**NC STATE** UNIVERSITY

*Institute for* **EMERGING ISSUES**

NOVEMBER 2010

# Are public-private partnerships right for North Carolina?

*A special thank you to Richard Little, Director of the Keston Institute for Public Finance and Infrastructure Policy at the University of Southern California and an Institute for Emerging Issues Faculty Fellow, for his expertise and contributions to the content of this report.*

Amidst the most severe economic crisis in our lifetime, investment in safe, reliable, efficient and effective physical infrastructure has forced its way to the forefront as an important option for repairing an ailing economy and securing a prosperous future for North Carolina and the nation. While traditional ways of funding the infrastructure we need will not meet current and future demands, North Carolina has struggled to develop consensus about the diversity of 21st century funding streams that must be available to pay for the built infrastructure it requires. This is especially true of efforts to determine the appropriate role of investments from the private sector that are coordinated through a comprehensive and strategic public framework.

In response, IEI convened the Business Committee on Infrastructure (BCI) to explore the viability of PPPs in North Carolina, especially as public funds for critical infrastructure projects become increasingly unreliable.

Current PPP legislation exists in North Carolina but some argue that these statutes lack the predictability needed to be effective and many projects must still be approved on a case-by-case basis. For example, when considering the legislation for the use of PPPs for school construction projects, no projects have been successfully implemented yet under the legislation as written because none could produce savings of time or money sufficient to justify using a PPP. Many believe that effective PPP legislation in the state should focus on achieving specific benefits of PPPs, such as risk sharing, faster or cheaper construction, or targeted economic development instead of attempting to remain too broad to be truly effective.

While PPPs will not resolve our state's growing need for infrastructure funding, they are an important tool that should be available to state and local entities

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as they build and repair the infrastructure in their communities. This report will serve to provide a general understanding of PPPs, including their benefits and drawbacks, as North Carolina continues to debate the viability of PPPs and the benefits to extending enabling authority for their use in our state.

## What are Public-Private Partnerships?

Public Private Partnerships (PPPs or P3s) are contractual agreements between the public and private sectors wherein the private sector, in exchange for compensation, agrees to deliver facilities and services that have been or could be provided by the public sector. The private sector typically agrees to design, build, finance, operate, and/or maintain infrastructure assets necessary to deliver the services. PPPs can work for a range of infrastructures including transportation, water and sewer services, solid waste disposal, municipal parking and "social" infrastructure such as schools, hospitals, and other public buildings.

Governments may choose a PPP option for a variety of reasons including a desire to accelerate long-overdue capital improvements, an inability to raise necessary capital or credit on their own, a lack of in-house expertise or resources, or a desire to ensure life-cycle maintenance and repair of facilities.

Typical PPP arrangements are generally grouped by the range of services provided and distribute risk accordingly (see Table on page 3).

*Design-Build*: The private sector designs and builds infrastructure to meet public sector performance specifications, often for a fixed price, so the risk of cost overruns is transferred to the private sector.

*Operation & Maintenance Contract*: A private operator, under contract, operates a publicly-owned asset for a specified term. Ownership of the asset remains with the public entity.

*Design-Build-Finance-Operate*: The private sector designs, finances and constructs a new facility under a long-term lease, and operates the facility during the term of the lease. The private partner transfers the new facility to the public sector at the end of the lease term.

*Build-Own-Operate*: The private sector finances, builds, owns and operates a facility or service in perpetuity. The public constraints are stated in the original agreement and through on-going regulatory authority.

*Build-Own-Operate-Transfer*: A private entity receives a franchise to finance, design, build and operate a facility (and to charge user fees) for a specified period, after which ownership is transferred back to the public sector.

*Buy-Build-Operate*: Transfer of a public asset to a private or quasi-public entity usually under contract that the assets are to be upgraded and operated for a specified period of time. Public control is exercised through the contract at the time of transfer.

*Finance Only*: On behalf of the public entity, a private entity, usually a financial services company, funds a project directly or uses various mechanisms such as a long-term lease or bond issue.

*Concession Agreement*: An agreement between a government and a private entity which grants the private entity the right to operate, maintain, and collect user fees for an existing publicly-owned asset in exchange for an up-front fee and sometimes a share of revenues. Although ownership usually does not transfer, certain rights of ownership may.

One of the attractive features of PPPs is that they can save significant time in the procurement process by consolidating many activities into a single solicitation. For example, instead of arranging financing, hiring a designer, soliciting construction bids, overseeing construction of the project, and ensuring maintenance and repair over its lifecycle, a PPP requires only the identification and retention of a qualified concessionaire. This can begin with a Request for Qualifications or other similar exploratory process to identify potential bidders and can save substantial time in the procurement process. Provided that an undue amount of time is not required to negotiate the contract documents, the value of this timesaving can be substantial on a large procurement.

It must be clear, though, that a PPP is not 1.) a panacea that resolves all procurement issues, 2.) a way to get something for nothing, or 3.) a privatization of traditionally public infrastructure.

## Value for Money

A major gate in the PPP decision process is the "value for money" (VfM) analysis. This exercise is intended to determine whether the "best" model for service provision is via public or private delivery. Although valuable input to the financial analysis, a very real limitation on VfM is that it fails to take into account

**Distribution of Risk for Selected PPP Options**

| Type | Description | Risk Transfer |
|---|---|---|
| Design-Bid-Build (DBB) | Design and construction contracts awarded separately to private sector engineering and contracting firms |   |
| Design-Build (DB) | Combines the design and construction phases into one fixed-fee contract |   |
| Design-Build-Operate-Maintain (DBOM) Build-Operate-Transfer (BOT) | Selected contractor is responsible for the design, construction, operation, and maintenance of the facility for a specified time |   |
| Design-Build-Finance-Operate (DBFO) Design-Build-Finance-Operate-Maintain (DBFMO) | Similar to DBOM, but contractor is also responsible for all or a major part of the project's financing |   |
| Build-Own-Operate (BOO) | The private partner owns the facility and is assigned all operating revenue risk and any surplus revenues for the life of the facility. |   |

social and other non-financial objectives that public sector policy makers must address. For example, if cost reductions (and higher VfM scores) are achieved by reducing the benefits paid to workers, eliminating subsidies to low-income customers, or cancelling services to communities, these financial savings would need to be balanced against social welfare objectives.

An important element of the VfM analysis is the relative cost of capital available to the public sector through tax-free municipal debt vs. the cost of commercial credit to the private sector. Although this difference may amount to several hundred basis points, in and of itself, this is not determinative. Factors to be considered in this regard are efficiencies that the private sector can bring to project delivery thereby reducing cost and whether it is politically and economically feasible for the public partner to issue debt. Voter resistance to additional debt, legislated debt limits, or concerns with credit ratings could reduce the viability of cheaper, tax-free debt. One of the underlying assumptions in any VfM analysis is that a viable public sector alternative actually exists. If this is not the case, a PPP may prove to be the only option regardless of the cost of capital.

## The Role of Project Finance

The key to most PPP ventures is the use of a financial engineering tool known as project finance to structure a highly leveraged arrangement of debt and equity either to build and operate a new facility or pay for a concession to operate an existing one. Typically, the private partner will bring a fraction of the total cost of the project to the deal as its equity share - prior to the financial crisis this was often as little as 10% - and raise the remaining 90% through commercial loans and other credit sources.

In exchange for the revenues produced by the infrastructure asset, a separate corporate entity or Special Purpose Vehicle (SPV) composed of architectural, engineering, construction, financing, and legal entities, is created to operate and maintain them on a non-recourse basis under a long-term concession agreement. That is, the private sector pledges only the revenue to be generated by the project as security for the debt. In the event that the project defaults or experiences other financial difficulties, the SPV alone is responsible; the parent organizations have no obligation to honor the debt or otherwise be accountable for the performance of the project.

Due to the limited liability inherent in the SPV, even if projects experience serious financial difficulties, the potential loss of equity may not be sufficient to compel the private partner to prevent default. This is particularly true if the SPV is comprised of several private parties whose equity share might be quite small compared to the overall cost of the project. For example, the equity investment or "at risk" capital of 5 equal-equity partners in a $1 billion project could be as little as $20 million. Although this is not a trivial amount, it does represent the upper bound on the financial risk faced by the private partners.

The potential for infrastructure to generate stable returns over the long term inspired many private investment banks to raise capital in the previous decade for their own infrastructure equity funds. These funds had been quite aggressive in seeking out potentially profitable projects and interest remains high despite the financial crisis. However, in light of increased financial scrutiny and the tightness and cost of commercial credit experienced since the crisis, a new global order for capital markets is still evolving.

## How the Private Sector Gets Paid

Once the project has either been completed or passed other mutually agreed-upon milestones, the providers of the debt (senior and subordinate) and equity will need to be repaid. In the case of highway projects, the revenue to do this can take several forms. The most obvious, and often the most unpopular, source of revenue for PPP highway projects are tolls.

However, there are alternatives to these direct user charges. Availability payments compensate the private partner for the time the facility is available for service in acceptable condition and can be funded from several sources such as gas, sales, or property taxes. "Shadow tolls" are calculated from actual or estimated vehicle counts and are paid by the governmental partner in lieu of direct charges to the user based on a predetermined pricing schedule. Funds for shadow tolls can come from the same sources as availability payments. For PPP projects other than highways, such as public buildings or facilities where a direct user charge is impractical, some form of availability payment is the usual means of compensation for the private partner. Regardless of the type of project, however, the public sector must identify a sustainable funding source to repay the private partner for its direct and indirect costs and a return on debt and equity capital over the life of the project.

## Risk Management

One of the attractions of PPPs is their ability to allocate risks more efficiently between the public and private sectors. However, because PPPs are subject to a broader range of risks than more routine procurements, the identification and management of these risks is at the core of the design of any PPP. In fact, one of the strongest arguments for the PPP delivery model is that the various project risks are transferred to the party best able to manage them. Some of the more common risks to a PPP project include:

*Political risks*, such as the unanticipated change in government, cancellation of a concession, unanticipated tax increases, arbitrary toll or fee imposition or increases, or new and unilateral regulatory policies

*Construction risks*, such as incorrect or inappropriate design, delays in land acquisition, environmental clearance, or escalation of land costs, project delays, unanticipated site or environmental conditions, or poor contractor performance

*Operation and maintenance risks*, such as the physical condition of a concession facility, operator's incompetence, poor construction quality, etc.

*Legal and contractual risks*, such as the concession warranty, or incomplete or inadequate contracts

*Income risks*, such as inaccurate estimates of traffic volume or revenue, construction of a competing facility that would reduce use or profitability

Who actually bears each of these risks will be determined by whether they are entirely under the control of one party. For example, the government should bear the risk of future legislation discriminating against the project while the private partner should be expected to control construction risk. If neither party can accept full control, then risk allocation should be based on the price the private party will charge to take on the risk and whether the government is able and willing to pay that price.

Many of the problems ascribed to PPPs are rooted in poor risk allocation such as when governments try to shift all of the usage or revenue risk for a new facility to the private party. This can be done, but then the private partner will set fees and returns accordingly which may require user charges that are too high to be sustainable. The key to risk management lies within the concept of partnership. If risk can be transparently identified, equitably allocated, and costed appropriately, successful projects will result. If the objective is just to shift risk away from one party to the other, success will be more difficult to achieve.

## Achieving Success in PPP Procurement

While there are many different factors that will influence the successful implementation of a PPP procurement, if the public and private partners are not in accord on certain key issues, failure is more likely to occur. For this reason, it is important to look first at why the different players are interested in PPPs and what they hope to attain from the process. The table on the following page summarizes some of the objectives sought through the use of PPP arrangements.

## IEI Business Committee on Infrastructure

Following the 2009 Emerging Issues Forum on Growth and Infrastructure and in partnership with UNC-TV, the Institute for Emerging Issues (IEI) convened two community forums in July 2009 in the Triad and Fort Bragg regions focused on local financing options for infrastructure. Participants at these community forums indicated through discussions and survey technology that they are most interested in exploring the opportunity to leverage private capital for infrastructure, for example, through the use of Public-Private Partnerships (PPPs). In response, IEI and UNC-TV hosted webinars to learn more about PPPs generally and later IEI convened the Business Committee on Infrastructure (BCI) to explore the viability of PPPs in North Carolina, especially as public funds for critical infrastructure projects become increasingly unreliable.

Even as the economy improves, traditional ways of funding alone will not meet current and future infrastructure demands. This is particularly true of fast-growing states, like North Carolina. Now, more than ever, North Carolina must explore innovative procurement and financing methods, including leveraging private capital resources for public infrastructure projects, if we are to ensure a strong economy and a high quality of life. In response to the growing need for additional funds to provide essential public services, such as safe and reliable infrastructure, IEI convened the Business Committee on Infrastructure (BCI) to explore increased authority for PPPs in North Carolina.

If PPPs are supported by a sound regulatory framework, sustainable revenue streams, and well-informed partners, the BCI believes that PPPs will be a valuable option for state and local entities seeking to design, build, finance, operate and manage needed infrastructure. Such partnerships are not a replacement for traditional procurement and finance methods – methods that have served North Carolina well for many years – but instead, they should be another "tool in the toolbox" to help meet the needs of the state's growing population and aging infrastructure. BCI members, comprised of a diverse and representative group of private sector stakeholders and supported by their public sector counterparts, stand ready to work with state and local leaders in this effort.

At the urging of the BCI, the Legislative Study Commission on PPPs was created during the 2010 legislative session. The BCI respectfully suggests that the Legislative Study Commission on PPPs explicitly consider two primary aspects indispensable to effective implementation of PPPs in North Carolina: 1.) increased authority for state, regional and local government units to engage in PPPs for public capital projects through a sound and predictable regulatory framework and 2.) development of a strategy for outreach and capacity building for potential partners so that they may act as well-informed principals.

Effective PPP legislation must include explicit consideration of the following public values:

***Value for Money*** – Value for money is a function of, among other things, price, quality, and the degree of

| Government Wants | Investors Want | The Public Wants |
|---|---|---|
| • infrastructure to support economic growth and quality of life<br>• minimum life-cycle costs<br>• adequate & timely maintenance and repair<br>• "off budget" capital improvements | • steady, stable long-term return on capital<br>• opportunity to take advantage of value "locked" in public assets<br>• ability to use innovation to improve productivity and meet performance goals | • Good, reliable service at a fair price |

risk sharing. North Carolina will need a framework for ensuring that desired services are provided at an appropriate cost over the project lifecycle. This will require clearer metrics for determining the social and community value of a project beyond the price considerations of a standard value-for-money analysis.

***Adequate Revenue*** – PPPs are not free money; revenues from some source must be available to the public sector in order to pay the private sector for its services and public infrastructure deliverables. This should be clear to all partners and the public. Explicit consideration should be given to the positive and negative effect of a project on the state or local government's debt capacity and credit rating.

***Access*** – North Carolina's approach to PPPs must take into account the need for open competition. In addition, increased flexibility for the private sector to be able to do its best work can offer beneficial impacts on time savings as well as the potential to expand participation of local, small, women and minority-owned businesses.

***Transparency*** – Citizens are entitled to know whether public resources are being properly used and what is being achieved with them. As such, infrastructure planning processes must be developed in a transparent manner and reflect the collective views of a community. Procurement should also allow for public scrutiny.

***Risk Management and Accountability*** – Successful PPPs require careful risk allocation and sharing. The enabling environment must allow all parties to negotiate and assume responsibility for the risks they are best prepared to manage. All partners must be accountable for meeting contract provisions and pre-determined performance goals. Having a statutory framework also enhances predictability and reduces transaction costs.

Effective PPP legislation can only be successful if the public and private partners are well-informed about the legal authority granted by law as well as in the risks, rewards and trade-offs associated with each individual project. A plan to build human and institutional capacity in partnering organizations must begin with answering the following key questions:

***Who must be further educated? –*** Any public (e.g. county, municipal and other local leaders, state elected and appointed officials and other public staff) or private (e.g. design/construction companies, financial organizations) partners who are responsible for decision-making or have some significant stake in PPPs for public capital projects. It also will be important for the general public to understand that PPPs are not a privatization of infrastructure but, instead, they offer an additional finance and delivery option to local and state government.

***What should the partners know?*** – Partners should gain clarity about the types of PPPs and the framework for evaluating their fit and value for particular projects. Any effort to educate partners should include examples of best practices and successful projects as well as consideration of the most important aspects of a sound regulatory framework as mentioned above. In addition, explicit consideration should be given to determining what it means for the public sector for a project to be "on or off the books," as well as the positive or negative effect that this may have on the state or local government's debt capacity and credit rating.

***Who should be responsible?*** – Credible organizations, such as UNC-Chapel Hill's School of Government, which are equipped to engage relevant parties in order to provide the information necessary for the implementation of effective PPPs. Private and public sector players who have engaged in PPPs in other states should also be called on to share lessons from those experiences.

Public-private partnerships will not replace traditional financing and development of infrastructure, but they offer some important benefits to governments trying to address infrastructure shortages and maintain the state's enviable quality of life. Governments at all levels across the globe are increasingly turning to PPPs to help close infrastructure gaps. The BCI believes that these innovative finance and delivery methods should be explored as a way to distribute the risk, costs (short-term and long-term) and resources required to successfully complete critical public capital projects across North Carolina.

*The Institute for Emerging Issues is a public policy organization dedicated to North Carolina's future competitiveness. By supporting collaboration among individuals from all sectors and areas of the state, IEI builds an enduring capacity for progress. Learn more at: www.emergingissues.org*