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Mike Walden: How do we pay for infrastructure?

Mike Walden/North Carolina Cooperative Extension

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The latest statistics show some challenges for North Carolina's transportation infrastructure. More than 60 percent of the urban interstate roads in the state are considered to be congested, and 30 percent of the state's bridges are reported to be deficient. Both of these rates are higher than the national averages.

Part of the reason is that North Carolina is a growing state; indeed, we are adding people at a rate faster than the rest of the nation. Also, the most rapid population growth is in the already highly populated metropolitan areas of the state. When more people are packed into the same space, roads get more congested and suffer more wear and tear.

There are private costs to an overly strained infrastructure system. If you and I sit in a traffic jam going nowhere, we're using time that could better be spent some other way – sleeping, helping children get ready for school or working. We're also burning gasoline and going nowhere. And of course, if we hit a pothole, who knows what damage will be done. Studies suggest all this costs the average car-owning household $1,700 a year in wasted time and money.

A lack of sufficient infrastructure can also cost a region income in another way. The movement of people from home to work and the movement of many inputs and final products – and even services – require the use of roads and bridges. Indeed, when a firm is considering moving to an area, the extent and quality of the local infrastructure is a major factor on its checklist. So insufficient infrastructure can lead to a lack of jobs and income-earning opportunities.

But here’s the main question: How do we fund infrastructure?

For almost eight decades, roads and bridges have been built and financed mainly as government projects. In North Carolina, the state government takes the lead. Traditionally, the problem with private funding has been the inability to easily restrict usage only to those that pay. In the “old days” this meant erecting barriers (gates) at road and bridge entry points. Can you imagine stopping, paying a toll and then re-starting every time you changed roads?

The typical process for the state to build or upgrade a road or bridge has been to borrow money from investors and repay the debt with funds collected from gas taxes and other vehicle-related fees. That way the road or bridge could be built today and then paid for by current and future drivers.

But this model has fallen apart with increasing resistance to gas taxes. Over time, gas-tax rates (which are applied to gallons bought) have to rise to keep pace with inflation. But, understandably, drivers became very sensitive to gas-tax rates, especially when the price of gasoline was constantly rising. Plus, fuel efficiency has been increasing, meaning drivers can use more road mileage from each gallon of gas. So the gas tax has not been getting the job done.

This is why the North Carolina Department of Transportation’s new road plan – just recently released – talks about public-private partnerships to help meet the state’s future infrastructure needs. Such partnerships have been used in other states, and there have even been some cases here in North Carolina.

The typical plan is for the state to pay for a portion of an infrastructure project in the normal way, using bonds and then gas taxes or other fees to repay the bonds. The other part of the costs – often a majority – is then financed by a private company. The company may also issue bonds, and those bonds are repaid by earnings the company receives from the project. In the case of a road, these earnings are usually in the form of tolls.

But the tolls aren't the old fashioned "stop, pay and go" tolls. Instead they are electronic tolls, using sensors imbedded in the roadway to record when a driver enters the road and when the driver exits. No stopping is needed.

Many experts think these public-private partnerships are the financing method of the future for infrastructure. They can be applied to roads, bridges and even ports.

Still, toll roads are despised by many drivers. But the question is, can infrastructure be built the old-fashioned way? And if new infrastructure isn't built, do we all pay in some other way? You decide if the old saying, "Pay me now or pay me later," applies.

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