

# Policy Update: Are P3's a practical tool to tackle the growing infrastructure deficit?

## What is a P3?

A public-private partnership is an agreement between a federal, state, or local agency (public agency) and the private sector. The arrangement provides for the sharing of resources - both skill and assets - in order to deliver a service or facility to the general public. Consequently, each party to the agreement also shares in the risks and profits derived therefrom.<sup>1</sup>

The financial crisis of 2008 spurred an increase in popularity of P3's. Limited government resources at every level combined with the world's growing infrastructure needs made P3's a popular tool among developed and developing countries alike. Globally P3's are used in a variety of sectors from power and energy to transportation, telecommunications and water infrastructure.

## Funding Mechanisms

According to the World Bank, there are three primary funding mechanisms for infrastructure projects - particularly P3s<sup>2</sup>:

### *Government (Public) Funding*

Projects with government funding can be separated into two categories, a concession or the Design-Build-Operate (DBO) model. In both cases the government provides some or all of the capital funding required for the project and brings in the private partner to provide expertise and increase efficiency in designing, building and/or operating the project.<sup>3</sup> Funds can be directly allocated or raised through bond offerings.

<sup>1</sup> NCPPP. 7 Keys to Success. Retrieved on January 15th 2016, from <http://www.ncppp.org/ppp-basics/7-keys/>

<sup>2</sup> PPPIRC. World Bank. Main Financing Mechanisms for Infrastructure Projects. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/financing/mechanisms>

<sup>3</sup> PPPIRC. World Bank. Main Financing Mechanisms for Infrastructure Projects. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/financing/mechanisms>

In a concession agreement, government finances and builds the project through traditional means, and brings the private sector partner into the fold after project completion to operate and maintain the asset for a fixed period of time. The facility generates revenue through user fees, some of which is returned to the government, which typically reinvests in the facility for repairs and replacements.<sup>4</sup>

Private sector involvement begins earlier in the DBO model. In a DBO project the government owns the facility while private sector designs, builds, and operates it. The private sector entity is compensated at completion of specified milestones throughout the project, and then receives an operating fee for ongoing operation and maintenance of the facility.<sup>5</sup>

### *Corporate Finance*

This funding mechanism is usually used in lower value projects or when the operator is large enough to fund the project directly. Under this structure, the private sector entity secures funding for the project through corporate financing in the form of either a long-term loan secured against its equity or funds allocated directly through its own balance sheet.<sup>6</sup> This model reduces costs involved and is much less complicated than project financing because the private sector effectively funds itself.

### *Project Finance*

Also known as limited recourse or non-recourse financing, Project Finance is the most commonly used and efficient P3 funding model. The Project Finance model assigns the right to construct and operate the

<sup>4</sup> PPPIRC. World Bank. Concessions, BOTs, DBO's. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/agreements/concessions-bots-dbos#overview>

<sup>5</sup> *Ib id.*

<sup>6</sup> PPPIRC. The World Bank. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/overview/ppp-objectives>

project to a newly created entity known as a Special Purpose Vehicle (SPV).<sup>7</sup> The SPV is created solely to carry out the project and allows accommodation of multiple shareholders, increasing the likelihood of funding more expensive projects.<sup>8</sup> The SPV raises funds directly from investors through pre-arranged contractual agreements.

The Build, Operate and Transfer model (BOT), wherein the SPV (the operator) finances, owns, constructs and operates the facility for a pre-arranged period of time before transferring ownership to the public sector, is the most common project finance model.<sup>9</sup> Investors recover funds through user fees, or from off taker purchases after construction.<sup>10</sup> In the case of an off taker purchase, the government or another private entity agrees to purchase project output from the operator.<sup>11</sup> For example, an SPV created to build a power plant would sign a power purchase agreement with the government and certain utility companies at the project's commencement to ensure a reliable revenue stream once the plant is in operation.

## Pros and Cons

The primary benefits of P3's are their ability to combine the stability and staying power of government with the efficiency and innovation of the private sector. This combination provides the general public with valuable resources that are made more efficiently and less expensively than would be the case if the government completed the project alone. With limited government resources at nearly every level, P3s also allows projects that might otherwise never get off the ground to move forward.

Additionally, P3s stimulate greater participation from private sector entities that are reliant on public infrastructure to get goods and services to market in tackling pressing infrastructure challenges. Finally,

the government's ability to reduce costs and share risks private sector investors and/or operators reduces the exposure on the tax-paying public.

P3's also carry risks. Traditional government procurement processes struggle to deal with certain P3 project requirements. Because the incentive for a private entity to enter into a P3 is return on the investment, these partnerships can go out of balance if either party seeks to maximize profits or benefits and operates only within the bounds in which they are required to operate by law, rather than as a full project partner.<sup>12</sup> Plus, even though risks may be shared, the public ultimately holds government entities accountable. Private financiers are only accountable to their investors. Therefore even if a project tanked due to the failure of the private partner, the government would still be on the hook with its citizens.

## P3's in America

The United States faces a serious infrastructure crisis. The World Economic Forum's 2013 report ranked U.S. infrastructure 25th in the world behind countries including Oman and Barbados.<sup>13</sup> The primary issue facing U.S. infrastructure is a lack of available government funding. P3's provide one fairly accessible solution to this problem.

While underutilized, P3s are not new to the U.S. According to a Harvard Kennedy School report forty-eight infrastructure projects totaling \$61 billion reached the formal announcement phase with 80 percent of them being closed successfully from 2005-2014. These projects include the \$1.8 billion Chicago Skyway, the \$2.3 billion I-4 Ultimate project in Florida and the \$1.9 billion I-595 express lanes in Florida.<sup>14</sup> Despite 33 states authorizing use of P3s for public projects, they only account for a small fraction of U.S. infrastructure projects.<sup>15</sup>

<sup>7</sup> *Ib id.*

<sup>8</sup> PPPIRC. World Bank. Concessions, BOTs, DBO's. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/agreements/concessions-bots-dbos#overview>

<sup>9</sup> PPPIRC. The World Bank. Retrieved on January 15th 2016, from <http://ppp.worldbank.org/public-private-partnership/overview/ppp-objectives>

<sup>10</sup> *Ib id.*

<sup>11</sup> *Ib id.*

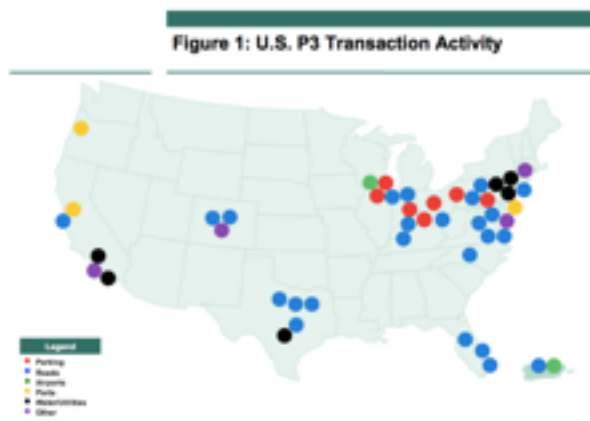
<sup>12</sup> *Ib id.*

<sup>13</sup> Kawa, Lucas. (2013). Business Insider. America's Infrastructure Ranks... 25th In The World. Retrieved on January 15th 2016, from <http://www.businessinsider.com/us-infrastructure-behind-developed-world-2013-1>

<sup>14</sup> Deye, Andrew. (2015). Kennedy School Review. US Infrastructure Public-Private Partnerships: Ready for Takeoff? Retrieved on January 15th 2016, from <http://harvardkenedy-schoolreview.com/us-infrastructure-public-private-partnerships-ready-for-takeoff/>

<sup>15</sup> TIAC. Funding and Financing Mechanisms. Retrieved on February 12th 2016, from <http://www.transportationinvestment.org/funding-financing-mechanisms/>

Figure 1<sup>16</sup> below highlights the P3 projects spread across



Limited P3 use domestically is surprising when considering that the United States Agency for International Development (USAID) has been a party to more than 1600 P3 projects globally (compared to 48 in the U.S.) since 2000, 90 percent of which are complete.<sup>17</sup> Recent passage of the surface transportation reauthorization bill (FAST Act) could help facilitate an increase in P3 activity. The bill provides a “relatively stable but still under-funded federal revenue stream,” and incentivizes state and local governments to experiment with alternative funding mechanisms to fill the gaps.<sup>18</sup>

The U.S. has experienced success on P3 projects, but there have also been some failures. According to the Kennedy School report “the most common thread in these unsuccessful P3 initiatives is a lack of political consensus to support the underlying project through to completion.”<sup>19</sup> Political consensus on these projects should be more common considering the greater benefits America could reap out of increased P3 projects domestically.

Competition across the globe is increasing. Countries once considered under-developed are reaching peak technological and economic status. The United States has a lot to gain from modernizing and maintaining a solid infrastructure network. Infrastructure is the backbone of any economy, and the foundation that allows all other economic productivity to exist. Policy makers should closely examine P3s as an undervalued financial resource with strong potential to increase domestic competitiveness and provide a better standard of living in the U.S.

*The Alliance for Innovation and Infrastructure (Aii) consists of two non-profit organizations, The National Infrastructure Safety Foundation (NISF) a 501(c)(4), and the Public Institute for Facility Safety (PIFS) a 501(c)(3). The Foundation and the Institute focus on non-partisan policy issues and are governed by separate volunteer boards working in conjunction with the Alliance’s own volunteer Advisory Council.*

<sup>16</sup> Deye, Andrew. (2015). Kennedy School Review. US Infrastructure Public-Private Partnerships: Ready for Takeoff? Retrieved on January 15th 2016, from <http://harvardkenedyschoolreview.com/us-infrastructure-public-private-partnerships-ready-for-takeoff/>

<sup>17</sup> Ingram, George. (2014). USAID. Retrieved on January 15th 2016, from [https://www.usaid.gov/opengov/developer/datasets/Ingram\\_PPP\\_Fact\\_Sheet\\_Final.pdf](https://www.usaid.gov/opengov/developer/datasets/Ingram_PPP_Fact_Sheet_Final.pdf)

<sup>18</sup> Schmidt et al. (2015). Law360. How the Fast Act will benefit Public-Private Partnerships. Retrieved on February 12th 2016, from <http://www.law360.com/articles/736145/how-the-fast-act-will-benefit-public-private-partnership>

<sup>19</sup> Ingram, George. (2014). USAID. Retrieved on January 15th 2016, from [https://www.usaid.gov/opengov/developer/datasets/Ingram\\_PPP\\_Fact\\_Sheet\\_Final.pdf](https://www.usaid.gov/opengov/developer/datasets/Ingram_PPP_Fact_Sheet_Final.pdf)