



Private Financing of Public Infrastructure: Risks and Options for New York State

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Table of Contents

EXECUTIVE SUMMARY	1
OVERVIEW OF PUBLIC-PRIVATE PARTNERSHIPS	3
NEW YORK'S P3 EXPERIENCE	5
P3 LEGISLATION IN OTHER STATES	9
FINANCING STRUCTURES OF P3S.....	10
POTENTIAL BENEFITS OF WELL-DESIGNED P3S.....	12
P3 FINANCING RISKS.....	13
HOW NEW YORK CAN PROTECT ITS INTERESTS.....	18

Executive Summary

In 2011, Comptroller DiNapoli released a report detailing the potential benefits and risks of a procurement technique known as the public-private partnership (P3).¹ The report noted that there was a large and growing gap between the State's infrastructure needs and its ability to pay for those needs. It concluded that P3s could help fill the gap, but that steps should be taken to limit the risks that are associated with these relatively new approaches to public procurement.

Since that time, the State has authorized a number of agencies and public authorities to use a simple form of public-private partnership known as design-build contracting.² The Thruway Authority's procurement of the new Tappan Zee Bridge is being undertaken using design-build methods, with the expectation that this approach will streamline the project, shift some financial risk to private contractors rather than the Thruway and its users, and result in savings for the Authority.

Policy makers in New York are now considering whether to authorize more sophisticated types of P3s that depend on private financial investments. The State Fiscal Year (SFY) 2013-14 Executive Budget included a proposal for "design-build-finance" P3s that would for the first time have given private firms the authority to finance public infrastructure projects.³ This provision, which was not contained in the Enacted Budget, would have permitted any State agency, public authority, commission, council, or other State entity⁴ to turn to private investors for the financing of public infrastructure projects. These P3 agreements would have been authorized throughout the State, without limits on the size or cost of the project and with no requirement for independent oversight.

Private financing does not alter the fact that the entire cost of public infrastructure will always be borne by the public.

A majority of states now permit some form of P3 contracting and many are ahead of New York in embracing the use of private capital for public projects. A recent study by the Brookings Institution concludes that P3s are becoming "integral to the overall capital investment and infrastructure strategy of the nation."⁵ Yet, every state that permits privately financed P3 contracts also imposes rules to ensure accountability and to protect the public from poorly designed financial agreements. Protections such as

¹ See the Office of the State Comptroller's report, *Controlling Risk Without Gimmicks: New York's Infrastructure Crisis and Public-Private Partnerships*, January 2011.

² *Infrastructure Investment Act*, Part F, Chapter 56, Laws of 2011. Design-build contracting permits a public agency to seek bids for both the design and construction of a public infrastructure asset in one step, rather than requiring separate contracts for each phase.

³ See the 2013-14 New York State Executive Budget proposal, Public Protection and General Government Article VII bill, Part S.

⁴ Excluding the State University of New York (SUNY) and the City University of New York (CUNY).

⁵ Robert Puentes, "Strengthen Federalism: Establish a National PPP Unit to Support Bottom-Up Infrastructure Investment." Brookings Institution, November 2012, p. 3.

these are important for all P3 programs, but especially for design-build-finance contracts, which can impact the public for decades. The private sector also benefits when a predictable legal structure for P3 agreements is in place, since private investors risk significant financial loss from badly planned P3 programs.

The Office of the State Comptroller recommends that, before State agencies are authorized to use P3 financing, policy makers should first develop a better understanding of the potential costs and benefits of this approach. As with other public procurements, a comprehensive legal framework should govern the role of private investments in public infrastructure finance. This report identifies a number of the risks associated with privately financed infrastructure agreements and suggests ways to reduce such risks. If New York is going to join other states in allowing privately financed P3s, lessons learned elsewhere may help avert costly mistakes.

At its best, private investment can save the public money and improve services in the long run. At worst, it can burden the public with costs that could have been avoided, while degrading the quality of or limiting access to essential services. As New York explores the potential risks and benefits of P3s, policy makers should keep in mind that private financing does not alter the fact that the entire cost of public infrastructure will always be borne by the public.

Overview of Public-Private Partnerships

In colonial America, and during the nation's early history, major infrastructure projects intended to serve the public were often developed by private individuals or companies. For example, a portion of the road now known as U.S. Route 20, from Albany to Cherry Valley, was built by a private corporation chartered in 1799. According to one history of the State, by 1821, 278 turnpike companies had received charters from the Legislature to operate toll roads and had built 4,000 miles of road.⁶ In addition, the State chartered many private bridges, including the Brooklyn Bridge, as well as ferries, railroads and transit companies and a large number of canals and waterworks.

From time to time, the State also became involved in the financing of these projects, which in turn frequently led to much burdensome public debt and eventually to the adoption of amendments to the State constitution prohibiting the use of State gifts, loans or debt for private development.⁷ The political battles fought over State involvement in private infrastructure projects played a very significant role in the development of New York's now long-established public finance law.⁸

By the end of the 19th century, state and local governments had become the dominant players in building, maintaining and operating roads, bridges, sewer and water systems. Such projects, which had come to be seen as quintessential public goods, frequently could only be financed using public resources. Distributing the cost of facilities which directly benefited a majority of residents through broad-based taxation (or, in select cases, tolls and user fees) provided an equitable and efficient revenue system. Significant federal support for highway projects began early in the 20th century, while federal aid for water and sewer projects came later in the century.⁹

Currently, most public works projects in New York are conceived, operated and financed by public entities, such as the State itself, municipalities, or public authorities. Responsibility for design of these projects may rest with agency engineers or may be awarded to private engineering firms. Private firms then compete to win a separate contract for construction of the public project. This procurement process is called design-bid-build (DBB).

Public-private partnerships (P3s) are based on the idea that the State can maximize the value of the public's assets by taking advantage of the private sector's profit motive and market discipline. The public sector is given a share of the benefits of the free market

⁶ David M. Ellis et al., *A History of New York State*, Cornell University Press, 1978, p. 180. For example, see Chapter 38, Laws of 1807, establishing the general privileges, structure and financing of turnpike companies chartered by the State.

⁷ New York State Constitution, Article VII, Section 8. See also Peter J. Gallie and Christopher Bopst, *The New York State Constitution*, 2nd ed., New York: Oxford University Press, 2012, p. 15 and pp. 220-223.

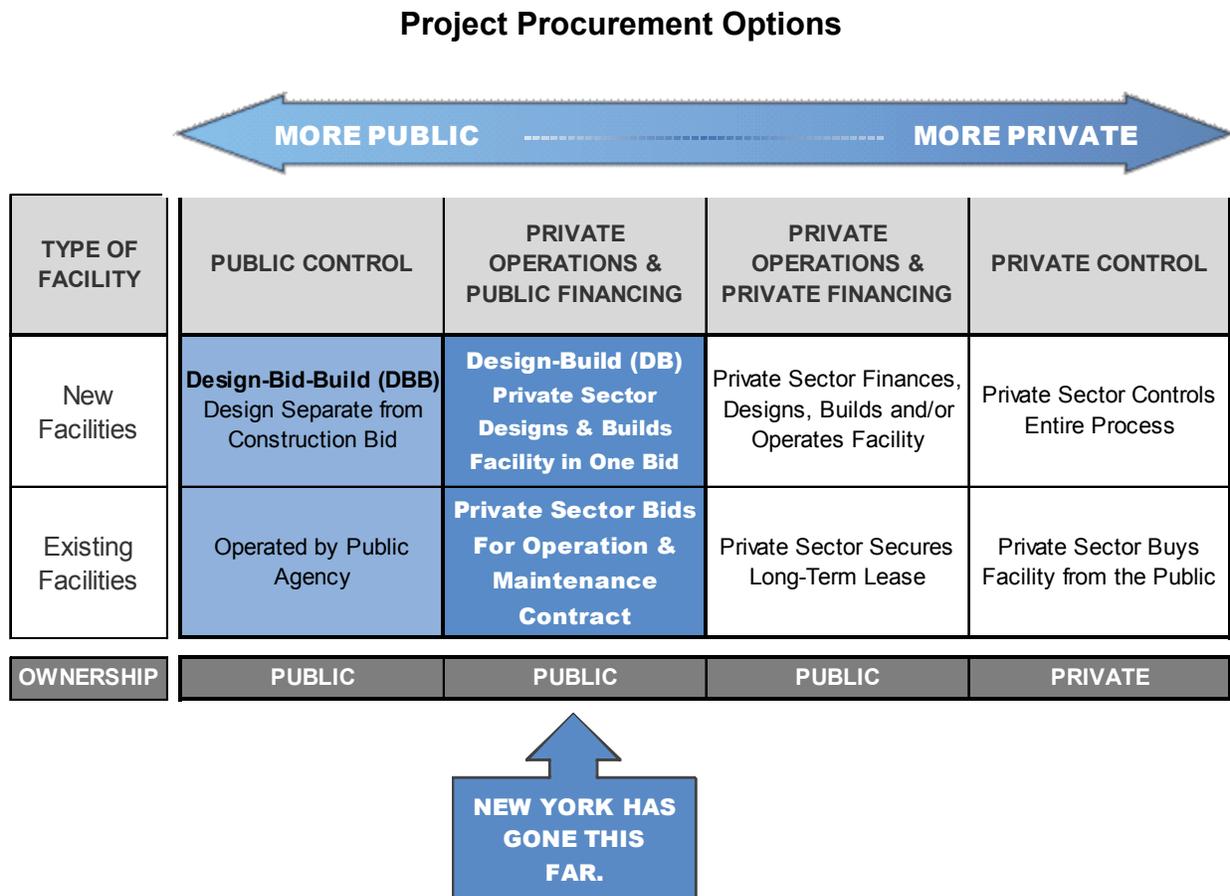
⁸ Daniel B Klein and John Majewski, "Economy, Community, and Law: The Turnpike Movement in New York," *Law and Society Review*, Vol. 26, No. 3 (1992), pp. 469-512; William J. Quirk and Leon E. Wein, "A Short Constitutional History of Entities Commonly Known as Authorities," *Cornell Law Review*, Vol. 56, Number 4 (April 1971); and Alfred D. Chandler, Jr. "Patterns of American Railroad Finance, 1830-50," *The Business History Review*, Vol. 28, No. 3 (Sep. 1954), pp. 248-263.

⁹ Ellis L. Armstrong, ed., *History of Public Works in the United States*, Chicago: American Public Works Association, 1976.

that come from increased competition, more accurate and sensitive pricing, expanded financing options, and more timely response to customer demand. In return, the private sector is given the opportunity to earn profits that might otherwise be unavailable. A well-designed P3 balances public and private sector capabilities and interests.

Although P3 agreements can cover almost any type of public service or activity, the most popular types of public-private infrastructure partnerships have involved roads, bridges, buildings, and water and wastewater facilities. A public-private partnership is not the same as full privatization. In a P3, the public partner retains a major role in determining the specific purpose and nature of the project, and almost always retains a significant degree of control over the private partner's use of the public asset. As the illustration in Figure 1 shows, P3 agreements come in many forms that fall along a spectrum of mixed public and private responsibilities.

Figure 1



Sources: Federal Highway Administration, Office of Innovative Program Delivery website (accessed February 28, 2013); Congressional Testimony of Bryan Grote, Principal, Mercator Advisors LLC, May 24, 2006; and E.R. Yescombe, *Public-Private Partnerships* (2007).

New York's P3 Experience

In January 2011, the Office of the State Comptroller released a report, *Controlling Risk Without Gimmicks: New York's Infrastructure Crisis and Public-Private Partnerships*, which noted that there was a large and growing gap between the State's infrastructure needs and its ability to pay for those needs.¹⁰ The report detailed the potential types and risks of P3s, and concluded that P3s could help fill the financing gap, but that steps should be taken to limit the risks to the public entailed by the P3 approach.

Design-Build (DB) Legislation

In December 2011, the New York State Legislature enacted an Executive Budget Bill that included provisions creating the Infrastructure Investment Act.¹¹ The Act authorized the Thruway Authority, the Department of Transportation (DOT), the Office of Parks, Recreation and Historic Preservation (Parks), the Department of Environmental Conservation (DEC), and the New York State Bridge Authority to use design-build procurement for the construction, replacement or repair of highways, bridges, dams, flood control projects, canals and parks, or to correct health and safety defects or comply with federal and State laws.

New York's design-build law places the State in the dark blue-shaded column near the center of the illustration in Figure 1. This shows what is possible under New York's existing law; however, in most cases contracting is still done using full public control, which is indicated in the light blue-shaded column to the left. Only the five agencies mentioned above are authorized to use design-build contracting under the Infrastructure Investment Act.

Unlike procurements done under full public control, the design-build process eliminates a step in the process by uniting the design phase and the construction phase in a single bid. The law requires that for DOT, Parks, and DEC to employ design-build, the cost of a project must be at least \$1.2 million. A two-step design-build procurement method is prescribed under the law, as follows:

- **Step One:** The procuring State agency creates a list of firms that have demonstrated the "general capability" to perform design-build contracts. The State agency will give each qualifying firm a rating score; these scores will determine which firms receive a Request for Proposals (RFP) for a capital project. Provisions are made to encourage the participation of minority- and women-owned business enterprises (MWBES).
- **Step Two:** Procurement is made on the basis of a "best value" analysis of proposals received. "Best value" is defined as a bid that maximizes quality, cost

¹⁰ See *Controlling Risk Without Gimmicks: New York's Infrastructure Crisis and Public-Private Partnerships* at www.osc.state.ny.us/reports/infrastructure/pppjan61202.pdf.

¹¹ See Part F, Chapter 56 of the Laws of 2011. This Act cannot be found in New York State Consolidated Law since it only exists as part of the 2011 budget language bill.

and efficiency. Ten best value criteria to evaluate a contractor's bid are listed: quality; timeliness; customer satisfaction; adherence to budget; limited change orders on past projects; appropriate project plans; technical capacity; qualifications of key personnel; ability to assess and manage risk; and past record of compliance with Article 15-A of the New York State Executive Law, which encourages contract participation by MWBEs.

Alternatively, the Act allows that a State agency may, rather than using the process outlined above, award a design-build contract: (1) to any contractor offering what the agency indicates is the best value; or (2) by using a "cost plus" method, to be determined by the agency; or (3) by issuing a lump sum contract without breakdown of contractor costs. This last alternate selection criterion is relatively broad and non-specific.

Design-build authority under the law is currently set to expire three years from the date of enactment, in December 2014, although any projects undertaken before the expiration date of the Act are authorized to proceed.

The legislative findings included in the Act state that a number of benefits are expected to accrue from design-build procurement. These include expedited project delivery, reduced public cost, leveraging of public human and capital resources, and job creation. In addition, the findings declare that reliance on private initiative will result in performance efficiencies, use of innovative best practices, the shifting of risks to the private sector and accelerated private capital investment. However, the Act is silent with regard to the measurement of these benefits. Unlike design-build authorizations in most other states, New York's design-build law contains no reporting mechanism and no requirements that benefits be substantiated – or even quantified.

The Tappan Zee Bridge replacement project is being procured using New York's new design-build law. This is the first major project to use this authorization, and has proven to be a significant undertaking, using resources from across the State. The Executive has drawn on the expertise of State employees with experience in major project procurements at several New York State agencies and public authorities, including staff from DOT, the Thruway Authority, the Metropolitan Transportation Authority and the New York State Bridge Authority, as well as the Federal Highway Administration. Even so, the Thruway Authority is also relying on the knowledge and guidance of hired private independent advisors and consultants.¹²

The Next Step: Design-Build-Finance?

Within the broader continuum of P3 projects, the next step that could be taken is a significant one -- adding private finance to the existing design-build authority. As complex as the Tappan Zee bridge procurement has been, a design-build-finance agreement would have been more complicated.

¹² These advisors have included Jeffrey A. Parker, now working with Ernst & Young, as financial consultant, AECOM as project management consultant, and the engineering firm HNTB as "owner's engineer."

To date, New York State has had minimal experience in negotiating or managing P3 agreements. As mentioned above, the SFY 2013-14 Executive Budget proposal would have authorized privately financed P3s, representing a major shift from traditional infrastructure procurement practices.

While restricted to infrastructure projects, the proposal was otherwise largely unlimited in scope, both in terms of dollar amounts and with respect to the projects that could be undertaken. It would have authorized the use of private financing for public capital projects by any department, division, board, commission, bureau, office, committee or council of any State department, as well as by *any* public benefit corporation, public authority, or commission, at least one of whose members is appointed by the Governor, excluding SUNY and CUNY. Authorized capital projects would have included, but not been limited, to State highways, bridges, buildings, dams, flood control projects, canals, and parks.

In Figure 2, the impact of design-build-finance authorization is represented by the red shaded column.

Figure 2

Impact of Allowing Private Financing of Public Infrastructure Projects

TYPE OF FACILITY	PUBLIC CONTROL	PRIVATE OPERATIONS & PUBLIC FINANCING	PRIVATE OPERATIONS & PRIVATE FINANCING	PRIVATE CONTROL
New Facilities	Design-Bid-Build (DBB) Design Separate from Construction Bid	Design-Build (DB) Private Sector Designs & Builds Facility in One Bid	Private Sector Finances, Designs, Builds and/or Operates Facility	Private Sector Controls Entire Process
Existing Facilities	Operated by Public Agency	Private Sector Bids For Operation & Maintenance Contract	Private Sector Secures Long-Term Lease	Private Sector Buys Facility from the Public
OWNERSHIP	PUBLIC	PUBLIC	PUBLIC	PRIVATE


A DESIGN-BUILD-FINANCE LAW WOULD PUT NEW YORK HERE.

Sources: Federal Highway Administration, Office of Innovative Program Delivery website (accessed February 28, 2013); Congressional Testimony of Bryan Grote, Principal, Mercator Advisors LLC, May 24, 2006; and E.R. Yescombe, *Public-Private Partnerships* (2007).

The impact of authorizing design-build-finance procurements would have been considerable. Under the proposal, private entities might have been given the ability to set tolls, fares, and other charges and to make broad decisions regarding the use of public assets, decisions that have traditionally been considered matters of public policy. By using the private sector as the financing vehicle for construction projects, the proposal would have also sidestepped the need to seek voter approval for the issuance of debt for new purposes. Such private debt would not be counted against the State's statutory debt limits; yet residents of the State would still bear most or all of the cost.

P3 Legislation in Other States

A majority of other states have enacted legislation permitting P3s in at least some circumstances. Yet to date, legislatures in these states have not granted unilateral authority to any agency to pursue P3s. Typically, P3 authorizations in other states require either explicit legislative approval or oversight by an independent planning board of some type. Nearly all states with P3 programs have also established other limits on the use of P3s.¹³

A number of states, including California, Michigan, Pennsylvania and Virginia, have created specialized P3 offices with responsibility for developing P3 policy, coordinating project development, developing technical expertise, and sometimes actually promoting the use of P3s.¹⁴ Only a few states permit privately financed P3s for all types of public infrastructure procurement. Examples of P3 authorizations in other states include:

- Virginia's P3 program is perhaps the most well-established in the nation. It is governed by the Virginia Public-Private Transportation Act of 1995, as amended, which includes detailed implementation requirements, stipulates the private partner's powers and duties, and provides explicit definitions of financing mechanisms.¹⁵
- Florida's extensive P3 program is governed by a number of statutes, including a requirement for legislative approval for most projects and a requirement that the state Department of Transportation provide an independent project analysis to the legislature for review and approval prior to contract award.¹⁶
- Pennsylvania recently enacted comprehensive P3 legislation that establishes a Public-Private Transportation Partnership Board, which must use criteria spelled out in the law when considering P3 contracts.¹⁷
- Connecticut's P3 legislation permits no more than five projects before January 1, 2015, limits agreements to no more than 50 years in duration, and requires the legislature to approve tolls.¹⁸

Practices used in other states could inform New York's policy decisions regarding P3s.

¹³ See U.S. Department of Transportation, Federal Highway Administration (FHWA), Office of Innovative Program Delivery website, under State P3 Legislation, posting of National Conference of State Legislatures (NCSL) summaries of state legislation, available at www.fhwa.dot.gov/ipd/p3/index.htm; and Pillsbury Winthrop Shaw Pittman LLP, "P3 Enabling Statutes," accessed online December 12, 2012 at www.pillsburylaw.com. On April 9, 2013, Maryland made significant changes to its existing P3 legislation through Chapter 5, Laws of 2013.

¹⁴ Emilia Istrate and Robert Puentes, "Moving Forward on Public Private Partnerships," Brookings-Rockefeller Project on State and Metropolitan Innovation, December 2011; Kyle Glazier, "Pennsylvania Issues P3 Guidance," *Bond Buyer*, January 14, 2013, accessed online.

¹⁵ Va. Code Ann. §§56-556 - 575.

¹⁶ Fla. Stat. §334.30.

¹⁷ Act of July 5, 2012, P.L. 853, No. 88.

¹⁸ HB 6801b, 2011 Gen. Assemb., Spec. Sess. (Conn. 2011).

Financing Structures of P3s

A major difference between a privately financed infrastructure project and one financed through traditional public means comes in determining the total cost of the project. Interest rates for project financing – the cost of borrowing, one element in the overall cost of a major project – tend to be higher for the private sector than for the public. This is because public debt is generally tax-exempt and can therefore be obtained at lower interest rates when compared with rates for private bank loans or other private investments.

Any savings that might accrue to the State from a privately financed P3 project must be found in areas other than the financing itself, such as lower costs for employee compensation, reduced operations and maintenance costs and the monetary value of shifting risks from the public to the private sector. Many of these potential savings are hard to quantify, which makes comparing public and private procurement methods difficult, especially for large and long-term projects. Effective use of P3 procurements requires the governmental authority to make most of its major decisions early in the process, ensuring that financial and other safeguards are built into the contracts it signs with private entities. In contrast, traditional public procurement methods allow the State to put off questions of operations and maintenance to the future.

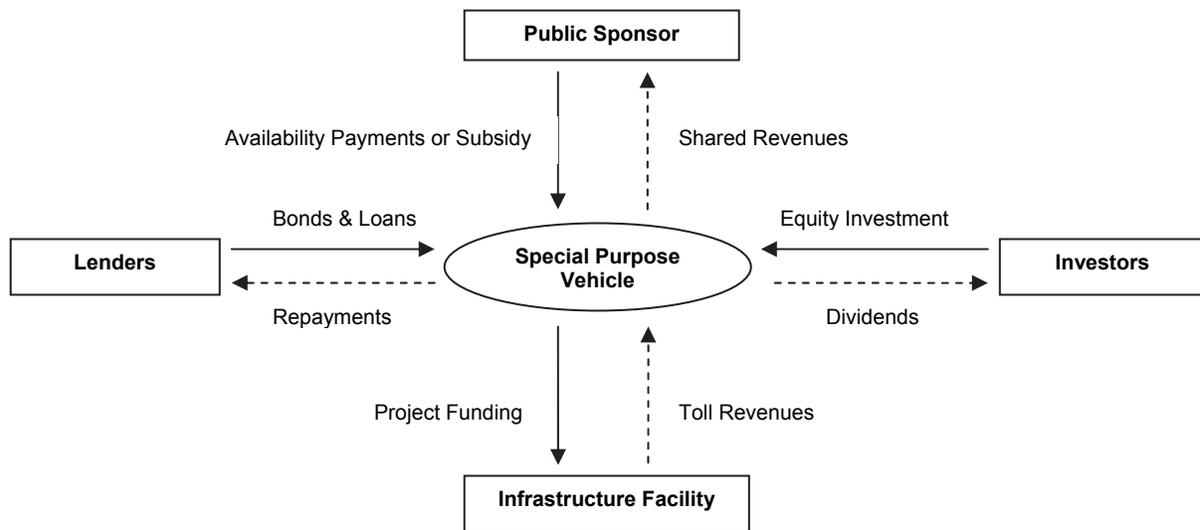
P3 procurements thus present challenges to government agencies and public officials that are qualitatively different from the requirements of traditional contracting. Any design-build-finance legislation enacted by the State should establish adequate safeguards for the public interest, create a balance between public and private control, and assure sufficient compensating value to the public. Such legislation should also prohibit the use of P3 agreements as one-time, non-recurring budgetary resources for the State or as a way to circumvent other statutory limitations and restrictions.

Significant questions exist regarding the ability of the State to oversee P3s generally and private financing agreements in particular. Figure 3, provided by the Federal Highway Administration (FHWA), shows an example of a “simple” private finance P3 agreement. The entity called a “Special Purpose Vehicle” (SPV) located at the center of the figure is worth noting. An SPV - sometimes known as a consortium, a sole purpose entity or a project company - might be created by a construction company working with a private bank, an engineering firm and a number of smaller firms, to design, build, finance, operate and maintain new infrastructure. Each participating company contributes expertise and resources to the project while the SPV structure limits the exposure of the parent companies to potential losses.

In most P3 agreements for major infrastructure projects, the private “partner” is just such an SPV, created solely for the purpose of managing that agreement. The public partner works with employees of all the firms that are part of the SPV, but its legal relationship is typically solely with the SPV itself.

Figure 3

FHWA Example of a Simple P3 Private Financing Structure



Source: "Financial Structuring and Assessment for Public-Private Partnerships: A Primer," Federal Highway Administration, October 1, 2012, p. 8.

As Figure 3 suggests, even simple P3 agreements with private financing can be more complicated than the project financing arrangements with which New York State typically deals. It is critical that the public's interests be adequately protected in these transactions, because in reality most design-build-finance agreements are much more convoluted than this illustration suggests.

What creates this added complexity? Project funding may come from many sources, including federal, state and local appropriations and loans, public and private debt issuances, bond anticipation notes, loan guarantees, and fund transfers. Revenue estimates are often projected decades into the future, based on economic and demand models using assumptions that are difficult to verify, prepared using highly detailed analyses by consultants, which are often then subject to analysis by other, independent experts. Toll and payment streams may be structured for decades. The participants in the SPV may themselves be SPVs, or similar entities created for one project, and may in turn be controlled by subsidiaries of other companies. Bond and equity arrangements may be exceptionally complex and entirely opaque.

The section on Financing Risks offers some examples of issues that can arise as the result of privately financed P3 agreements.

Potential Benefits of Well-Designed P3s

As the Comptroller's first report on P3s noted, there are a number of possible benefits arising from the use of public-private partnerships. P3s have the potential to build on the strengths of both public and private sector partners. They have the capacity to incorporate some of the characteristic advantages of free markets – increased competition, more accurate and sensitive pricing, expanded financing options, and timely response to demand – in the provision of public goods. At the same time, the partnership ideally should preserve traditional public interests in areas which markets may be unsuited to handle, such as ensuring general equity and accessibility, avoiding unwanted externalities (such as pollution), recognizing the interests of diverse stakeholders, and coordinating the development and operation of a particular project with the needs of larger systems and adjacent communities.

A well-designed P3 balances public and private sector capabilities to advance the common good. Given the fiscal constraints facing New York State and its local governments, P3 agreements may be viewed as an alternative means of constructing and maintaining facilities and providing services. To achieve desirable outcomes, however, policy makers must exercise great care in reviewing proposals, entering into negotiations and crafting agreements.

The recently signed design-build contract between the Thruway Authority and an SPV known as Tappan Zee Constructors¹⁹ contains a number of provisions that are intended to encourage positive outcomes by rewarding the private partners for innovative designs and efficient construction techniques, while imposing penalties for cost overruns or construction delays. In return for payments of slightly more than \$3.1 billion, the SPV guarantees to have traffic on the new bridge 1,491 days after it is given notice to proceed (slightly over four years), with overall completion of the entire project after no more than 1,901 days from that date (about five years and two months). The notice to proceed was given in January 2013, which makes the completion date about March 2018.

The contract includes significant penalties for failure to meet project deadlines. The contractor was required to obtain bonds that will pay for as much as \$1.5 billion (or roughly 50 percent of the contract price) in damages if the Thruway Authority must incur such costs to complete or correct problems with the bridge, and up to another \$350 million for any other cause. Other penalties may be imposed if the new bridge does not open on time, if the new tolling system is not ready on schedule, or in cases of unscheduled lane closures or inability to collect tolls. The Thruway Authority argues that these provisions will help avoid the “pattern of cost overruns and schedule problems on past projects large and small that ultimately cost the public owner a lot more money than expected.”²⁰ It remains to be seen whether the Authority's confidence in the contract incentives is well placed. In any case, its experience using the State's new design-build law will bear watching for lessons regarding the impacts of the existing statute, which should influence any additional P3 legislation in coming years.

¹⁹ Tappan Zee Constructors consists of Fluor Enterprises, Inc., American Bridge Company, Granite Construction Northeast, Inc., and Traylor Bros., Inc.

²⁰ Statement by Thruway Executive Director Thomas J. Madison, Jr., to *The Journal News*, reported April 9, 2013.

P3 Financing Risks

Up to this point, New York has not developed a comprehensive or coordinated P3 policy. In fact, even the State's experience with the more limited form of P3s – design-build – has not been well documented since authorized agencies do not report measures of cost-effectiveness or performance. Without a formal, well thought out P3 policy, New York State may find itself at a disadvantage when negotiating with private-sector companies that have P3 experience in other states. Issues worth consideration include:

- **Private Debt Can Be Costly.** Private financing could be viewed as a new form of backdoor borrowing – a financial commitment that does not directly involve the State, but draws on the same resource base or otherwise holds potential implications for the State's finances and other interests.

It is important to recognize that private financing does not constitute a new source of funding – ultimately, the costs will be borne by the public. The Congressional Budget Office explains, "Private financing is unlikely to increase the availability of funds for highway projects because the revenues from taxpayers and from users of the highway are the source of repayment regardless of the financing mechanism chosen for the project."²¹ Or, as the FHWA puts it, "P3 concessions do not generate revenue, they require it."²²

Private financing may increase the ready availability of funds in cases where states or localities have self-imposed spending and debt limits that can be bypassed by using P3 financing. So private financing could be used, in effect, as a new source of borrowing that might never appear in any budget, on any financial plan, or in financial statements.

In addition, mechanisms currently in place to promote prudent State debt practices, such as limiting the use of debt to capital purposes and imposing reasonable terms for any debt, may be circumvented through private financing. This could potentially increase the cost of such debt above the cost of a comparable State-financed alternative.

- **Availability and Shadow Payments Can Be Costly.** One popular type of public-private infrastructure partnership provides up-front private financing that is repaid with what is known as an "availability payment," wherein the public partner agrees to pay the private partner when construction milestones are achieved, and then to pay an inflation-adjusted amount periodically for the life of the agreement, irrespective of demand. The \$1.5 billion Goethals Bridge replacement project, being undertaken by the Port Authority of New York and New Jersey, will make availability payments over 40 years to compensate the SPV recently chosen to design, build, finance, and maintain the new bridge. (The Port Authority is able to enter into P3 contracts

²¹ Congressional Budget Office, "Using Public-Private Partnerships to Carry Out Highway Projects," January 2012, p. 9.

²² "Public-Private Partnership Concessions for Highway Projects: A Primer," Federal Highway Administration, October 2010, p. 14.

because, as a bi-state authority, it is not bound by the same provisions of New York State procurement law as other State agencies and authorities.)

A similar type of payment is called a “shadow payment” or “shadow toll,” where the actual owner of the asset – a bridge, highway, water treatment facility or other public asset – pays the private manager of the facility an amount that is based on the levels of use. The more the public comes to rely on the facility, the higher the payment.

Both availability payments and shadow tolls usually include some sort of payment guarantee to the private partner, so that the public is obliged to pay for years, with no consideration of changing circumstances or ability to pay. It is important, therefore, that any contract for either availability or shadow payments establishes a maximum payment.²³

Even with this safeguard, future resources will be locked up, limiting the public partner’s ability to respond to changes in revenues or needs.²⁴ The public may end up paying far more for the facility than it would have using traditional procurement methods if it fails to price availability and shadow payments accurately.²⁵ Recently, a number of highways in Europe that were financed using availability payments have faced financial difficulties as a result of the economic downturn.

- **Long Term Agreements Can Represent A Gamble.** When the idea of privately financed leases of public assets first became popular about 10 years ago, some P3 concessions were made for extremely long periods, such as for 75 years (Indiana Toll Road) and 99 years (Chicago Skyway). The rationale given was that such long-term contracts were needed to offset unfavorable interest rates paid by private sector investors and to better capitalize on tax appreciation.²⁶

This turned out to be a questionable decision from both public sector and private sector points of view. Governments in Indiana and Chicago used the infusion of cash they received at the start of the agreements for short-term budget relief. When that money was gone, they were faced with the choice of leasing other public assets or finding a more responsible long-term solution to their budget problems. Private sector investors have found that the Great Recession resulted in significantly lower demand for some P3 facilities, and thus lower profits than they had anticipated.²⁷ Public sector partners should use care in considering long-term financing, especially if project financing includes federal loans or state bond issuances.²⁸

²³ This safeguard was included in the contract for the Port of Miami (Florida) Tunnel, where availability payments were capped at \$33.2 million per year. Port of Miami Tunnel Case Study, Appendix to the Tappan Zee Financial Plan Study, November 2008, p. 2.

²⁴ “Public-Private Partnership Concessions for Highway Projects: A Primer,” Federal Highway Administration, October 2010, p. 7.

²⁵ Deepak Sharma and Qingbin Cui, “Design of Concession and Annual Payments for Availability Payment Public Private Partnership (PPP) Projects,” Construction Research Congress, 2012, p. 2292.

²⁶ Lisa Lerer, “Road Warriors,” *The American Lawyer*, April 2005.

²⁷ A proposed solution to such demand risk is a flexible-term Present-Value-of-Revenue (PVR) contract, where the contract lasts until the private partner collects the revenue it demanded in its winning bid. If demand is higher than anticipated, the contract terminates sooner. If it is lower, the contract is extended until the required revenue is collected. See Eduardo Engel, Ronald Fischer and Alexander Galetovic, “Public-Private Partnerships to Revamp U.S. Infrastructure,” *The Hamilton Project*, Brookings Institution, February 2012, p. 7.

²⁸ “Public-Private Partnership Concessions for Highway Projects: A Primer,” *op. cit.*, p. 8.

- **Poorly Drafted Agreements Can Be Costly and Difficult to Correct.** A number of P3 contracts around the United States have had to be renegotiated or refinanced due to private partner bankruptcy, costly design changes, or dramatic declines in the number of users. The legal and administrative costs associated with such restarts can easily eat up all the benefits that were supposed to accrue from the P3 contract. A Brookings Institution report warns that: “Since renegotiations occur in the absence of competition, the results can be very profitable to the private party.”²⁹

One example is a 1997 concession granted by the Port Authority of New York and New Jersey to replace Terminal 4 at the JFK International Airport. The project was a design-build contract that was financed with \$934 million in tax-exempt debt issued by the Port Authority on behalf of the private SPV. The private team also took responsibility for operations and maintenance of the facility. According to *Public Works Financing*, the contract had to be renegotiated when the project experienced construction cost overruns of \$100 million and when revenue declined following the terrorist attacks of September 11, 2001.³⁰

Many P3 contracts around the United States have had to be renegotiated or refinanced due to private partner bankruptcy, costly design changes, or dramatic declines in the number of users.

In the end, the Port Authority was required to assume \$173 million in subordinated debt to cover the funding shortfalls. Revenue fell again as a result of the Great Recession and, in 2010, the Terminal 4 project received another \$796.3 million in Port Authority-issued Special Project Bonds, re-payment of which is contingent upon the success of renegotiated tenant agreements for the facility.³¹

Although traditional public procurements are also subject to risks from unforeseen events, one of the most common arguments in favor of the P3 model is that it shifts financial risks to the private partner. As the Terminal 4 experience suggests, public entities may bear more risk than initially perceived.

- **Poor Analysis Can Lead to the Undervaluing of Public Assets.** When considering a P3 agreement, the public partner must have a clear understanding of the full value of the assets and resources it will contribute to the partnership. Achieving such an understanding typically requires conducting a “Value for Money” (VfM) analysis, which consists of a comparison of the estimated cost of a project using traditional procurement methods and the cost using a P3 agreement.

The lead public agency will begin by creating a “Public-Sector Comparator” (PSC), which is a hypothetical, risk-adjusted estimate of the cost of providing an asset through traditional procurement methods. This estimate is then compared with the

²⁹ Engle, et. al., op. cit., p. 12.

³⁰ “Gov. Pataki’s JFK Terminal Four P3,” *Public Works Financing*, November 2012, p. 2.

³¹ The Port Authority of New York and New Jersey, Special Project Bonds, Series 8, Official Statement dated December 1, 2010, p.12.

lead agency's best estimate of the cost of P3 options, which is called a "shadow bid." A number of different finance and risk models are used to create the shadow bid.³² If the VfM analysis shows that a P3 option would cost less than traditional procurement methods, then the public agency could consider negotiating a P3 agreement.

One problem with VfM analysis is that it may be difficult to create accurate and unbiased estimates. A recent report prepared by the California Legislative Analyst's Office (LAO) found that several of the VfM analyses it examined were "based on assumptions that favored P3 procurement." These biases included use of questionable discount and tax rates, dubious estimates of savings from potential cost overruns, and failure to account for savings that were likely to occur using traditional public procurement. These biases led to "questionable" P3 procurements for the Presidio Parkway in San Francisco and for a courthouse building in Long Beach, according to California LAO.³³

Inaccurate modeling of project costs is not the only danger. As complex as a VfM calculation is, such an analysis does not consider the more basic question of the value of the asset not just to the State but to the public itself. It is not enough to measure and estimate current market conditions as they impact State finances. The lead agency should also consider the value of the asset in terms of performance, user satisfaction and the overall viability of the project. This type of valuation is sometimes called a "qualitative value for money assessment."³⁴ There is no simple mathematical model for this assessment because many of the factors have not and cannot be quantified. What is the value of ensuring that a public facility is affordable or available to all? What is the cost of locking the public into a particular pattern of consumption when alternatives might serve them better in the future? Should the State commit itself to a long-term agreement that depends on heavy automobile usage when mass transit might be a preferable alternative in a few years' time?

Other concerns, beyond the financial aspects of P3s, should also be considered by policy makers. Examples include:

- *Community Issues* – Localities may incur unanticipated resource strains. For example, where a highway or bridge is tolled, users may choose to avoid tolled assets in favor of facilities without tolls, which may impose additional burdens on nearby facilities and the local governments responsible for their maintenance and repair. The State should assess the local impact of P3s and involve local officials and the public in considering such risks and other potential community impacts.
- *Labor Issues* – Some P3 agreements have resulted in the loss of public employee income and benefits. The State should carefully consider and candidly disclose any

³² "Financial Structuring and Assessment for Public-Private Partnerships: A Primer," Federal Highway Administration, October 1, 2012, pp. 26-27; Price Waterhouse Coopers, "Public-Private Partnerships: The U.S. Perspective," June 2010, p. 9.

³³ Mac Taylor, "Maximizing State Benefits from Public-Private Partnerships," California Legislative Analyst's Office, November 8, 2012, p. 18.

³⁴ "Value for Money Assessment for Public-Private Partnerships: A Primer," Federal Highway Administration, September 11, 2012, pp. 28-30.

potential impacts on employees. The Executive Budget proposal to authorize design-build-finance procurements discussed above did not address the role of labor protections, such as whether Project Labor Agreements would be incorporated into projects undertaken using such authority.

- *Environmental Issues* – Major infrastructure projects inherently create environmental concerns that may be inadequately considered by private-sector partners to P3 agreements, and must therefore be addressed by the public sector.
- *Eminent Domain and Other Legal Issues* – Complex legal issues will arise as a range of new procurement conflicts find their way into court. These include the tax implications of P3s and the use of eminent domain for projects designed and managed by the private sector. The lack of legal clarity regarding such issues makes caution all the more essential.

How New York Can Protect Its Interests

Before New York goes forward with private financing or any new type of P3 agreement, the State should establish a comprehensive legal framework to govern all future contracts in order to ensure full protection of the taxpayers' interests. As discussed in the Comptroller's 2011 report, public partners in P3 agreements should be required to: (1) obtain the full value of all public assets involved in P3 agreements; (2) avoid unreasonably high tolls, fees and charges to the public; (3) draft contracts that reflect realistic assumptions and reasonable goals; and (4) reject any agreement that is used as a budget gimmick.

New York has the opportunity to learn from P3 experiences in other states. Steps can be taken to mitigate risk and reduce the likelihood that the State would face the same problems that have plagued P3 projects elsewhere. To accomplish this, New York's statutory framework for P3s should, at a minimum, include the following features:

- **Create a specialized entity to oversee P3 agreements.** Actions by such a council or other body should be governed by statutory provisions that establish detailed procedures for the consideration of P3 agreements. This approach has been used in many other states to ensure that procurement is fully transparent.
- **Develop staff expertise to evaluate and manage P3 agreements.** Compared with other states, New York agencies have little experience with P3s. The State will be at a disadvantage in negotiations with the private sector until such time as it has its own expert staff dedicated to P3 project development and management.
- **Require independent evaluations of P3 cost-benefit analyses.** All Value for Money calculations or similar estimates of P3 agreement values should be subject to an impartial review-and-approval process that is completed before the public entity invites P3 bids or indications of private sector interest.
- **Require complete financing plans.** A comprehensive financing plan should be prepared for any project financed through a P3 agreement must have a comprehensive financing plan. These plans should be subject to independent review and approval before contracts for the project are finalized.
- **Require competitive bidding process.** Competitive bidding should be required for P3 projects in order to establish a level playing field among prospective vendors and to ensure the State receives the best possible value.
- **Require contract approval.** All P3 contracts should be subject to the independent review and approval of the Office of the State Comptroller. This will ensure that contracts are awarded through a fair and open competitive process in compliance with applicable laws and regulations.
- **Prohibit unfunded future obligations.** The State should ban private financing agreements that require future payments by the public partner, unless such

payments are included in both the State's Capital Program and Financing Plan and its Financial Plan, with the revenue source of those payments clearly identified.

- **Ensure responsible use of any financial benefit.** Require that any payment or revenue stream accruing to the public partner from infrastructure projects be dedicated to either debt reduction or capital expenditures. All the financial benefits of a P3 agreement should be used to reduce the burden on taxpayers.
- **Ensure full transparency and accountability for P3 projects.** The State has a well-developed body of rules, in the State Finance Law and elsewhere, to protect the taxpayers' interests in public procurements. All statutory provisions related to P3s should likewise be enacted in consolidated law, rather than Article VII budget language. Detailed monitoring and reporting requirements should be established, so public officials and taxpayers can assess these often-complicated financial transactions. Public involvement should be encouraged through hearings and other outreach efforts, which should be conducted in coordination with affected localities.