

# Tennessee Congressional District 8

- Of the 4,652 bridges in the counties of this district, 204, or 4.4 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 193 bridges classified as structurally deficient in 2020.
- Repairs are needed on 1,553 bridges in the district, which will cost an estimated \$1.7 billion.
- This compares to 1,596 bridges that needed work in 2020.
- The state has committed \$482.8 thousand in IIJA bridge formula funds to support 3 projects in the District.

41

Compared to 40 in 2023

in the nation in % of structurally deficient bridges

|               |       |
|---------------|-------|
| 1. Iowa       | 19.0% |
| 40. Minnesota | 4.0%  |
| 41. Tennessee | 4.0%  |
| 42. Virginia  | 3.0%  |

20

Compared to 20 in 2023

in the nation in # of structurally deficient bridges

|               |       |
|---------------|-------|
| 1. Iowa       | 4,544 |
| 19. Wisconsin | 942   |
| 20. Tennessee | 898   |
| 21. Arkansas  | 704   |

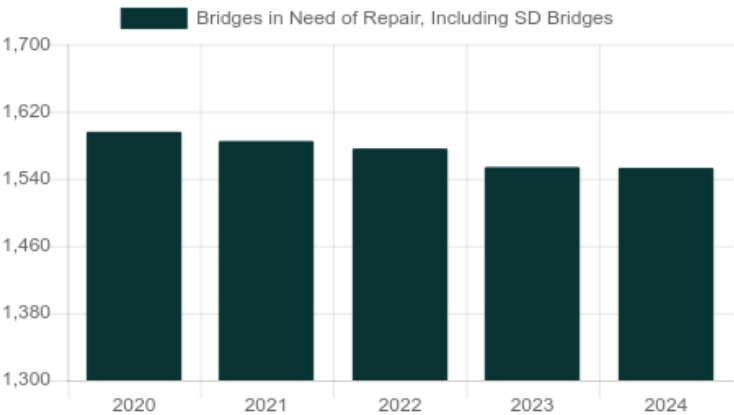
28

Compared to 28 in 2023

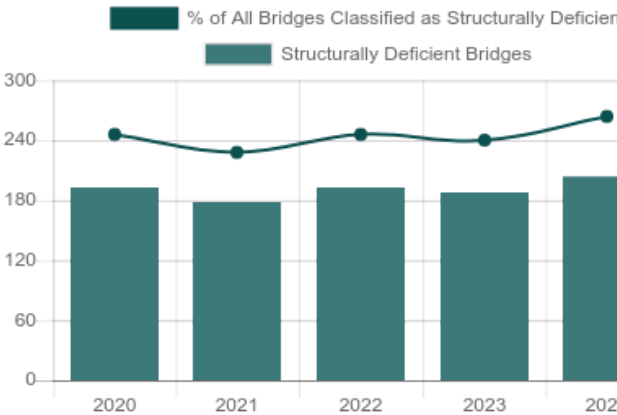
in the nation in % of structurally deficient bridge deck area

|                 |       |
|-----------------|-------|
| 1. Rhode Island | 14.0% |
| 27. Minnesota   | 5.0%  |
| 28. Tennessee   | 5.0%  |
| 29. Arkansas    | 5.0%  |

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



Number of Structurally Deficient Bridges



## Top Most Traveled Structurally Deficient Bridges in Tennessee

| County  | Year Built | Daily Crossings | Type of Bridge                 | Location                                       |
|---------|------------|-----------------|--------------------------------|--|
| Shelby  | 1958       | 59,405          | Urban other principal arterial | Fas 177 over Wolf River                        |
| Shelby  | 1968       | 53,975          | Urban freeway/expressway       | Fau 4032 over Waring Rd                        |
| Shelby  | 1973       | 53,211          | Urban Interstate               | I40-LI-Exit-Ramp over I40-WB-Ex Rp / N 3rd St. |
| Shelby  | 1929       | 48,162          | Urban other principal arterial | Fap 14 297767K over IC RR & Nonconnah Creek    |
| Shelby  | 1958       | 44,832          | Urban minor arterial           | Fau 2825 over Cherry Creek                     |
| Shelby  | 1970       | 36,821          | Urban other principal arterial | Fau 2830 over Johns Creek                      |
| Shelby  | 1978       | 36,663          | Urban freeway/expressway       | Fau 2810 over Winchester Rd                    |
| Shelby  | 1928       | 33,396          | Urban other principal arterial | Fau 57 299598G over SR 23 CSX & Cnic RR        |
| Shelby  | 1979       | 31,787          | Urban other principal arterial | Fas 175 over Branch of Johns Creek             |
| Shelby  | 1965       | 30,230          | Urban other principal arterial | Fau 2803 over I-240 & I-40 Ramps               |
| Shelby  | 2003       | 29,627          | Urban minor arterial           | Fau 4032 over Cnic E419 Iccn & 5250            |
| Shelby  | 1954       | 25,855          | Urban other principal arterial | Fau 2810 663402M over Airways Blvd/Yale Yards  |
| Shelby  | 1963       | 25,735          | Urban minor arterial           | Fau 2878 over Branch                           |
| Shelby  | 1964       | 25,215          | Urban other principal arterial | Fap 14 over SR-14 / I-55                       |
| Shelby  | 1962       | 23,199          | Urban minor arterial           | Fau 5012 over Johns Creek                      |
| Shelby  | 1978       | 22,230          | Urban other principal arterial | Fau 2813 over Plough Blvd. SB. Lanes           |
| Shelby  | 1965       | 22,230          | Urban other principal arterial | Fau 2813 over Days Creek                       |
| Shelby  | 1978       | 22,230          | Urban other principal arterial | Fau 2810 over Plough Blvd. NB. Lanes           |
| Fayette | 1992       | 21,609          | Rural arterial                 | Fap 15 over Branch                             |
| Shelby  | 1970       | 21,303          | Urban minor arterial           | Fau 2814 348583D over pedestrian walkway       |
| Shelby  | 1968       | 21,303          | Urban minor arterial           | Fau 2814 over Sam Cooper Blvd.                 |
| Shelby  | 1963       | 20,846          | Urban minor arterial           | Fau 4189 over Johns Creek                      |
| Shelby  | 1968       | 20,398          | Urban minor arterial           | Fau 5156 over Sam Cooper Blvd.                 |
| Shelby  | 1968       | 19,431          | Urban other principal arterial | Fau 4191 over Days Creek                       |
| Shelby  | 1970       | 18,304          | Urban minor arterial           | Fau 2863 over Days Creek                       |

## Bridge Inventory: Tennessee

| 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               | 91                | 151,077                          | 2,100,147                      | 0  | 0   | 0   |
| Rural arterial                 | 322               | 306,984                          | 2,745,052                      | 5  | 12,414  | 62,024  |
| Rural minor arterial           | 224               | 164,322                          | 856,846                        | 6  | 4,760   | 25,327  |
| Rural major collector          | 646               | 235,430                          | 914,412                        | 19                                       | 11,683  | 26,604  |
| Rural minor collector          | 628               | 150,942                          | 416,658                        | 30                                       | 8,249   | 29,709  |
| Rural local road               | 1,251             | 196,195                          | 247,161                        | 76                                       | 11,619  | 14,188  |
| Urban Interstate               | 197               | 459,596                          | 16,291,747                     | 1  | 628   | 53,211  |
| Urban freeway/expressway       | 89                | 156,201                          | 3,813,966                      | 3  | 2,874   | 102,384   |
| Urban other principal arterial | 335               | 426,166                          | 7,628,515                      | 12                                       | 39,688  | 376,992   |
| Urban minor arterial           | 322               | 311,823                          | 4,356,874                      | 22                                       | 29,055  | 323,052   |
| Urban collector                | 202               | 76,174                           | 879,538                        | 10                                       | 4,510   | 33,216  |
| Urban local road               | 345               | 111,759                          | 519,144                        | 20                                       | 11,016  | 33,368  |
| Total                          | 4,652             | 2,746,670                        | 40,770,060                     | 204                                      | 136,496   | 1,080,075   |

## Proposed Bridge Work

| Type of Work                    | Number of Bridges | Cost to Repair (in millions) | Daily Crossings | Area of Bridges (sq. meters) |
|---------------------------------|-------------------|------------------------------|-----------------|------------------------------|
| Bridge replacement              | 190               | \$204                        | 1,061,683       | 92,106                       |
| Widening & rehabilitation       | 581               | \$444                        | 4,927,572       | 306,866                      |
| Rehabilitation                  | 712               | \$856                        | 10,781,019      | 526,881                      |
| Deck rehabilitation/replacement | 15                | \$175                        | 221,057         | 103,476                      |
| Other structural work           | 55                | \$14                         | 171,334         | 10,743                       |
| Total                           | 1,553             | \$1,693                      | 17,162,665      | 1,040,071                    |

**About the data:**

Data includes information for the following area(s): Benton County, Carroll County, Crockett County, Dyer County, Fayette County, Gibson County, Haywood County, Henry County, Lake County, Lauderdale County, Madison County, Obion County, Shelby County, Tipton County, Weakley County

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.