American Road & Transportation Builders Association

National Bridge Inventory: Kentucky

- The state has identified needed repairs on 3,182 bridges.
- This compares to 3,328 bridges that needed work in 2020.
- Over the life of the IIJA, Kentucky will receive a total of $472.7 million in bridge formula funds, which will help make needed repairs.
- Kentucky currently has access to $283.6 million of that total, and has committed $142.0 million towards 147 projects as of June 2024.
- Of the 14,548 bridges in the state, 1,072, or 7.4 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 1,033 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 5.2 percent of total deck area on all structures.

19

Compared to 20 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	**19.0%**
18. New Hampshire	8.0%
19. Kentucky	7.0%
20. Montana	7.0%

15

Compared to 17 in 2023

in the nation in # of structurally deficient bridges

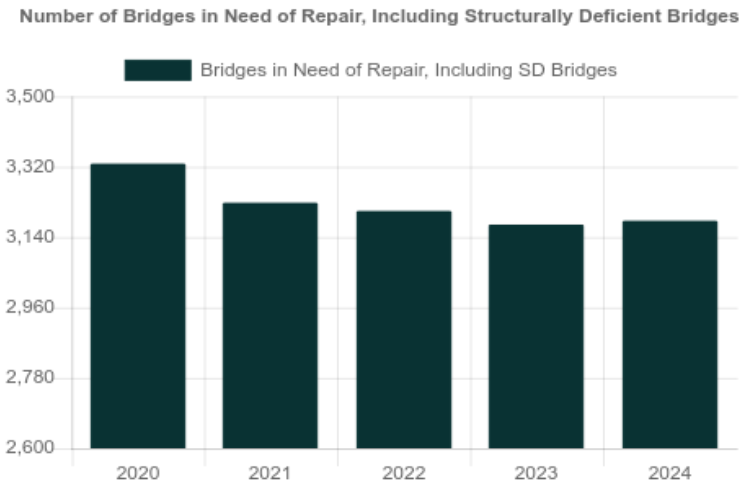
1. Iowa	**4,544**
14. Nebraska	1,217
15. Kentucky	1,072
16. Indiana	1,018

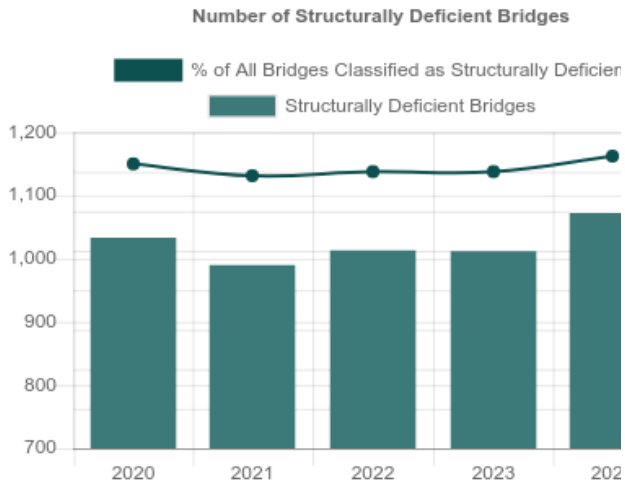
25

Compared to 29 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	**14.0%**
24. North Dakota	5.0%
25. Kentucky	5.0%
26. South Carolina	5.0%





Top Most Traveled Structurally Deficient Bridges in Kentucky

County	Year Built	Daily Crossings	Type of Bridge	Location
Jefferson	1988	159,448	Urban Interstate	I-65 over Standiford Ln
Jefferson	1965	144,000	Urban Interstate	I-64 over Ky 3077 (River Rd)
Jefferson	1957	129,829	Urban Interstate	I-65 over Bradley Ave
Jefferson	1957	118,227	Urban Interstate	I-65 over Hill, CSX RR & Burnett
Jefferson	1959	118,227	Urban Interstate	I-65 over E Kentucky & S Brook St
Fayette	1964	90,324	Rural Interstate	S 75 Nc over I 64
Jefferson	1972	87,355	Urban Interstate	I-64 over Ky 3077 & Belvedere
Jefferson	1960	84,001	Urban Interstate	I-65 over Jacob, Broadway, Gray St
Jefferson	1971	81,936	Urban Interstate	I-64 EB Off Ramp over Northwestern Pkwy
Jefferson	1974	81,002	Urban Interstate	I-264 EB over I-264 WB On Ramp
Jefferson	1970	59,068	Urban Interstate	I-264 over P&L Railway
Jefferson	1976	58,404	Urban Interstate	I-64 over Parking Lots (7-13 St)
Jefferson	1985	51,078	Urban freeway/expressway	Ky 841 over Big Bee Lick Creek
Jefferson	1967	41,584	Urban other principal arterial	US 42 over I-264
Jefferson	1970	38,400	Urban Interstate	I-265 SB over Ky 22 (Brownsboro Rd)
Jefferson	1970	38,400	Urban Interstate	I-265 NB over Ky 22 (Brownsboro Rd)
Jefferson	1966	31,513	Urban Interstate	I-64 WB over Mid Fork Beargrass Creek
Jefferson	1966	31,513	Urban Interstate	I-64 EB over Mid Fork Beargrass Creek
Fayette	1963	30,879	Rural Interstate	SB 75 Non-Cardinal over Relocated Kearney Road
Hopkins	1968	30,484	Urban Interstate	Edward T Breathitt over Pennyrile Parkway
Jefferson	1987	29,753	Urban Interstate	I-265 SB over Ky 155 (Taylorsville Rd)
Jefferson	1965	28,333	Urban minor arterial	Ky 864 over Branch of Greasy Ditch
Jefferson	1966	25,429	Urban Interstate	I-71 SB over Beargrass Creek
Franklin	1963	24,081	Rural Interstate	I-64 EB over Kentucky River
Franklin	1963	24,081	Rural Interstate	I-64 WB over Kentucky River

Bridge Inventory: Kentucky

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	455	551,326	8,864,360	8	9,453	208,551
Rural arterial	777	1,035,731	4,691,752	6	13,592	34,854
Rural minor arterial	662	460,490	2,686,458	16	5,997	51,461
Rural major collector	1,929	794,625	3,671,384	136	45,008	232,335
Rural minor collector	2,437	586,544	1,525,261	233	46,098	143,482
Rural local road	5,996	850,021	1,242,130	541	68,019	102,729
Urban Interstate	468	949,498	28,116,116	18	98,948	1,346,989
Urban freeway/expressway	132	161,771	2,999,357	1	327	51,078
Urban other principal arterial	284	467,831	4,018,441	9	15,300	134,916
Urban minor arterial	504	567,045	5,270,631	23	30,121	227,306
Urban collector	427	236,256	1,717,832	29	11,638	108,993
Urban local road	477	113,630	661,592	52	8,244	50,334
Total	14,548	6,774,768	65,465,314	1,072	352,744	2,693,028

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	499	$617	995,616	268,720
Widening & rehabilitation	1,905	$1,502	18,807,931	1,071,342
Rehabilitation	657	$309	975,563	185,835
Deck rehabilitation/replacement	2	$5	3,721	2,490
Other structural work	119	$219	993,468	167,201
Total	3,182	$2,651	21,776,299	1,695,588

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.