



# Vermont Bond Bank

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Date: November 8, 2024

To: School Aid for School Construction Working Group

From: Michael Gaughan, Executive Director

Subject: Potential Applications of Public-Private Partnership Model for School Construction

As described in the School Construction Aid Taskforce Report, Vermont school districts suffer from significant deferred maintenance that includes over \$3 billion in costs over the next 10 years alone<sup>1</sup>. This estimate may underestimate the total cost of bringing Vermont's schools in line with the quality deserving of its students, which in many cases, may require new schools to be constructed.

The scale of this need presents obvious challenges given both the fiscal and capacity pressures on the state. *However, the scale and timeline for addressing the facilities challenge also provides an opportunity to access resources unavailable to individual school districts when acting alone.*

The following is a description of a potential public-private partnership (P3) structure that could be used to manage both the risk of delivery and capacity issues faced by the state. **This is for discussion purposes only, does not represent a policy position of the Vermont Bond Bank, and is provided with interest of exploring all cost/risk reduction strategies.**

Exhibit A to this memo provides a background on P3s including the potential trade-offs of the structure. Simply put, P3s provide an alternative form of procurement and financing. They do not solve problems but do help to match the resources and needs of a government to private sector services at an aggregate versus project level. Successful and unsuccessful case studies abound in P3 literature.

Vermont has many preconditions that will challenge the timely and cost-effective delivery of new schools, including but not limited to: many schools of same age, contractor workforce constraints, school district workforce constraints, escalating supply and labor costs, and administrative capacity. Many of these conditions were also present in Maryland's Prince George County that employed a P3 for the construction of \$8 billion in new schools<sup>2</sup>.

A P3 has the potential to leverage the scale of the Vermont school construction business opportunity as an incentive for the private sector using a national and international market for construction delivery. This would effectively outsource much of the work that would otherwise be done at the local and state level after establishing the parameters and design requirements for the new schools. Notably, a P3

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<sup>1</sup> <https://education.vermont.gov/sites/aoe/files/documents/edu-legislative-report-school-construction-aid-taskforce-2024.pdf>

<sup>2</sup> <https://www.route-fifty.com/infrastructure/2023/09/unique-approach-one-county-uses-p3-build-public-schools/390740/>

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would be most effective when standardization is possible and is unlikely to offer benefits for the renovations of existing facilities.

One of the most common P3 structures internationally is for new construction is based on a design-build-finance-operate-maintain (DBFOM) model and related contract (called the “concession”). Domestically, the financing aspect of these contracts tends to be less effective given the public sector’s access to tax exempt financing. This is even more true in Vermont given the Bond Bank’s ability to aggregate tax exempt financing.

The remaining components—DBOM—remain attractive as standardized models of new schools (with local considerations) could be developed and implemented across the state. This would create efficiency as each district would not need to create a customized school under a more conventional design-bid-build model. In many respects, the P3 procurement would effectively outsource many (but not all) functions of the Massachusetts School Building Authority through the private sector.

Most importantly, under the P3 contract, the delivery and construction risk of the new schools would be assumed by the private sector while reducing the state or local absorption of risks related to cost escalation and workforce shortages. Accommodation for this risk would be accounted for in the contract via the delivery price and the level of customization available for each school.

This risk transfer via the P3 contract provides an opportunity for local districts whereby the state could establish the following framework to align local and state incentives. Critically, this would place the responsibility for procurement of new schools in the hands of the state via the P3 solicitation process.

1. State of Vermont, as P3 sponsor, could offer new schools to local districts at a set price following the procurement process. Local districts would thereby gain budget certainty given the price certainty and transfer of delivery risk to the state. The state would then transfer delivery risk to the P3 entity (i.e. the “concessionaire” made up of design and construction professionals).
2. Local district would pass a bond to pay for its share of the project. This financing would be facilitated through the Bond Bank. State aid for the project could pass through the Bond Bank or be delivered to the P3 entity directly (subject to further diligence on state credit implications). Release of bond proceeds to P3 entity could be facilitated by the Bond Bank. The facility itself would stay in local or state ownership in perpetuity.
3. Specialized staff within the Agency of Education would monitor the P3 entity and contract compliance but would not recreate the design functions of the P3 entity.
4. On an on-going basis, the P3 entity would provide operation and maintenance (O&M) of the facility to ensure the asset is maintained. Local districts would provide “availability payments” to the P3 entity as payment. These payments would be a known budgetary impact for the term of the O&M contract with the P3 entity thus relieving specialized facilities maintenance expertise and budgetary uncertainty.

The above methodology is subject to significantly more due diligence. This is intended as a conceptual framework only. The Bond Bank is willing to assist the Agency of Education in identifying potential advisors or legal council that could assist as desired.

**Exhibit A**

## Report

# Building-Up: How States Utilize Public-Private Partnerships for Social & Vertical Infrastructure

Updated February 16, 2017

Related Topic: [Transportation](#)

## Introduction

The United States is in the midst of a well-documented public infrastructure crisis. Due to a variety of circumstances, states have found themselves facing sizeable budgetary shortfalls amid a stock of aging infrastructure.

The American Society of Civil Engineers' (ASCE's) 2013 Infrastructure Report Card [gave the country's infrastructure an overall grade of D+](#), and estimates the need for additional investment in excess of \$3.6 trillion by 2020.

Further, the Congressional Budget Office (CBO) has found, while nominal spending on American infrastructure has increased by 44 percent since 2003, the [real purchasing power of that spending has decreased by 9 percent](#). This is due in large part to the rapidly rising costs of infrastructure-specific materials and services.

According to CBO data, states and localities provide the lion's share of infrastructure funding in the United States, [providing \\$320 billion as compared to \\$96 billion from the federal government](#). As with any area of government spending, it is difficult for lawmakers to find new ways to increasing funding.

Increasingly, states have turned to innovative approaches to help solve their infrastructure dilemma. One such innovative technique is the use of public-private partnerships (P3s), and many states are looking at P3s as one tactic as part of a multifaceted solution.

In the United States, public-private partnerships are commonly associated with large-scale transportation projects. In recent years [Virginia, Florida, Colorado, Pennsylvania](#) and [others](#) have delivered large transportation projects such as roads, bridges, transit systems and toll facilities via public-private partnerships.

However, transportation is not the only sector in which states have utilized the P3 approach. Examples abound of innovative solutions used by states and localities while capitalizing on the P3 model for a variety of infrastructure needs. Below is a map highlighting a number of the current non-transportation P3s from around the country. NCSL, in coordination with the [American Institute of Architects](#) and the National Council for Public-Private Partnerships, has compiled case studies for the projects that have a particularly enhanced or important legislative role.

## Key Takeaways

**States and localities provide the lion's share of infrastructure funding in the United States.**

**A public-private partnership is an alternative procurement method in which a public agency partners with a private-sector entity in order to leverage private resources and expertise through the transfer of risk.**

## What is a Public-Private Partnership?

At its core, a public-private partnership is an alternative procurement method in which a public agency partners with a private-sector entity in order to leverage private resources and expertise through the transfer of risk. P3s are agreements that allow private companies to take on traditionally public roles in infrastructure projects, while allowing the public sector to continue to ensure accountability to the public.

The Office of Innovative Program Delivery (OIPD), a division of the Federal Highway Administration (FHWA), [defines public-private partnerships](#) 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.” While this definition is specific to transportation projects, the general definition and the concept of “greater private sector participation” can hold true for P3s for other types of public infrastructure.

A key aspect of P3s is the combination of traditionally separate phases of procurement. The traditional form of U.S. public-sector procurement is design-bid-build, in which a contract is developed over the course of three individual phases. Many states and jurisdictions have begun to move beyond a traditional phased procurement by utilizing design-build methods, an approach to streamline the design, bid and construction phases into a single contract.

P3s take this approach one step further by allowing for the combination of construction, financing and maintenance phases. P3s enable the private sector to engage not only private sector capital/debt to help government pay for the upfront planning, design and construction but also enables the private sector to hold the long-term operations and maintenance responsibilities.

## Public-Private Partnership Project Delivery Models

Common structures of P3s include design-build-maintain (DBM), design-build-operate-maintain (DBOM) or design-build-finance-operate-maintain (DBFOM). Each method can offer advantages or disadvantages, depending on the specific project and parties involved. By combining the traditionally separate steps that make up the development and execution of an infrastructure project, efficiencies can be realized and public goals can be aligned with private sector interests.

NCSL's P3 Toolkit discusses many of the variations of P3s and key characteristics, including the mission, method and financial resources of P3s.

## **Greenfield vs. Brownfield**

P3s can be a valuable tool for states looking to build new infrastructure assets (greenfield projects) or for states looking to repair or upgrade existing infrastructure assets (brownfield projects). Alternatively, states may seek to carry out a hybrid of these two approaches in which an existing asset is upgraded alongside the construction of new infrastructure (i.e. adding new capacity to an existing roadway). All three of these approaches to a P3 may involve some combination of design, construction, financing, operations or maintenance; the difference arises in the mission of the public-sector. A jurisdiction may seek to improve existing infrastructure assets via a brownfield project whereas a greenfield project allows for the creation of new assets.

New infrastructure is not always the end-goal for the public-sector, but rather states seek a solution that best meets the needs of the public.

## **The Legislative Role in Public-Private Partnerships**

The primary role for state legislatures in P3s is determining first whether their states wants to pursue P3 procurement. If the intent of the legislature is to provide their state agencies with this procurement tool, creating sound policy is the next step.

Few states require legislatures to officially approve a P3 project. However, the need for legislative support should not be overlooked. A political champion can go a long way towards helping make a P3 successful. The asset is ultimately still owned by the state and will need to serve the public's interest and provide public benefit.

## **State Public-Private Partnership Legislation: Why is it needed?**

Due to the inherent complexity of P3 agreements and the typically large scale of the infrastructure projects involved, the legislature's role is vital. Creating enabling statutes is the first step a state can take to encourage P3 interest in its state, and is often seen as a pre-requisite by the private sector.

Enabling statutes dictate the ability of existing or newly created state agencies to engage with private industry through P3s. Each state has written its statutes to meet its specific needs and take into account the unique conditions of its economy, infrastructure and public policy context.

However, some general trends can be identified with regards to many aspects of P3 legislation. In an analysis of enabling statutes for transportation P3s (the sector most widely authorized for P3s in state statute), NCSL found many legislatures chose to address similar issues in their enabling statute.

## **Commonly Addressed Provisions in P3 Enabling Statutes**

## General

- Public Entities Authorized to use P3s
- Design Build Authorization
- Any broad limitations on P3 use
- Project types

## Governance

- Legislative Involvement
- Other Governmental Involvement
- P3 Advisory Bodies

## Proposals

- Solicited vs. Unsolicited Bids
- Bidder Confidentiality and Fees
- Publicly Hired Consultants
- Public Comments/Hearings

## Funding and Finance

- Tolls (for transportation P3s)
- Revenue Sharing
- Combination of State/Local/Federal Funding
- Exemption for certain taxes

## Other

- Specific Provisions in P3 Agreements
- Cost-Benefit Analysis
- Labor Issues
- Material Default/Bankruptcy

State P3 legislation creates the framework within which public agencies can accomplish the governmental role of protecting the public's interest while leveraging the expertise and resources of private industry. Sound public policy will help protect the public's interest, establish the conditions in which agreements can be made and allow for both public and private goals to be satisfied.

As the P3 market in the U.S. expands and jurisdictions look to use the model in additional sectors, new questions and policy issues arise. While many aspects of sound policy are important for every jurisdiction, lawmakers tailor their legislation to fit the specific needs and desires of their state.

As the legislation below demonstrates, some states choose to enable P3s across multiple sectors under one section of code while others provide statutory authority sector by sector.

## When is a Public-Private Partnership Appropriate?

One of the fundamental decisions to be made regarding P3s is whether or not a project is well-suited for P3 procurement. The process of making this determination typically starts with the public sector agency responsible for an infrastructure asset.

Legislatures may or may not play a role in this process, and states have chosen to handle legislative participation in a variety of ways. While a handful of enabling statutes place limitations on the type, size and price of P3 projects, the majority of states have broad enabling legislation with few project specific limitations. The majority of enabling statutes provide for some form of legislative review or involvement, but very few states require legislative approval for specific projects; leaving the procurement decision up to the appropriate state agency.

## Transportation P3 Toolkit

- NCSL's report, *Public-Private Partnerships for Transportation: A Toolkit for Legislators*, provides expert guidance, dependable counsel and a compilation of best practices to assist state legislatures as they consider whether and how to pursue transportation P3s in their states.
- Similar to the P3 market in America, NCSL's P3 research began with a focus on the transportation section. As the P3 market expands, so does the need for continuing the policy discussion.
- Building off the foundational research in the P3 Toolkit, this web brief provides additional analysis and guidance for P3s outside of the transportation sector.

A variety of circumstances can make a project a potential good fit for P3 procurement. Key aspects of a project that will help determine the suitability for a P3 include opportunities for available revenue streams, risk transfer, scalability, proper statutory authority, public vs. private cost of financing and the long-term performance strategy for asset owners.

## Revenue Streams

For many years the P3 market in the United States focused heavily on large-scale transportation projects, especially projects with an associated revenue stream. Many of the early U.S. P3s involved adding toll lanes as new capacity to existing roadways. A dedicated revenue stream in the form of tolls may be attractive to the private sector in order to pay back their investment and provide a financial rate of return for their acceptance of project risk. Revenue streams also can be used to subsidize long-term operations and maintenance payments to the private sector in the case of



design-build-operate-maintain (DBOM) or design-build-finance-operate-maintain (DBFOM) models.

More recently, states have begun to move towards an availability payment structure for transportation projects, rather than relying on future revenue streams associated with the project.

Essentially, in exchange for design, construction, long-term maintenance and/or operations of an infrastructure project, the state will pay the private partner an “availability payment,” backed by future public funding, dependent on the private sector meeting predefined benchmarks of performance. Florida’s I-4 Ultimate P3 and Pennsylvania’s Rapid Bridge Replacement P3 are both examples of an availability payment approach, both of which are lauded among the P3 community.

The availability payment model may help expand the feasibility of P3s in non-transportation infrastructure projects. Many infrastructure projects are associated with a revenue stream, including energy production projects, micro-grids, water systems or buildings with commercial rental space. However, for any number of reasons the public sector may decide against dedicating those future revenues to repay the private-sector financing of a P3.

Some jurisdictions have found that “user risk”, or the uncertainty of a future user-based revenue stream, can be expensive to transfer to the private entity. It generally will require a greater rate of return than a more certain revenue stream such as availability payments which is associated with an “appropriations risk.”

## **Risk Transfer**

A key selling point for P3s is the ability for the public to transfer risk to the private sector and the subsequent enhancement of the public interest. While this can provide great benefit to the public sector, any time the private sector accepts additional risk they will require additional financial incentives to do so.

Certain types of risk are better managed by the private sector while others are more appropriate for the public sector to retain. Common risk transfers to the private sector include operations risk, maintenance risk, construction risk, finance risks and more. Conversely, risks commonly retained by the public sector include ridership (when appropriate) or user risk, force majeure and revenue risk.

As previously discussed, the determination of risk transfer surrounding revenue risk or user risk can be alleviated with the introduction of availability payments. In the absence of a user-based revenue stream, when the revenue stream is not appropriate to be accessed by the private sector, or when the risk of future use is too prohibitive for the private sector to accept, the public sector partner can build a P3 agreement around payments from future public sector funding.

## **Scalability**

P3s are complex legal agreements that often involve sophisticated financial analysis and legal consultation. The barriers to entry for P3 agreements may preclude small municipalities or public agencies with small-scale projects from utilizing P3s.

An idea that has garnered increased attention recently is bundling together multiple similar small-scale projects. Pennsylvania recently entered into an agreement to replace and maintain more than 500 small to medium-sized bridges. Each bridge being too small a project on its own, bundling the projects has created an opportunity to leverage the private sector and transfer maintenance risk into a long-term contract.

Many possibilities abound for states to facilitate the bundling of small-scale municipal or county projects into larger regional P3s, particularly in the water/wastewater sector. In 2015, the EPA successfully worked with the state of Maryland and localities to pursue what is called community based public-private partnerships (CBP3s).

## **Other Considerations**

Other determinations to be made concerning whether to employ a P3 for a certain project include the financing costs, especially the cost of public vs. private financing, and the long-term goals of performance management for infrastructure assets. One factor that is currently up for debate is the relatively cheap price of private financing compared to historical trends due to current low federal interest rates.

## **Finding of Public Interest**

In 2015, the Virginia Legislature enacted legislation to tweak the state's long-standing and well-respected P3 laws. VA HB 1886 requires the public agency to produce a finding of public interest, and the Virginia Transportation Public-Private Partnership Committee (created by the bill) is required to ensure a P3 project meets the finding of public interest throughout the P3 process.

## **Public-Private Partnership Potential Benefits and Concerns**

P3s do not act as a funding source; rather, they can provide additional financing opportunities and create efficiencies leading to cost savings. Nor are P3s a cure-all for infrastructure funding needs. Every project is different, and may or may not benefit from innovative delivery methods.

Asset owners (public sector agencies) must ensure the appropriate conditions exist before pursuing a P3. This may include an assessment of the public sector goals and mission in order to determine if the private sector can be leveraged to reach the desired outcome.

Key benefits of the P3 project delivery method arise from the leveraging of the private sector's expertise and resources. Private sector partners can bring to the table tools to achieve efficiencies, provide financing and enhance quality. However, ultimately the public asset will need to serve the public interest and public goals should be considered before private sector interests.

Any new and innovative technique naturally will create concerns over protecting the public's needs, goals and quality of life. Difficult questions have arisen around P3s in general, and each individual project often will include its own unique considerations and controversies.

## Potential Benefits

- Private Financing and Project Acceleration
- Monetization of Existing Assets
- Cost and Time Savings
- Lifecycle Efficiencies
- Improved Project Quality
- Risk Transfer
- Public Control and Accountability
- Access to cutting-edge technology
- Enhanced operations and maintenance

## Potential Concerns

- Loss of Public Control and Flexibility
- Private Profits at the Public's Expense
- Loss of Future Public Revenues
- Risk of Bankruptcy or Default
- Accountability and Transparency
- Environmental Issues
- Labor Concerns
- Risk Negotiation
- Increased Consulting Needs/Costs
- Limited government oversight
- Foreign Companies
- Specific Contract Terms

These benefits and concerns need to be addressed at the outset of any P3 agreement. The partnership's concessionaire agreement is considered by many P3 experts to be the most appropriate place to alleviate any potential issues associated with specific projects. Ideological and project-neutral concerns may be addressed in the legislature when debating the creation of P3 enabling laws.

Sound public policy through state law is the primary and most authoritative tool state legislatures have to alleviate any issue. Many state legislatures have enacted statutory provisions to address potential concerns about P3s and enhance the benefits such models can provide. Depending on the goals of the legislature and all parties involved, these benefits and concerns are handled differently

and therefore enabling laws will vary from state to state.

## Public-Private Partnership State Statutes

As of February 2016, NCSL is aware of 38 states which have some form of P3 enabling legislation on the books. The list of statutes below provides a general analysis of each law and allows for a rough comparison among states. This NCSL analysis:

- Categorizes each law as comprehensive or limited based on the specific language in code.
- Notes which jurisdictions (state/local/regional) are permitted to enter into P3 agreements. As discussed earlier, some states choose to enable P3s across multiple sectors under one section of code while others take a more piecemeal approach.
- Details which state agencies that have authority to engage in P3s.
- Highlights any additional language relevant to P3s.

## States with P3 Enabling Legislation

### Alabama

#### Ala. Code §23-1-81

<b>Year of Enactment</b>	1996
<b>Statute Type</b>	Limited
<b>Jurisdiction</b>	State and Local
<b>Sector</b>	Transportation
<b>Public Entities Authorized</b>	State DOT and County Commissions
<b>Additional Info</b>	State DOT and county commissions may license any legal entity to establish or operate toll roads, toll bridges, ferries or causeways.

#### Ala. Code §§23-2-140 to 163

<b>Year of Enactment</b>	2009
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