Public Private Partnerships (PPPs) in Transportation
NCSL Transportation Standing Committee

Michigan's Experience

Background on Public Private Partnerships

Public Private Partnerships (PPPs) are broadly defined as "contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects." This definition, and additional information on PPPs, can be found on the Federal Highway Administration (FHWA) website: http://www.fhwa.dot.gov/PPP/index.htm.

The FHWA document contrasts PPPs with traditional procurement practices: "Traditionally, private sector participation has been limited to separate planning, design or construction contracts on a fee for service basis – based on the public agency’s specifications." The website further notes that the term public-private partnership is applicable to "any scenario under which the private sector assumes a greater role in the planning, financing, design, construction, operation, and maintenance of a transportation facility compared to traditional procurement methods."

The FHWA website identifies several PPP options for the construction or reconstruction of transportation facilities. ¹

Design-Build – a project delivery method that combines two usually separate services into a single contract. With design-build procurements owners execute a single fixed-fee contract for both architectural/engineering services and construction. The design-build entity may be a single firm, a consortium, joint venture, or other organization assembled for a particular project. ²

Design-Build-Operate (Maintain) – an integrated partnership that combines the design and construction responsibilities of design-build procurements with operations and maintenance. These project components are procured from the private sector in a single contract with financing secured by the public sector.

Design-Build-Finance-Operate (DBFO) – a procurement method in which the responsibilities for designing, building, financing, and operating are bundled together and transferred to private sector partners. One commonality that cuts across all DBFO projects is that they are either partly or wholly financed by debt-leveraging revenue streams dedicated to the project. Direct user fees (tolls) are the most common revenue source. However, others range from lease payments to shadow tolls and vehicle registration fees. Future revenues are leveraged to issue bonds or other debt that provide funds for capital and project development costs. They are also often supplemented by public sector grants in the form of money or contributions in kind, such as right-of-way. In certain cases, private partners may be required to make equity investments as well. ³

¹ The descriptions of PPPs from the FHWA PPP website were modified by the HFA analyst to improve readability.
² The Minnesota Department of Transportation used a design-build procurement for the replacement of the I-35W Bridge over the Mississippi River in Minneapolis. For a description of this project, see “Minneapolis Speedway” from the March 2009 issue of Governing Magazine. http://www.governing.com/topics/mgmt/Minneapolis-Speedway.html
³ The Confederation Bridge linking Prince Edward Island and New Brunswick Canada is an example of a project constructed using a DBFO procurement. See http://en.wikipedia.org/wiki/Confederation_Bridge

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Footnotes:
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3. The Confederation Bridge linking Prince Edward Island and New Brunswick Canada is an example of a project constructed using a DBFO procurement. See http://en.wikipedia.org/wiki/Confederation_Bridge
Background on Public Private Partnerships (cont.)

In addition to the above examples which are primarily associated with the construction or reconstruction activity, PPPs can also involve the transfer of operating and maintenance functions of an existing facility to a contractor. The FHWA website discusses two such PPPs:

*Operations and Maintenance Concessions* – in which public operating agencies utilize operations and maintenance (O&M) concessions to transfer responsibility for asset operation and management to the private sector. Contractors can be paid either on a fixed fee basis or on an incentive basis, where they receive premiums for meeting specified service levels or performance targets.

Operations and maintenance concessions may be used as a means to transfer responsibilities for a single highway facility or a series of facilities. These contracts transfer responsibility for ongoing activities such as snow removal and grass mowing, as well as maintenance and major repairs.

*Long-Term Lease* – This PPP model involves the long term lease of existing, publicly-financed toll facilities to a private sector concessionaire for a prescribed concession period during which the concessionaire has the right to collect tolls on the facility. In exchange, the private partner must operate and maintain the facility and in some cases make improvements to it. The private partner must also pay an upfront concession fee.  

All PPPs share a common feature: As compared to traditional procurement methods all PPPs transfer risk from the public owner of transportation facility to the contractor. For the construction or reconstruction of a transportation facility using traditional procurement methods, the owner determines what needs to be done, and then develops design plans and project specifications which largely define how the project is to be accomplished. The owner awards a contract to the lowest qualified bidder. To the extent that the contractor completes the project according to the design plans and specifications, the contractor's liability is generally limited; the contractor's *contract* liability is generally limited to materials and workmanship.

In a traditional construction procurement (sometimes described as design-bid-build), the contractor is not liable for design errors made by the owner. In a design-build contract, risks of design error are transferred, at least in part, to the contractor. In PPP contracts involving private financing or leveraged financing using tolling, additional financial risks are transferred to the contractor.

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4 Two widely publicized PPP contracts involved the long-term lease of public facilities to private concessionaires in return for concession fee payments. The first was the October 2004 agreement between the city of Chicago and the Skyway Concession Company (SCC) involving a 99-year lease of the 7.8 mile Chicago Skyway. The SCC made an upfront concession payment to the city of $1.83 billion. The SCC took responsibility for all operating and maintenance costs of the facility in exchange for the right to all toll and concession revenue over the life of the lease. A 2006 contract between the state of Indiana and a private investment group involved a 75-year lease of the 167 mile Indiana Tollway. The contract included a concession fee payment to the state of $3.85 billion. A more detailed discussion of these agreements is found on the FHWA website: http://www.fhwa.dot.gov/ipd/pdfs/us_ppp_case_studies_final_report_7-7-07.pdf
PPP Authorizing Legislation
House Bill 4961 (2009-2010 Michigan Legislative Session)

Public Act 286 of 1964 provides for the organization, powers, and duties of the State Transportation Commission and the State Transportation Department, and provides for the appointment, powers and duties of the State Transportation Director.

House Bill 4961, introduced May 19, 2009, would have amended Public Act 286 of 1964 to authorize public-private agreements relating to "researching, planning, studying, designing, developing, financing, acquiring, constructing, charging user fees, operating, or maintaining a public transportation facility, or other arrangements for the creation and operation of public transportation facilities that may be financed by user fees, charges, and other revenue." The bill was specific to the Michigan Department of Transportation (MDOT).

At the time the bill was introduced, the department already had statutory authority to procure some construction contract services through certain PPP procurement methods, including design-build, and design-build-finance. One of the department's first paving design-build contracts was a 1997 contract for the rehabilitation of US-23 from Milan Road in Monroe County to Bemis Road in Washtenaw County.

In 2009, the department used a design-build contract to accelerate the replacement of the 9-Mile Road Bridge over I-75 in Oakland County. The contract value was $11.8 million. The bridge had been destroyed in a July 15, 2009 tanker truck crash and subsequent explosion and fire. The replacement bridge was open to traffic on December 11, 2009.

Previously, in 2008, the department had awarded two pilot design-build-finance contracts: a $38 million project, completed in September 2009 for the reconstruction of I-69 in Lapeer and St Clair counties; and a $7.3 million contract, completed July, 2009, for the replacement of the M-21 bridge over I-75 in Genesee County.

Of the various PPP procurement methods, the department appeared to lack only the statutory authority to enter into a long-term lease using a pledge of toll revenue or certain kinds of design-build-finance contracts involving the pledge of toll revenue. A department presentation on PPPs indicated that "enabling legislation [is] required to move to broader concession-type leases."  

House Bill 4961 passed the House in May 2010, but was not taken up in the Senate. The bill died at the end of the 2009-2010 Session. No general PPP authorizing bills have been offered in the current (2011-2012) legislative session. One bill, House Bill 4262, would specifically prohibit the department from tolling.

Some opponents of House Bill 4961 believed the bill gave MDOT too much authority to enter into PPP agreements and wanted legislative approval of PPP agreements. Other opponents wanted legislative control over the revenue that a potential concession-type PPP contract would generate. Others opposed the bill because it would have allowed MDOT to enter into a PPP for the development of a new publicly-owned international bridge between Detroit and Windsor Ontario.

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5 Note that while public-private partnership (PPP) is a commonly used term, the bill referred to public-private agreements.
6 There are currently three publicly-owned toll facilities in the state: the Mackinac Bridge, the International Bridge, and the Blue Water Bridge. Each was established under special enabling legislation that authorized the use of tolling.
7 June 18, 2009 testimony to the House Committee on Transportation in support of House Bill 4961.
PPP Authorizing Legislation
House Bill 4961 (2009-2010 Michigan Legislative Session) (cont.)

In the period since the end of the 2009-2010 Legislative Session, and the demise of House Bill 4961, MDOT has continued to use innovative PPP contracting methods other than those involving tolling. In April 2012, the department awarded a $9.3 million design-build contract related to the completion of the $230 million Gateway project connecting the privately-owned Ambassador Bridge with the I-75 and I-96 expressways in Detroit.

MDOT has also used Construction Manager/General Contractor (CM/GC), a qualifications-based selection option for projects with complex engineering problems, unknown engineering variables, and/or significant time constraints. The first CM/GC project, initiated in March 2011, involved the $8.8 million emergency slope repair for M-222 in the city of Allegan Michigan.

Subsequent MDOT projects using CM/GC contracts include the rehabilitation of the Zilwaukee Bridge on I-75 over the Saginaw River, a $35 million project, and a Detroit Riverwalk redevelopment project involving a pavilion, water feature/playscape, tensile structures, and non-motorized path, an $11 million project.

The department still does not have legal authority to enter into concession-type PPP agreements using tolling or user fees to finance transportation infrastructure projects.

PPP Agreements, Legislative Considerations

According to the FHWA, PPP agreements "can provide access to private capital, reduce costs borne by transportation agencies, accelerate project delivery, shift project risk, spur innovation, and provide for more efficient management." Other potential benefits incorporation of performance measures in PPP agreements, and the use of tolling as a tool in congestion management.

However, as noted in a Government Accountability Office (GAO) report on PPPs, "...there are costs and trade-offs involved, including loss of public-sector control of toll setting and potentially more expensive project costs than publicly procured projects."

The increased initial cost of certain PPP procurements may include private financing costs which are generally higher than those of public agencies. In addition, private sector contractors may factor into contract prices increased risks associated with a PPP agreement. The most efficient procurement method is a function of a number of project-specific factors.

In addition to efficiency considerations, a PPP procurement option may be selected for reasons of program effectiveness. As noted above, a PPP procurement method, such as Design-Build, Design-Build-Finance, or Construction Manager/General Contractor may deliver a specific transportation facility faster than a traditional design-bid-build procurement, giving the public the economic use of a new facility months or years sooner than a traditional procurement method. In some cases, a concession-type public-private agreement may allow for the construction of a new facility or the expanded capacity of an existing facility that the public agency could not self-finance through traditional methods.

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9 The GAO report, "Highway Public Private Partnerships," February 2008, also noted that highway PPPs are potentially more costly to the public as "it is likely that tolls will increase on a privately operated highway to a greater extent than they would on a publicly operated toll road." http://www.gao.gov/new.items/d0844.pdf
PPP Agreements, Legislative Considerations (cont.)

It should be noted that Michigan has very limited ability to monetize existing transportation infrastructure by leasing assets to a concessionaire in return for a large up-front concession payment as was done by the city of Chicago with regard to the Chicago Skyway and the state of Indiana with regard to the Indiana Tollway. In both those cases the transportation facility had been built by a toll authority by pledging future toll revenue to sell revenue bonds. Neither facility had been constructed using federal funds.

All of Michigan's interstate highways were constructed using federal funds. Federal law currently provides for only a limited number pilot conversion projects on existing Interstate highways.

If you have any questions, please contact William Hamilton at (517) 373-8080.