

Highlights from FHWA’s 2014 National Bridge Inventory Data:

- Of the 52,937 bridges in the state, 1,127 bridges, or 2% are classified as structurally deficient. This means one or more of the key bridge elements, such as the deck, superstructure or substructure, is considered to be in “poor” or worse condition.¹
- There are 8,872 bridges, or 17% of all state bridges, classified as functionally obsolete. This means the bridge does not meet design standards that are in line with current practice.
- State and local contract awards for bridge construction totaled \$5.35 billion over the past five years, 17 percent of highway and bridge contract awards, compared to a national average of 29 percent.
- Since 2004, 6,699 new bridges have been constructed in the state and 1,299 bridges have undergone major reconstruction.
- The state estimates that it would cost approximately \$8.9 billion to fix a total of 12,622 bridges in the state.²

Bridge Inventory:

| Type of Bridge | All Bridges | | | Structurally deficient Bridges | | |
|--------------------------|---------------|-------------------|--------------------|--------------------------------|-------------------|------------------|
| | Total Number | Area (sq. meters) | Daily Crossings | Total Number | Area (sq. meters) | Daily Crossings |
| Rural Bridges | | | | | | |
| Interstate | 2,273 | 1,722,419 | 31,234,155 | 6 | 2,372 | 84,450 |
| Other principal arterial | 4,220 | 3,611,665 | 31,057,905 | 17 | 48,016 | 101,768 |
| Minor arterial | 4,029 | 2,890,454 | 14,894,056 | 20 | 107,536 | 86,100 |
| Major collector | 8,231 | 3,533,348 | 12,755,369 | 81 | 63,314 | 93,620 |
| Minor collector | 2,983 | 767,483 | 1,635,074 | 26 | 6,363 | 12,025 |
| Local | 10,256 | 2,018,920 | 3,774,304 | 798 | 81,983 | 94,448 |
| Urban Bridges | | | | | | |
| Interstate | 3,223 | 7,990,010 | 175,593,147 | 20 | 224,368 | 928,950 |
| Other freeway | 4,068 | 11,175,908 | 133,451,284 | 7 | 18,699 | 156,703 |
| Principal arterial | 3,659 | 4,918,186 | 58,000,867 | 19 | 28,112 | 238,940 |
| Minor arterial | 2,684 | 2,411,348 | 28,785,251 | 33 | 80,632 | 301,731 |
| Collector | 2,533 | 2,072,665 | 18,124,651 | 25 | 33,691 | 123,415 |
| Rural | 4,778 | 2,518,466 | 17,590,892 | 75 | 25,428 | 324,764 |
| Total | 52,937 | 45,630,872 | 526,896,955 | 1,127 | 720,513 | 2,546,914 |

¹ According to the Federal Highway Administration (FHWA), a bridge is classified as structurally deficient if the condition rating for the deck, superstructure, substructure or culvert and retaining walls is rated 4 or below or if the bridge receives an appraisal rating of 2 or less for structural condition or waterway adequacy. During inspections, the condition 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 and the individual element displays signs of advanced section loss, deterioration, spalling or scour.

² This data is provided by bridge owners as part of the FHWA data and is required for any bridge eligible for the Highway Bridge Replacement and Rehabilitation Program. However, for some states this amount is very low and likely not an accurate reflection of current costs.

Proposed bridge work:

| Type of Work | Number | Cost (millions) | Daily Crossings | Area (sq. meters) |
|---------------------------------|--------|-----------------|-----------------|-------------------|
| Bridge replacement | 3,597 | \$3,592.2 | 12,137,128 | 1,434,242 |
| Widening & rehabilitation | 82 | \$67.9 | 1,551,044 | 42,751 |
| Rehabilitation | 266 | \$849.5 | 1,189,123 | 126,933 |
| Deck rehabilitation/replacement | 10 | \$954.6 | 1,800 | 1,624 |
| Other work | 8,667 | \$3,403.2 | 83,900,401 | 6,849,969 |

Top 10 Most Traveled Structurally Deficient Bridges in the State:

| County | Year Built | Daily Crossings | Type of Bridge | Location |
|---------|------------|-----------------|--------------------------|---|
| Harris | 1961 | 124,280 | Urban Interstate | I-45 NB over White Oak Bayou |
| Dallas | 1943 | 88,900 | Urban Interstate | I-35E SB over Hutton Branch |
| Harris | 1964 | 78,320 | Urban Interstate | I-610S EB over Holmes Road, Union Pacific Railroad and Theresa |
| Harris | 1964 | 78,320 | Urban Interstate | I-610S WB over Holmes Road, Union Pacific Railroad and Theresa |
| Denton | 1960 | 75,357 | Urban local road | S Denton Drive over I-35E |
| Orange | 1952 | 73,490 | Urban Interstate | I-10 over the Neches River |
| Tarrant | 1961 | 70,850 | Urban Interstate | I-35W NB over Nixon Street |
| Tarrant | 1966 | 57,220 | Urban Interstate | I-35W SB over the Union Pacific Railroad/Fort Worth & Western Railroad/DART and 36th Street |
| Potter | 1964 | 48,050 | Urban Interstate | I-40 EB over Arthur Street |
| Dallas | 1964 | 45,310 | Urban freeway/expressway | SH 114 EB over Hackberry Creek |

Sources: All data is from the 2014 National Bridge Inventory, released by the Federal Highway Administration in January 2015. Note that specific conditions on bridge may have changed as a result of recent work. Cost estimates of bridge work provided as part of the data and have been adjusted to 2014\$ for inflation and estimated project costs. Contract awards data is for state and local government awards and comes from McGraw Hill. Note that additional bridge investment may be a part of other contract awards if a smaller bridge project is included with a highway project, and that would not be accounted for in the total in this profile.