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Taking the weight

By Joseph Hopper, Daily Reporter Staff



One of the many pony truss bridges that exist across rural Clay County.

A look at the state of rural bridges in Clay County

A recent report published by the non-profit research group TRIP, entitled: Rural Connections: Challenges and Opportunities in America's Heartland, evaluated rural roads and bridges across the nation, and listed the state of Iowa in a three-way tie with Rhode Island and Pennsylvania with the highest percentage of structurally deficient rural bridges at 22 percent.

"Deficient is a term ... used in the past to determine whether federal funding can be used to fund or repair a bridge. An indicator that things are starting to happen to say, 'You could spend money on it if you want to,'" said Scott Neubauer, bridge maintenance and inspection engineer at the lowa Department of Transportation. "Structural deficiency isn't used for funding like it used to be anymore. It's a term that they still want us to use for asset management purposes. We need to keep the number of deficient bridges at our national highway system under a certain number. ... Right now lowa is below the threshold."

Most bridges that are currently labeled "structurally deficient" or otherwise in Clay County are typically old, and the Clay County Engineer's office notes that bridges that fall under that category are then scheduled to be replaced.

"There's a couple ways they rank or classify bridges.
'Structurally deficient' is one of them and 'functionally obsolete' is another one. Both of those don't necessarily mean that (they're dangerous). Most of the bridges we have in Clay County that are classified as one of those two are old truss bridges, like the Thunder Bridge in west Spencer," said Mark Thompson, assistant to the Clay County engineer.

He continued, "It doesn't mean that they're dangerous, just that they're old, mostly made of steel, they're narrow, they don't carry a lot of weight and are posted (with a weight limit). If you follow the postings you should be good. We have some smaller bridges that way as well, pony truss bridges, probably a dozen in the county, (around) 100 years old as well. ... We are

working on replacing them. As far as Clay County, I would say we're really in decent shape. I think most of our bridges — other than those really old ones — we've been knocking a few out every year. ... Smaller (bridges) like those pony truss bridges, can be replaced with box culverts. They're fairly easy to remove. We don't have any (bridges) that are shutdown, anything like that. To me, I don't think our bridges are in bad shape at all."

Neubauer echoed the sentiment, stating that out of the differing areas of lowa, northwest lowa was in possibly the best shape in the entire state.

"Northwest Iowa is probably one of the best, or best area for fewest deficient bridges. Our southern counties seem to be the ones with the most problems with deficient bridges, and it's probably just population, income levels and things (like) that. Northwest Iowa has better farm ground so they take in better revenue to maintain their structures than maybe some of the southern counties," Neubauer said. "We've been cutting down our number of deficient bridges for 10 to 12 years now. For locals, I can't really say what their strategies are. They know where their traffic is, ... they're very aware of their needs and do a good job and take care of what's needed."

Neubauer also clarified that there is a clear distinction between a bridge being labeled "structurally deficient" and having the potential for danger.

"(Structurally deficient) doesn't mean necessarily dangerous or unsafe at all. ... We don't leave an unsafe bridge open to traffic, there is a definite distinction in those two things," Neubauer said.

In TRIP's study, while Iowa is tied for first for the highest percentage of structurally deficient rural bridges, the state of California is outside of the top 25. Neubauer shared that while California does have fewer structurally deficient bridges than Iowa, comparing state's infrastructures can be difficult, and that problems that face different states may be quite different.

"(It's) hard to compare (different states). I know I can compare states by the size of the bridges that are deficient in Iowa. California has fewer deficient bridges than Iowa, but the size (of their bridges) is five times bigger and their traffic is a lot more higher. They have a lot more expensive problems than we do in Iowa," Neubauer said.

While Neubauer and Thompson both agreed that the state of bridges in northwest lowa is currently in a good place and that work is being done to stay on top of structurally deficient bridges, Neubauer explained that funding will need to keep up with infrastructure improvements into the future, in order to ensure that new bridges are being built and replacing older ones.

"There's going to be a point where things may take a turn again. We're not getting increases in funding every year anymore, and inflation is eating at what we're spending too. At some point inflation will eat up our budgets too, so it's really hard to say what the next 10 to 20 years are going to be like," Neubauer said.