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Risks and Rewards of Transportation Public-Private Partnerships (P3s), with Lessons from Texas and Indiana

A public-private partnership (P3) is a contractual arrangement between a public agency and a private company for the company to assume substantial responsibility for some or all of the planning, design, financing, construction, operation, and maintenance of a transportation facility. P3s have been used for highways, airports, transit systems, and other types of facilities. Statements by the Trump Administration have indicated that P3s will be an important part of a forthcoming infrastructure initiative.

There are many arrangements P3s can take, but the two most often discussed are the following:

Design-Build-Finance-Operate-Maintain (DBFOM), in which the private sector takes on most facets of constructing, operating, and maintaining a *new* facility, including the up-front costs. The private-sector partner is repaid by facility users through fares or tolls, or by availability payments from a state or local government agency over the life of a contract.

Long-term lease agreements, under which the private party undertakes to run an *existing* facility for a specified amount of time. The private partner pays the public sector a concession fee and agrees to operate and maintain the facility to prescribed standards. In return, the private company typically collects tolls or other user fees to pay debt holders and to generate a return on equity investment.

Risks and Rewards of P3s

There are three main potential benefits of P3s. First, P3s are a way to attract private capital, including foreign capital, to invest in transportation infrastructure. This can be particularly important when public sector budgets are heavily constrained. P3s, therefore, can spur the building of transportation facilities earlier than would be the case if left to the public sector alone.

Second, P3s may be able to build and operate transportation facilities more efficiently than the public sector through better management and innovation in construction, maintenance, and operation. Private companies may be more able to consider the full life-cycle cost of investments, whereas public agency decisions are often tied to short-term budget cycles.

Third, through P3s the public sector can transfer to the private sector partner many of the risks of building, maintaining, and operating transportation infrastructure. One major risk is that construction will cost more and take longer than foreseen. Another is that a facility to be financed by tolls or user charges will have less demand than estimated, and will fail to generate the expected revenue. Transferring these and other risks to the private sector is not necessarily a money saver, as the private partner requires compensation for assuming them, but the risk transfer may provide greater certainty for the public sector.

Concerns with P3s include the types of projects involved, the risks retained by the public sector, and the administrative costs borne by the public sector. Private-sector investors are drawn to projects that have the greatest potential financial returns, adjusted for risk. P3s that are reliant on tolls or other user fees, therefore, are unlikely to be suitable for airports with little patronage or roads that carry relatively little traffic but provide important connections between more heavily traveled segments. However, P3s in these areas can be based on state and local government availability payments.

Although some risks are typically transferred to the private sector in a P3, the public sector may retain significant risk. In some P3s, the public sector retains revenue risk, accepting responsibility to repay creditors if the project fails to generate anticipated revenue. Poorly written contracts, weak private-sector partners, and external events may force the public sector to renegotiate the P3 contract or to assume project ownership. And many transportation P3s involve federal loans through the Transportation Infrastructure Finance and Innovation Act (TIFIA) program that expose federal taxpayers to losses.

P3s typically entail complex and costly legal, financial, and technical issues that require public oversight over the course of a long-term contract. This may require extensive staff time and hiring outside experts.

Lessons from Two P3 Bankruptcies

Many P3s have been successful, but some have not. Among these are two highway DBFOM partnerships—State Highway 130 (Segments 5-6) in Austin, TX, and Interstate 69 (Section 5) in Indiana. These two bankruptcies reveal some of the risks these partnerships pose, but they also highlight some of the rewards the public can receive despite the problems.

Texas State Highway 130

Designed to relieve congestion on Interstate 35, SH-130 is a 90-mile, four-lane toll road on the east side of Austin, TX, connecting I-35 in the north and I-10 in the south. In 2007, the Texas Department of Transportation (TxDOT) entered into an agreement with a concessionaire, the SH 130 Concession Company, to design, build, finance, operate, and maintain a 40-mile extension to the existing 50 miles of SH 130 known as segments 5 and 6. The agreement

specified a 50-year concession from the opening of the new segments, which occurred in 2012.

According to the Federal Highway Administration (FHWA), the $1.3 billion project was primarily financed by the concessionaire with $686 million in senior bank loans, $210 million in private equity, and a $430 million federal loan from the TIFIA program. Interest payments on the TIFIA loan were scheduled to begin in June 2017, with final maturity of the loan in June 2047.

Since opening in 2012, the 40-mile toll road extension has had lower traffic volumes than forecast and, therefore, generated much less revenue than the concessionaire needed in order to service its loans. SH 130 Concession Company filed for Chapter 11 bankruptcy in March 2016. A reorganization plan was approved by the bankruptcy court in May 2017.

Several risks were transferred to the private partner by TxDOT, including demand risk, construction cost risk, and operations and maintenance cost risk. Despite the problems of the original owner, SH-130 was built and in operation much sooner than if the state had relied on its own funding. Moreover, TxDOT received from the concessionaire an upfront payment of $142 million and a revenue-sharing agreement entitling it to 4.65% of gross revenues.

Operation of the toll road was not interrupted by the bankruptcy. However, the condition of the road may have suffered as financial problems mounted. Repairing the road is estimated to cost the new owners about $90 million.

The TIFIA loan was secured by a lien on project revenues, but the lien was subordinate to the bank loans. In bankruptcy, due to a statutory requirement known as the "springing lien," TIFIA debt claimed parity with other creditors. According to the U.S. Department of Transportation (DOT), the SH-130 TIFIA loan was converted to 34% of the new company that will operate the toll road until 2062, a payment to the government of $15 million, and remaining debt of $87 million.

TxDOT has argued that state taxpayers are not at risk due to the way in which the P3 contract was written. There is risk for federal taxpayers, however, because of the federal loan to the project. It is not known at this time whether the federal government will recoup all the money it loaned to the original toll road company. Conceivably, the federal government might receive more money from the sale of its equity stake than it anticipated from repayment of the loan. According to one source, DOT's equity stake in the new toll road company currently could be worth $600 million, more than the original loan. However, the value of DOT's share in the company will be determined by market conditions when DOT attempts to sell. In this case, therefore, the federal government has swapped its loan default risk for market risk. According to reports, DOT will attempt to sell its share in the company when the repair work is complete, which could take a year.

Interstate 69 in Indiana

The intent of the I-69, section 5 project is to upgrade a 21-mile stretch of four-lane highway to Interstate Highway standards as part of a program to extend I-69 in Indiana from Kentucky to Indianapolis. Section 5 is southwest of Indianapolis, from Bloomington and Martinsville. Among the intended improvements are a third lane within urban areas and four new interchanges and overpasses.

The Indiana Finance Authority (IFA) awarded a 35-year DBFOM concession to I-69 Development Partners in February 2014. According to FHWA, the project was to be financed with $244 million in private activity bonds benefiting from a federal income tax preference and $41 million in private equity. The state was to pay $93 million for design, right-of-way acquisition, utility relocation, and environmental mitigation, and four milestone payments to the concessionaire during construction totaling $80 million. The concessionaire was to be repaid by state availability payments over the life of the contract. The 21 new miles of Interstate Highway were to open by October 2016.

The concessionaire experienced numerous problems, including slow construction, unpaid contractors, and bankruptcy of one of the firms in the partnership. The IFA terminated the contract in August 2017 and reimbursed bondholders. At this time, according to reports, the project was two years behind schedule and 60% complete. The IFA will issue new bonds to finance the project, which will now be directly controlled by the Indiana DOT. The new estimated date of completion is August 2018.

The main advantage of the P3 contract was the capital raised by the concessionaire, possibly allowing the project to move ahead more quickly than if the state had pursued traditional financing and delivery methods. The P3 also transferred two main risks to the private developer, construction cost and operations and maintenance cost.

In a P3, the public partner relies on the expertise and financial stability of the concessionaire. Reports have noted, however, that the winning bidder on the I-69 project had little highway experience in the U.S. and underbid others by a significant amount. Presumably the state could have found another private partner to fulfill the obligations of the contract, but this could have delayed the project further and required additional funding from the state. The construction delay has also led to safety concerns, as the pre-existing highway remains open to traffic.

Another lesson is that P3s are not necessarily cheaper for the state. There is typically a price to transferring risks to the private sector. According to the IFA, the state takeover will bring the cost of the entire project, including maintenance, to $560 million, whereas under the P3 the cost would have been $590 million. However, the state now assumes the risk of construction and maintenance cost overruns. The state also has borne the costs associated with establishing and subsequently canceling the P3.

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