States Apply Innovative Strategies to Meet Transportation Needs

By Sean Slone

America’s infrastructure needs are great. As concerns about federal transportation programs endure, state governments are making strides to address their needs. While major transportation funding packages got much of the attention in 2013, states are implementing numerous strategies to address needs related to bridges, highways, transit and future funding.

America’s Infrastructure Needs

In a January 2014 report to Congress, the U.S. Department of Transportation said between $23 billion and $46 billion more per year would need to be spent at all levels of government to maintain and improve the condition of U.S. bridges and roads. Other estimates say an additional $79 billion is needed annually to improve the roads and an additional $8 billion to tackle what has become a $76 billion backlog of deficient bridges. Transit has a preventive maintenance backlog of $86 billion that is expanding at a rate of $2.5 billion a year, the U.S. DOT report found. This news came just as another report noted that Americans took 10.7 billion trips on public transportation in 2013, the highest ridership in 57 years.

Meeting the numbers to maintain and improve the nation’s infrastructure with some combination of federal, state and local funding likely will prove difficult. The federal Highway Trust Fund, which relies largely on dwindling gas tax revenues, is expected to run out of cash just before the expiration of MAP-21, the 2012 federal surface transportation authorization bill, in September 2014. Members of Congress have not demonstrated much enthusiasm for proposals to raise the gas tax to ensure the fund’s longevity and have, as of April 2014, been unable to reach consensus on other possible solutions.

States have had relatively more success of late, although they continue to rely heavily on federal and other partners. Six states—Maryland, Massachusetts, Pennsylvania, Vermont, Virginia and Wyoming—in 2013 passed significant transportation funding packages that relied on gas tax increases, sales taxes or tax swaps of one kind or another. Beyond the main headlines about those states and their transportation funding packages, however, there are significant examples of states pioneering modern solutions for bridges, roads, transit and transportation funding.

Pennsylvania’s Rapid Bridge Replacement Project

The Keystone State is embarking on a significant effort to address a big chunk of its 4,500 structurally deficient bridges thanks to a 2012 law signed by Gov. Tom Corbett that allows the state to enter into public-private partnerships—called P3s for short—to finance and complete infrastructure projects. As of April 2014, 33 states and Puerto Rico have laws that enable the use of various P3 approaches. Some, but by no means all, of those states have used that authority to complete projects. But Pennsylvania’s Rapid Bridge Replacement Project will be unique, according to Bryan Kendro, director of the Pennsylvania Office of Policy and Public-Private Partnerships.

“All the P3 projects to date in the United States have been single asset or at most two mega-bridge type projects,” he said in a March 2014 telephone interview. “(Here you’re talking about essentially 600 discrete (bridge) projects rolled up into one contract. We’re finding that at every turn we’re charting new territory here.”

The private sector approached Pennsylvania officials with the idea to tackle a bundle of bridges as a P3. The state had demonstrated—and the private sector had seen—something similar could be successful, albeit on a much smaller scale.

“We had three county pilots that we started early on in Gov. Tom Corbett’s administration,” said Kendro. “(We bundled) five, six, seven bridges in a region, a combination of state bridges and local...
bundling in the pilots produced significant cost savings during the design phase and is now producing significant savings in construction.

“We’re confident that in most cases those savings will be greater than 20 percent,” said Kendro.

The Pennsylvania Department of Transportation issued a Request for Qualifications, which resulted in a short list of five design teams that will submit proposals by September 2014. The team with the winning proposal will enter into a public-private transportation partnership agreement with the state to develop, design, build, finance and maintain the project in exchange for periodic availability payments from the state over an anticipated term of between 25 and 35 years. Availability payments are used in some P3s by the public sector to compensate a private partner for performance on infrastructure projects that are not expected to generate direct revenue from sources such as tolling.

The Rapid Bridge Replacement Project is also somewhat unique for what the private sector is being asked to bring to the table.

“Frankly, with a $2 million bridge, we’re not looking for a ton of innovation in the design and construction (from the private sector),” said Kendro.

“Where we’re looking for them to bring innovation is more the logistics associated with the project and the prefabrication and the mass production and the standardization of those 600 bridges. It’s more how do they manage the portfolio of projects versus how do they figure out how to build a small, less than 100-foot bridge, which isn’t that difficult.”

With the state planning to tackle as many as 600 bridges under the project over a period of five years, as well as numerous other infrastructure projects made possible by the significant transportation funding package Pennsylvania lawmakers approved in 2013, the public and private sectors will have to work together to ensure the Keystone State doesn’t become known as the Construction Gridlock State in the years ahead.

Ultimately, the P3 approach to Pennsylvania’s bridges is both the only alternative and the last, best hope for improving the ride and ensuring the safety of the traveling public in a timely fashion with significant cost savings.

Despite the potential advantages of the deal, some have expressed wariness about essentially privatizing so many of the state’s bridges. The concerns include things like the possibility of the private sector installing tolls on some of the 600 bridges to try to get a better return on their investment. The length of the contract is another concern.

“Once the government and private contractor sign their 40-year deal, the people of Pennsylvania will have to live under a 40-year monopoly contract that will cost the state money any time it needs to make a change.” Ellen Dannin, a former Penn State law professor and longtime critic of privatization, wrote in a January 2014 piece for the website Truthout. “What will the privatization contract say about adverse action and other contractor rights? Forty years is two generations, and there likely will be many unanticipated situations the contract does not cover. For example, how will developments in transportation technology affect the bridges?”

But state transportation officials continue to believe the project will reap benefits for motorists, taxpayers, the private sector and Pennsylvania’s economy in the years ahead.

**Florida’s Tolling Program**

Shortly after Ananth Prasad became Florida’s secretary of transportation in 2011, he announced the state would rely more heavily on tolls in the future because the gas tax as a revenue source was no longer sustainable and couldn’t be counted on to provide the dollars necessary to improve the state’s infrastructure.

During Prasad’s tenure, the state has focused on adding tolled express lanes to increase capacity on major urban highways in places like Miami, Fort Lauderdale, Palm Beach, Jacksonville and Orlando. “The commuters and our residents have an option,” Prasad said in a February 2014 interview. “They can use the general purpose lanes, which will continue to be toll free, or if they’re running late and they want to catch a flight or a doctor’s appointment or pick up their kid, they can get on an express lane, where we use a toll as a way to manage capacity. So if the general purpose lanes on I-95 are congested, then we use tolls as a way to discourage more people jumping in.”

Prasad said the state has been pleased with how the managed lanes approach has worked out.

“The first project that was on I-95 in Miami-Dade County has been very successful,” he said. “It not only has provided a reliable choice for commuters—they make a time-value decision—it also
helps relieve some congestion on our general purpose lanes. And the big thing is, as a result of those express lanes, we now have revenue to not only upkeep the existing facility, but also continue to invest in other infrastructure in the county where those tolls are collected.”

As the state moves forward to try to duplicate that success with express lanes on other facilities, transportation planners must guard against putting a significant burden on its residents and visitors, Prasad said.

“You have to be mindful of that, but that’s why our policy has been we will not toll any existing toll-free lanes on the interstate,” he said. “We will not convert them to toll because if you start converting them, I think then you will have a bigger public policy issue.”

Current federal law generally prohibits the imposition of tolls on existing federal aid highways, although some exceptions have been carved out for special pilot programs. Some people around the country have expressed hope that Congress will one day lift that prohibition, perhaps as part of the next federal surface transportation authorization legislation, and give states greater flexibility to toll existing interstate lanes should they choose. But Prasad said that wouldn’t necessarily mean more tolling for Florida.

“In Florida, Gov. (Rick) Scott’s guiding principle is, ‘We don’t want to raise the cost of living for Floridians,’” he said. “We don’t want to convert an existing free lane to a toll facility. ... Now, if it makes sense for some other state to do it and they do the public outreach and the residents of that state (embrace) that idea, then I think that’s democracy and let them handle that.”

A number of states could follow Florida’s footsteps to develop tolling as a transportation funding and mobility option in the years ahead. Wisconsin is among them. With the state facing a funding shortfall and little agreement about any other funding source that could be more sustainable than the gas tax, lawmakers on both sides of the aisle in the state assembly cited tolling as a possibility during the 2014 legislative session. Wisconsin has mostly borrowed money in recent years to fund road work. State officials say raising fees for driver’s licenses, license plates and registration, putting a sales tax on gasoline and other strategies won’t bring in nearly enough revenue to make an impact.

“If both political parties say it’s time for tolls, I would much rather have people pay for a system that they use,” said Assembly Speaker Robin Vos, a Republican.

“Everybody pays their fair share, whether you’re an electric car, a gas-operated car, a truck or a bus,” said Minority Leader Rep. Peter Barca, a Democrat. “The only way we’re going to have efficient, strong infrastructure in Wisconsin is if the users pay for it.”

Not everyone is a fan of the idea, however. Hayes Framme, a spokesman for the Alliance for Toll-Free Interstates, wrote in a February 2014 op-ed for the Milwaukee Journal-Sentinel that Wisconsin’s consideration of toll roads is just a distraction.

“Wisconsin is facing a significant challenge with funding transportation infrastructure, as are many other states,” he wrote. “A reasonable, efficient solution will require creativity and innovation from legislators. But tolling existing interstate lanes is too costly, too harmful to businesses and consumers and too philosophically objectionable to be the right path forward. The Wisconsin Legislature needs to steer the dialogue back toward viable solutions and ensure that Wisconsin interstates remain toll-free.”

Managed lanes like the ones in Florida have been implemented in a number of urban areas around the country, including San Francisco, Los Angeles, Atlanta and the Washington, D.C., area. Some have expressed concern that the 495 Express Lanes in northern Virginia have not proved to be as successful as hoped. While the number of motorists using the lanes and the amount of toll revenues have both shown steady growth since the lanes opened to traffic in 2012, both figures fell below the projections of the private sector firm that paid three-quarters of the cost to build the lanes—the Australian conglomerate Transurban. Although a $51 million loss on the corridor in 2013 didn’t faze company officials, that number can’t look very good to investors. Transurban is slated to receive the bulk of toll revenue from the express lanes for the next 70 years under its contract with Virginia.

Of course, every project and, indeed, every state is different and in each case it will be important for policymakers to closely examine whether tolling and express lanes can be a workable solution.

Minnesota Transit Investment Expected to Pay Dividends

A new transit light rail line was scheduled to open in the Twin Cities in the summer of 2014. The Green Line will transport riders along an 11-mile track between downtown St. Paul and downtown St. Paul.
Minneapolis. At a cost of $957 million paid for with a combination of federal, state and local funds, the
Green Line is the state’s largest single public works project and is expected to one day provide more
than 40,000 weekday rides for residents.

According to the Metropolitan Council, the regional planning agency and transit operator, the project has brought with it significant economic development and will create even more in the years ahead. The council reported more than $1.7 billion in private development already has taken place along the light rail line with more than 10 projects built, under construction or in the planning phase. Through November 2013, more than 5,400 construction jobs had been created to complete work on the project and by 2030, 90,000 jobs are projected to be created as a result of the project.17

While the Green Line will help meet a need in the Twin Cities, the state of Minnesota has plenty of other transit needs. In 2013, the national transportation research group TRIP identified the state’s top surface transportation challenges, including “transit routes or facilities that do not provide adequate mobility because they are overcrowded, deficient or underfunded.” An additional $171 to $181 million annually is needed to address Minnesota’s public transit challenges, the group said.18

The need for more transit investment was one of the topics at a series of December 2013 town hall meetings led by Minnesota Department of Transportation Commissioner Charles Zelle and Metropolitan Council Chair Susan Haigh.

“As one (town hall) participant told us, his bus route only runs until 6 p.m.,” Haigh said in a speech in January. “For him, that means he is unable to take on special projects and late hours that might help him earn extra income for his family. Transit expansion is clearly linked to his economic success.”19

Haigh said that’s one reason expansion of bus rapid transit will be another focus in the region in the coming years.

“(Bus rapid transit) offers safer and more comfortable stations, frequent all-day service, faster rides and easier bus boarding at a fraction of the cost of light rail,” she said. “It is simply a more equitable service throughout parts of our region that already have a high demand for regular route buses.”

In 2013, Gov. Mark Dayton proposed, and the state senate passed, a half-cent transit sales tax for the Twin Cities that ultimately failed in the House.20 Haigh said such a tax could make many things possible.

“We could further expand transit routes and service hours, catalyze new development, and create equity and more financial stability for low-income communities,” she said.21

Zelle said more transit is necessary to serve an expanding population that is demanding transportation options.

“We’ll accommodate the extra million people coming into our area through build-out of our transit system,” he said in a January 2014 interview with the Civic Caucus. “It’s not (light-rail transit) vs. (bus rapid transit) vs. arterial streets vs. buses vs. streetcars vs. bikes. You need all of them together. In a high-density corridor, (light-rail transit) is the proper investment. But it may not be the solution in another corridor, which might call more for (bus rapid transit). We need road investment along with transit investment, not one or the other. We must plan for growth, because there will be one million more people in the metro area. If we don’t, businesses will move out and people won’t live here. The market will take care of itself.”22

Minnesota isn’t alone in focusing on transit investment and how to fund it. In early 2014, Utah lawmakers were considering legislation to allow counties and cities to let voters decide whether to increase the sales tax for mass transit by a quarter-cent for every $1 purchase.23 A measure pending in the Indiana legislature would allow five counties to raise individual income taxes with voter approval to fund more buses and bus routes.24

Such voter-dependent initiatives have seen success in other states. In 2004, for example, voters in Phoenix approved a 20-year, half-cent transportation sales tax that would help fund a plan to add 57 miles of high-capacity transit. A 20-mile light rail starter line opened in December 2008 serving the cities of Phoenix, Tempe and Mesa.25

Oregon’s Mileage-Based Road Usage Charge Program

In 1919, Oregon became the first state to adopt a gas tax. Ninety-four years later, in the summer of 2013, Oregon took another step toward exploring a funding mechanism that could one day replace the gas tax—a mileage-based road usage charge.

Oregon lawmakers approved Senate Bill 810, authorizing a program under which up to 5,000 vehicle owners will pay a 1.5 cents per-mile road use charge and receive a refund of the state gas tax beginning in 2015. The legislation followed more than a decade during which Oregon transportation officials explored the concept in a series of
smaller pilot projects. The state’s first pilot project in 2006–07 required those participating to have a GPS device in their cars to track mileage and to pay at the gas pump for the mileage they drove. While the test was successful, some had concerns about how the use of GPS would impact privacy and about the cost of equipping vehicles and fueling stations with the necessary equipment.

Those concerns led to a redesign of the concept into a system that would allow those participating to be able to choose the level of technology with which they were comfortable.

The new thinking took shape in the Road Usage Charge Pilot Project, which ran from November 2012 through February 2013. Forty-four volunteer participants, including eight state legislators, took part in the pilot. They were allowed to select between two service providers—the private sector firm Sanef and the Oregon Department of Transportation—and to select how the mileage fee would be collected from them. Those who were more technology-averse could pay a flat rate for maximum mileage. The greater the level of technology involved, the more specific the data collection could be and thus the more precise the fees collected.

Now with the 2013 legislation in place, the state has the opportunity to do a demonstration on an even larger scale.

James Whitty, who directs the mileage fee program for the Oregon Department of Transportation, said the state’s activities have attracted the attention of other states, some of which have come on board as partners in the experiment. Oregon has formed a group with Washington—the Western Road Usage Charge Consortium for Western states; seven states have agreed to put money into the system and work together. “All of the states know that they have to do something because the gas tax is failing, and they’re hoping that Oregon’s per-mile charge is the way to go,” Whitty said in a January 2014 interview with the Reason Foundation’s Leonard Gilroy.

But Whitty noted Oregon has faced challenges along the way and policymakers in other states are likely to hear similar arguments.

“Anyone who just jumps out on this issue without doing their homework learns quickly the public tends to react quickly and negatively toward the idea, largely because they are apprehensive about the idea of government tracking them,” he said. “Once we demonstrated that the government wouldn’t be tracking them and that they had choices to avoid anything like that, then it calmed everything down.”

Whitty and his team were able to assuage initial privacy concerns expressed by the American Civil Liberties Union about Senate Bill 810 by including a provision to destroy mileage and location data about participants in a 30-day timeframe.

While many believe the mileage fee concept could one day be employed at the federal level as a replacement for the gas tax, Oregon officials say it initially will be up to the states to make the strides necessary to move the concept forward, ideally with the interest and support of the federal government.

“We must allow the states to continue to innovate,” Matt Garrett, director of the Oregon Department of Transportation, said at a July 2013 CSG policy academy. “We are where things happen. We are where creativity happens. ... Allow those states that are looking at funding mechanisms that transition from the gas tax to a new way to invest in transportation infrastructure. Help us pay for that. Put a little skin in the game. But allow the laboratories of the state to develop and tailor those opportunities.”

Notes

4 U.S. Department of Transportation.
10 Telephone interview with Ananth Prasad. February 27, 2014.
21 Haigh.

About the Author

Sean Slone is the program manager for transportation policy at The Council of State Governments. He staffs CSG’s Transportation Public Policy Committee and writes about transportation policy for CSG publications, such as Capitol Ideas magazine, the Capitol Comments blog and Capitol Research policy materials. He is the author of two CSG national reports: Transportation and Infrastructure Finance (2009) and Shovel-Ready or Not? State Stimulus Successes on the Road to Recovery (2010). His work also appeared in the 2010, 2011, 2012 and 2013 volumes of The Book of the States.