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

## Deteriorating roads and bridges affects one and all

"A woman is driving down the highway when, 'BLAM,' out of nowhere a chunk of concrete falls from a bridge onto her car almost killing her." It sounds like a television ad for an insurance company, except that it is not. It happened underneath the Capital Beltway in Maryland. Katherine Dean, running a couple of errands, almost became a casualty of the decaying road and bridge infrastructure in the US.

It could be argued that in many ways rural residents are more dependent upon a good transportation system than urban residents. Those living in urban areas, with a walk or relatively short drive, can buy groceries, shop for other items, be entertained, and access medical care. Unless they have family to visit or want to take a hike, many urban residents have little need to use rural roads beyond the interstate highways that traverse the rural landscape. At the same time they do depend upon rural roads and highways to bring them the foodstuffs that are produced in rural areas.

The opposite cannot be said for rural residents who are sparsely scattered across a much larger landscape. The nearest grocery store and church may be 10 or more miles away while a primary health care facility is often much further away. While many urban residents seldom drive down rural roads, rural residents often go to urban centers to make larger purchases, visit family, and access tertiary referral hospitals for cardiac care and cancer treatment.

As a result both rural and urban residents are dependent upon a robust, state-or-the-art transportation infrastructure. While that quality of transportation infrastructure was once in place, the American Society of Civil Engineers (ASCE) issued a Report Card in 2013 on America's Infrastructure giving the nation a grade of D+ (http://tinyurl.com/c796yj). If our children brought home a grade card like that, we would not tolerate it and yet we continue to underfund the repair and growth of our basic infrastructure, including roads and bridges.

Roads and bridges "in poor condition lead to increases in operating costs for trucks [and] cars.... Additional costs include damage to vehicles from deteriorated roadway surfaces, imposition of both additional miles traveled, time expended to avoid unusable or heavily congested roadways or due to the breakdown of transit vehicles, and the added cost of repairing facilities after they have deteriorated as opposed to preserving them in good condition."

There is the time that is lost as vehicles creep along on congested highways during rush hour and have to drive more slowly due to the condition of the pavement. This imposes a cost on individual travelers as well as freight vehicles, increasing the cost of freight

deliveries. Congestion due to deficiencies in transportation infrastructure also results in higher fuel costs, thus higher per mile costs to operate these vehicles.

While the costs of the deficiencies in roads and bridges in 2010 were nearly \$130 billion, by 2020 it is estimated that they will increase to \$210 billion per year at the end of the decade. In addition there are the human costs. In an article in the New York Times, "Human cost rises as old bridges, dams and roads go unrepaired," Ron Nixon writes, "The federal Department of Transportation estimates that obsolete road designs and poor road conditions are a factor in about 14,000 highway deaths each year. Research by Ted Miller, a senior research scientist at the Pacific Institute for Research and Evaluation, which receives financing from the Transportation Department, put the medical cost of highway injuries from poor road conditions at \$11.4 billion for 2013, [which is] the latest data available" (http://tinyurl.com/nph6svn).

To begin to overcome these problems and problems with other parts of our national infrastructure like municipal water systems, pipelines, railroads, and schools, the ASCE estimates that \$3.6 trillion in investment is needed by 2020. They argue that investment in infrastructure not only will reduce the costs we now bear, it will spur economic development that will increase US gross domestic product as well as average household income.

We are not in the classic "pay me now or pay me later" situation. Instead we are facing a "pay me now or pay me now" conundrum. We are already paying the costs of deferred maintenance of our public infrastructure. The longer we go without doing something, the higher the costs will be. Much of infrastructure, including roads, bridges, and dams were built with a 50 year expected lifespan. Much of the interstate highway system is hitting that point with many dams well beyond that point.

As we write this column, Congress is in the process of working on a transportation bill that will put some certainty into the system, though the funding level is not adequate to meet the transportation needs identified in the ASCE report card. An additional problem with the legislation is that Congress has been unwilling to act on the need to establish a long-term funding mechanism that will provide the full funding needed to make real improvements.

Without full funding, the problems with rural infrastructure that we talked about in the previous column (http://tinyurl.com/poe4nla) will remain unaddressed as funds are directed toward roads and bridges that have higher daily traffic counts than many rural roads and bridges experience in a month. If farmers

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and rural residents are to receive the kinds of roads and bridges they deserve and yearn for, they will need to support higher federal transportation spending than Congress is willing to consider today.

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