

## PolicyPennings by Daryll E. Ray &amp; Harwood D. Schaffer

## A large number of rural bridges are your great grandparents' bridges

"I've got an old mule and her name is Sal, Fifteen years on the Erie Canal. She's a good old worker and a good old pal, Fifteen years on the Erie Canal." When we learned that song in grade school, we had no idea that it was talking about early agricultural policy in the US; it was just fun to sing.

It turns out that much of early agricultural policy was what is known as developmental policy. One element of those developmental policies was public actions that lowered the cost of inputs—in this case transportation. While the Erie Canal was built for more than agriculture, it had a direct impact on farms that had developed along the Great Lakes. With the opening of the canal, farmers could afford to ship their products into the lucrative New York City market. Soon we saw the digging of the Ohio and Erie Canal the Pennsylvania and Ohio Canal and the Miami and Erie Canal—among others—with public support.

With the civil war raging, the US Congress adopted plans to link the states of the east with California, opening up vast agricultural lands with easy access to eastern markets. In the early 20th century, we saw the development of the US highway system that converted muddy tracks to well-paved roads that were later linked to farms with the construction of farm-to-market roads, reducing the cost of delivering agricultural products to various consumers.

This history of a century-and-a-half of investment in transportation infrastructure came to mind when we read a recent Associate Press article by Scott McFetridge in which he (<http://tinyurl.com/nqghbu4>) described the problems with rural roads and bridges across the US. In both rural and urban areas the issue of bridge decay is serious but with less traffic, rural bridges are less likely to rank high on the project lists of state and county highway departments.

"There's only so much money, so you need to prioritize," David Carroll, engineer for Warren County, just south of Des Moines [Iowa], said of the roads and bridges built decades ago. "We're living off our grandparents and great-grandparents right now." As a result Warren County has had to close 20 bridges with more to come.

McFetridge tells the story of the impact of one of these bridge closures on a farm family. "Duane Ohnemus and his wife, Mary Jo, raise cattle, corn and soybeans on 1,500 acres their family has owned for more than a century. But they are having trouble just getting around their land because of the closure of one small bridge and load limits on others.

"Ohnemus must take a 4-mile detour to check on cattle or take equipment to his crops. And since the bridge closed, the remaining dirt road has not been

maintained. The weight limits mean he's tempting fate whenever he rumbles across other bridges in his three-quarter-ton pickup. When moving his tractor or combine, he has to choose routes carefully.

"They need to come up with some sort of alternative," Ohnemus said. "You can't hardly run a business."

A Google search of news articles about rural bridge closures points to problems in places from coast to coast, from Washington state through Nebraska and New York to Maine and then south to Louisiana. Tight budgets are creating a backlog of work on roads and bridges.

An examination of a spreadsheet of deficient bridges compiled by the US Department of Transportation (DOT) (<http://tinyurl.com/ovvjkzq>) shows that 145,890 of the country's 610,749 bridges are structurally deficient or functionally obsolete. According to National Bridges (<http://tinyurl.com/pl3o7qv>), "Structurally Deficient is a status used to describe a bridge that has one or more structural defects that require attention. This status does not indicate the severity of the defect but rather that a defect is present. Please see the Structural Evaluation and the Condition ratings of each bridge Deck, Substructure, and Superstructure for details of the nature and severity of the defect(s)."

"Functionally Obsolete is a status used to describe a bridge that is no longer by design functionally adequate for its task. Reasons for this status include that the bridge doesn't have enough lanes to accommodate the traffic flow, it may be a drawbridge on a congested highway, or it may not have space for emergency shoulders. Functionally Obsolete does not communicate anything of a structural nature. A Functionally Obsolete bridge may be perfectly safe and structurally sound, but may be the source of traffic jams or may not have a high enough clearance to allow an oversized vehicle."

Of the 145,890 bridges that are in one of these two categories, 30,049 are a part of the national highway system which "includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility." That would leave out most rural bridges and some urban bridges that are the responsibility of municipalities.

While farmers currently have other things to be concerned about like low crop prices, the condition of their bridges ought to be on their radar. While we are currently experiencing a political climate in which many are trying to shrink governmental budgets, ignoring the cost of maintaining and upgrading the country's roads and bridges, including those in rural areas, may end up being costly in the long run.

One of the advantages that US farmers have in getting their products to international markets is a superior infrastructure, including railroads, waterways, and rural roads and bridges. It would be a shame to allow a system of roads and bridges built by our grandparents and great-grandparents fall into disrepair, increasing the cost that farmers have to bear in getting their products to market.

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