

Public-Private Partnerships: Lessons Learned and Predictions for the Future

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Most commentators recognize and credit the United Kingdom (UK) as the birthplace of the modern version of public-private partnerships (P3s) and related infrastructure funding mechanisms, although some version of the P3 model has undoubtedly existed for hundreds of years. Initial success with the P3 approach in the UK led, not unexpectedly, to its use on other projects in the UK and its migration around the world, most successfully to Canada and Australia, but also elsewhere, including to the United States.

Although the modern history of P3s is far shorter and more compressed than that of other, more traditional project financing and project delivery systems, it is rich enough that we can draw some conclusions that can be instructive for the future. As a result, public entities and the private sector now have many examples of P3 projects to analyze and evaluate as they look forward to the next wave of development, repair, and renovation of the world's critical infrastructure.

Given the mixed rate of success of P3s around the world, it seems likely that the public and private sectors will continue to modify the approach to these systems, just as the approaches to more traditional project delivery systems have been modified in the past. The good news in that regard is the prevalence of a number of careful evaluations of past P3 projects, some of which are discussed below, which provide many lessons to be learned by those who want to use P3 projects in the future.

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This article focuses on what we can and should expect from P3s as we move forward in this century. Those expectations are shaped in part by the past, so we start below with some background regarding the history and development of the P3 model in the UK and around the world, including a discussion of the recent assessments and evaluations that have been done in the UK, Australia, and the United States of the use of P3s over the last more than 20 years. We then move to a discussion of the key features of P3 projects that can, if poorly structured, result in failures. Next we focus on the key pitfalls in P3 arrangements, which can be minimized or avoided by using certain best practices, identified below, that have been developed by analyzing the problems encountered by past P3s. Finally, we end with a discussion of prospects and predictions for the use of P3 delivery systems in the future.

The History and Development of the Modern P3

There is no universally accepted definition of a public-private partnership, but when people discuss P3s, they are usually referring to a partnership between public and private entities in which the private partner does at least one of the following: (1) participates in financing a project and/or (2) shares project risks and rewards during and beyond the construction phase. Under the most common forms of P3s used in the UK and around the world, a single private partner or a consortium of private partners provides up-front financing for a construction project; designs and builds the project, often based on a set of broad criteria from the public entity; then operates and maintains the project for a lengthy period, usually between 20 and 50 years. Although no single P3 model exists, especially in the United States, the overall structure usually “bundles investment and service provisions into a single (in most cases) long term contract” in which a “concessionaire (or private partner) will build (or rehabilitate), manage, maintain, operate and control the assets in exchange for some combination of user fees and/or government transfers/payments, which are its compensation for the investment and other costs.”¹ Such an arrangement provides three key advantages over more common design/build or design/bid/build arrangements: private financing, private expertise, and end-to-end integrated risk management.²

P3s take many forms, utilize a variety of payment models, and can involve work on new or existing infrastructure.³ In the context of an existing facility, a full P3 arrangement providing for the designing, building, financing, operating, and maintaining of a public structure or project may call

for the lease of a public facility, such as a maritime facility or a wastewater treatment plant, to the private entity for a set period of years, during which time the private partner is obligated to make capital improvements in order to address such things as deferred maintenance, expansion to accommodate population growth after the facility's original construction, and modernization. In these types of arrangements, lines of responsibility for pre-existing conditions (including environmental contamination), new conditions that develop during the project life, and similar items should be clearly defined.

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Similarly, a P3 agreement may call for the long-term lease of public lands to a private entity in exchange for the private entity's agreement to construct a new facility on the site. In either context, a P3 agreement may require that the private partner make an up-front payment to the public entity that could then be used to retire the public entity's existing debt. When these features—up-front payments, as well as the financing of the infrastructure project itself—accomplish their goals, they allow cash-strapped public partners to use P3s to conduct much-needed infrastructure upgrades.

The most common form of P3 used in the UK, the private finance initiative (PFI), was introduced in 1992 to involve the private sector in the design, construction, financing, operation, and maintenance of public infrastructure and to secure the delivery of well-constructed, well-maintained infrastructure at a good value for taxpayers. During the initiative's history, spanning more than 20 years, the UK has experienced many successes in the more than 700 PFI projects it has brought to financial close. Perhaps not surprisingly, Canada and Australia followed the lead of the UK in using P3s for major infrastructure projects, and with similar success.

But even in the UK, Canada, and Australia, where P3s have been widely accepted,⁴ not all P3s have been successful. As a result, the governments in the UK and Australia recently undertook studies to evaluate their P3 programs; the results of those studies, discussed more fully in the next section, provided guidance on what has worked and what has not. The findings and conclusions also have led to adjustments in the use, structuring, and evaluation of future P3s in those countries.

The ever-increasing draw on public funds to address the needs of the community, coupled with the relatively recent economic downturn in the United States and the compelling need for building, renovating, and replacing critical infrastructure that had been neglected for years, created the perfect environment for the birth and pursuit of public-private partnerships in the United States. However, the United States lags behind Europe in terms of P3 infrastructure projects, and the success rates of the projects here have been decidedly mixed, as discussed more fully below. "Between 1985 and 2011, there were 377 P3 infrastructure projects funded in the United States," representing only nine percent of the "total nominal costs of infrastructure P3s around the world."⁵ Europe, on the other hand, by 2011 could point to a P3 concentration of more than 45 percent of the nominal value of all P3s worldwide.⁶ Between 1989 and 2011, 104 American transportation P3 infrastructure projects were recorded, with 81 percent of these projects for highways, bridges, and tunnels.⁷ Rail and one airport, John F. Kennedy in New York, account for the remainder.⁸

The use of the infrastructure P3s has also spread throughout the majority of the world's regions in the last 10 years. In 2011, 178 infrastructure P3 projects were identified in five world regions, including the South Asian, Latin American and the Caribbean, European and Central Asian, East Asian and Pacific, and African regions.⁹ Of these 178 P3 projects, the South Asian region is responsible for 74, with 65 of the 74 in India.¹⁰

The use of the P3 model also has increased throughout Latin America, including in Brazil, Chile, Colombia, Mexico, and Peru.¹¹ Use of P3s in the Chilean infrastructure market has been the most successful, especially on road, airport, and seaport projects, although even there problems have occurred.¹²

After a more-than-20-year history in the UK, and a less lengthy, but still significant, history in other parts of the world, the stage was set in the early part of this century for in-depth evaluations of the successes, failures, and key factors determining the outcomes of P3s, with an eye toward developing better practices for the use of P3s in the future. Some of the most significant of those evaluations are discussed in the next section. They also form the basis for predictions for the future, which are included at the end of this article.

Have P3s Succeeded?

Perhaps the most significant studies of P3s undertaken to date come from Australia and the UK, although there have also been some studies of note in the United States. The highlights of these studies, and the adjustments made in response to them discussed below, provide significant input for predicting the likely role for P3s in the future and better guidance for those embarking on such projects.

Evaluation of the Australian and Canadian Experiences
Australia's commitment to the use of P3s has been

significant. The early creation of a centralized P3 agency to develop standardized agreements, and to shepherd and oversee the use and implementation of the P3 model for such projects, seems to be one of the key factors that has contributed to Australia's success, or at least to have lessened the number of severe failures. Canada has a similar central P3 agency, and the UK study discussed in the next section credits that central agency as a key factor in Canada's relatively low P3 procurement time.¹³

Australia's commitment to the use of P3s was further demonstrated in November 2008, when the Council for Australia Governments (COAG) endorsed the National Public Private Partnership Policy and Guidelines (P3 Guidelines).¹⁴ The P3 Guidelines, driven by the National Public Private Partnership Forum (Forum), replace all previously existing policies and guidelines held by state, territorial, and Australian governmental agencies.¹⁵

As experience with P3s in Australia increased, however, some level of industry criticism led the government to commission a review of its P3 programs in early 2010. Infrastructure Australia was created to respond to industry criticism that "bid costs in Australia are excessive, it takes too long to award contracts, and . . . new local and overseas entrants face barriers to entering the Australian P3 market."¹⁶ The June 2010 review results were mixed; while bid costs for Australian P3 contracts were found to be significantly higher (25–45%) than Canadian bid prices for comparably sized and complex projects, Australian bid costs were significantly lower than those in the UK.¹⁷ A similar dynamic was discovered for procurement time: Canada's procurement time was 16 months, Australia's was 17, and the UK's was 34 months.¹⁸ Moreover, in the area of P3 market barriers, the study concluded that Australia's smaller pool of P3s, as compared to those for Canada and the UK, served to "deter new entrants from establishing the capability to go head to head with the existing highly competitive field of bidders."¹⁹

The Forum responded to the mixed reviews in August 2010 by indicating that it would continue to collaborate to improve Australia's P3 processes but that overall Australian P3s compare favorably with similar processes worldwide.²⁰ In accordance with the P3 Guidelines, the Australian, state, and territory governments will consider a P3 for any project with a capital cost in excess of AUD\$50 million.²¹ Potential projects include roadways, schools, light rail, courts, student housing, and laboratory facilities.²²

Evaluation in the UK

Amid growing concerns that the public might not have received the best value for its money through the PFIs, the UK's economic and finance ministry in December 2011 launched a study on the UK's PFI program.²³ Based on a large number of public- and private-sector comments, Her Majesty's Treasury released its report on the study in December 2012 (the UK PFI Report or Report).²⁴ The Report provides important guidance to nations, states, and local entities around the world where the use of P3

alternatives have met with less success, including Latin America and the United States, and resulted in a significant restructuring of the P3 process in the UK itself.

In summary, the UK PFI Report both highlighted the perceived weaknesses in the initial PFI model and institutionalized changes for the future. The predominant weaknesses in the original PFI model cited in the Report include that:

- the process is often slow and expensive, leading to reduced value for the taxpayer;
- the PFI contracts are often inflexible, making alterations difficult during the operational period;
- the process has not been transparent enough in the areas of future liabilities and returns to the investor;
- the risks transferred to the private sector have resulted in higher risk premiums charged to the public sector; and
- the perception of windfall gains to equity investors has led to concerns about the true value for money of the projects.²⁵

In short, while the PFI had been touted initially "as a means of harnessing the private sector's efficiency, management and commercial expertise and to bring greater discipline to the procurement of public infrastructure," the Report concluded that these strengths had not been fully realized.²⁶

As a result of the conclusions in the Report, the UK adopted a new initiative (the PF2 initiative) whereby private financing initiatives will be used in the future only in circumstances where they can truly capitalize on the private sector's stronger project management skills, innovation, and risk management expertise.²⁷ To achieve this goal and address other perceived weaknesses in the previous PFIs, the UK's PF2 initiative will

- include the government as a minority public equity co-investor;
- introduce funding competitions for a portion of equity to attract long-term investors;
- accelerate project delivery by, among other things, strengthening the mandate of Infrastructure UK and supporting departmental centralized procurement units, shortening the tender process, standardizing procurement documentation, and introducing additional treasury oversight;
- improve transparency by publication of more information throughout the process; and
- return more risk management to the public sector.²⁸

These modifications to the standard UK P3 model both are instructive for future P3s around the world and also provide a partial explanation for certain failures of P3s undertaken in the United States and elsewhere. In general, the Report concludes that P3s remain appropriate for "the delivery of major and complex capital projects with significant ongoing maintenance requirements" because for such project "the private sector can offer project management skills, innovation and risk management expertise."²⁹

Evaluation in the United States

Although P3s have a much less robust (and somewhat less successful) history in the United States than in the UK, Australia, and Canada, there is still enough history to provide insights into the use, successes, and failures of these types of projects, and a road map for the future. One of the most instructive, if controversial, analyses comes from the California Legislative Analyst's Office study mentioned above (the LAO Report).³⁰ The LAO Report critically evaluated two major state infrastructure projects, the Presidio Parkway transportation project in San Francisco and the new state courthouse in Long Beach, California. In summary, the LAO Report concluded that neither project used clear P3 best practices, nor was either appropriate for a P3 model. The LAO Report also criticized the assumptions used to compare project costs under different potential procurement methods, concluding that several assumptions tended to favor a P3 approach. Although not all of the conclusions in the LAO Report seem on the mark, and it has been criticized by P3 advocates, the overall guidance provided by its conclusions regarding maximizing the benefits of P3 offers a good overview of why P3 projects in the United States likely will succeed or fail. In summary, the LAO Report concluded that a public entity (in this case, the State of California) can maximize benefits from future P3 procurements by the following:

- specifying P3 project selection criteria in state law in order to provide for greater consistency in selections across departments;
- requiring a comparative analysis of a range of procedure options (including design/bid/build, design/build, and P3) for all potential P3 infrastructure projects in order to better determine which procurement option would most effectively benefit the state, as well as to allow the state to better balance the potential benefits of increased private-sector involvement with the potential risks unique to each project;
- requiring the existing Public Infrastructure Advisory Commission (PIAC) to approve state P3 projects in order to improve the consistency of the state's P3 approval process; and
- requiring PIAC to (1) have a broad mix of expertise related to P3 and state finance and procurement, (2) develop additional best practices for the state's use of P3s, and (3) evaluate other state departments to determine if they would benefit by having P3 authority.³¹

In essence, the LAO Report emphasizes many of the same critical areas that will better predict a P3's success or failure as were identified in the analyses of P3s in the UK, Australia, and Canada: ensuring that P3s are only used on the "right" projects; developing some level of standardized selection and oversight procedures; focusing on the unique expertise needed to design, build, operate, and maintain a successful infrastructure project through

a life cycle; and choosing the appropriate, properly risk-balanced project delivery mechanism for that project. Because, as with most, or perhaps all, project delivery systems, the greatest opportunities for failure come from inappropriate allocation of risk and sharing of costs, the next section focuses on some key features of those two project components in the P3 environment.

Handling Risk and Financing Mechanisms to Maximize the Chances for Success

Payment Mechanisms

In the past, and almost certainly for the future, a key component of any successful P3 arrangement has been, and will continue to be, the method adopted for seeing that the initial investment by the private partner is paid back. History has taught us that the choice of payment model is crucial and often lays the foundations for a project's success or failure. P3 arrangements that provide for maintenance and operation by the private entity for some period after construction is completed (often 20 years or more) typically utilize one of two payment models, each of which can be individually tailored to meet a particular project's needs. Under the first, a "user fee" payment model, the private partner is paid a return on investment through fees paid by users of the given facility once it is completed. Typically, a rate-setting mechanism or formula is contractually established to provide the private partner a return based on performance. User-fee arrangements have been used on all manner of project, including toll roads, airports, marine ports, railways, and even the provision of power, water, and telecommunications.³² Many agreements include a cap that prevents the private entity from recovering a windfall, while some models also guarantee the private partner a threshold or minimum rate of return.³³

History has proven that there may be some significant value in providing for such caps and thresholds on rates of return in projects where predicting future usage is harder. The inclusion or exclusion of a minimum rate of return is a key decision point because it significantly impacts not only the project's risk profile, but also the public's perception of whether the finished project has been a success or a failure. If an agreement does not provide a floor on rates, the risk that an adequate number of users will materialize to provide a return on investment falls squarely and only on the private partner. If the users don't materialize, the results can be dramatic, often ending in bankruptcy for the private partner and perceived or actual failure for the project.

On the other hand, when a floor or threshold on the fee is included and sufficient users don't materialize to satisfy the floor fee, the public partner must pay out funds it often did not anticipate having to pay. In this situation, the general public may feel as if they have not gotten the bargained-for return for the concessions they gave. In such a situation, the evaluation of the success of the project suffers.

Importantly, under either scheme, the private partner does not begin receiving compensation until construction has been satisfactorily completed and the project is in use. This again plays into one of the key advantages of P3 agreements—an ability to bridge the disconnect between supply and demand for public works projects.

In the United States, user-fee arrangements have most often been associated with toll roads, although they could also be used well for marine terminals, airports, and other revenue-producing projects with revenues that are based on usage. For example, one of the first P3 projects in California involved SR-91, a 10-mile long, four-lane toll road in southern California that opened to traffic in 1995 and cost about \$130 million to develop. The concession agreement for SR-91 provided for a 35-year term, during which the private partner would be entitled to a portion of the tolls paid by users of the road. The Orange County Transportation Authority (OCTA) purchased SR-91 in 2002 for about \$208 million; however, after a dispute between the concessionaire and the California Department of Transportation (Caltrans) about a nearby freeway development that allegedly violated a noncompete in the concession agreement, OCTA still maintains the SR-91 toll road, reinvesting excess toll revenues back into surrounding infrastructure.³⁴

The second commonly used payment model is based on “availability.” Under an availability scheme, the public entity pays its private partner a contractually set amount during the term of the P3 agreement, based on the private entity’s performance.³⁵ Not surprisingly, the primary factor influencing payment is usually the availability of the structure for its intended purpose, although other, more detailed performance criteria can be used as the basis for payment as well. For example, an availability P3 agreement for a waste treatment plant might provide a base payment when the plant is available to process waste but include additions or deductions to the payments based on factors such as odor level or unauthorized release of untreated water.³⁶

One highly publicized availability-style P3 is Phase II of the new upgrade of Doyle Drive, the primary San Francisco–side approach to the Golden Gate Bridge, currently under construction, and discussed somewhat critically in the LAO Report mentioned above. The program was touted as the first attempt in California to implement a European– or Canadian-style P3.³⁷ The \$500 million project is being financed and implemented by a consortium of investors, the majority of which are European companies. The payment plan envisions a \$173 million up-front payment by Caltrans, with the rest to be paid incrementally based on availability. Under the P3 agreement, the consortium is responsible not only for construction, but also for upkeep and maintenance of the route for 30 years as well.

The yearly availability payment due to the consortium is subject to adjustments based on the consortium’s ability to meet predetermined incentives, such as the removal of debris from the roadway or prompt clean-up after a traffic

accident. As noted above, the LAO Report was skeptical regarding the use of the P3 model for this project. Only time will tell if that skepticism is warranted.

Autonomy, Flexibility, and Control

Another key decision point when planning and negotiating a P3 involves determining the level of autonomy or freedom the public partner will allow the private partner with regard to the design, construction, operation, and maintenance of the facility; indeed, this may be the most important factor for determining the success or failure of a P3 project.³⁸ Some P3 agreements include detailed designs for construction work to be undertaken by the private partner. This approach, however, can undercut a key benefit of P3s by limiting the private entity’s flexibility at the front end and creating unnecessary downstream risks. An error in design, or a simple lack of imagination or foresight about the long-term implications or effect of a preliminary design decision on the ultimate operation, can lead to inefficiency and more costly operation and maintenance as the project matures and enters into use.

As experience with P3s in Australia increased, however, some level of industry criticism led the government to commission a review of its P3 programs in early 2010.

To avoid this problem, the better P3 agreements limit the public entity’s input to setting clear and straightforward performance criteria that the upgraded or new facility must meet; this allows the private partner to devise the best means and methods for an overall design-and-construction plan. If the P3 is a full design/build/finance/operate/maintain project, the private partner should have more freedom to design the best operation and maintenance methodologies so long as it meets required performance standards. By giving as much autonomy to the private entity as possible from the beginning, the public partner gains the benefit of advanced risk management techniques that can bear dividends down the road.

Moreover, P3 agreements that maximize end-to-end autonomy minimize the chances that a single early mistake will snowball into a larger one after the project is completed. McKinsey & Company described this effect in a recent working paper on infrastructure projects:

The fact that risks can materialize in later stages, but have actually been caused in earlier stages under

different responsibilities, requires an end-to-end risk-management view, as opposed to a siloed, individualized process-step responsibility. There is a clear need for strong risk-management processes from the outset, and for these to be applied and continuously developed throughout the life of the project.³⁹

One common example of the problems inherent in a “siloed” approach to infrastructure development is the “design liability gap” that can occur in projects using the traditional design/bid/build delivery method. In this approach, the public project owner initially retains a designer to fully design the facility and then awards a construction contract to the lowest responsive and responsible bidder. In such situations, the public owner is held to have impliedly warranted to the contractor the adequacy and completeness of the design. The design the public owner receives from its designer, however, is not similarly warranted; instead, the designer merely warrants that its design is only as good as that produced by a reasonably prudent designer under similar circumstances. This can create a “liability gap” for the owner if the errors and omissions of the designer do not fall below the applicable standard of care, but nevertheless cause problems in the project for which the owner is liable.⁴⁰

In summary, the LAO Report concluded that neither project used clear P3 best practices, nor was either appropriate for a P3 model.

A well-designed P3 agreement is structured to incentivize the private partner to attempt to avoid those things that could create the liability gap by aggressively anticipating that risk throughout the entire project and developing ways to avoid it. P3s that maximize autonomy on the front end, while keeping the same private entity “on the risk” for all or a substantial portion of the life of the facility, provide the best means of implementing an “end-to-end” risk management approach. When a single private partner is required and incentivized to focus on the lifespan of a facility, not just initial construction, the focus on prudent and cost-effective design, construction, and management of the facility increases.

In the context of a wastewater treatment plant, for example, an optimal P3 agreement might require the plant to treat a certain quantity and quality of influent to a certain level, while maintaining certain odor controls, meeting certain energy efficiencies, and remaining capable of future expansion, with the payment stream to

the private partner based on the completed facility’s performance with respect to these criteria. But aside from setting these goals, the agreement would allow the private partner maximum latitude to design and build the facility. After construction, the private partner would assume the risk of operating and maintaining the facility, which in the context of a wastewater treatment plant would include the risk of liability for the unauthorized release of untreated or undertreated wastewater. At the end of the P3 agreement, the infrastructure facility would be returned to the public entity in a contractually predetermined condition, and the public entity would then operate and/or maintain the facility itself or outsource this work to the private sector.⁴¹

In this example, the private partner is best served by setting clear goals on the front end and partnering those goals with proper incentives. When implemented correctly, the result is a cost-effective project that minimizes risk. That was the result with the Moray Coast Wastewater project in Scotland. In 2001, a private consortium was awarded a 30-year contract to design, build, finance, and operate three sewage treatment plants; a sludge dryer; 20 pumping stations; two new, long sea outfalls; and a 47-km pipeline network. In designing the project, environmental issues were paramount because of the natural beauty and fauna of the Moray coast. Indeed, the contract required that the consortium build facilities that could maintain extremely low levels of effluent release, and payments were based, in part, on the consortium’s ability to meet these goals. Managing a wide variety of contractors throughout all stages of the project and often employing new state-of-the-art technology, the consortium was able to finish the project ahead of schedule. It is currently servicing the surrounding areas.⁴²

Pitfalls and Best Practices to Avoid Them

Experience and the studies undertaken to evaluate P3 experiences around the world have highlighted a number of common pitfalls associated with P3s. Not coincidentally, most of these pitfalls involve mistakes at the very outset of the project. The adoption of procedural modifications to P3 arrangements and the development of best practices to guide the P3 process can improve the selection mechanisms for P3s at the front end and maximize the chances for long-term success. These key pitfalls and best practices to avoid them are discussed below.

Select the Right Project

One of the biggest mistakes that tends to occur in the project delivery process is the use of P3s on the wrong types of projects. As discussed above, each P3 agreement is unique, and there is no “form” P3 agreement, particularly in countries like the United States that do not have extensive P3 experience. If the P3 project is to have the best chance of success, both the public and private partners will find themselves investing a not-insignificant amount in attorneys and consultants well before

a concession agreement is closed. In short, because the delivery of projects on a P3 basis requires significant technical and legal input to both public and private partners, transaction costs can be high. If the project size and scope do not justify those costs, the project will likely fail, or, at a minimum, be deemed unsuccessful.

Best practices to avoid this problem should include the following:

- At the outset, stakeholders should focus on whether the particular project being contemplated should proceed on a P3 basis or a traditional, publicly funded basis.
- After establishing that it may be feasible and desirable to do the project as a P3, the public partner should conduct a rigorous value-for-money (VFM) analysis that compares VFM for delivery under a P3 model to VFM for delivery under a standard model. This VFM analysis should consider not just construction, but also the project's entire life cycle. A meticulous VFM analysis will help the public partner avoid spending time and money pursuing a project on a P3 basis that is too small to justify the cost, as well as force the public entity to choose between retaining flexibility and control over the use of the finished project and pursuing the efficiencies presented by a P3.
- Avoid using the P3 system on projects if clear performance criteria cannot be articulated from the outset. Having to change performance criteria mid-project or midoperation creates the potential for added expense and disputes, and can also open partners up to charges of cronyism or preferential treatment, thereby playing into the public perception problems already inherent in P3s.
- Projects for new infrastructure are generally easier to accomplish successfully under a P3 model than those for upgrades to existing facilities. A well-constructed P3 agreement for a new facility allows the private partner to choose a design that is best equipped to meet the public's objectives while minimizing risk.
- When using P3 agreements for renovation or upgrading of existing facilities, which are often more technically and legally complex, the P3 deal should balance the public partner's goal of shifting operation and maintenance cost risks to the private partner with the private partner's interest in not taking on open-ended or undefined cost risks associated with a facility that was built years in the past.
- Projects that need to be finished on a tight schedule, or are complex and require highly technical expertise, will usually benefit from the private sector's expertise in scheduling, design, construction, operation, and maintenance.
- Avoid using a P3 on projects that require flexibility of postconstruction operation and management outcomes because private partners usually cannot

provide sufficient VFM necessary to justify a P3 if the private partner has to account for the public partner's required flexibility.

Autonomy and Risk-Sharing for the Partners

As discussed above, the failure to allow the private partner sufficient autonomy to achieve project goals efficiently while managing risk is a frequent mistake that often has its roots in procurement documents and the concessionaire agreement. When a project's procurement documents remove too much discretion from the private partner, a key advantage to P3s becomes a shortcoming, and the public partner ends up with a complex and expensive project that carries a substantial risk of failure.

At the same time, if the private partner's autonomy is not limited by some reasonable and well-understood expectations of the public entity and the public, the project can also be on a road to failure. To balance these competing needs, the following best practices are appropriate:

- Allocate risk to the party best able to manage it. Even when it is perceived that a key benefit of the P3 will be the shifting of risks, the decision regarding what to shift should be made with care.
- Upgrade P3 projects should be structured around a defined approach for preventative, predictive, and corrective operation and maintenance management. Ideally, this results in a shared responsibility for the as-is risk that is transferred to the private partner over the first several years of the P3 agreement.
- Clearly define performance requirements and essential technical aspects the project must meet, but limit public control over how to achieve them.

Public Perception and Understanding

Especially in places where P3s are both relatively rare and controversial, a general lack of familiarity with the P3 delivery model can cause problems. Even in countries like Australia, with centralized P3 agencies and well-developed P3 guidelines, transaction costs can be high.⁴³ If the public is not prepared for the overall costs, trying to use the P3 approach may be unproductive. Even where costs are managed, public resistance can be significant, especially if the public employees may or will be displaced when the private entity begins operation and maintenance.

Best practices to address these issues include:

- Create a P3 program that is clear, transparent, and fair, particularly with regard to evaluation criteria, with project objectives, as well as the evaluation of the private partner's performance in meeting those objectives, that remain open to the public.
- Avoid the appearance, or the delivery, of unfair windfall profits to the private sector.
- Create a program that includes specific and consistently enforced objectives, and then fastidiously maintain transparency throughout the life of the agreement.
- Get stakeholders to work diligently to generate and

maintain internal political support. The public partner, for its part, must start this work early, ideally well before the procurement documents are drafted.

- In projects where private-sector workers will replace public employees in the operation and maintenance phases of the project, consider requiring the private entity to give some preference in hiring (with appropriate protections to ensure employee performance) to the public employees who were previously operating and maintaining the project or facility in question.
- Establish a government oversight system that is diligent but does not unnecessarily limit the rights of the private partner.
- Once a deal has been done, both public and private partners must be ready to educate the public and political officials about the benefits of the P3, and continue that education as the project proceeds.

The Future: P3s at a Crossroads

So what does the future hold for P3s, and what can those involved in the public and private sectors expect? A few things seem obvious.

First, one of the key drivers for the creation of the public-private partnership model—scarce public funds for needed public infrastructure creation, maintenance, and replacement—is likely still to be a driver for the foreseeable future. But as private investors have more examples of what succeeds and what fails in the public infrastructure field, their dollars (and those of the public that get devoted to this process) will get directed toward projects that are more likely to succeed; the literature and analyses of past P3s suggest these potentially more successful projects will be larger, more complex and technical, and more performance criteria driven.

Second, we are likely to see greater emphasis on the upfront evaluation of projects to determine whether it makes economic and practical sense to develop them on a P3 basis at all. As in all things, one size—or one approach—doesn't fit all. Expect greater front-end evaluation of the real benefits the public might achieve from the project, as well as the best revenue stream or source to pay for it, especially for projects in areas where earlier P3 projects have been less than successful.

Third, the centralized management and oversight of P3 projects, with an emphasis on standardized agreements, which is characteristic of the projects in the UK, Australia, and Canada, are not likely to be fully achievable in the United States due, in part, to our 50-state configuration. We can expect to see greater efforts to create a more standardized framework for such projects in the future, at least on a state-by-state basis. The recommendations and conclusions in the LAO Report mentioned above provide a good starting point for that approach.

Finally, as public entities in the United States become more educated about the disastrous outcomes that can result from heavily unbalanced risk allocation and control

in P3s, we are likely to see more careful and thoughtful approaches to risk allocation and risk control. Better partnering in the review and development of risk control mechanisms, including environmental and other insurance purchased with public or private funds or a combination of both, will improve the balancing of risk allocation and costs. 🏗️

Endnotes

1. *Government Support to Public Private Partnerships: 2011 Highlights: PPI Data Update Note 78*, PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE (Sept. 2012), <http://ppi.worldbank.org/> [hereinafter *PPI Database*].

2. Although certain other project delivery systems, including design/build, share some features of P3s, such arrangements do not usually include the same advantages and pitfalls typically associated with P3s. Because the private partner in a design/build project usually does not participate in financing or post-construction risk, design/build projects do not benefit from many of the advantages typically associated with P3s. Moreover, without a private financing component, design/build projects do not allow cash-strapped public entities to tap into private liquidity. Similarly, a design/build project does not provide the same incentives to the private entity to minimize risk throughout the lifetime of the facility or structure since that entity has no responsibility for, or economic share in, the project once completed. Conversely, design/build projects do not face the same challenges as full-fledged P3s, including what we describe below as the P3 public perception problem. For these, and other, reasons, many observers do not consider design/build projects to be P3s at all. In fact, the California Legislative Analyst's Office's report on P3s contrasted P3s with more traditional design/build methods. See MAC TAYLOR, CAL. LEGISLATIVE ANALYST'S OFFICE, *MAXIMIZING STATE BENEFITS FROM PUBLIC-PRIVATE PARTNERSHIPS* (Nov. 8, 2012), http://www.lao.ca.gov/reports/2012/trns/partnerships/P3_110712.pdf.

3. Indeed, most P3 agreements (also called concession agreements) are unique. As discussed in more detail below, this tendency for wide variation in contract documents can be a drawback because the lack of a standard model both increases transaction costs and decreases predictability.

4. *Contracted PPPs May 2013*, AUSTL. GOV'T: INFRASTRUCTURE AUSTL., http://www.infrastructureaustralia.gov.au/public_private/ (last visited Aug. 4, 2014).

5. EMILLA ISTRATE & ROBERT PUNTES, BROOKINGS-ROCKEFELLER PROJECT ON STATE AND METROPOLITAN INNOVATION, *MOVING FORWARD ON PUBLIC PRIVATE PARTNERSHIPS: U.S. AND INTERNATIONAL EXPERIENCE WITH PPP UNITS 3* (Dec. 2011), http://www.brookings.edu/about/projects/state-metro-innovation/~/_/media/BC5358BD93B34E76ACD885F9BD60B35C.ashx [hereinafter *MOVING FORWARD*].

6. *Id.*

7. *Id.*

8. *Id.*

9. *PPI Database*, *supra* note 1.

10. *Id.*

11. Jose Luis Vittor & Tim R. Samples, *PPPs and Latin American Infrastructure Markets: Brazil and Chile*, 19 *LATIN AM. L. & BUS. REP.*, no. 7, July 2011, at 1, <http://www.hoganlovells.com/files/Publication/ef6ff8d4-c4f0-4e0e-adf5-2e36ac1bbae1/Presentation/PublicationAttachment/882619d4-3efd-4fd2-ac28-5b7fa990fdf4/LALBR.pdf> [hereinafter *Brazil and Chile*].

12. *Id.*

13. HM TREASURY, *A NEW APPROACH TO PUBLIC PRIVATE PARTNERSHIPS 39* (Dec. 2012), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/205112/pf2_infrastructure_new_approach_to_public_private_partnerships_

051212.pdf [hereinafter NEW APPROACH].

14. *Public Private Partnerships*, AUSTRALIAN GOVERNMENT INFRASTRUCTURE AUSTRALIA, http://www.infrastructureaustralia.gov.au/public_private/ (last visited Aug. 1, 2013) [hereinafter *PPPs*].

15. *Id.*

16. Press Release, Australian Government Infrastructure Australia, Barriers to Competition and Efficiency in the Procurement of Public Private Partnerships (June 2, 2010), <http://www.infrastructureaustralia.gov.au/publications/barriers.aspx>.

17. *Id.*

18. *Id.*

19. *Id.*

20. Nat'l PPP Working Grp., *Response to the Infrastructure Australia & KPMG Report* (Aug. 2010), <http://www.infrastructureaustralia.gov.au/publications/barriers.aspx> [hereinafter *Working Group Response*].

21. *PPPs*, *supra* note 14.

22. *Potential PPP Projects as at July 2014*, AUSTRALIAN GOVERNMENT INFRASTRUCTURE AUSTRALIA, http://www.infrastructureaustralia.gov.au/public_private/potential.aspx (last visited August 4, 2014).

23. NEW APPROACH, *supra* note 13, at 3.

24. *Id.*

25. *Id.* at 6.

26. *Id.* at 16.

27. *Id.* at 23.

28. *Id.* at 7–11.

29. *Id.* at 22–23.

30. Taylor, *supra* note 2.

31. *Id.*

32. EDWARD FARQUHARSON ET AL., HOW TO ENGAGE WITH THE PRIVATE SECTOR IN PUBLIC-PRIVATE PARTNERSHIPS IN EMERGING MARKETS 12 (World Bank Publications 2011).

33. B. Scott Douglass & Jeffrey A. Sykes, *Public-Private Partnerships in California, Part 1 of 2*, 36 CAL. PUB. L.J., no. 3, May 2013, at 2–3 [hereinafter *California P3s 1 of 2*].

34. 2013 91 *Express Lanes Annual Report* 9, ORANGE COUNTY TRANSPORTATION AUTHORITY, <http://www.octa.net/About/2013-91-Express-Lanes-Annual-Report/> (last visited August 4, 2014).

35. *California P3s 1 of 2*, *supra* note 33, at 3.

36. *Id.* at 2–4.

37. Matthew Roth, *Planners Expect Public-Private Partnership to Lower Doyle Drive Costs*, STREETS BLOGSF (Nov. 15, 2010), <http://sf.streetsblog.org/2010/11/15/planners-expect-public-private-partnership-to-lower-doyle-drive-costs/>.

38. See Frank Beckers et al., *A Risk Management Approach to a Successful Infrastructure Project: Initiation, Financing, and Execution* (McKinsey Working Papers on Risk No. 52, 2013).

39. *Id.* at 4.

40. B. Scott Douglass & Jeffrey A. Sykes, *Public-Private Partnerships in California, Part 2 of 2*, 36 CAL. PUB. L.J., no. 4, Nov. 2013, at 43 n.3 [hereinafter *California P3s, 2 of 2*].

41. *California P3s 1 of 2*, *supra* note 33, at 2–3.

42. *Moray Coast Wastewater, United Kingdom*, WATER-TECHNOLOGY.NET, <http://www.water-technology.net/projects/moray/> (last visited Aug. 4, 2014).

43. *Working Group Response*, *supra* note 20.