

STATE BRIDGES RATE BETTER THAN THOSE ON LOCAL ROADS

The overall quality of bridges in Wisconsin exceeds the national average, with a higher percentage of bridges rated in good condition. However, bridges on local roads are often in significantly worse condition than those on state roads and highways, creating challenges for local governments responsible for their maintenance. Sustaining high-quality local bridges may require additional investments, but state and local governments may find these costs challenging.

Bridges are a vital part of Wisconsin's road network, helping to connect communities and businesses across the state. Bridges that are in poor condition are more likely to have weight limits on the vehicles that use them or to be [closed completely](#), which can result in increased traffic congestion and travel times and contribute to potential economic disruptions.

As of 2024, 51.0% of Wisconsin's bridges were classified as being in good condition – the highest rating available – based on a national inventory of bridges conducted each year. On the other end of the scale, 6.6% of Wisconsin's bridges were rated in poor condition. The proportion of Wisconsin's bridges in good

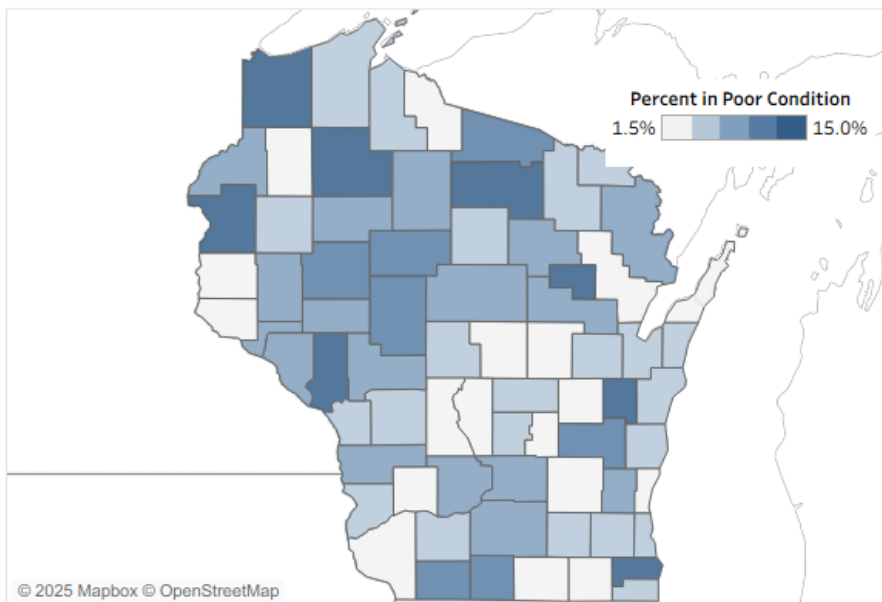
condition consistently has surpassed the national average for many years.

In this brief, we use data collected by the Wisconsin Department of Transportation and reported to the Federal Highway Administration in 2024 to identify trends in bridge quality across the state and by road type. We use the Federal Highway Administration definition of a bridge, which is a structure of more than 20 feet that carries traffic over water, a highway, railway, or other obstruction.

HOW BRIDGES ARE RATED

The Wisconsin Department of Transportation uses a detailed scoring system defined by the Federal Highway Administration, known as the [National Bridge Inspection Standards](#), to measure bridge quality. State law requires every bridge to be inspected at least once [every two years](#), with more frequent inspections for older structures and those in poor condition. Inspection requirements vary based on the type of bridge, with larger structures requiring more complex procedures. In some cases, state or local engineers perform the inspections, while in other cases they are done by qualified consultants. Each year, the state must submit the results of these inspections to the Federal Highway Administration, which publishes an annual report on the [nation's bridges](#).

Figure 1: Higher Share of Bridges in Northern Wisconsin in Poor Condition
Share of bridges in county rated in poor condition, 2024



Source: Wisconsin Department of Transportation

The overall condition of every bridge is rated based on the lowest score given to any one of its three components: the deck (surface) of the bridge, the superstructure that supports the deck, and the substructure that supports the entire structure. Each component is evaluated separately, with scores ranging from zero to nine; zero indicates failure and nine indicates excellent condition.

Bridges with structural ratings of seven, eight, or nine are considered to be in good condition for all three major components, with no substantial signs of deterioration. They may have some minor problems, but many have none at all.

Bridges in fair condition are rated five or six on at least one component. These structures may suffer from minor deterioration and may show signs of erosion like surface-level chipping of concrete or damage to the bridge foundation. These bridges require less costly repairs than those in poor condition but may deteriorate to poor condition without proper care.

Lastly, bridges that receive scores of one, two, three, or four on any one of the three components are considered to be in poor condition. These scores indicate a need for major repairs to address fatigue cracks or major deterioration. Previously, the Federal Highway Administration designated bridges in poor condition as structurally deficient, but that term was retired [in 2018](#).

It is important to note that a bridge rated in poor condition is not necessarily unsafe for travel, though it may become unsafe for some loads and require weight limits or complete closure in the future. However, these structures do often require significant repairs or are nearing the end of their service life and may soon need replacement. Major repairs and replacements tend to be costly, which can create financial burdens for the state or local government that owns the structure.

LOCAL BRIDGE RATINGS LAG

While the statewide average paints a relatively positive picture, a deeper look reveals uneven quality ratings based on bridge ownership, location, and road type. Figure 1 on the previous page shows that bridge quality tends to lag in the northern and western parts of the state.

The Wisconsin Department of Transportation owns more than 5,300 bridges, or 37.3% of the statewide total. Bridges on or over [the state highway system](#) are built and maintained by the department and supported by the state's transportation fund and federal funds designated for road construction. These tend to be bigger structures and include the state's largest bridges, like the Hoan Bridge in Milwaukee County and the Blatnik Bridge (co-owned with Minnesota) connecting Superior to Duluth. They also tend to have the highest quality ratings, with only 1.6% of these bridges rated in poor condition.

Towns own the next highest number of bridges – nearly 4,500 or 31.3% of the statewide total. Among them, 8.6% are in poor condition. These bridges tend to be on rural, relatively low-traffic roads.

Counties own 21.8% of Wisconsin's bridges, or just over 3,100, and are located on county highways that serve both rural and urban areas and typically have higher traffic compared to town roads. County roads have the highest percentage of bridges in poor condition among all ownership types, with 11.3% rated as poor.

Cities and villages own over 1,300 bridges, or 9.4% of the statewide total, which serve as vital connections within communities. The frequency of poor ratings among city and village roads nearly matches that of town roads, with 8.8% rated as poor.

Wisconsin's remaining bridges – accounting for less than 1% of the total – are owned by railroad companies, other state agencies, or private entities.

The state's bridge conditions follow a similar pattern to its overall pavement and road conditions: roads that carry less traffic tend to be in worse condition than higher-traffic roads and highways. Around 10% of bridges on county highways and 8% of those on city streets are classified as being in poor condition, compared to just 2.3% of bridges on state highways, 1.0% of those on interstate highways, and 1.3% of those on U.S.-numbered highways. Despite only owning around 60% of the state's bridges, local governments are responsible for approximately 80% of those rated in poor condition. These disparities underscore the unique challenges that local governments face in funding and maintaining transportation infrastructure.



MILWAUKEE BRIDGES

Although a recent Wisconsin Policy Forum [analysis](#) found that roads in the city of Milwaukee were in worse condition than the state average, the city's bridges perform better on quality ratings. Among 577 bridges in the city of Milwaukee, only 5.0% were rated as poor, compared with 6.7% of bridges statewide. However, in Milwaukee, only 25.5% of bridges were rated as good, compared to 46.5% of bridges in the state.

Bridges in Milwaukee tend to be older, with 53.6% of the city's bridges over 50 years old compared to 32.6% statewide. However, older Milwaukee bridges are in better shape than the average Wisconsin bridge built in the same decade. Only 2.3% of Milwaukee bridges between 50 and 79 years old were rated as poor, compared to 13.1% of those in the same age range statewide.

Of the bridges inside city limits, 365 are owned by the state Department of Transportation, including nearly 18.2% of Wisconsin's interstate highway bridges, while 31 are owned by Milwaukee County and 181 by the city of Milwaukee. The quality of bridges owned by the city itself is more concerning, with a higher percentage of city-owned bridges in poor condition than the statewide average, though the average for Milwaukee was similar to other cities and villages.

AGING BRIDGES

About one-third of the state's bridges are over 50 years old. These structures tend to be in worse condition overall than newer bridges, though even among bridges

over 70 years old, the average rating is 5.1, which is considered fair.

Among Wisconsin's bridges, less than 1% of those under 40 years old are in poor condition, while 5% of those between 40 and 49 years old are rated as poor. Those conditions are much more common with each additional decade of age. Of the 1,596 bridges in the state that are over 70 years old, 27.0% are in poor condition. Figure 2 shows the sharp drop in structure quality as bridges age.

BRIDGE POSTINGS AND CLOSURES

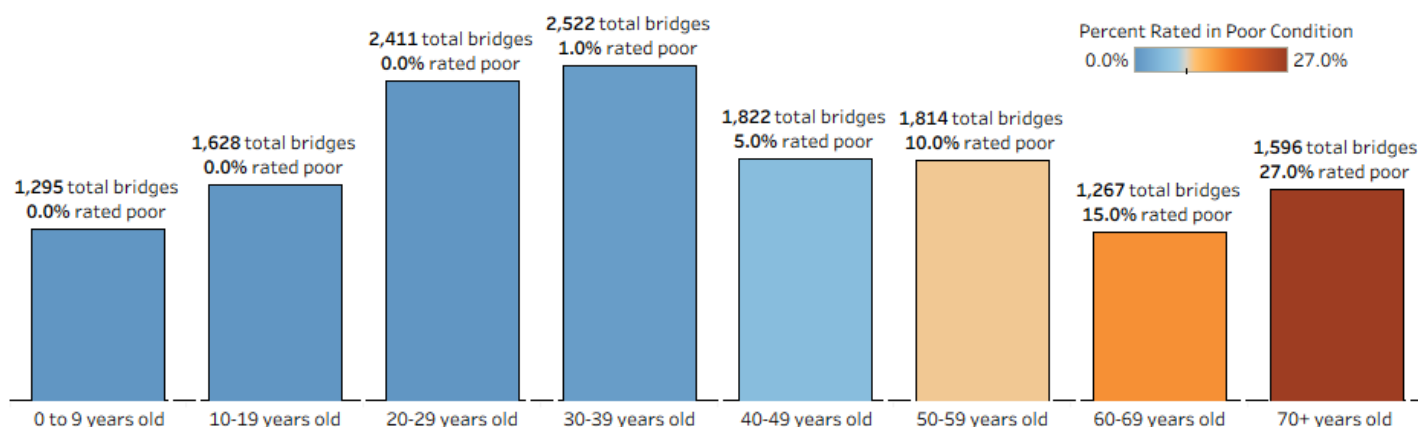
Even bridges rated in poor condition have been deemed safe for use by all vehicles allowed on the state's roads, including heavy trucks that weigh up to [80,000 pounds](#). However, 29 bridges in the state have been closed outright, and another 447 have restrictions that limit the weight of vehicles that can operate on them. Weight restrictions range from as little as three tons to as much as 45 tons and also include limits on how many lanes on the bridge are open to traffic.

Bridge closures can be disruptive to travelers of all types, forcing them to take longer routes to get to their destinations. Weight restrictions can be nearly as disruptive as closures to business and farm operations because they may require heavy trucks and equipment to take much longer routes, costing time and money.

Figure 3, on the next page, shows where the state's 29 closed bridges are located, which tend to be in rural areas. Towns own 319 or 66.7% of the posted bridges (those with signs indicating the maximum weight limits

Figure 2: Bridge Condition Ratings Decline Sharply for Structures Over 50 Years Old

Number of bridges in Wisconsin and their conditions by age, 2024

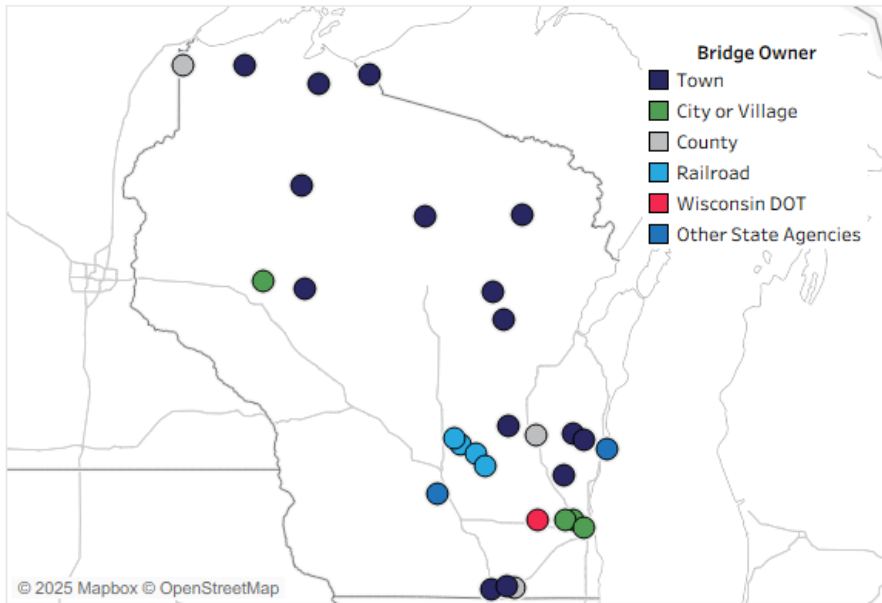


Source: Wisconsin Department of Transportation



Figure 3: Towns Own the Majority of Closed Bridges

Closed bridges by owner, 2024 inventory of bridges



Source: Wisconsin Department of Transportation

for different types of vehicles to cross safely), while counties own 97 posted bridges or 20.3% of the statewide total. State-owned roads have relatively few posted bridges, with only 11 either closed or restricted, comprising 2.3% of the total.

NATIONAL COMPARISONS

Since 2017, the overall quality of bridges in Wisconsin has consistently exceeded the national average, and as of 2024, 51.0% of the state's bridges were rated in good condition, compared to 44.1% nationwide. This trend has remained steady over time, underscoring Wisconsin's relatively strong performance in maintaining its bridges.

Both the United States and Wisconsin have made modest but steady progress in reducing the share of bridges rated in poor condition. In 2017, the quality of approximately 7.8% of bridges both nationwide and in Wisconsin were deemed poor, a figure that dropped to 6.6% nationally and 6.8% in Wisconsin by 2024.

CONCLUSION

Much as [state highways](#) are [generally in better condition than local roads](#) in Wisconsin, bridges on local roads are often in worse shape than those on state highways. While local bridges typically carry fewer vehicles each day than those on state highways, they still represent important links in the state's transportation system and

overall economy. Thankfully, the vast majority of bridges in Wisconsin are in good or fair condition regardless of who owns them, with only a small percentage in such poor condition that they need to be closed or posted with weight restrictions.

However, maintaining and upgrading local bridges to keep them in good condition can be costly. As our previous research has shown, [local governments have faced budget constraints](#) from state limits on local property taxes and state aid payments. The Legislature and Gov. Tony Evers have increased a form of state aid known as shared revenue, particularly to [towns and other small communities](#). However, the boost in aid varied widely by community and increases in local property taxes used for operations remain capped at the rate of

new construction, limiting both maintenance spending on existing bridges and cash financing for upgrades. As a result, some local governments have turned to other funding sources for transportation such as local [vehicle registration fees](#) and [transportation utility fees](#), with utility fees facing legal setbacks in court.

While there are [state and federal resources](#) dedicated specifically to local bridges, our [research has also shown](#) the state's transportation fund is being stretched thin, resulting over time in a prioritization of the state highway system over local roads. Recent state budgets have tried to make up for that by approving substantial investments in local projects including bridges, with more than \$100 million in supplemental state funds available in each of the past [four budgets](#). However, continuing these investments may not be possible without changes to the state's transportation revenues or spending in other areas.

The recent increases in shared revenue and state transportation aid may help communities to fund local bridge projects going forward. Many local communities, however, may continue to find it difficult to finance major bridge projects without running up against state limits to property tax increases. Ultimately, state and local leaders will have to decide how much they're willing to tax and spend in service of maintaining high-quality bridges on interstates and rural roads.

