interstate | I-270 over S Indian Run |
| Cuyahoga | 1973 | 44,715 | Urban Interstate | Ir 480 WB over Up480-ES&Wn,Dn77-Sw&Ne |
| Cuyahoga | 1973 | 44,715 | Urban Interstate | Ir 480 E.B. over Up 480-ES&Wn,Dn 77-Sw&Ne |
| Hamilton | 1931 | 43,788 | Urban other principal arterial | Western Hills Viad over Mill Creek, State, Sprin |
| Cuyahoga | 1976 | 41,217 | Urban minor arterial | Warren Road CR-66 over IR-90 (Warren) |
| Hamilton | 1969 | 40,186 | Urban other principal arterial | Winton Road over Winton Woods Park Drive |
| Hamilton | 1964 | 36,784 | Urban Interstate | WB IR 74 over Cr 184;Trib Taylor Creek |
| Hamilton | 1970 | 35,701 | Urban Interstate | EB IR 275 over Cr 299(Loveland Rd);lory |
| Hamilton | 1970 | 35,701 | Urban Interstate | WB IR 275 over Cr 299(Loveland Rd);lory |
| Trumbull | 1956 | 35,398 | Urban Interstate | 180 Oh Tpk over CSX RR |
| Trumbull | 1954 | 35,398 | Urban Interstate | 180 Oh Tpk over CSX RR |
| Lake | 1962 | 34,896 | Urban freeway/expressway | SR 2 over East 337th St |
| Cuyahoga | 1987 | 31,223 | Urban other principal arterial | SR 237 over Snow Road |
| Lake | 1969 | 30,463 | Urban other principal arterial | SR 91 over Nsc,CSX RR N. of US 20 |

Bridge Inventory: Ohio

| 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 | 543 | 635,046 | 12,252,136 | 1 | 487 | 20,873 |
| Rural arterial | 950 | 667,705 | 6,475,503 | 8 | 3,622 | 39,620 |
| Rural minor arterial | 813 | 356,668 | 3,599,577 | 19 | 7,163 | 80,660 |
| Rural major collector | 3,260 | 1,033,778 | 6,407,698 | 104 | 27,795 | 195,953 |
| Rural minor collector | 1,738 | 367,482 | 1,479,739 | 84 | 12,058 | 54,346 |
| Rural local road | 10,175 | 1,565,953 | 4,763,434 | 678 | 84,123 | 232,255 |
| Urban Interstate | 1,641 | 3,102,520 | 74,022,261 | 25 | 80,374 | 1,211,677 |
| Urban freeway/expressway | 990 | 1,418,418 | 19,487,527 | 8 | 20,511 | 170,930 |
| Urban other principal arterial | 1,208 | 1,904,549 | 17,131,340 | 40 | 93,131 | 569,037 |
| Urban minor arterial | 1,492 | 1,531,747 | 14,517,306 | 69 | 106,812 | 705,223 |
| Urban collector | 1,757 | 1,019,638 | 8,806,331 | 75 | 35,770 | 317,313 |
| Urban local road | 2,162 | 650,393 | 4,249,438 | 156 | 30,690 | 216,173 |
| Total | 26,729 | 14,253,897 | 173,192,290 | 1,267 | 502,537 | 3,814,060 |

Proposed Bridge Work

| Type of Work | Number of Bridges | Cost to Repair (in millions) | Daily Crossings | Area of Bridges (sq. meters) |
|---------------------------------|-------------------|---------------------------------|-----------------|---------------------------------|
| Bridge replacement | 1,162 | \$871 | 3,530,280 | 325,335 |
| Widening & rehabilitation | 111 | \$121 | 626,164 | 62,967 |
| Rehabilitation | 1,422 | \$1,499 | 5,219,317 | 805,488 |
| Deck rehabilitation/replacement | 193 | \$647 | 2,605,269 | 334,641 |
| Other structural work | 308 | \$249 | 1,145,459 | 133,075 |
| Total | 3,196 | \$3,386 | 13,126,489 | 1,661,506 |

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.