P3 Governance: Ensuring Public-Private Partnerships are Built to Last
Arup is an independent professional services firm that provides essential advisory and engineering services to the P3 market.

Understanding the interconnectedness of organizational strategy, risk analysis, design, asset performance outcomes, and financing options is crucial to maximizing the value of alternative project delivery. That is why many clients are turning to Arup to successfully deliver their P3 projects. Arup has helped clients deliver over $202 billion in successful P3 transactions since 2008.

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In 2014 the state of Indiana reached a landmark $350 million agreement to allow a private firm — Development Operators — to manage a 21-mile stretch of Interstate Highway 69. Development Operators agreed to build and maintain the road for 35 years in exchange for a $22 million annual availability payment from the state. This deal was lauded as a model public-private partnership (P3) that would bring cost transparency, efficiency, budget stability and innovative design to this crucial piece of Indiana’s infrastructure.

In June 2017 Indiana and Development Operators agreed to terminate the deal and return the road to the state. That termination followed nearly two years of unexpected delays and cost overruns that raised the total costs to more than $550 million. Critics of P3s have called this termination a cautionary tale of why P3s are unlikely to work in the United States.

Meanwhile, the same week the Indiana P3 was terminated, the city of Chester, Pa., closed on a $50 million, 35-year P3 to build 350 acres of new stormwater infrastructure. Chester will pay its private partner Corvias an annual availability payment in exchange for measurable improvements in the city’s stormwater quality. Perhaps more important, this P3 will bolster community development and create livable wage jobs in Chester — a community where more than one-third of residents live below the poverty line.

These two anecdotes illustrate some of the key points you’ll find throughout this fourth edition of the Governing Guide to Financial Literacy. The I-69 example shows that P3s can and often do fail. But they rarely fail because of cost overruns or construction delays. Governments can manage those risks through properly structured contracts and other risk-sharing tools. In fact, a P3 fails when citizens decide it’s no longer achieving its goals, which is what happened with the Indiana P3 — the project came first, and the goals came second. Without a path to redefine the project’s deliverables, Indiana’s transportation leaders had no choice but to terminate.

By contrast, Chester chose a partnership model that allows Corvias to change the types of infrastructure it builds and manages as the regulatory and technological landscape changes, and perhaps more important, as the city’s needs evolve. The partnership’s goals will not change, but the tactics to achieve those goals will. This type of dynamic partnership will require deep engagement from many stakeholders, including Chester’s public works personnel, local economic development officials and a citizen oversight board. If these stakeholders work together well, they will keep this P3 moving toward its desired outcomes. The process of engaging stakeholders is known as P3 governance.

The third edition of the Governing Guide to Financial Literacy described what P3s are and covered how to decide if and when a P3 is right for your jurisdiction. It emphasized the risks and rewards that surround typical P3s, and the tools governments use to assess and manage those risks.

This fourth edition of the Guide is about P3 governance. Most P3s are long-term arrangements. They’ll encounter unexpected challenges to both their internal operations and their external environment. But what makes a P3 more likely to succeed for the long-haul? The answer is simple: a robust governance process. This Guide covers the tools, tactics and structures of contemporary P3 governance.
The termination of the $350 million Indiana I-69 P3 agreement is a cautionary tale about the necessity of proper governance.
WHAT ARE PUBLIC-PRIVATE PARTNERSHIPS?
A QUICK REVIEW
The key to this definition is shared risks and rewards. With traditional public sector procurement, the government designs the project, engages a private partner for the construction or “build” phase, and then operates and maintains the project into the future. With a few exceptions, like some of the construction-related risks assumed by the build contractor, virtually all the project risks stay with the government. It secures the requisite financing, manages all permitting and regulatory compliance, manages user demand for the project and others. In return, it keeps all the revenues or other benefits the project produces.

With a P3, the government engages the same private partner across multiple stages of the project. In “design-build” arrangements, the private partner engaged to construct the project is also responsible for designing it. In many recent P3s, private partners are involved in design, construction, maintenance and ongoing operations. This is called a “Design-Build-Operate-Maintain” P3, or DBOM. Figure 1 illustrates the most common P3 models and various roles private partners play in each model. For more details on specific P3 structures and arrangements, see Volume 3 of the Guide.

Figure 2 shows how risks are typically allocated in a DBOM P3. Under that arrangement, most of the construction, operational and financial risks are with the private partner, and the main political and demand risks are shared between the government and the private partner. Recall that “Force Majeure” is “act of God,” or the risk that the project will be damaged or impaired by a natural disaster or some other uncontrollable event. For more details on strategies to manage particular risks in this chart, see Volume 3 of the Guide.
P3 Governance: Ensuring Public-Private Partnerships are Built to Last

P3s vs. Traditional Procurement: The Government Perspective

Why would a government use a P3 instead of traditional procurement? There are four main reasons:

Fewer transaction costs. By working with a single private partner across multiple stages of a project, a government can reduce the costs of writing and enforcing separate contracts with separate partners for the same work. P3s also allow governments to focus more on monitoring performance instead of hiring contract specialists to oversee traditional procurement details. Economists call these contract development and enforcement activities “transaction costs.” Contracting with a single entity, and focusing contract enforcement in areas where existing staff have relevant knowledge, are two key ways that P3s reduce transaction costs.

Design innovation. P3s can offer private partners a powerful incentive to design projects with an eye toward long-term efficiency and cost savings. Innovation sounds exciting, but it's expensive, difficult, risky work. This is especially true when designing public facilities like a city hall. If the private partner’s design is flawed, everyone will know. That’s why many private partners tend to stick with a design they know will work, even if that design can’t adapt as the public’s needs change. However, in a decades-long P3 the private partner can recover its initial investment in innovation, share some of the political and other risks with the government, and capture some of the long-term cost savings and efficiencies.

Faster delivery. In construction, time is money. For instance, prices on concrete, steel, glass, fuel and other commodities can increase by double-digit percentages over a few weeks, or interest rates on construction loans, lines of credit and other financing can rise sharply if market-wide interest rates rise.

Availability Payments

P3s are often arranged around lease payments from the government to its private partner. With a city hall P3, for instance, the government would likely retain ownership of the land on which the new city hall is built, but allow the private partner to own the actual building. The city would then lease that building from the private partner, and the private partner would commit some or all of those lease payments to the building maintenance and operations. Or put differently, the city would pay its private partner to make city hall “available.” These payments are quite different from tolls. Tolls are earmarked for a specific purpose, where availability payments can come from a variety of state or local revenues. Moreover, toll-centered P3s almost always require gradual increases in tolls while most availability payments are designed to deliver the same or even better quality infrastructure for a steady payment over time.
Traditional government procurement is to some degree designed to slow down the project’s progression from design to completion. Governments typically have managed the risks of large infrastructure projects by monitoring the design, financing and build components as separate processes. There is a trade-off built into this strategy. On the one hand, taxpayers can be certain contractors are accountable for their portion of the project, and that public money is spent according to the project plans. On the other hand, that oversight takes time and the project can experience major setbacks as it moves through those stages, which can lead to cost overruns.

Under a DBOM P3, the private partner can quickly adapt both the design and build plan. For these and other reasons, most research shows P3s almost always deliver completed projects faster than traditional procurement. The challenge for governments is to ensure accountability in P3s without the direct oversight offered by traditional procurement.

**Budget certainty and transparency.** In traditional procurement the government takes over a piece of infrastructure at the operations and management stages. Some governments are diligent about funding ongoing infrastructure operations and maintenance, but many are not. In the face of chronic problems like housing affordability, the opioid epidemic and underfunded public schools, most state and local governments are reluctant to commit the resources needed to fix pipes and fill potholes. That’s a big part of why the American Society of Civil Engineers has estimated the cost of state and local governments’ “failure to act” on infrastructure maintenance will add up to more than $4 trillion in lost economic productivity by 2025.1

With P3s, and in particular P3s organized around an availability payment, a government commits to a given level of infrastructure investment over a long period, which makes it easier to build a long-term budget. Perhaps more important, policymakers and citizens know how to hold the project accountable, since the P3 agreement outlines the outcomes the private partner must deliver in exchange for that availability payment.

To realize these potential benefits a P3 must establish a robust and effective governance process. The tools, tactics and strategies to develop that governance are described later in this guide.

**P3s vs. Traditional Procurement:**

**The Private Partner Perspective**

Private partners get involved in P3s for four reasons of their own:

**Steady revenues.** State and local infrastructure is supported by steady, predictable revenues. Those revenues can be directly related to use of that infrastructure, such as water utility payments, stormwater user fees or tolled bridges. They also can be regular appropriations from a government, like the availability payments described previously. Regardless of the source, those revenues are attractive to investors.

P3s almost always deliver completed projects faster than traditional procurement. The challenge for governments is to ensure accountability in P3s without the direct oversight offered by traditional procurement.
The Role of Governance in P3 Risks

P3s can help governments realize a variety of benefits. But they do come with several risks and potential drawbacks. And like with the potential benefits, many of these concerns are directly related to the quality and effectiveness of P3 governance.

✓ Solving the wrong problem. P3s give governments access to new investors who are willing to commit money to projects that have yet to produce any revenue. This process of using borrowed money and investor equity to finance a project, and then pay those creditors and investors back with cash generated by the project, is known as “project finance.” This is quite different from traditional public finance where the project must have an identifiable revenue stream or a specific revenue pledge from a government before investors will commit.

P3 critics point out that while project finance is powerful, it’s a financing tool, not a funding source. State and local government infrastructure is not underfunded because investors aren’t willing to invest. It’s underfunded because taxpayers aren’t willing to pay the additional taxes, fees and user charges needed to fund it. P3s can address this problem in part by helping to contain project costs and make infrastructure outcomes more transparent. But they cannot change deeply held taxpayer attitudes.

✓ Loss of public ownership. By necessity, P3s transfer much of the day-to-day control of a public asset to a private operator. This can undermine public trust in government, distort citizens’ understanding of what their government does and diminish residents’ sense of place in the community. This is why it’s imperative P3s include a robust public engagement and communications effort.

✓ Too much trust. Even with the best governance structure and the perfect alignment of incentives, the public and private sectors have fundamentally different objectives. P3s simply depend too much on trust in the best intentions across both sectors. Put differently, if the public and private sectors were good partners, we wouldn’t need consumer protection laws, environmental quality standards, anti-trust regulation and other government efforts to protect the public from capitalism’s ill effects.

✓ Upsetting the status quo. Contemporary P3s require governments to engage new and unfamiliar private partners. For instance, many of the high-profile P3s among U.S. state and local governments today are led by major international construction and management companies like Skanska (Sweden), Meridiam (France), Plenary Group (Australia) and Balfour Beatty (UK), among others. These firms engage deeply with local subcontractors and stakeholders, but they inevitably displace local expertise and interests.

because they’re predictable. Private partners can and often do use those predictable revenue streams to stabilize other parts of their investment portfolios. That’s why international insurance and financial services companies like Allianz, Swiss Re, Macquarie and others are some of the largest P3 investors around the globe.

Economies of scope. P3s are now common for multi-billion dollar infrastructure “mega projects,” such as rebuilding international airports like LAX or LaGuardia, regional water treatment and distribution systems, or housing for tens of thousands of university students. Many potential private partners have the expertise and capacity to play a specific role in a mega project but not to manage one, so they don’t participate. P3s that bring together many potential private partners offer the opportunity to leverage expertise across many different project phases.

Research and development. In traditional government procurement a private partner delivers a specific piece of infrastructure according to design specifications. In most P3s, the private partner has the latitude to deliver the infrastructure however it sees fit, as long as results are delivered. That latitude allows the private partner to develop and test new technologies, materials and processes that can be used on other future projects.

Relationship-building. Like all partnerships, P3s are fundamentally a relationship between two entities. P3s offer private partners an opportunity to develop a relationship with a government. That relationship can produce a variety of benefits, including future projects and connections to other governments.

Essential Questions

- What broader goals do we hope to accomplish through infrastructure investments? Community development? Workforce development? Local capacity building?
- Do our key stakeholders understand how P3s are different from privatizations? Do they understand the various P3 models?
- How might a potential infrastructure project benefit from design innovations made possible through P3s?
- Do we have the capacity to manage demand risk? Political risk? Regulatory risk?
WHY THE PUBLIC SECTOR SHOULD ADOPT LIFE CYCLE COST ANALYSIS

The American Society of Civil Engineers’ (ASCE) 2017 Infrastructure Report Card grades the nation’s infrastructure a “D+,” and estimates the U.S. needs to invest an additional $2 trillion in infrastructure.

These infrastructure challenges are significant but solvable. An infrastructure system fit for the 21st century will require increased long-term investment. Public-private partnerships (P3s) offer one valuable avenue for financing some infrastructure improvements, and more must be done to incentivize and augment their use.

Increased infrastructure investment from government and the private sector must be spent wisely, considering the costs of building infrastructure and maintaining and operating it for its lifespan. One way to help maximize investments is to leverage the private sector’s wealth of experience in examining total life cycle costs. Life cycle cost analysis (LCCA) — a data-driven, detailed account of the total costs of a project over its expected life — offers a proven path for cost savings and better planning. Embracing LCCA results in higher-quality projects with lower long-term costs, increased industry competition instead of selections based on the lowest bid, and improved public credibility.

The private sector often uses LCCA to justify capital investments, but there has been less incentive for its use in the public sector. P3s help public sector employees learn from private sector successes, while also demonstrating the benefits of controlling life cycle costs, promoting greater emphasis on maintenance, setting clear performance standards and encouraging innovative project design.

Increasing the use of LCCA to lower life cycle costs is one way civil engineers are addressing the nation’s infrastructure challenges. Through the ASCE Grand Challenge, America’s civil engineers pledge to reduce infrastructure life cycle costs, increase the value and capacity of infrastructure, and increase and optimize infrastructure investments. The federal government must incentivize LCCA’s use to motivate states and cities to incorporate it into the infrastructure decision-making process and optimize performance outcomes.

By implementing LCCA and lowering life cycle costs, the U.S. can transform the way the nation’s infrastructure is planned, delivered, operated and maintained, ensuring it is built for the future.
President Donald Trump made infrastructure a centerpiece of his 2016 campaign. He pledged massive federal investment in roads, bridges, ports and other vital infrastructure as part of his “America First” policy. He claimed he could make this massive investment without raising taxes. Clearly, this message resonated with voters.

In fall 2016 the Trump campaign circulated a white paper that described how he planned to pay for a massive infrastructure plan without raising taxes. The answer: public-private partnerships. In particular, he proposed to offer $137 billion in new federal tax credits. According to the main authors of that plan — Peter Navarro and Wilbur Ross, now the director of the White House National Trade Council and secretary of commerce, respectively — those credits would stimulate $1 trillion of new investment through concession/privatization-style P3s. Those credits, along with low interest rates around the world, would set off an infrastructure investment bonanza that, according to Trump adviser Steve Bannon, “would be as exciting as the 1930s.”

To date, the Trump infrastructure plan has not materialized into actual legislation. However, his rhetoric both as a candidate and as president has drawn new attention to both our infrastructure spending needs and the potential role of a particular type of P3 in meeting those needs.

Perhaps more important, these recent national-level developments highlight two key points that are the focus of this section. First, federal policy matters. Most infrastructure spending happens at the state and local level, including and especially ostensibly “federal” projects like interstate highways. And yet, federal policy is critical because it shapes where and how much of the state and local spending happens. That’s why some recent changes and proposed changes to federal policy could reshape large parts of the P3 landscape. Second, states and localities are using the P3 model to execute an ever-widening scope and scale of infrastructure projects.

Los Angeles World Airports recently finalized an RFP for a $5 billion Landside Access Modernization Program at LAX, which will be delivered through a Design-Build-Finance-Operate-Maintain arrangement.

Not Just For Roads

P3s are synonymous with major bridge and highway projects. The Chicago Skyway and the Indiana Tollway were two of the original high-profile P3s. Several recent major road and bridge projects also happened through P3s, including the Goethals and Tappan Zee bridges in greater New York City, the Pocahontas Parkway in suburban Virginia and the Highway 520 floating bridge in Seattle.

However, P3s are now at the center of an ever-expanding array of projects in areas beyond highways and bridges. In just the past two years, states and localities across the country have launched the following:

- **The San Antonio Water Supply agency (SAWS)** recently finalized a 30-year, $927 million Design-Build-Finance-Operate-Maintain (DBFOM) to develop a new water supply pipeline. According to SAWS, the Vista Ridge Water Supply project will be the first major water supply P3 in the nation.

- **Los Angeles World Airports (LAWA)** recently finalized a request for proposals for a $5 billion Landside Access Modernization Program at Los Angeles International Airport (LAX). This program features a new “people mover” rail system to connect LAX with the Los Angeles County Metro Transit system and a new consolidated rental car facility. LAWA will deliver this project through a DBFOM.

- **In summer 2016 the city of Fort Lauderdale, Fla., issued a request for proposals for a DBOM to redevelop the city-owned Las Olas Marina.** This $200 million project will expand Las Olas’ capacity to accommodate “mega yachts” and the economic development opportunities they bring.

- **In early 2017 Pennsylvania’s Department of Transportation launched an $85 million long-term DBFOM to develop 29 compressed natural gas fueling stations for public transit agencies throughout the state.** These fueling stations will also be available for a fee to non-government agencies.

All these projects show the ever-widening array of stakeholders that governments now engage through P3s. That broader engagement requires new and effective approaches to P3 governance.
The Changing Federal Role

The federal government traditionally has played an important, but indirect role in state and local infrastructure development. That role is simple: State and local government debt typically is exempt from federal income taxes. In other words, investors can purchase bonds used to finance state and local infrastructure projects, receive interest payments on those bonds and not pay federal income taxes on those interest payments. There is approximately $4 trillion in state and local bonds (collectively called municipal bonds) outstanding today, and the vast majority of those bonds are federal tax-exempt.

Tax-exempt bonds are a unique feature of U.S. public finance. No other country has this type of robust, dynamic, tax-exempt public capital market. At the same time, tax-exempt financing has also discouraged states and localities from aggressively pursuing P3s. Why turn to private investors when tax-exempt financing is cheap and plentiful?

But this is changing. As described earlier, states and localities are struggling to find reliable infrastructure funding sources. Financing — that is, the upfront money needed to complete a project — is readily available. What's less available is dedicated revenue sources to pay back that financing and reliably maintain public infrastructure. That's why P3s are growing in popularity. They allow a state or local government to complete a project that can generate its own revenues, but only once it’s complete. Such projects are usually not suitable for tax-exempt financing. P3s also allow states and localities to stretch their infrastructure dollar further by delivering more reliable infrastructure over time for the same basic level of spending. All this suggests states and localities will continue to use P3s to augment traditional tax-exempt financing.

To that end, one of the key policy questions today is how the federal government can best support this emerging state and local P3 industry. There are two divergent perspectives.

Financing and funding. One view is that the federal government can and should offer states and localities more direct financial support. That support could take the form of new funding sources, like new federal grants or direct appropriations. Past experience in areas like urban transit systems has shown that even a small amount of federal funding — perhaps as low as 10 percent of the total project amount — can be the difference between a state or locality going forward with a project or not. The federal government could also expand low-cost financing for P3s with new loans, loan guarantees and tax credits that allow states and localities to stretch their limited funding sources further.

Regulatory reform. Another perspective suggests the federal government should give states and localities more latitude in how they engage private partners in P3s. As an example, federal rules prohibit states and localities from using tax-exempt financing for private activity like leasing a facility from a private partner as part of a P3. Easing these types of restrictions would allow states and localities to more effectively use tax-exempt financing to drive P3s.

Recent federal government policy is a mix of both. The Obama administration was quite active on the financing side. It expanded the Transportation Infrastructure Finance Innovation Act (TIFIA) loan program, which offers tax-exempt federal loans states and localities can use to support early private investments in P3s. To date, TIFIA has supported more than $75 billion of transportation P3s. Under the Obama administration the federal government also created an analog program, the Water Infrastructure Finance Innovation Act (WIFIA), to support water infrastructure P3s. This is in addition to long-standing infrastructure grant programs like the Transportation Investment Generating Economic Recovery (TIGER) and Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) grants, among others.

Federal Tax Credits and P3s

A tax credit is when one part of government gives up tax revenue so that another part can support a project without either part actually spending money. Federal Historic Tax Credits (HTC) are a good example. With the HTC program, an investor who spends money to rehabilitate a historic property can reduce its federal tax liability by up to 20 percent of the total amount of that spending. Federal policymakers prefer tax credits because they don’t require any new taxes or spending cuts. They simply require the Treasury to collect less taxes. Federal and state tax credits are important because they encourage investors who might not benefit from tax-exempt bonds to participate in P3s. For example, a corporation with a low federal income tax liability is not likely to purchase tax-exempt bonds. However, it might invest in a P3 and earn a federal tax credit that it can save for a year when it has a higher tax liability or sell to another corporation. Because tax credits are popular with investors, they’re a core part of P3s for housing, energy conservation, environmental remediation, historic preservation and many other areas.
At the same time, President Obama also was active on the regulatory side. For instance:

- He proposed several times to expand the scope and scale of private activity bonds (PABS). As mentioned previously, federal rules prohibit states and localities from using tax-exempt bonds for private purposes. However, the federal government does grant limited exceptions to this rule, particularly for private purposes that have substantial economic development benefits like industrial parks or convention centers. Those exceptions are called “qualified PABS.” President Obama proposed expanding the definition of qualified PABS to include a variety of new public facilities.

- The Internal Revenue Service (IRS) recently changed federal rules in a way that could reshape the DBOM landscape. Until recently, the IRS considered long-term operations and maintenance contracts a private activity. Because of that interpretation, it limited the length of operations and maintenance contracts financed by tax-exempt bonds to 15 years. Most tax-exempt investors are interested in a longer-term investment, so shorter-term DBOMs have been forced to look to taxable debt or private equity for financing. However, in August 2016 the IRS released Revenue Procedure 2016-44 which changed these rules to allow for tax-exempt financed operations and maintenance contracts of up to 30 years. This change will almost certainly draw new tax-exempt investors into long-term DBOMs, particularly for social infrastructure like higher education, corrections and public buildings.

- President Obama also proposed different versions of a federal infrastructure bank and a federal P3 policy bank. The infrastructure bank would be modeled after state-revolving loan funds and other financing sources capable of supporting P3s. The federal policy bank would be modeled after state government P3 offices.

So far, President Trump has clearly favored the deregulation approach:

- His original $1 trillion infrastructure plan called for tax credits of about 80 percent of capital invested in P3s. In that plan, he also references lifting the restrictions on private activity bonds and other restrictions on private investment in a wide variety of public infrastructure projects. Taken together, these changes would create a particularly favorable environment for P3s, especially those with dedicated revenue streams like toll roads, bridges and airports.

- He has talked openly about ending the federal tax exemption for municipal bonds. That change would likely come as part of a broader comprehensive tax reform package.13

- In his inaugural budget proposal, he called for cuts to traditional federal grants and other direct funding sources, including TIGER and FASTLANE.14

State Policy and Its Implications

Today’s federal P3 policy is ambiguous. But state policy is not. Several state governments have moved aggressively to develop

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**Five Contemporary Trends in U.S. P3s**

1 **Blended Financing**

Many of the most exciting P3s today blend tax-exempt financing with several other sources, including: taxable debt and equity from private investors; loans from state governments and the federal government; grants and other philanthropic support from foundations; and state and federal tax credits purchased by corporations, banks and other institutional investors. This uniquely U.S. model is a sharp contrast to the emphasis on private equity common in the “international model.”

2 **Emphasis on O&M**

Private partners are more involved in P3s with a long-term operations and maintenance (O&M) component, but where the public maintains full ownership of the asset in question. This is also a contrast to other countries where concessions and privatizations are more common.

3 **Role of Nonprofits**

Many emerging U.S. P3 models incorporate the investment, expertise and statutory authority of nonprofits. In some models — such as the “American Style” P3 advanced by the National Development Council — a nonprofit organization maintains ownership of the asset and the tax-exempt debt used to finance it.

4 **Redefining “Essential”**

In other countries P3s are the go-to approach for “essential” infrastructure like roads, bridges and water treatment facilities. The U.S. experience with those P3 models has been less favorable, mostly because of the political controversy surrounding new tolls and user charges. But P3s have exploded in the U.S. as a way to provision “social infrastructure” like courthouses, city halls and electric car charging stations.

5 **Emphasis on Affordability**

P3s work well as a way to provide a particular type of infrastructure on a fixed budget.
the authority, capacity and resources to expand their P3 efforts. These developments are another piece of the rapidly evolving P3 landscape. Consider the following:

- Several states have developed statewide legislative frameworks to enable both state and local P3s. For example, in 2015 Georgia Gov. Nathan Deal signed into law the “Partnership for Public Facilities and Infrastructure Act.” This legislation calls for the state to create consistent guidelines for social infrastructure P3s. Those guidelines are designed to streamline the development of P3s going forward. Several other states have passed or are considering similar legislation.
- Many states have established P3 advisory centers within state government. These centers are tasked with developing uniform guidelines for P3 development, sample contracts and other legal documents, and technical/financial analysis of potential P3 opportunities, among other tasks. Virginia’s Office of Public-Private Partnerships was one of the first, and since then Texas (Texas Center for Alternative Finance and Procurement), Illinois (Bureau for Innovative Service Delivery), Florida (Florida P3 Center), Arkansas (P3 staff within the Arkansas Economic Development Commission) and other states have established similar functions.
- Several states and regional authorities have hired or have issued RFPs/RFQs for P3 advisory services. For instance, in February 2017 the Puget Sound regional transit authority, Sound Transit, issued an RFP after the region passed a local sales tax to fund a $50 billion expansion of regional light rail.17
- Some states are building a performance orientation into their traditional procurement functions. For example, the Washington State Department of Enterprise Services now includes potential energy savings into its evaluation criteria for many state contracts. This “green contracting” initiative is a way for the state to pursue broader policy goals like conservation and energy savings through ongoing relationships with the private sector.

These bold, definitive state and local actions stand in sharp contrast to the ambiguity in current federal policy.

### Essential Questions

- Do we have infrastructure projects that are complex enough to benefit from a P3?
- Do we have the appropriate federal, state and local authority to pursue a P3?
- Do we have the relevant technical expertise to negotiate a P3? If not, is that expertise available at the state or some other level of government? If not, can we hire that expertise?
- What is our past experience with tax credits like historic preservation or “New Markets”?

### TIFIA and Floating Bridges

In April 2016 the Washington State Department of Transportation opened the first lanes of a replacement for the Evergreen Point Floating Bridge. This bridge, first completed in 1962, spans Lake Washington and is one of the main connections between the city of Seattle and its “eastside” suburbs. Initial construction was made possible in part by a $300 million TIFIA loan that will be repaid through new tolls collected on the bridge.
How a Parking Garage
P3 Changed Scranton’s Future

A P3 in Scranton, Pa., serves as a model for how municipalities can monetize assets while maintaining control and ownership.

Parking garages may seem benign, but they can be critical to economic development.

In 2012, the city of Scranton, Pa., suffered a financial blow when the Scranton Parking Authority defaulted on its debt, and the City Council declined to cover debt payments. The default caused the city’s bond rating to suffer, which increased interest rates on its debt, threatening to force the city into bankruptcy.

The National Development Council (NDC), a community and economic development nonprofit, formed a standalone nonprofit with the city to lease, operate, repair and maintain six parking structures and all on-street parking meters in downtown Scranton.

Unlike the private equity approach to monetizing city assets, NDC’s nonprofit P3 model leverages tax-exempt bonds through its affiliate, the Housing and Economic Development Corporation. This approach allows cities to leverage low-cost financing and private sector management to update infrastructure without adding user fees or compromising other programs through budget offsets. The model also ensures all proceeds in excess of operating expenses, debt service, and capital repairs and replacement are returned to the city in the form of grants. When all the debt has been retired, ownership of the parking system is returned to the city.

The P3 not only stabilized Scranton’s immediate financial situation, it also paved the way for the city’s economic recovery. For the first time since the Parking Authority defaulted on its debt in 2012, the city did not have to increase property taxes.

Utilizing NDC’s P3 model, parking garages will be repaired and small business owners in downtown Scranton will benefit from faster turnover in metered spaces. The growing downtown residential population will be positively impacted by better management and maintenance of the garages, and the pedestrian experience will be enhanced as ground floor retail spaces — which have experienced high turnover and vacancies due to neglect — are upgraded and re-leased.

This nonprofit P3 approach is ideal for small and mid-sized cities to develop any social or traditional infrastructure, such as justice centers, city halls, broadband, hospitals and laboratories, student housing and more.

For more information on NDC and our unique approach to P3s, contact Allison Kelly at akelly@ndconline.org
P3 Governance: Ensuring Public-Private Partnerships are Built to Last
The previous sections described how P3s today present states and localities with new challenges and opportunities. They include:

✅ **New stakeholders.**
Many emerging P3 models demand that the public sector engage nonprofit organizations, small businesses, philanthropy and other stakeholders. This is a big change from traditional P3s where the arrangement is mostly between the government and the private partners’ project company. New stakeholders bring fresh resources, expertise and perspectives to a P3. But they also bring different goals and objectives.

✅ **Complex operations.**
Through P3s, private partners are more involved than ever in the maintenance and operations of public facilities like city hall buildings and water treatment facilities that are far more complex than the roads and bridges of traditional concession-style P3s.

✅ **Broader performance expectations.**
Some of the most exciting P3s are in areas where the infrastructure itself is not the main deliverable. P3s for stormwater infrastructure, for instance, are as much about developing green, high-tech, livable wage jobs to a community as they are about water quality. This presents an additional performance measurement challenge. That is, how will citizens know if a P3 is improving the quality of life in their community?

✅ **Demands for transparency.**
On occasion, P3s do fail to meet their performance goals, and often at a substantial loss to the public. That’s why it’s appropriate for the public to demand more transparency than ever on P3 costs and performance. The challenge, of course, is that private partners need to protect their trade, technology and financial performance secrets to preserve their competitiveness. This is a delicate and challenging balance in today’s P3s.

All of these challenges have one thing in common: They can pull a P3 out of alignment and disconnect its daily operations from its long-term goals. Effective governance ensures a P3 stays in alignment even in a dynamic economic, political and regulatory environment. But as P3s change, so too must the tools of P3 governance.

This section covers the 10 tools of P3 governance. The first five are “ex ante” (i.e., based on a projection or expectation) tools. Governments can use them when evaluating or designing a P3 to ensure its long-term success. The second set of five are “ex post” (i.e., based on facts or actual circumstances) tools. Governments employ these when a P3 is operational.
Ex Ante Tools of P3 Governance

If a P3 is successful, it’s usually because the government and private partners were able to think ahead. Most P3s are long-term, performance-oriented agreements. Governments today can and should consider these five tools when evaluating or designing a P3.

1. Key Performance Indicators

Many of today’s most innovative P3s are for “social infrastructure” — like courthouses, “green” public buildings, affordable housing and university research labs, among others — where it’s more difficult to measure performance. What does it mean for a building to perform well? Do users feel safe and comfortable? Are the spaces within the building adequate to meet users’ needs? Is it energy efficient (and how do we know)? In these settings, reliable performance can mean many different things.

In response to that challenge, many social infrastructure P3s are organized around sophisticated and comprehensive systems of key performance indicators (KPIs). KPIs are a measurable indicator of a specific aspect of performance. Social infrastructure P3s use them in a big way.

For example, the Long Beach Courthouse P3 agreement was organized around 75 unique KPIs. Three of them are recreated in the table below. One of those measures covers the building management staff’s responsiveness to routine maintenance orders. A second tracks management’s attentiveness to preventive maintenance needs. At the end of this P3 agreement, the private partner — in this case a company formed by a group of private partners called Long Beach Judicial Partners (LBJP) — will “hand back” the courthouse building to the state of California. That’s why

FIGURE 3: Selected KPIs for the Long Beach Courthouse P3

<table>
<thead>
<tr>
<th>REPORT TYPE</th>
<th>FREQUENCY</th>
<th>DESCRIPTION</th>
<th>METRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Order Responsiveness — Customer Service Activities:</strong></td>
<td>Monthly</td>
<td>Total number of service work orders that are within acceptable response timeframes divided by total work orders closed X 100%</td>
<td>Emergency/Urgent Lower Limit = 98% Base Level = 99% Upper Limit = 100%</td>
</tr>
<tr>
<td>Emergency</td>
<td>Urgent</td>
<td>Routine</td>
<td>Facility Modifications</td>
</tr>
<tr>
<td><strong>Preventive Maintenance Work Orders:</strong></td>
<td>Monthly</td>
<td>Total number of preventive maintenance work orders (PMWOs) scheduled for the current month divided by the total number open PMWOs X 100%</td>
<td>Lower Limit = 90% Base Level = 100% Upper Limit = 110%</td>
</tr>
<tr>
<td>Customer Service Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job Satisfaction:</strong></td>
<td>Monthly</td>
<td>Questionnaire asking customers about the work management program &amp; contractual services. Use 5-point “Likert” scales where 1 is bad service and 5 is outstanding service. Use approximately 5-7 questions</td>
<td>Lower Limit: average of questions = 2 Base Level: average of questions = 3 Upper Limit: average of questions = 5</td>
</tr>
<tr>
<td>Survey Conducted by the Project Company with Key Court Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Financing Costs vs. Life Cycle Costs

For many P3s, and especially DBOMs, the revenue to pay back initial investors does not exist until the project is operational. That's why P3s often require equity investors to put money into a project's more uncertain early stages. For that reason, equity investment comes with a “sticker shock.” Investors command a much higher rate of return than municipal bonds or other traditional investments in public infrastructure.

That sticker shock is enough to steer many governments away from P3s. But this is short-sighted. Financing costs are just one of many costs a government should consider as part of a life cycle cost analysis (LCCA). In fact, a DBOM with high financing costs might actually deliver the same infrastructure for a much lower LCCA, especially if it allows private partners to guarantee careful attention to maintenance and operations needs over a long period of time.
the state has a particular interest in making certain the building is properly maintained. The third measure is an overall indicator of customer satisfaction. LBJP is expected to meet the “base level” performance for each measure, or risk financial penalties. Those performance levels are based on KPI outcomes for other, similar buildings over time. As the social P3 infrastructure space develops, so will the benchmark data available to set those expectations.

2. Pay for Submissions

P3 critics often point out that P3s are unfair to small contractors who are often reluctant to devote the time and resources to prepare a P3 proposal without a guaranteed return on investment. Meanwhile, large global players in P3s are willing to commit those resources and can manage those risks across a global base of potential projects. They can afford to prepare P3s for “unsolicited” bids to governments around the world.

To address this concern, some governments will pay potential partners to prepare bids on P3s. In the Long Beach Courthouse project, for example, the state of California offered an honorarium of $500,000 for responses to its request for qualifications that it selected for additional consideration. In other words, if a private partner’s proposal was good enough to make the “short list,” that private partner was paid at least enough to cover the costs of developing its proposal. In this specific case, two proposals reached that stage.

When a government must choose between an unsolicited bid on a badly needed project and no project, it’s difficult to choose the latter. But choosing the former assumes that partner was the right partner for that project, and that may not be the case. Proposals from a range of qualified private partners can help to address this concern and keep the eventual partnership in alignment over time.

3. Partnership Development Plans

P3s are long-term engagements that will evolve over time. New technologies and partners will emerge, and the P3 will demand new skills and innovations from the public and private partners.

Some of the most innovative P3s today plan for this evolution. They include in the service agreement the ability for the private partner to develop partnerships that can offer skills and innovations in the future. Private partners call this process a “partnership development plan,” a “community-based partnership plan” or a “partnership management plan.” These plans have a clear
strategy and KPIs that capture how the partnership will engage local businesses, nonprofits, community organizations and other stakeholders to develop those needed capacities.

4. Life Cycle Cost Analysis

P3s are attractive because they allow governments to pay a fixed rate that ensures a piece of infrastructure will be maintained over time. That careful attention to maintenance can yield big savings. Life cycle cost analysis (LCCA) is a foundational tool to evaluate those long-term costs. The American Society for Civil Engineers defines LCCA as “a data-driven tool that provides a detailed account of the total costs of a project over its expected life.” It’s a robust framework that incorporates costs for upfront development, capital and financing, operations, maintenance and disposal of a piece of infrastructure.

LCCA is especially important in the context of P3s, and in particular DBOMs where the government agrees to an availability payment for long-term performance on a piece of infrastructure. Most private partners that routinely participate in P3s do sophisticated LCCA as part of their planning and evaluation work. P3s offer governments the opportunity to access and incorporate that knowledge into their own capital planning and analysis.
5. Affordability Ceiling

Cost is a contentious issue in P3s. Proponents often claim that P3s can offer lower life cycle costs compared to traditional procurement. Many governments test this claim with the Public Sector Comparator (PSC) methodology. The PSC is a best attempt at an “apples to apples” comparison of a project delivered through traditional government procurement to that same project delivered through a P3.

Critics say even the most thorough PSC cannot reliably compare traditional procurement with P3s. It’s difficult to estimate the value of cost savings over time and the value of risks transferred to the private partner. It’s also difficult to incorporate the qualitative characteristics of a project like historical or cultural significance. For these and many other reasons, critics say PSC is not an effective tool to evaluate P3 opportunities.

However, a new version of PSC known as the “affordability ceiling” can help address these criticisms and, in turn, bolster the effectiveness of P3 ex ante governance. The affordability ceiling was developed by Partnerships British Columbia (PBC), the BC provincial government’s P3 evaluation and advisory arm, and one of the leading government agencies in the world on P3s. Under the affordability ceiling approach, the government quantifies the risks it’s willing to take on a P3 in advance, and then assigns a value to risks it’s willing to transfer to the private partner. Those dollar values are then added to a modified LCCA and compared to the revenues the government is able to devote to the project. PBC then establishes the maximum amount the government is willing to spend on the project, and that figure is known as the affordability ceiling.

That affordability ceiling is included in the initial request for proposals that generates responses from private partners. In their responses, potential private partners have the latitude to identify changes to the project scope, and in particular, risks the government would need to take to deliver a project within the affordability ceiling. This approach has two main advantages. First, it averts the typical criticism about the cost comparability of proposals. Private partners might propose different scopes of work, but all are within the same cost parameters. And second, it allows private partners to bring design innovation to the project much sooner. So far, PBC has used the affordability ceiling approach with 12 projects and none have experienced any substantial cost overruns, delays or performance issues.

Ex Post Tools of P3 Governance

Some P3 governance tools are focused on what happens once the agreement is in place. These are called ex post tools.

1. Facility Condition Indices

A Facility Condition Index (FCI) is a facility’s ratio of deferred maintenance costs to replacement costs. In effect, an FCI measures “catch up costs,” or deficiencies in a facility that will require additional spending. Once again, this is a critical concern in P3s generally, but especially in social infrastructure P3s where the private partner hands back the facility at the end of the agreement.

FCIs work in tandem with KPIs. An FCI methodology assigns a dollar value to most or all of the KPIs included in a service agreement. One value is what it will cost to maintain some level of performance on that KPI. The other dollar value is for replacement, or what it will cost to replace or refurbish that part of the facility’s performance. Those dollar value assignments are derived from data on the performance of thousands of similar facilities around the world. If performance on a KPI falls below expected levels, maintenance costs increase. As maintenance costs increase, the FCI increases.

FCIs are a comprehensive, informative and simple indicator of how a P3 performs over time. Policymakers, citizens and other concerned stakeholders can track FCIs and compare them across projects. For instance, the Long Beach Courthouse P3 mentioned previously requires an FCI of .15. That means at any time, maintenance costs cannot exceed 15 percent of the building’s total replacement cost. That .15 maximum limit is based on industry standards for “comprehensive stewardship” of public facilities.

2. Performance Audits

A government performance audit is a formal, independent evaluation of whether a program or service is meeting its objectives. City and county auditors review the full scope of local government services, and many states have a legislative auditor who carries out performance audits at the request of legislators. P3 performance audits can happen from two main perspectives. One perspective is process. Performance auditors routinely review government contracting processes, usually with an emphasis on whether a contract approval followed appropriate procurement rules and ensured appropriate internal controls. In this setting auditors ask questions about the contracting process: Were there clear criteria to evaluate competing bidders? Was the most qualified or appropriate bidder selected?

A second and more promising perspective is for performance auditors to evaluate whether P3s deliver their intended results. From that perspective, auditors might ask: Are P3 performance metrics properly defined? How does reported performance compare to actual performance? How might the government change a P3’s operations to improve its effectiveness? Here performance auditors can add substantial value to P3 ex post governance.

To illustrate, in 2014 the city auditor in Portland, Ore., released a two-part audit of the Portland Streetcar (PS). PS was one of the first public transit DBOMs in the nation. It’s also unique in that the private partner is the nonprofit Portland Streetcar, Inc. This P3 had several performance metrics, principally around streetcars arriving safely and on time.
The Portland Streetcar P3 is unique in that the private partner is the nonprofit Portland Streetcar, Inc. This P3 had several performance metrics, principally around streetcars arriving safely and on time.
The city auditor identified several issues with PS' performance. It found that performance metrics were often undefined, and that actual performance data was often quite different from reported performance outcomes. It also showed the city lacked a clear process to connect the streetcar’s goals to the citywide strategic planning process, even though its mission called for that sort of integrated goal-setting. Finally, the auditor concluded that no real financial risk or operational risk had been transferred from the city. PS management disagreed with some of these findings, but did agree that the audit offered useful guidance for how to improve the partnership’s performance going forward.

3. Contingent Payments and Performance Bonuses
Governments can use KPIs to align their partners’ incentives with their own. In a typical P3 arrangement, KPIs are part of a “sticks” approach to ensure performance. The private partner is paid unless it fails to deliver on certain KPIs. If it fails to deliver, the P3 agreement calls for financial penalties or other punitive actions.

However, some recent P3s have shifted this arrangement toward a “carrots” approach, which calls for the government to pay a bonus if the private partner exceeds performance expectations. A growing number of private partners now prefer this performance incentive model.

In November 2014 the University System of Georgia awarded a concession to Corvias to provide campus housing to tens of thousands of students across nine system campuses. That agreement is organized around four KPIs: 1) student satisfaction; 2) facility condition assessments; 3) work order response times; and 4) occupancy rates. Half of the system’s payment to Corvias is a pre-determined base management fee, and the other half is based on meeting or exceeding expectations on these four KPIs.

4. Ongoing Public Oversight
What’s often overlooked in a P3 arrangement is the role of public oversight once the arrangement is in place. KPIs and other formal assessment tools are crucial indicators of a P3’s success. But they don’t tell the whole story. How citizens experience a P3, and whether they consider that P3 successful are just as, if not more, important indicators of success. Robust and engaged public oversight can bolster trust in P3 operations, identify emerging problems with P3 performance, and help maintain alignment between the government and its private partners.

In 2009 the Massachusetts Department of Transportation (MassDOT) formed the Public-Private Partnership Oversight Commission. This commission comprises technical experts from civil engineering, finance, logistics and other fields relevant to P3 operations. Part of its mission is “to raise the awareness of government and business stakeholders of the means by which their cooperation can cost effectively provide the public with much-needed transportation services and facilities.”

5. Ongoing Advice
One of the core themes throughout the Governing Guide series is “know what you don’t know.” Most state and local government staff are not experts on finance, procurement and the other technical areas on which P3s are based. And yet, they must engage those topics if they’re to be effective in negotiating and managing P3s. The key is to know the landscape well enough to know when to ask for help.

Fortunately, the P3 advisory industry has grown over the past few years. Governments can now hire “brand name” firms like KPMG, McKinsey, Arup and others to analyze P3 finances, negotiate P3 arrangements and develop KPIs on their behalf. However, most of that advice is transactional, meaning it’s focused on getting the deal to close. There’s far less advice available for how to adjust, restructure or renegotiate a P3 if it’s not achieving its goals.

But that’s also changing. A number of firms focused on transactional advice have bolstered their advisory capacity for “partnership development.” To capitalize on that trend, several states and localities have released RFPs and RFQs for P3 advisory services. Those services can include technical analysis of potential P3s, but more important, of the actual cost savings and performance of existing P3s.

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**Essential Questions**

- **Do we routinely use Life Cycle Cost Analysis (LCCA)?** If not, why not? What are the technical, political or other barriers to us using LCCA?
- **How do the “all in” or “life cycle costs” of a potential P3 compare to the upfront costs?** If P3 financing is more expensive than traditional tax-exempt financing, what accounts for that difference?
- **Have we identified the maximum amount we’re willing to pay for a P3?** If so, could that amount lend itself to an “affordability ceiling” approach?
- **Can we effectively measure the performance of a potential P3?** Can we measure our policy goals with clear key performance indicators (KPIs)?
Most P3 projects involve construction, and construction involves risk. Research conducted between 2013 and 2015 found that contractors had a failure rate of approximately 29 percent, meaning more than 1 in 4 of these businesses will fail. Even though bonded contractors are less likely to fail, over the last 15 years, surety companies paid nearly $12 billion to complete construction contracts and pay subcontractors and suppliers what they were owed. These numbers do not include the significant money sureties spent to finance troubled contractors so they could complete contracts, protecting governments and private owners from defaults. In 2016 alone sureties paid approximately $1.4 billion to owners, subcontractors, suppliers and contractors on surety bond obligations.

Why are performance and payment bonds, typically for 100% of the contract price, universally required on infrastructure projects in the U.S.? To provide public owners, developers and lenders the benefit of an independent third party, the surety, and to help determine that a contractor has the ability to perform the contract and meet its payment obligations. And, if something goes awry and the contractor defaults, to have the surety to provide funds to complete the contract, and to directly manage and pay claims of subcontractors and suppliers on the job. Those subcontractors and suppliers have a direct right to make a claim on the surety bond for payment rather than having to attempt payment from a bankrupt contractor or from a public entity.

Surety bonds significantly increase the likelihood that a construction contract will be completed and that subcontractors, suppliers and workers will be paid.

P3s provide a new source of financing for the public entity to procure work, not a new revenue source. A P3 is a way for public entities to access the capital market but the construction risks remain the same. High percentage performance and payment bonds remain a best practice for the design build portion of any P3 contract.

Surety bonds also empower contractors. Contractors can obtain more work when they are backed by surety bonds than by only their own balance sheet. This significantly benefits small, emerging, disadvantaged and minority contractors.

Strong businesses are bondable businesses and sureties focus on strengthening businesses, managing growth and building legacy wealth. No matter the project delivery method, bonding helps public agencies assess and minimize their risk while empowering contractors to undertake work they can deliver.

P3 Governance: Ensuring Public-Private Partnerships are Built to Last

DAVID KIDD
**CONCLUSION**

A P3 BUILT TO LAST

**P3s are here to stay.** They’re now a core part of the state and local government infrastructure toolkit. They’re also becoming more complex and intricate. They’re now used to move forward an enormous variety of infrastructure projects, including and especially “social infrastructure” like courthouses, affordable housing, university research facilities, stormwater management infrastructure and many others. Moreover, today’s most innovative P3 models require states and localities to engage a broader group of stakeholders, including many who have not typically played a large role in infrastructure finance or operations. All of this happens in a complex, dynamic and sometimes ambiguous federal and state policy environment.

Our recent experience has shown that the biggest risks with P3s are not financial or technical. You can manage financial risks with good contracts, insurance and service agreements. You can manage technical risks with good designers and design processes. But political risks are much more difficult to manage.

One especially important threat is that policymakers can change their minds about a P3. They can decide a P3 is no longer a priority. They can try to modify its core service delivery model. They can change the criteria to evaluate a P3’s success. All these changes are well within the purview of most state and local elected officials. If any of these happen, a P3 will quickly fall out of alignment and fall short of its objectives.

The tools of P3 governance described here are designed to ensure a P3 can adapt to changing circumstances. If KPIs are properly designed and life cycle costs properly evaluated, there is space for the service delivery model to change. If an independent oversight body and independent audits show it’s successful, it’s difficult for anyone to claim otherwise. If it’s organized around availability payments based on a thorough life cycle cost analysis, it’s difficult to claim there are “hidden costs” or that it’s unaffordable. Using these tools effectively will set governments up for more successful and long-term P3 arrangements.
ACKNOWLEDGMENTS

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Endnotes

7. https://www.cbo.gov/publication/49910 (in particular, see Table W-7)
11. http://www.penndot.gov/ProjectAndPrograms/p3forpa/Pages/CNG-Fueling-Stations-.aspx
20. For an example of the affordability ceiling approach, see Partnerships BC’s case materials on the Okanagan Correctional Centre project at http://www.partnershipsbc.ca/projects/operational-complete/okanagan-correctional-centre-project/