Can Public–Private Partnerships Fill the Transportation Funding Gap?

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Abstract: Given tight federal budget restraints and shrinking transportation trust fund revenues, states and the federal government need to find alternative financial resources to finance needed transportation infrastructure projects, especially maintaining and expanding the capacity of the Interstate Highway System. Increased use of public–private partnership contracts (P3s) promises to help finance some of the needed infrastructure projects, but the federal government needs to allow states more freedom to use P3s, and states need to adopt the policies and practices needed to use P3s effectively. P3s are not the solution to every transportation infrastructure challenge, but they can be used to address some of the challenges.

The House of Representatives and the Senate are working to complete the legislative language for their respective highway reauthorization plans. Proposals circulating in the House and Senate indicate that Congress could exercise some degree of restraint in federal transportation spending compared with earlier proposals and the President’s exceptionally generous plan of February 2011.1

As a consequence, federal, state, and local transportation programs may need to find alternative financial resources just to maintain current levels of inflation-adjusted spending. Under the right circumstances, public–private partnerships could play a targeted role.

Talking Points

- Limited growth in federal fuel tax revenues has left the highway trust fund in deficit and dependent on general revenue supplements to meet commitments.
- With little political support for raising the federal fuel tax, surface transportation advocates are searching for non-tax sources of revenues to address funding shortfalls.
- Public–private partnership contracts (P3s) offer the promise of providing additional funds by attracting money from private investors.
- In recent years, P3s have been implemented in several states and have raised hundreds of millions of dollars for surface transportation investments, most notably in the $2 billion Capital Beltway HOT lane project now nearing completion.
- While P3s can be a promising approach for generating additional funds for transportation investments, experience indicates that they are a valuable tool, not a panacea. Only a fraction of the transportation projects under consideration would be suitable for the P3 approach.
Innovative Opportunities

To shrink the financial gap between wishes and reality, many have proposed that governments seek to negotiate public–private partnership contracts (P3s) with infrastructure investors and developers. These complex and carefully drafted agreements allow governments to leverage scarce public funds with private capital for major transportation projects. However, while P3s have demonstrated the ability to raise substantial sums of money for major infrastructure projects—especially those that add needed capacity in congested corridors—experience demonstrates that they can be complicated and time-consuming to create and that not every transportation project is amenable to the P3 approach.

For the most part, the quest for alternative financing sources is driven by public opposition to raising state and federal fuel taxes. The last time the federal fuel tax was increased was in 1993. The federal excise tax is currently 18.3 cents per gallon and is the major source of revenue for the highway trust fund. Much higher fuel efficiencies mean lower gas tax proceeds and a shrinking trust fund.

The disparity between transportation spending needs and wants as defined by congressional transportation committees, the Obama Administration, and the program’s stakeholders is growing as shrinking trust fund revenues limit future investment. Under the circumstances, a non-tax alternative procurement approach based on private-sector involvement using tolls and other types of user fees would fill part of the yawning gap.

Options Under Review

A number of states have expressed interest in placing tolls on their free interstate highways, which are state-owned assets. While such proposals arouse considerable controversy, governments clearly need to find some source of funding in the coming years to rebuild the aging road network that has fostered U.S. economic productivity for the past 50 years. The federal government is steadily back- ing away from this responsibility, but it still restricts states’ options for financing the modernization of their own roads. If Washington is not going to be part of the transportation solution, it should simply get out of the way and let states find their own ways forward.

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Among the many non-tax options under review by many states is greater reliance on public–private partnerships, an arrangement in which private investors, construction companies, and developers join with state or federal government agencies to combine their experience, expertise, and funding sources to build and operate major transportation projects. These arrangements can come in many forms, and the examples that follow are indicative of the several transportation P3s already underway or completed.

P3 Successes in Virginia and Texas

In the Virginia suburbs of Washington, D.C., a $2 billion project is adding 14 miles of four high-occupancy toll (HOT) lanes in the median of the Capital Beltway from the Springfield Interchange of I-95, I-395, and I-495 to the Dulles Toll Road exit in Fairfax County. Single-occupant cars will be charged variable-rate tolls to pay for the improvements, while carpools and express buses will travel for free.

The partnership between the Virginia Department of Transportation and a private company formed by Transurban (Australia) and Fluor (U.S.) expects to complete the project by 2013. The project is financed by a $409 million grant from the state of Virginia; a $589 million Transportation Infrastructure Finance and Innovation Act (TIFIA) loan from

the U.S. Department of Transportation (USDOT); $589 million in private activity bonds (PABs); and a $350 million equity investment by the joint venture partners. Net revenues after expenses for operations, maintenance, and reserves will be applied first to the PABs and then to the TIFIA loan. Any residual revenue will accrue as profit to the private joint venture partners.

The benefits to Virginia are obvious. For an investment of $409 million, Virginia gets $2 billion worth of new road capacity in one of the nation’s most congested regions. Area motorists will have quicker commutes. Thousands of new construction and engineering jobs will have been created between 2008 and 2013, and more than $280 million of aging infrastructure, including more than 50 bridges and overpasses, will be replaced in the process.

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A second Virginia P3 project will reduce congestion choking the Hampton Roads area by expanding highway and tunnel capacity between Portsmouth and Norfolk. The state recently agreed to contribute $395 million to fund the $1.9 billion project. In exchange, the private developers agreed to put in $318 million in equity and carry $495 million in debt that will be repaid by toll revenues alone.

The Texas Transportation Commission started its P3 program in 2001. During the next seven years, it negotiated three concessions worth $8.15 billion—State Highway 130 between San Antonio and Austin and two HOT lane projects in the Dallas–Fort Worth region. The state leveraged its contribution of $990 million in public funds to eight times that much by attracting investment from the private sector.

Growing Support in Congress

To date, all of these projects have been developed and initiated by states, private investors, or a combination of the two, often with federal support, such as TIFIA grants and permission to build on the interstate right-of-way. With federal transportation funding limited by macroeconomic budget concerns, many in Congress are looking to be more proactive. Both the House and Senate reauthorization draft proposals welcome and encourage greater private-sector involvement in transportation investment.

In June 2011, House Committee on Transportation and Infrastructure Chairman Jon Mica (R–FL) released a 22-page summary of his highway reauthorization proposal, which included several provisions that would encourage states to utilize P3s and access other sources of funds to meet their transportation needs. While Chairman Mica has since announced that his committee will issue a new reauthorization plan in early 2012, it is likely that his P3 proposals will be included. Chairman Mica’s earlier P3 proposals included:

2. TIFIA loans are granted on a competitive basis at the discretion of the USDOT. They are often provided on liberal terms and are usually subordinate to other debt assumed for the project. In the case of Virginia’s Beltway project, the TIFIA interest payments are expected to begin in 2018. Loan repayments are scheduled to begin in 2033 and conclude in 2047. The TIFIA loan is structured with five years of capitalized interest during construction followed by five years of partially capitalized interest during ramp-up, 15 years of current interest only, and another 15 years of interest plus principal.


• Allowing states to toll new capacity on the Interstate Highway System;
• Increasing funding for the TIFIA loan program from $122 million per year to $1 billion per year;
• Increasing the maximum percentage of a project's total cost that can be funded through TIFIA from 33 percent to 49 percent;
• Requiring that TIFIA applications be approved or disapproved within 75 days of when the application is filed;
• Allowing states to pay their own credit subsidy cost to obtain a TIFIA loan if the appropriation of $1 billion per year runs out in any particular year;
• Requiring the U.S. Secretary of Transportation to compile and make available the best practices of how states can work with the private sector in developing, financing, constructing, and operating transportation facilities; and
• Requiring the Secretary of Transportation to develop standard model contracts for public–private transactions for the most popular types of P3s. States could then use these contracts as templates when developing contracts for specific projects.

While Chairman Mica’s proposal for greater use of P3s is a great start, Congress should consider other ideas and changes, such as:
• Removing political considerations from the project selection process so that user fee–funded highway projects that involve “innovation” receive equal consideration with transit projects supported by the Obama Administration, and
• Revisiting the provision to allow states to subsidize TIFIA loans that exceed the $1 billion dollar limit because this provision could open the door to a run on banks.

As for the proposal that the federal government should offer guidance on and standardization of P3s, whenever the federal government begins to promulgate policies and manuals, it often ends up managing projects, especially if it has a $1 billion program (i.e., TIFIA) for leverage. Opening the door to federal manuals and standard contracts for these very local, innovative, and evolving deals could kill P3s.

Other Proposals

Moving Ahead for Progress in the 21st Century (MAP 21, or S. 1813), the Senate’s version of the reauthorization, is silent on P3s, but it proposes boosting TIFIA funding to $1 billion per year.

In addition to the House reauthorization proposal that supports P3s, individual Members of Congress have introduced bills to enhance the private sector’s role in transportation infrastructure. Notable in this regard is the Lincoln Legacy Infrastructure Development Act (S. 1300), a bill introduced by Senator Mark Kirk (R–IL) that would provide P3 Challenge Grants, allow for privatizing interstate rest stops, add more interstate tolling pilot projects, increase TIFIA funding, remove the cap on PABs, and reform the airport privatization pilot project program.

Limited P3 Use to Date

While some P3s have succeeded in adding significant road capacity in a number of metropolitan areas in recent years, they remain a minor contributor to overall transportation infrastructure investment. According to a comprehensive 2011 review of P3s prepared for the American Road and Transportation Builders Association:

• Just eight states accounted for almost 75 percent of the total contract value ($54.3 billion) of P3 projects over the past 22 years;
• Only 11 of the P3 projects—totaling $12.4 billion— included a financing component;
• The P3 market share of all highway investment since 2008 is about 2 percent; and
• P3 projects, most of which are tolled express lanes next to existing freeways in heavily congested urban corridors, accounted for 11 percent of capital for new highway capacity under construction in 2011.

Thus, despite the successes beginning with Denver’s E-470 tollway in 1989, P3s are still a minor part of the surface transportation landscape. Opposition to tolling, opposition to private profits from operating public infrastructure, and concern over foreign investment in government assets in the U.S. have generated political opposition in some states. These challenges need to be overcome before the P3 concept can become a significant supplement to taxpayer funding.

As a consequence, policymakers should recognize that P3s are not the solution to the transportation infrastructure investment gap that threatens to undermine commerce in the United States. There are too few financially viable P3 projects to meet the national need for new highway capacity and to modernize existing roads. No amount of enabling legislation will bring private investors into projects that are not financeable, and very few highways could support themselves on tolls alone. Thus, some combination of gas taxes, sales taxes, fees, and appropriations of state funds is necessary to make a creditworthy public–private partnership.

Nonetheless, P3s offer valuable improvements and opportunities for U.S. transportation. P3s are coming to America and will become a growing component of U.S. infrastructure investment.

• The simple fact that contracts are enforceable in the U.S. has created wide interest among international investors in participating in P3s in the U.S.
• P3s can bring substantial expertise in financing, project delivery, and long-term asset management to the delivery of publicly owned infrastructure.

Creating Opportunities for P3s

In contrast to past skepticism in the House and Senate about the P3 concept, renewed congressional interest in and endorsement of new policies and additional resources to facilitate P3 use are welcome changes. Nonetheless, supporting states in developing P3 programs will require significant challenges.

Given these difficulties—more thoroughly discussed in the 2011 review—federal and state governments should take several steps in addition to the proposed increase in TIFIA funding:

• Congress should remove or raise the limit on private activity bond volume for all qualified P3 projects.
• The states should enact the necessary legislation to accommodate P3s. Such legislation should protect taxpayers, encourage private initiative and investment, and provide a common framework for all stages of the process. Recent efforts to enact such laws in New Jersey and New York failed as a result of union opposition.
• State departments of transportation should ensure that the responsible managers and staff are qualified to conclude these complicated deals successfully.
• State governments should adopt policies and practices to ensure that the P3 option is considered at the outset of any planning process for projects over a certain cost rather than perpetuating the current practice of using it as a fallback.
position if everything else fails. For example, Congress could require—as Canada does—that all projects over a certain size that seek federal assistance undergo a formal analysis of the P3 option.

• Congress should carefully review current tolling restrictions on interstate highways, which are owned by the states. No state has yet been willing to toll existing free capacity, despite a federal pilot program that would allow it if the tolls are used to increase capacity. At least three states are considering tolling interstate highways, and many more probably will if other sources of funding are not available to rebuild the system.

Creating an Innovative Future

The leaders of the House and Senate transportation committees should be commended for proposing reauthorization plans that include a greater role for the private sector in surface transportation. The relevant provisions included in the final reauthorization bill need to reflect the lessons learned from projects that have been completed, are underway, or have failed to move forward.

P3s have demonstrated the ability to raise substantial sums of money for major infrastructure projects, especially to add needed capacity in congested corridors. Experience has also demonstrated that P3 projects can be complicated and time-consuming to create and that not every transportation project is amenable to this approach. As a consequence, other innovative and traditional finance solutions will be needed to meet current and future infrastructure spending plans.

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