



## The rising advantage of public-private partnerships

In the United States, governments are increasingly turning to public-private partnerships (P3s) to implement public infrastructure works. Here's why the benefits of P3 project delivery, not just financing, will continue to shift the market in this direction.



**Michael Della Rocca**

Partner, Philadelphia  
McKinsey & Company

**The World Economic Forum** ranks US infrastructure behind that of most other comparable advanced nations such as Singapore, Germany, and the United Kingdom.<sup>1</sup> And it will get worse: from 2013 to 2020, cumulative US infrastructure needs are estimated to be nearly \$3.5 trillion. Fiscal constraints limit how much governments can do on their own, and [much has been written](#) about how public-private partnerships (P3s) can be a viable option for filling this financing gap. But most overlook P3s' ability to address many of the nonfinancing pain points in infrastructure development and delivery.

A 2016 study by Syracuse University concluded through dozens of owner and concessionaire interviews for US-based projects that there is a significantly higher likelihood of meeting cost and schedule objectives under P3 models compared with traditional public sector project delivery where a project is owned, managed, and financed by government.<sup>2</sup> And yet when it comes to large, expensive public works projects, US elected officials have often struggled to develop and sustain the political will to partner with private investors on project delivery. The United States—which in 2015 accounted for roughly a quarter of nominal global GDP and 18 percent of global construction spending—accounted for just 9 percent of the world's nominal total costs of P3 infrastructure in the same time period.<sup>3</sup>

Elected officials' reasons for hesitance are varied but often boil down to misplaced perceptions about enabling a private entity to finance, construct, and manage the long-term operation of public assets. Those who are singularly focused on the finance and ownership debate, however, can miss other tangible benefits arising from a P3 delivery model. P3s can address some of the key structural and operational reasons why traditional large infrastructure project delivery so often fails.

### **The pain points that P3s can address**

A strategic P3 approach can potentially mitigate the overruns and schedule delays that plague traditional infrastructure project delivery by clearly delineating governance, allocating shared risk, integrating resources, applying best practices, and establishing a lifecycle-long perspective of costs and accountability. In our experience, institutions face eight recurring challenges with their capital project portfolios, often unrelated to financing. P3s can potentially address each of these pain points to varying degrees depending on the project.

*Unclear responsibilities.* A lack of clarity about decision making and project governance often hinders effective project delivery. P3s address this challenge by requiring the owner to document and negotiate the performance standards, risk-allocation mechanisms, responsibilities, rewards, and penalties in a transparent and commercially realistic manner.

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<sup>1</sup> [The global competitiveness report 2016–2017](#), World Economic Forum, 2016.

<sup>2</sup> [Public-private partnerships: Benefits and opportunities for improvement within the United States](#), Syracuse University, 2017.

<sup>3</sup> Emilia Istrate and Robert Puentes, [Moving forward on public private partnerships: U.S. and international experience with PPP units](#), Brookings-Rockefeller Project on State and Metropolitan Innovation, December 2011.

*Poor alignment with strategy.* Support can wane, or implementation can be delayed, when projects are not backed by a strategic and robust commitment. P3s, however, are thoroughly screened and vetted from a portfolio of potential investments with a high degree of public visibility, resulting in project commitments aligned with the strategy of the sponsor.

*Insufficient optimization of project features.* Sponsors are often constrained by existing standards, methodologies, and limited exposure to best practices under traditional approaches. But P3s encourage innovative problem solving by concessionaires during the bidding, design, construction, and long-term operational phases of the project.

*Lack of an ownership mind-set in the delivery team.* Traditional project delivery often results in poor alignment between the contractor and owner. In P3s, concessionaires adopt the perspective of owners, sponsors, or both because of the performance incentives and obligation to ultimately transfer assets in a state of good repair.

*Lack of discipline in execution.* Large infrastructure projects often suffer from competing objectives, time frames, and resource commitments. P3s achieve clarity of delivery and operational accountability by defining and aligning contractual obligations and integrating project delivery functions, such as design, procurement, and supply chain management.

*Poor project controls.* Multiple participants and different systems can result in competing versions of progress, differing views of the truth, wasted effort on reconciliation, and a strained relationship among participants. P3 concessionaires typically deploy project-wide systems and considerable resources to identify, manage, and mitigate deviations from plan, resulting in better contingency planning and faster response to changes.

*Low initial cost mind-set.* Traditional procurement approaches frequently award contracts to the lowest construction bid without a mechanism to consider the full cost of lifecycle operation and maintenance (O&M). P3s, by definition, focus on the long-term total cost of ownership, including O&M, at the time of contract award, thereby incentivizing the concessionaire to optimize not the minimum required capital, but the initial capital expenditure and ongoing operating expenditures that actually maximize value.

*Poor resource optimization.* Owners sometimes suffer from inadequate internal resources to ensure progress and daily decision making in a timely manner. P3s address this challenge by transferring delivery responsibility to highly capable and well-resourced teams incentivized to perform through the negotiated contract terms.

### **P3s consistently deliver better schedule and cost performance. Opinion or fact?**

P3s will not tackle all of these challenges all the time—but a growing body of evidence supports the assertion that they can indeed solve many structural and operational problems that often cause budget and schedule overruns for large capital projects.

Based on published studies of the design, construction, and maintenance of social infrastructure projects, such as schools and clinics, in Europe, we find that the P3 approach

can reduce lifecycle cost up to 20 percent compared with the traditional approach. The UK Audit Office found a reduction of 70 percent of project budget overrun counts and 65 percent reduction in project schedule overruns deploying a P3 model.<sup>4</sup> An Australian study of 54 projects showed that only 1 percent went over budget; they also beat the schedule on average by 3 percent, while traditional approaches were on average 24 percent late.<sup>5</sup>

Like Australia, Canada boasts an impressive track record, with a mature P3 market that offers many lessons in best practices, including the establishment of an agency to oversee the growth and accountability of P3 opportunities to deliver infrastructure. A transparent procurement process and consistent approach drive Canada's success.

Success stories also exist in the United States. The largest availability payment-based social infrastructure project in US history, the George Deukmejian Courthouse in Long Beach, California, represents a successful P3 that accelerated replacement of an outdated and poorly functioning facility. The state of California awarded the project to a private consortium in a 35-year project agreement. The building was completed in 2013, on time and within budget, and it opened in May 2014.<sup>6</sup> For its part, the private consortium gained low-risk cash flow payments on the lease for the full duration, protected by the clause that the consortium can evict the state if availability payments are not made. Today, the state of California continues to occupy the award-winning courthouse, with dramatically improved facilities and amenities, room to expand, and a performance-based agreement with the concessionaire to ensure satisfactory long-term operations. Transportation success stories, such as the I-595 reversible managed lanes in Broward County Florida and the I-495 lanes in Virginia, have proven the ability of properly conceived and managed P3 projects to provide tangible transportation benefits.



Of course, the P3 approach isn't right for every project. In some cases, the advantages do not sufficiently offset the political, procurement, delivery, or revenue risks; value-for-money analyses clearly point out instances where this model is not applicable. Sophisticated financial investors place high hurdles on risk identification and mitigation before submitting proposals that satisfy their expected returns. And no matter the situation, a poorly executed contract can put a government in a risky position should the private partner fail to deliver.

However, public officials charged with shepherding the use of public funds are increasingly looking for better ways to deploy resources in the most efficient way possible. The P3 approach solves many root causes of poor project performance on

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<sup>4</sup> [PFI: Construction performance—Report by the comptroller and auditor general](#), House of Commons, February 5, 2003; [Performance of PFI construction](#), UK National Audit Office, October 2009.

<sup>5</sup> *Ibid.* [Public-private partnerships](#), Syracuse University, 2017; [Performance of PPPs and traditional procurement in Australia](#), Allen Consulting Group and the University of Melbourne, November 30, 2007.

<sup>6</sup> [Governor George Deukmejian Courthouse: Evaluation of cost-effectiveness](#), California Administrative Office of the Courts, June 2014.

large capital investments. And indeed, the current market suggests strong momentum. As of January 2016, the Federal Highway Administration had identified that 35 states, the District of Columbia, and Puerto Rico have statutes that enable the use of various P3 approaches for the development of transportation infrastructure, to provide another arrow in the project delivery quiver.<sup>7</sup> And governments are validating this delivery approach through a documented portfolio of successful projects that offers many lessons about the circumstances, ingredients, and benefits of deploying a P3 approach that places project delivery excellence at the fore. We anticipate that as evidence of successful infrastructure P3s continues to mount, we'll see the pace of P3 deployment increasing in the US market. 

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<sup>7</sup> Kevin Pula, [Public-private partnerships for transportation: Categorization and analysis of state statutes](#), National Conference of State Legislatures, January 2016.