

ALTERNATIVE INFRASTRUCTURE FINANCE: SHOULD THE UNITED STATES ADOPT FEDERAL GUIDELINES TO P3 CONCESSIONS?

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I. INTRODUCTION

The United States (“U.S.”) has been unable to modernize the infrastructure needs of the nation.¹ This is largely because the level of

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¹ See Eduardo Engel, Ronald Fischer & Alexander Galetovic, *Public-Private Partnerships to Revamp U.S. Infrastructure*, BROOKINGS 5 (2011), https://www.brookings.edu/wp-content/uploads/2016/07/02_partnerships_engel_fischer_galetovic_paper.pdf.

spending on infrastructure is low in the U.S. European nations, on average, invest five percent of GDP in infrastructure, whereas the U.S. spends only about half as much.² The U.S. government only spends two percent of the nation's overall capital investment in its infrastructure.³ Infrastructure finance means money invested in public services, such as: roads, rails, hospitals, and even the internet.⁴ Depending on the amount of capital being invested in these public services, public benefits can be negatively affected, and degrading road conditions and surface transportation has resulted in nearly \$120 billion in losses to fuel and time.⁵ Transportation companies were reported to spend an additional \$27 billion in freight costs to compensate for these infrastructure conditions, either through fleet repairs or technological upgrades.⁶ In the public utility space, the U.S. is spending at least \$18 to \$33 billion annually to maintain electric grids and fighting nearly 240,000 water main breaks in the deteriorating water systems.⁷

A. How To Solve Deteriorating Infrastructure?

Infrastructure projects require proper financing. Traditionally, U.S. infrastructure projects are financed by state or local governments because of their abilities to raise revenue and their abilities to spend it on overcoming infrastructure financing issues.⁸ The local municipality's

² Anthony Foxx, *Removing the Roadblocks to Smarter Investment in American Transportation*, MCKINSEY & CO. (June 2015), <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/removing-the-roadblocks-to-smarter-investment-in-american-transportation>.

³ *Panel on Public-Private Partnerships: Hearing on Overview of the Role of Public-Private Partnerships in Highway and Transit Projects Before the H. Comm. on Transportation and Infrastructure*, 113th Cong. 8 (2014), (statement of Richard Fierce, Senior Vice President, Flour Enterprises, Inc.) [hereinafter Fierce]

⁴ See Isabel Marques de Sá, *How Do You Build Effective Public-Private Partnerships?*, YALE INSIGHTS (May 16, 2017), <https://insights.som.yale.edu/insights/how-do-you-build-effective-public-private-partnerships>.

⁵ David Schrank, Bill Eisele & Tim Lomax, *TTI's 2012 Urban Mobility Report*, TEX. A&M TRANSP. INSTITUTE 5 (Dec. 2012), <https://static.tti.tamu.edu/tti.tamu.edu/documents/ums/archive/mobility-report-2012.pdf>.

⁶ *2017 Infrastructure Report Card: A Comprehensive Assessment of America's Infrastructure*, AM. SOC'Y OF CIV. ENGINEERS (2017), <https://www.infrastructurereportcard.org/wp-content/uploads/2016/10/2017-Infrastructure-Report-Card.pdf>.

⁷ U.S. DEP'T OF THE TREASURY, *EXPANDING OUR NATION'S INFRASTRUCTURE THROUGH INNOVATIVE FINANCING* 1 (2014), https://www.treasury.gov/resource-center/economic-policy/Documents/3_Expanding%20our%20Nation's%20Infrastructure%20through%20Innovative%20Financing.pdf.

⁸ See Charles D. Jacobson and Joel A. Tarr, *Ownership and Financing of Infrastructure: Historical Perspectives* 3-4 (World Bank Policy Research Working Paper No. 1466, 1995).

financial burden is then transferred to the public, in the forms of utility bill surcharges, toll service fees, or increased taxes each year.⁹ The local municipalities can also raise funds through financial products and securities, such as: government bonds, infrastructure-related corporate equity, or debt products.¹⁰

An alternative to traditional sources of project financing is through public-private partnerships. According to the National Council for Public-Private Partnerships, a public-private partnership (“P3” or “P3 concessions”) is “a contractual arrangement between a public agency (federal, state or local) and a private sector entity.”¹¹ P3s have been used for projects in the U.S. for more than 30 years, but have been a relatively small part of the total funding of U.S. infrastructure projects.¹² While other economies, including Australia, Canada, and the United Kingdom (“UK”) already utilize P3s to secure private financing for projects, the role of P3s in the U.S. market is just starting to grow.¹³

Rather than an analysis of the constitutional implications from a federally mandated P3 legislation, this Note focuses solely on the financial and operational effects of P3 legislation on project finance. An exhaustive analysis of constitutional limitations on federal funding appropriations does not highlight the outcomes that project finance stakeholders seek to understand when engaging in P3 concessions. The constitutional limitations are assumed to be non-issue if the P3 framework is enacted and enforced by a quasi-governmental agency specializing in project management and oversight.

This Note analyzes only Australia and UK, due to the similarity in infrastructure needs and infrastructure maturity with the U.S. While countries such as Brazil, the Philippines, and China have increasing infrastructure needs and have national policies regarding P3’s, they lack the infrastructure history and political regime that is characteristic of the U.S.

⁹ See *id.* at 3.

¹⁰ Thierry Deau & Julien Touati, *Using PPPs To Fund Critical Greenfield Infrastructure Projects*, MCKINSEY & CO. (May 2014), <https://www.mckinsey.com/industries/public-sector/our-insights/using-ppps-to-fund-critical-greenfield-infrastructure-projects>.

¹¹ NAT’L COUNCIL FOR PUBLIC-PRIVATE PARTNERSHIPS, TESTING TRADITION: ASSESSING THE VALUE OF PUBLIC-PRIVATE PARTNERSHIPS 2 (2012), <https://ncppp.org/wp-content/uploads/2013/03/WhitePaper2012-FinalWeb.pdf> [<https://web.archive.org/web/20180404020449/https://ncppp.org/wp-content/uploads/2013/03/WhitePaper2012-FinalWeb.pdf>].

¹² See generally Fierce, *supra* note 3.

¹³ See U.S. DEP’T OF THE TREASURY, *supra* note 7, at 4.

This Note focuses on a comparative review of economies that have developed robust legislation for P3 concessions and suggests how the U.S. Federal Government should approach P3 concessions. Part II of this Note addresses the contexts and capacities in which a P3 concession would be more economical than the traditional procurement process. Part III identifies the challenges to P3 concessions. Part IV provides an overview of foreign sovereignties, such as Australia and the UK, that have an established P3 legislature as national law, in comparison with the U.S. P3 regime. Part V proposes a way in which the U.S. Federal Government can develop robust guidelines into P3 financing, by identifying key elements of a P3 procurement process and establishing structured guidelines for P3 concessions.

II. OVERVIEW OF P3 CONCESSIONS

In 2012, forty-two states had budget shortfalls totaling \$107 billion,¹⁴ and a shortfall totaling \$55 billion across thirty states was forecasted for the 2013 fiscal year.¹⁵ Shortfalls exist in a budget when a state's revenue stream is less than the costs of providing services. An example would be the amount of money generated from a toll road is less than the costs of maintaining and operating a toll way. In an effort to try to narrow these gaps, forty-six states have been forced to cut services, and thirty states have raised taxes.¹⁶ However, local municipalities can avoid raising taxes or increasing municipal spending by pursuing alternative financing sources, such as P3 concessions, in infrastructure projects.¹⁷ There are three elements to a P3 concession: (1) a concession goal; (2) a compensation structure; and (3) the term or length of time.¹⁸

A. Concession Goals and Types

There are two general types of P3 concessions depending on the goal of the project: greenfield projects and brownfield projects.¹⁹ Brownfield

14 Phil Oliff, Chris Mai & Vincent Palacios, *States Continue to Feel Recession's Impact*, CTR. ON BUDGET & POL'Y PRIORITIES 2 (June 27, 2012), <https://www.cbpp.org/sites/default/files/atoms/files/2-8-08sfp.pdf>.

15 *See id.* at 1.

16 *Id.*

17 U.S. DEP'T OF TRANSP., PUBLIC—PRIVATE PARTNERSHIP CONCESSIONS FOR HIGHWAY PROJECTS: A PRIMER 4 (2010), https://www.fhwa.dot.gov/ipd/pdfs/p3/p3_concession_primer.pdf.

18 *Id.*

19 Steven Kmiecik and Richard Preston, *Public Private Partnerships: An Answer to The Infrastructure Needs of The United States*, in CONSTRUCTION AND PROJECTS HANDBOOK 2010-2011 (2011).

projects are typically improvements or expansions to existing infrastructure.²⁰ In the 1990s, the Environmental Protection Agency launched a number of Superfund reforms in an effort to encourage more brownfield project developments.²¹ Brownfield initiatives include: increasing jobs, improving the tax base, health and safety benefits, and improving the quality of life for people living in neighborhoods with the redevelopment of brownfield sites. While site redevelopment increases assessment values, this effect diminishes with distance from the brownfield.²² In a brownfield project, the private sector partner may only sign an operating and maintenance agreement, which obligates private sector project operations and project management for a specific period of time, known as an *operate and maintain* structure.²³ In an *operate, maintain, and manage* structure, the private sector partner can pay a lump sum payment to the public agency and can expect returns on a designated payment schedule generated during the public use of the project.²⁴ Other brownstone structures include *buy-build-operate*, *enhanced-use leasing*, and *lease-develop-operate*.²⁵ In a *buy-build-operate* agreement, the government grants the right to finance, design, build, operate and maintain a project to a private entity, which retains ownership of the project.²⁶ The private party is not required to transfer the facility back to the government. *Enhanced-use leasing* agreements are a contractual arrangement whereby an existing infrastructure facility is handed over to private parties on lease for a particular period of time for the specific purpose of renovating the facility and operating it for a specific period of time.²⁷ This will be done on such terms and conditions as may be agreed upon with the government, with the goal of recovering the costs with an agreed return and, thereafter, transferring the facility to the government.²⁸

Greenfield projects are new infrastructure projects, meaning the concessionaire builds a brand-new facility or project as part of the P3

²⁰ *Id.*

²¹ See Kenneth Clinton, Peter Schwartz & Kenneth Godwin, *Verifying the Social, Environmental, and Economic Promise of Brownfield Programs*, U.S. ENVTL. PROTECTION AGENCY 1 (Sept. 2015), https://www.epa.gov/sites/production/files/2015-09/documents/trta_report_2009.pdf.

²² See *id.* at 1, 12.

²³ See U.S. GOV'T ACCOUNTABILITY OFF., GAO-99-71, PUBLIC-PRIVATE PARTNERSHIPS: TERMS RELATED TO BUILDING AND FACILITY PARTNERSHIPS 4 (1999).

²⁴ See *id.*

²⁵ See *id.* at 4, 6-7.

²⁶ See *id.* at 4.

²⁷ See *id.* at 6-7.

²⁸ See *id.* at 6-7.

goal.²⁹ Greenfield project schemes are specially tailored to the objectives and risks of the project.³⁰ For example, *design-build-operate* projects award the design process, construction, and operations of the public project to a private contractor. However, the title of the facility remains with the public agency.³¹ Under *build-develop-operate* arrangements, the private party leases or purchases an existing public facility (usually abandoned or unused properties), invests private capital to redevelop the public facility, and then operates it under a contract with the public entity.³² Many municipal facilities are operated under this type of arrangement.³³ Under the *design-build-finance-operate/maintain* model, the private sector designs, builds, finances, operates and/or maintains a new facility under a long-term lease.³⁴ The repayment of the capital cost, financing costs and operating costs are rolled into a series of performance payments made by the public-sector owner to the private partner over a long period of time.

A *divestiture* allows the government to transfer assets, operations, and investment obligations, which are transferred to the private operator.³⁵ According to this type of contract, the asset can be transferred in part or full. The private entity may acquire equity of a state-owned enterprise through an asset sale, public offering, or privatization. The government generally imposes certain conditions with the sale of an asset to ensure guarantees for future tariff increases to achieve full recovery or return on capital.³⁶ With a *concession* the government grants the private sector entity the operation and maintenance of a facility based on a lease for the contract period, during which the investment obligations in new equipment or the replacement of the existing infrastructure are required.³⁷ Thus, commercial risks are imposed solely on the private sector party with ownership remaining with the government. These contractual relationships are characterized by the long-term period of operation (thirty years and more), therefore, a private entity has the incentive to build a facility of good quality, to keep it in good condition, and to optimize maintenance costs.³⁸ This type of project presupposes that all

²⁹ See *id.* at 6.

³⁰ See *id.*

³¹ See *id.* at 5-6.

³² See *id.* at 7.

³³ See *id.*

³⁴ See *id.*

³⁵ See 5 (2006).

³⁶ See *id.*

³⁷ See *id.*

³⁸ See *id.*

market risks (e.g. property value, market trends, sector changes, labor shortages) associated with production, construction, and operation costs is shifted to the private sector.

B. Value Driven Compensation

As a result of the contractual allocations of risks and obligations, P3s aim to generate greater efficiencies and synergies, to increase revenues and reduce deficits, and to drive quicker market development.³⁹ The contractual nature of P3s allows for flexibility in risk management and compensation structure.⁴⁰ Private sector partners require a return on the investment, through dedicated revenue streams such as user fees or the government.⁴¹ This return on investment can come in various forms, thanks to the expanded financial capacity of P3 concessions.⁴² Certain public projects such as transportation, water, or wastewater assets, generate fees directly from the consumer of service.⁴³ Alternatively, the public agency can contractually determine a payment schedule with the private investors, contingent upon the effective and successful delivery of not just completing the project, but good provision of public services.⁴⁴ The public agency may even decide to utilize tax revenues to fund the payments of private sector partners when user fees are not available, such as for the maintenance or development of schools or hospitals.⁴⁵

While these types of P3s do not eliminate the financial burden from the public, they do minimize the total costs that the public agency must recoup through special taxes. Private equity capital contributions result in less issues relative to public agency financing.⁴⁶ Public agency funding options can face limitations from debt-issuance policies, project coverage level caps, or other legal limits.⁴⁷ Besides deriving value through capital raising, the implementation of a bidding process, much like the traditional

³⁹ See X.Q. Zhang & M.M. Kumaraswamy, *Procurement Protocols for Public-Private Partnered Projects*, J. CONSTRUCTION ENGINEERING & MGMT. 351 (2011).

⁴⁰ See David W. Gaffey, *Outsourcing Infrastructure: Expanding the Use of Public-Private Partnerships in the United States*, 39 PUB. CONT. L.J. 351, 354-55 (2010).

⁴¹ See *id.*

⁴² See *id.*

⁴³ See *id.*

⁴⁴ See U.S. DEP'T OF TRANSP., *supra* note 17, at 4.

⁴⁵ See *id.* at 20.

⁴⁶ See *id.* at 5.

⁴⁷ See *id.* at 5.

procurement context, can drive value in P3 cost savings.⁴⁸ Since P3s address the whole lifecycle, an overall increase in lifecycle savings is also a benefit.⁴⁹ Efficiencies occur when a single contractor is responsible for multiple project phases and they make attempts to reduce costs over the life of the infrastructure through operations and maintenance.⁵⁰ The contractual nature of P3s increases project quality by providing more leeway for contractors to use new practices, and basing incentives and value on project performance.⁵¹ In order to drive these economic efficiencies, contractors and financial sponsors for projects must identify the overall value of the project for all parties considering the risks, rights and obligations.

The costs of P3-based provisions are determined by a quantitative analysis into value for money (“VfM”).⁵² This method of analysis takes into account several key factors: (1) assessment of public agency cost of delivery compared to P3s delivery costs; (2) comparative analysis of full-life cycle costs and revenue; (3) identifying appropriate risk sharing scenarios; and (4) assessing public opinion.⁵³ Traditionally, public agency projects rely on a bidding format to procure finances for projects.⁵⁴ This bidding process involves early-stage valuation with undependable projections for revenue and equity allocation. However, this method can delay the overall scheduling of a project completion, while P3s allow for phases such as design or building to overlap.⁵⁵ Public agents rarely have the resources or expertise for managing the entire lifecycle of large-scale infrastructure projects, and thus rely on bidders for accurate costs of building and maintain a project’s life-cycle. However, upon completing the project and returning it to the public agency, the public agency does not have the resources or expertise to handle the project post-construction, due to the early reliance of private sector management. In anticipation of these increased costs of operations and management, P3s are able to increase the VfM by contractually retaining

⁴⁸ See JAIME RALL, JAMES B. REED & NICHOLAS J. FARBER, PUBLIC PRIVATE PARTNERSHIPS FOR TRANSPORTATION: A TOOLKIT FOR LEGISLATORS 9 (2010), <http://www.ncsl.org/documents/transportation/PPPTOOLKIT.pdf>.

⁴⁹ See *id.* at 10.

⁵⁰ See *id.*

⁵¹ See *id.*

⁵² NAT’L COUNCIL FOR PUBLIC-PRIVATE PARTNERSHIPS, *supra* note 11, at 8.

⁵³ See *id.*

⁵⁴ See Robert H. Edwards Jr., Randall F. Hafer & Mark J. Riedy, *United States*, in THE PUBLIC-PRIVATE PARTNERSHIP LAW REVIEW 170 (Bruno Werneck & Mário Saadi eds., 2015).

⁵⁵ See *id.* at 11.

responsibilities for an adjusted rate of return.⁵⁶ P3 valuations will therefore consist of several iterations in developing costs valuations, comparing whole-life costs for traditional processes and for P3 contract variances.⁵⁷ Due to the length of the projects, the contracts must be flexible enough to accommodate any potential change in technology, demographics, environment, or politics.⁵⁸ To assess the best partnership structure for meeting this objective, a financial analysis is conducted to determine the expected cash flows during the construction and operations phases of the project (usually considered over twenty years). This analysis makes it possible to compare the relative cost for each partnership structure. Once cost values have been calculated, they are converted to net present value to facilitate an apples-to-apples comparison of total costs incurred (in today's dollar value). This is typical of the analysis that should be completed by any procuring agency when considering potential structures in advance of actual procurement. These of course can be compared with actual results when detailed bids are received.

C. Whole-Life Project Operations and Management

P3s not only design, finance, and build similar to single procurement contracts, but they also oversee operations and maintenance responsibilities.⁵⁹ Whole-life costing helps ensure efficient project delivery, budgeting maintenance, and risk-adjusted returns for private sector experts.⁶⁰ The public-sector transfers certain risks for private sector management in order to create value for taxpayers through improvement of services and reduction of costs.⁶¹ Operational risks, such as construction issues, logistics delay, or anything else that can happen during the course of project development, are transferred to the experienced private sector contractor.⁶² In traditional building processes, whether it is contacting contractors or securing equipment, the public agency has to initiate these workflows. The value of having private sector management is that there may be value derived from packaging multiple

⁵⁶ See *id.* at 10.

⁵⁷ See Isabel Marques De Sá, *How Do You Build Effective Public-Private Partnerships?*, YALE INSIGHTS (May 16, 2017), <https://insights.som.yale.edu/insights/how-do-you-build-effective-public-private-partnerships>.

⁵⁸ See *id.*

⁵⁹ See *id.*

⁶⁰ See Deau & Touati, *supra* note 10.

⁶¹ See U.S. DEP'T OF TRANSP., *supra* note 17.

⁶² See Deau & Touati, *supra* note 10.

projects, pre-established relationships with certain industrial players, and pre-established workflows to securing logistics or equipment. Fixed prices for taking on these costs on the front-end can reduce delays that occur in traditional procurement processes.⁶³ The impact of such contractual rigor is significant: according to reports, the average cost of projects that are overrun is below 3.5 percent for P3 project schemes, and nearly twenty-seven percent for traditional procurement methodologies.⁶⁴ P3s are able to manage these risks and drive value through the fluidity of P3 structures.

While initial financing costs may be higher for P3s, there are savings over time due to the reduced costs associated with risk allocation, design, construction, and long-term operations and maintenance, which are greater for P3s than for standard public delivery.⁶⁵ Overburdensome costs of operations and maintenance under the traditional financing framework will then be subject to political scrutiny, which could potentially evolve into budget cuts, deferred management, and politically charged conversations about tax costs.⁶⁶

III. CHALLENGES TO P3S

Despite the operational benefits of P3s, there are some challenges compared to traditional procurement strategies. Disadvantages to P3s include: (1) need for legislation; (2) loss of governmental control; (3) changing structures and processes; and (4) time to build trust between public and private actors.⁶⁷ The most significant obstacle to developing the P3 market in the U.S. is the patchwork of different legal environments and procurement practices across states.⁶⁸ “The established rule is that the expenditure of public funds is proper only when authorized by Congress, not that public funds may be expended unless prohibited by Congress.”⁶⁹

⁶³ *See id.*

⁶⁴ *See* Frédéric Blanc-Brude & Dejan Makovsek, *Construction Risk in Infrastructure Project Finance*, EDHEC BUS. SCH. (2013) https://www.edhec.edu/sites/www.edhec-portal.prod.net/files/publications/pdf/edhec-working-paper-construction-risk-in-infrastructure-project-finance-f_1368520743197-pdf.jpg.

⁶⁵ Office of Public-Private Partnerships, *PPTA Value for Money Guidance*, VA. DEP'T OF TRANS. (2012), http://www.virginiadot.org/office_of_transportation_public-private_partnerships/resources/VDOT%20VfM%20guidance%20document_final_20110404.pdf.

⁶⁶ NAT'L COUNCIL FOR PUBLIC-PRIVATE PARTNERSHIPS, *supra* note 11, at 5.

⁶⁷ Wie Yusuf, Candice Wallace & Merl Hackbart, *Privatizing Transportation through Public-Private Partnerships: Definitions, Models, and Issues*, KY. TRANSP. CTR. 20 (2012), https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1111&context=krc_researchreports.

⁶⁸ U.S. DEP'T OF THE TREASURY, *supra* note 7, at 15.

⁶⁹ *United States v. MacCollom*, 426 U.S. 317, 321 (1976).

If an agency is embarking on a public-private venture that is not enumerated within its powers by Congress, then the enterprise must rely on the push for new legislation.⁷⁰ This causes an overall delay in the development or redevelopment of infrastructure, or even outright prevents certain projects from ever coming to fruition.⁷¹

A. Typical P3 Risks

The P3's revenues and costs will be based on an assessment of risks and the compensation required by all parties to undertake those risks. Private entities must consider design and construction risks: material and labor prices, normal cost overruns, and force majeure.⁷² Depending on how costs are structured, the financial risks involved with market fluctuations and unstable government regimes are all critical factors to assessing the revenue stream required by private parties. Market timing is a critical issue for P3s, because the time-value of money changes during a P3 concession. Projects last anywhere from five to thirty years, and market timing is an uncontrollable factor. P3s contract around market issues by structuring credit and debt vehicles in accordance to performance, rather than predetermined payment schedules. Other risks include project-specific operational issues, such as traffic patterns or surface transportation trends. While building out a high-speed rail project, autonomous cars may very well be the market standard, making the rail a less than necessary accommodation. The most prevalent risk that investors are wary of is policy or political constraints during the P3 concession. Besides regulatory uncertainty and public support, the public actor's role includes being a champion for public-private engagement.

B. Public Party's Commitment is Critical

Political support for private sector participation is not driven solely by externalities. In many countries, the impetus in favor of private sector involvement is driven by high-ranking political champions who spearhead the process of policy and legislative reform.⁷³ In many

⁷⁰ *Id.*

⁷¹ *How and When to Use Private Money in Infrastructure Projects*, THE ECONOMIST (Apr. 22, 2017), <https://www.economist.com/news/finance-and-economics/21721229-public-private-partnerships-their-promise-and-their-pitfalls-how-and-when-use>.

⁷² SIDNEY LEVY, PUBLIC-PRIVATE PARTNERSHIPS: CASE STUDIES ON INFRASTRUCTURE AND DEVELOPMENT 42 (2012).

⁷³ Neisen Kasdin, *Creating a Shared Vision and Public Purpose*, in SUCCESSFUL PUBLIC/PRIVATE PARTNERSHIPS: FROM PRINCIPLES TO PRACTICES 16, 16 (Stephen B. Friedman ed., 2016).

countries it is possible to identify the individual(s) who championed the process at the outset and who worked with sectoral departments or local government to put policy in place. It is also vital that policy-level leaders bring about a convergence of departmental attitudes and objectives and build support in relevant administrative departments. Cross-sectoral capacity building programs at the national level are often significant turning points, enabling change at lower levels of government.⁷⁴

P3 investments are influenced by a hierarchy of legal regimes, from the local municipality up to the federal agency overseeing the sector specific project. Municipal officials will also be interested in the political position of key stakeholders such as trade unions and consumer groups. Key national-level stakeholders involved in private sector participation will include national federations of unions, and national unions representing local government workers. Each must be accounted for when developing a P3 both to guarantee the ability to access funds but also to ensure the long-term legality and viability of the project. The effectiveness and impact of a P3 depends, to a large extent, on the regulatory mechanisms used to influence and guide the parties and in particular the private sector decision making process (e.g., lumber trade regulations, steel trade regulations, healthcare programs). Due to these critical interactions, it is preferable to ensure the development of effective legislative and regulatory provisions before developing P3 relationships. Currently, P3 players only need to look to state legislature on the legal and regulatory guidelines regarding project finance. However, they are also limited in actions in accordance to national legal frameworks set forth by agencies such as the U.S. Securities Exchange Commission and the Department of Transportation.

Even when states do have P3 enabling legislation, private sector investors' willingness to participate in projects will be affected by the flexibility and the predictability of the legal framework.⁷⁵ For example, certain projects require flexibility in exit strategies or the redeployment of funds to alternative uses, due to changes during the project's lifecycle. However, catering too much to the private sector's needs results in a fear that the local government loses control in protecting the public interest.⁷⁶ While contractual limitations can restrict the private sector's powers in a project, the contracting public agency's attitude may shift with a change

⁷⁴ Doyin Abiola et al, "Solutions to International Challenges in PPP Model Selection: A Cross-sectoral Analysis," paper prepared for Deloitte Research and the London School of Economics, March 13, 2006.

⁷⁵ BLANC-BRUDE & MAKOVSEK, *supra* note 64, at 16.

⁷⁶ Oliff, Mai & Palacios, *supra*, note 14.

in regime or part ideology.⁷⁷ Trust between public and private actors includes other considerations such as: individual expertise in financial literacy, accessibility to public opinions, dissemination of information, and the development of a positive legal environment for public-private ventures. The public is also concerned with the possibility of: private profits at the expense of the public, private investor's bankruptcy or insolvency, transparency issues, labor issues, foreign companies, or general contract law.⁷⁸ As a result, the private sector considers political risk more than ever prior to entering a market for P3 procurement.⁷⁹ Beyond political risk, public agency actors must be able to establish realistic concession goals to entice private financing.

P3s are generally favored over traditional procurement methods in reducing the public's monetary burden. However, if charging users offers a realistic prospect of covering capital or management costs, then the public agency should assume such arrangements are appropriate.⁸⁰ Investors also want assurances that governments have the personnel capable of managing the P3 process and that policy makers and the parties implementing projects have a realistic understanding of the complexity of P3 projects. Public procurement authorities often fail to appreciate the significant differences between P3s and traditional forms of procurement and the implications of these differences for the level of resources, the unique skills, the output-based nature of the contracts, and the new processes and institutions required. Indeed, implementing a P3 program may often lead to fundamental changes in the way a public authority perceives its role and the way it goes about its business.

C. P3s: Creatures of Contract

In conjunction with enabling legislation, P3s rely on robust contract drafting to achieve optimal performance goals. P3 contracts must vest rights accordingly to the concessionaire.⁸¹ It is necessary to explicitly grant rights to the private party concessionaire to enable operational oversight as well as limitation of private powers. Ownership interests in the project assets are strictly defined, interests in the project right of way must be determined, and various franchise, licenses and permits need to

⁷⁷ See Gaffey, *supra* note 40, at 356.

⁷⁸ RALL, REED & FARBER, *supra* note 48, at 11-13.

⁷⁹ *Id.* at 18.

⁸⁰ Tyler Duvall, Alastair Green & Mike Kerlin, *Making the Most of a Wealth of Infrastructure Finance*, MCKINSEY & CO. (June 2015), <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/making-the-most-of-a-wealth-of-infrastructure-finance>.

⁸¹ See Edwards, Hafer & Reidy, *supra* note 54, at 176.

be granted.⁸² The contract also needs to grant a permit to engage in P3 development, creating an exclusive right to perform.⁸³ Subsequent rights include the power to establish, impose, charge, collect, use, and enforce the payment of tolls and other service related charges.⁸⁴ These subsequent rights are then factored into the greater calculation of project financing.⁸⁵ P3 contracts tightly integrate financial modelling, financial costs, private actor rights, and related issues, so that the cash flows of the project can provide an appropriate rate of return while guarding against unreasonable costs.⁸⁶ The ultimate design and construction of the project are conditioned in the contract, along with timelines for commencement and completion.⁸⁷ Prior to engaging in final contracts, P3s will often negotiate and determine preliminary terms of engagement with a memorandum of understanding (“MOU”).⁸⁸

A MOU memorializes a partnership by providing specific clauses and protocols.⁸⁹ Federal agency MOUs are non-binding and do not obligate financial commitments.⁹⁰ Private partners sometimes consider MOUs to be binding, in which case the agreement should be termed a letter of intent to prevent the public agency from enforcing the MOU.⁹¹ MOUs should address information sharing, publicity, voluntary services, as well as the roles and responsibilities of every party to the transaction.⁹²

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.* at 177.

⁸⁵ *Id.* at 178.

⁸⁶ *Id.* at 178.

⁸⁷ *Id.* at 178.

⁸⁸ See, e.g., *Memorandum of Understanding*, U.S. FOOD & DRUG ADMIN, <http://www.fda.gov/AboutFDA/PartnershipsCollaborations/MemorandaofUnderstandingMOUs/default.htm> (last updated Oct. 24, 2018); *Memorandum of Understanding (MOU)*, DEP'T OF HOUSING & URBAN DEV. 1, http://www.hud.gov/offices/pih/programs/hcv/wtw/resources/bs8/mou_guide.pdf [https://web.archive.org/web/20170829043901/http://www.hud.gov/offices/pih/programs/hcv/wtw/resources/bs8/mou_guide.pdf] (last visited Feb. 23, 2019); Secretary's Office of Global Partnerships, *State of Global Partnerships Report*, U.S. DEP'T OF STATE 20 (Mar. 2015), <http://www.state.gov/documents/organization/239008.pdf> [<https://web.archive.org/web/20150412193131/https://www.state.gov/documents/organization/239008.pdf>]; *FY2014 & FY2015 Global Development Alliance Annual Program Statement: USAID and the Private Sector: Partnering for Impact*, U.S. AGENCY FOR INT'L DEV. 38 (2014), https://www.usaid.gov/sites/default/files/documents/1880/2014_GDA_APS.pdf.

⁸⁹ 48 C.F.R. § 6.101(a) (2018).

⁹⁰ Alissa Ardito, *Public-Private Partnerships*, ADMIN. CONFERENCE OF THE U.S. (Nov. 30, 2016), <https://www.acus.gov/sites/default/files/documents/Partnership%20Report%20Draft%20.pdf>.

⁹¹ *Id.*

⁹² *Id.*

A review of agency practices for documenting P3s reveals essential components of a partnership agreement.⁹³ While the majority of agencies and departments views MOUs as legally non-binding,⁹⁴ there are situations, especially in more complicated partnerships involving the exchange of funds or services, where a non-binding agreement is insufficient, and a binding contract is required in addition to the MOU establishing the overall framework of the partnership.⁹⁵ To memorialize the agreement, roles are determined and expectations are clarified. MOUs should be non-binding for a variety of reasons, foremost among them is to avoid potential Anti-Deficiency Act⁹⁶ violations. An agency may not obligate funds in excess or advance of available appropriations.⁹⁷

1. A P3 Contract

A P3 project-finance structure has multiple parties and agreements. At the core of the structure is a special-purpose vehicle (“SPV”).⁹⁸ The SPV can take on many forms, oftentimes a limited partnership in the P3 context.⁹⁹ Primary financing methodologies to an SPV include the debt provider(s) and the equity holder(s).¹⁰⁰ Debt financing is generally issued through a debt finance agreement from investment banking firms, while equity and sub-debt finance agreements are handled by financial sponsors and developers.¹⁰¹ The primary public party will be the procuring authority, who is primary decisionmaker for the concession agreement.¹⁰² Other parties to the concession agreement may include: off-taker(s), who may be parceled out specific parts of the project timeline for performance; construction contractor(s), the companies that perform actual construction or operational performance; and facilities-management operators, third-party professionals that operate and

⁹³ *Id.*

⁹⁴ *CDC’s Guiding Principles for Public-Private Partnerships*, CTRS. FOR DISEASE CONTROL & PREVENTION (Apr. 2018), <https://www.cdc.gov/partners/pdf/partnershipguidance-4-16-14.pdf>.

⁹⁵ See U.S. DEP’T OF VETERANS AFF., VETERANS HEALTH ADMIN., DIR. 1098, VHA PUBLIC-PRIVATE PARTNERSHIPS app. A, at 3 (2015).

⁹⁶ Antideficiency Act, 31 U.S.C. §§ 1341, 1342, 1517 (2012).

⁹⁷ U.S. DEP’T OF VETERANS AFF., *supra* note 95.

⁹⁸ Vialeta Khmel & Shengchuan Zhao, Arrangement of Financing for Highway Infrastructure Projects Under the Conditions of Public–Private Partnership, 39 IATSS RESEARCH 138 (2016).

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

maintain the contractual performances mandated by the procuring authority.¹⁰³

SPVs are used for the securitization of assets for long-term management.¹⁰⁴ Once the P3 entity is formed, the SPV uses the purchase price paid by the investors for the securities to fund its purchase of the assets, which are referred to as “underlying” the transaction.¹⁰⁵ The underlying assets are pledged to the holders of the securities as collateral for their investment in the securities issued.¹⁰⁶ These component transactions all occur simultaneously in a securitization transaction.¹⁰⁷ The cash flows generated by the securitized asset pool over time are then used to pay the investors the interest and principal on the securities.¹⁰⁸ Greenfield P3s generally utilize a hybrid or cooperative framework for the SPVs, in the form of limited liability companies or limited partnerships, primarily so that the transfer of asset management and ownership interests can be fluid and seamless down the line.¹⁰⁹ Brownfield P3s may require the SPVs to lease or own the underlying assets in a debt position before completion of the project, which results in limitation in project financing flexibility.¹¹⁰

IV. A COMPARATIVE LOOK

A. United States' P3 Legislation

The U.S. federal system has no national legislative standard providing for P3s.¹¹¹ However, individual states such as Ohio and Hawaii, have adopted some kind of legislation.¹¹² P3 legislation determines the minimum requirements in prequalifying project eligibility, proposal formations and procedures, and funding requirements.¹¹³ Legislation and

¹⁰³ *Id.*

¹⁰⁴ OECD Secretary-General, *Infrastructure Financing Instruments and Incentives*, ORG. FOR ECON. CO-OPERATION AND DEV. (2015), <https://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ LESLIE SLUGER & STEPHANIE SATTERFIELD, HOW DO YOU LIKE YOUR INFRASTRUCTURE: PUBLIC OR PRIVATE? 12 (2010), <https://aiai-infra.info/assets/pdf/PS-2010-HowDoYouLike.pdf>.

¹¹² PRICEWATERHOUSECOOPERS LLP, PUBLIC-PRIVATE PARTNERSHIPS: THE US PERSPECTIVE, 4 (2010), https://www.pwc.com/gx/en/psrc/pdf/public_private_partnerships.pdf.

¹¹³ *Id.* at 5.

statutory limitations should be enacted because they would combat contractual issues that arise out of public private ventures. The majority of project-finance issues stem from the lack of legislation.¹¹⁴ Negative covenants, contract length and terms of agreement, performance issues, financial viability, risk mitigation, and environment reviews—these are just some of the contractual considerations that require clarification by the government.¹¹⁵ Legislation can also encourage overall efficiency in the P3 procurement process. For instance, if a state mandates the formation of P3s to include competitive bidding as opposed to general negotiated bidding, then there would be more public transparency in project initiation.¹¹⁶ Predeveloped processes enabled by legislation allow for early access and predictability in project formation.¹¹⁷ Despite the lack of federal legislation governing P3s, the Federal Government has laws authorizing P3s to function.¹¹⁸ These quasi-legislative mandates enable state and local municipalities to tap into federal funding for infrastructure and social work-related projects.

In 1991, the Intermodal Surface Transportation Efficiency Act authorized the implementation of toll collection services from P3 projects in several states.¹¹⁹ In 1998, the Transportation Equity Act for the 21st Century further permitted states to implement toll collection services on older roads through the “Interstate Reconstruction and Rehabilitation Pilot Program.”¹²⁰ In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users was passed, in order to enable transportation toll usage.¹²¹ The most recent funding and authorization bill for federal surface transportation, Moving Ahead for Progress in the 21st Century Act, was passed into law in 2012.¹²² Beyond

114 ENO CENTER FOR TRANSPORTATION, PARTNERSHIP FINANCING: IMPROVING TRANSPORTATION INFRASTRUCTURE THROUGH PUBLIC PRIVATE PARTNERSHIPS 56 (2014), <https://www.enotrans.org/wp-content/uploads/P3-paper-Final.pdf?x43122>.

115 Edwards, Hafer & Reidy, *supra* note 54, at 176.

116 Darrin Grimsey & Mervyn Lewis, *The Governance of Contractual Relationships in Public-Private Partnerships*, J. CORP. CITIZENSHIP, Autumn 2004, at 91.

117 See Hiroyuki Iseki, Jeanette Eckert, Kanshi Uchida, Ryan Dunn & Brian D. Taylor, *Task B-2: Status of Legislative Settings to Facilitate Public Private Partnerships in the U.S.*, CAL. PARTNERS FOR ADVANCED TRANSP. TECH. (2009), <https://merritt.cdlib.org/d/ark%253A%252F13030%252Fm5348mdj/2/producer%252FPRR-2009-32.pdf>.

118 *See id.* at 1.

119 *See id.* at 4.

120 *See id.* at 5.

121 *See id.* at vii.

122 U.S. Dep’t of Transp., Fed. Highway Admin., *MAP-21-Moving Ahead for Progress in the 21st Century*, <https://www.fhwa.dot.gov/map21> (last updated Nov. 7, 2018).

infrastructure, the U.S. engages in research and development of P3s in the legislative form of Cooperative Research and Development Agreement (“CRADA”).¹²³ CRADA allows the Federal Government to provide personnel, services, facilities, equipment, intellectual property or other resources, with or without reimbursement to non-federal parties and vice-versa.¹²⁴ With respects to direct use of federal funds, states have access to two programs: the Transportation Infrastructure Finance and Innovation Act (“TIFIA”) and the Water Infrastructure Finance and Innovation Act (“WIFIA”).

The TIFIA program provides credit services for qualified regional and national projects.¹²⁵ TIFIA was enacted to attract private interests in revitalizing the nation’s surface transportation system.¹²⁶ This program provides long-term, flexible financing to highway and transit projects that feature dedicated revenue sources.¹²⁷ WIFIA is the Environmental Protection Agency’s (“EPA”) answer to the nation’s deteriorating water infrastructure needs.¹²⁸ WIFIA offers low-interest loan programs from the EPA in conjunction with the U.S. Army Corps of Engineers.¹²⁹ While these federally mandated programs exist to help P3 costs, P3 concessions are still reliant on state legislation in order to function.

Besides domestic interests, the Federal Government is also interested in P3s for foreign assistance. The Millennium Challenge Corporation (“MCC”) is a quasi-governmental agency that encourages private sector engagement to invest in countries that have shown a commitment to open markets and fighting corruption.¹³⁰ The MCC hopes to leverage additional resources from private sector actors in order to enhance sustainability within growing markets. MCC has a “private sector initiative toolkit” that gives guidance on private sector engagement—encouraging risk-sharing activities between private companies and local governments.¹³¹

¹²³ 15 U.S.C. § 3710(a) (2012).

¹²⁴ Off. of the Solic., *Partnership Legal Primer*, DEP’T OF THE INTERIOR (Sept. 2004), <https://edit.doi.gov/sites/doi.gov/files/migrated/partnerships/upload/PartnershipLegalPrimer1stEdition.pdf>.

¹²⁵ *TIFIA: Overview*, U.S. DEP’T OF TRANSP. (2018), <https://www.transportation.gov/buildamerica/programs-services/tifia/overview> (last updated June 27, 2018).

¹²⁶ *See id.*

¹²⁷ *See* Edwards, Hafer & Reidy, *supra* note 54, at 184.

¹²⁸ Water Infrastructure Finance and Innovation Act, 33 U.S.C. §§ 3901–3914 (2012).

¹²⁹ *See* PRICEWATERHOUSECOOPERS LLP, *supra* note 112, at 6.

¹³⁰ *See* MARIAN LEONARDO LAWSON, CONG. RESEARCH SERV., R41880, FOREIGN ASSISTANCE: PUBLIC-PRIVATE PARTNERSHIPS (PPPs) 8 (2011).

¹³¹ *See id.* at 9.

The U.S. Trade and Development Agency (“USTDA”) and the Overseas Private Investment Corporation also use P3s to advance economic development and U.S. commercial interests in developing and middle-income countries.¹³² The USTDA supports infrastructure development and fair trade by providing services and studies.¹³³ These services are offered with the intent to increase private investment by filling in information gaps and improving the general business environment within these developing markets.¹³⁴

State legislation varies among federal statutes due to the different goals and objectives within the states.¹³⁵ States value P3s differently than the federal mandates, because statutes utilize alternative project financing strategies to do more with less funding, when sharing the risks and costs with private actors.¹³⁶ Generally, state statutes enable: project selection and approval, proposal review, necessary funding and any restrictions, procurement and management, and toll oversight.¹³⁷ Project selection and approval statutes are in place to determine the issues commonly associated with P3s.¹³⁸ Statutes may determine the solicitation process of private sectors, limit the number of projects a municipality may engage in, geographic or modal limitations on the project itself, public engagement, or limitation on certain risk factors in the initial discovery process.¹³⁹ Proposal review statutes generally institute guidelines to the public partner’s obligations to the public.¹⁴⁰ There can be implementation of requirements of third-party consultants, timelines and deadlines, specified criteria, or confidentiality.¹⁴¹ Statutory requirements also address the biggest issue with P3s, which is the financial aspects to project development.¹⁴² States predetermine their use of state and federal funds, the transfer of revenues, and the types of revenues permitted.¹⁴³ Two examples of states with successful P3 frameworks are Virginia and Illinois.

¹³²See *id.* at 9.

¹³³ *Id.*

¹³⁴*Id.*

¹³⁵ See RALL, REED & FARBER, *supra* note 48.

¹³⁶ See 15 U.S.C. § 3710(a) (2012).

¹³⁷ See *id.*

¹³⁸ WILLIAM D. EGGERS & TOM STARTUP, CLOSING THE INFRASTRUCTURE GAP: THE ROLE OF PUBLIC-PRIVATE PARTNERSHIPS 5 (2006).

¹³⁹ 15 U.S.C. § 3710(a) (2012).

¹⁴⁰ See *id.*

¹⁴¹ See RALL, REED & FARBER *supra* note 48, at 71-72.

¹⁴² See *id.* at 17.

¹⁴³ See *id.*

1. Virginia

The Virginia Department of Transportation (“VDOT”) has been aggressive and innovative in finding approaches to moving people and freight from point-to-point within its jurisdiction.¹⁴⁴ Early on, the VDOT recognized the value of private sector expertise, enacting legislation in 1988 to enable private sector involvement.¹⁴⁵ The Virginia Highway Corporation Act of 1988 provided the model for P3 transportation projects in the state, leading to the successful Dulles Greenway project. This act established step-by-step measures to be initiated by respondents to requests for proposals relating to P3s.¹⁴⁶ There were several provisions of this act that are the basic elements of any state infrastructure agreement.

First, the Virginia State Corporation Commission (“VSCC”) has the power to supervise and control the P3 concession’s performance, determine the revenue rates, and consider changes to revenue rates.¹⁴⁷ This revenue rate is meant to be reasonable for the operator, and the operator would need to pay a small annual fee to cover the costs incurred by the VSCC during operational review.¹⁴⁸

The VSCC then requires an application for concessions to include: (1) the geographic area to be served and a topographical map indicating the route of the proposed roadway; (2) a list of property through which the proposed roadway will cross, including the names of the property holders; (3) the way the applicant plans to secure the necessary rights-of-way; (4) a complete and comprehensive plan indicating how this roadway will pass through all counties, cities, and towns in its proposed path; (5) the developer’s plan to finance the project, the proposed toll rates, anticipated traffic flow, and details of how the distribution of funds will be made; (6) a plan for the operation of the proposed highway; (7) a list of all permits and approvals required for the project; (8) a description of the project design and all proposed interconnections with existing interstate, state, and local highways, as well as secondary roads and local streets; (9) a list of all public utilities that will be crossed or will need to be relocated; (10) a certification that the roadway design will meet or exceed VDOT standards; (11) a certification that the highway will be built within the timetable established for the project; and (12) completion and performance bonds in a form and amount satisfactory to the VSCC.

¹⁴⁴ See LEVY, *supra* note 72, at 119.

¹⁴⁵ See *id.*

¹⁴⁶ See *id.* at 120.

¹⁴⁷ See *id.*

¹⁴⁸ See *id.*

The Commonwealth Transportation Board (“CTB”) also has the authority to approve or deny any application for a certificate.¹⁴⁹ Decisions are based on the determination of whether there is a public need for a project and whether it is compatible with existing network of infrastructure.¹⁵⁰ Construction costs are reviewed to determine whether they are reasonable.¹⁵¹ Upon approval, the CTB would enter into an agreement with the private sector party to review all plans, specifications, maintenance practices, costs-coverage, and assurance that the operator will fund an account to meet all of the financial requirements, including the establishment of reserve funds for contingencies, maintenance, and replacement costs.¹⁵² The operator not only reimburses the department for all services performed by VDOT on behalf of the operator, but the VSCC will require further funds to cover public liability costs.¹⁵³

Because of the comprehensive framework set forth by the VDOT, Virginia was able to develop a series of transportation projects over the years. Besides the Dulles Greenway, VDOT also commissioned the Capital Beltway HOT Lanes in 2007.¹⁵⁴

B. The United Kingdom

The UK provides one of the most notable examples of the widespread implementation of P3s through the private finance initiative (“PFI”), introduced in 1992 by Prime Minister John Major.¹⁵⁵ It was a means of upgrading public infrastructure such as schools, hospitals, roads, and other public facilities without burdening the UK Treasury.¹⁵⁶ The program quickly became successful because from 1992 to 2008, the UK instituted over seven hundred PFI projects, and planned to implement over two hundred more projects worth over four hundred billion dollars in the coming years.¹⁵⁷

149 *See id.* at 121.

150 *See id.*

151 *See id.*

152 *See id.* at 122.

153 *See id.*

154 *Commonwealth Announces Agreement for Capital Beltway HOT Lanes*, VA. DEP’T OF TRANSP. (Sept. 10, 2007), https://www.virginiadot.org/newsroom/statewide/2007/commonwealth_announces_agreement_for14762.asp.

155 John Forrer, James Edwin Kee & Zhibin Zhang, *Private Finance Initiative: A Better Public-Private Partnership?*, 2 PUB. MANAGER 43, 43-44 (2002).

156 *Id.* at 44.

157 Patricia Carrillo et al., *Participation, Barriers, and Opportunities in PFI: The United Kingdom Experience*, 24 J. MGMT. ENGINEERING 138, 138 (2008).

The UK Government went to great lengths to increase public perception of private investments, implementing several unique regulations for private investments in P3s. Rather than limiting the investment period to pre-procurement and pre-project planning, the UK Government has allowed for later-stage investments in order to spread the private risks and to increase the rate of return for the public good.¹⁵⁸ This curbs the ability of primary investors from feeling the need or engaging in practices that are meant to generate excessive profits, and consequently creating windfall gains on secondary markets.¹⁵⁹ The UK Government has also implemented measures to increase transparency in P3s, forcing PFI liabilities to be publicized to all public agencies for best-practice determinations.¹⁶⁰ In Australia, risk allocation between public and private parties are determined through progress reviews, which can allow the fluid allocation of developing or pending risks, whether financial or operational.¹⁶¹ The UK developed a strong framework of institutional support based on standardization and local guidance.¹⁶² The PFI movement in the UK has not only been limited to roads, bridges and tunnels; it has also been used for government-controlled healthcare programs, and even prisons and schools.¹⁶³

In 2012, the UK set out a new approach, Private Finance 2 (“PF2”) “for involving private finance in the delivery of public infrastructure and services.”¹⁶⁴ PF2 addresses certain issues that PFI projects exhibited in the past, issues such as: removing superfluous services, like cleaning and catering, included within P3 projects; providing procuring authorities with up-front discretion to include maintenance requirements; and providing flexibility in the provision of services once a contract begins until the end.¹⁶⁵ The new approach also seeks to improve P3 value for money through: greater retention and management of certain risks by the government agency, such as risks of additional cost overrun arising from unforeseen legislative changes; and amendments to the current

¹⁵⁸ *See id.* at 57.

¹⁵⁹ *See id.* at 6-8.

¹⁶⁰ *See id.* at 6.

¹⁶¹ *Id.*

¹⁶² ERNST & YOUNG, PUBLIC-PRIVATE PARTNERSHIPS AND THE GLOBAL INFRASTRUCTURE CHALLENGE (2015), https://www.ey.com/Publication/vwLUAssets/Health/%24FILE/EY_PPP_Thought_Leadership.pdf.

¹⁶³ *See* LEVY, *supra* note 72, at 9.

¹⁶⁴ *A New Approach to Public Private Partnerships*, H.M. TREASURY (Dec. 2012), <https://www.gov.uk/government/publications/private-finance-2-pf2>. The U.K. Government has since decided to cease using PF2 for new government projects.

¹⁶⁵ *Id.*

arrangement for risk sharing of core required insurances for the operational phase of projects, so as to allow the public agency to take a more appropriate share of risk and reduce private sector's need to build reserves against increases in insurance premiums.¹⁶⁶ PF2 aims to facilitate greater access to capital markets by capitalizing on the possibility of institutional investors and other sources of long-term debt finance. This also introduces deleveraged capital structures, as a result of better risk allocation and removal of certain operational risks, which were limitations to access to institutional investor capital.¹⁶⁷ The changes to capital management are great, but transparency is the main focus of PF2 arrangements. The UK Government intends to increase the amount of project information made available to taxpayers in order to increase public confidence in VfM. This includes providing information on the project approval process, specifically: publishing reports detailing full project and financial information of the projects where the Government is a stakeholder; requiring the private sector to provide forecasts of equity return information; increasing transparency and control on liabilities created by the projects; introducing a case approval tracker to the website to provide the public with status updates on project progress; and publishing readily accessible and easily understood information on current and future PFI and PF2 projects.¹⁶⁸

C. Australia

In 2007, thirty-eight P3 projects were under contract in Australia, including tunnels, highways, rail, waste and water treatment facilities, correctional facilities, film and television studios, hospitals, and educational facilities.¹⁶⁹ The Australian Government's commitment to investing in infrastructure resulted from the National P3 Guidelines (the "Guidelines").¹⁷⁰ The Guidelines "provide a framework that enables both the public and private sectors" to collaborate on public service delivery of infrastructure and other related services.¹⁷¹ In order to create a unified national framework, individual Australian jurisdictions provide P3

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 55.

¹⁶⁹ See LEVY, *supra* note 72, at 12.

¹⁷⁰ AUSTL. DEP'T OF INFRASTRUCTURE & REGIONAL DEV., NATIONAL PUBLIC PRIVATE PARTNERSHIP GUIDELINES: OVERVIEW (2008), <https://infrastructure.gov.au/infrastructure/ngpd/files/Overview-Dec-2008-FA.pdf>.

¹⁷¹ *Id.* at 5.

guidance material for consolidation.¹⁷² This allows for maximization in efficiency on infrastructure procurement, reduction of public and private sector P3 procurement costs, and removes disincentives to participation in the infrastructure market.¹⁷³ P3s are heavily encouraged by governments across jurisdictions in Australia.¹⁷⁴ The Guidelines work in conjunction with the National P3 Policy Framework, which provides definitions for the types of P3s, whereas the Guidelines provide a framework for procurement processes.¹⁷⁵

According to the Guidelines, there are several key features that represent a shift in thinking from traditional infrastructure procurement methods.¹⁷⁶ The focus of P3s is on purchasing services of a predetermined quality and quantity within a predetermined timeframe.¹⁷⁷ The government has greater strategic flexibility and can focus more attention on the quality of services being delivered as opposed to the traditional asset acquisition methodologies.¹⁷⁸ This focus on service is both a difference and an innovation compared to traditional infrastructure procurement.¹⁷⁹ The focus is primarily on “core services”, which are those where governments have responsibilities to the people using the service and the community.¹⁸⁰ These services are subject to predetermined payment plans, which are subject to terms and conditions relevant to the delivery of services.¹⁸¹ For the private sector party to gain any value from a P3, the private party must deliver the services according to the terms and conditions.¹⁸² The conditional element is not only more cost-effective for both parties, but it can also be a form of risk management to ensure the core services are acceptable by the government.¹⁸³ Due to the conditional requirement for payment, P3 projects must include full integration, management and oversight, and ongoing service delivery for the life of the contract.¹⁸⁴ “Whole of life

172 *Id.* at 5.

173 *See id.* at 12.

174 *Id.* at 5.

175 *See id.* at 5.

176 *See id.* at 9.

177 *See id.* at 9.

178 *See id.* at 9.

179 *See id.* at 9.

180 *Id.* at 8.

181 *See id.* at 9.

182 *See id.* at 9.

183 *See id.* at 12.

184 *See id.* at 7.

service” means that private finance is under strict rigor.¹⁸⁵ As such, the output terms are specified in accordance to the financial strength of the private party as well as the overall service to be delivered.¹⁸⁶ P3 services are assessed both quantitatively and qualitatively to determine the benefits of private party financing.¹⁸⁷ The key feature to financial assessment of P3s value for money is using the Public-Sector Comparator, which is a whole-of-life net present cost model that reflects government retaining ownership and responsibility for construction, redevelopment, and ongoing management of the project.¹⁸⁸

Prior to a P3 delivery, the Guidelines identify three key steps in the investment and procurement decisions: (1) identify the service’s needs; (2) assess the project and procurement strategy; and (3) receive the government’s approval of the investment and procurement processes.¹⁸⁹ Departments and agencies are expected to undertake developmental planning within their government’s overall framework when they assess deficiencies in public service delivery.¹⁹⁰ Service needs can mean: health, education, transportation, and metropolitan development.¹⁹¹ Opportunities in addressing service needs require strategic planning to ensure sustainable project delivery.¹⁹² The Guidelines mandate a minimum due diligence in understanding service needs from a holistic standpoint, which mitigates ad hoc research and reporting when private sector solicitations occur.¹⁹³ Solicitations and procurement strategies are critically analyzed through a business scope, ensuring the government scrutinizes project objectives, financial feasibility, and risk analysis.¹⁹⁴ Besides helping to determine the procurement process, the Guidelines also lay out suitability standards for P3 projects.¹⁹⁵

The Guidelines identified the need for projects to consider several key attributes.¹⁹⁶ Projects suitable for P3s are long term projects.¹⁹⁷ Contracts that tend to be long-term have better leverage when negotiating

185 *Id.* at 19.

186 *See id.* at 12.

187 *See id.* at 26.

188 *See id.* at 9.

189 *See id.* at 14.

190 *See id.* at 14.

191 *See id.* at 14.

192 *See id.* at 15.

193 *See id.* at 14.

194 *See id.* at 15.

195 *See id.* at 17.

196 *See id.* at 18.

197 *See id.* at 18.

an acceptance of whole-of-life cycle costing risk by the private party.¹⁹⁸ These contracts also should have measurable outputs that can be translated to a performance-based contract, where the payment mechanism is contingent on these output specifications.¹⁹⁹ The project must also be sufficiently complex enough to encourage innovative methodology to optimizing value for money.²⁰⁰ Full integration delivers not only optimal value for money, but also efficiency in design and construction with operations and management.²⁰¹ These complex contracts must create a market appetite for private parties, otherwise there is no meaningful competitive bidding process.²⁰² P3 projects also need to consider the adequacy of risk allocation as a key driver for project success.²⁰³ By bundling these service goals, performance standards, and risk provisions, a singular long-term contract can be issued for simplified project management.²⁰⁴ These bundles will also take into consideration non-core services and support activities to be delivered in order to facilitate longer management and public-sector inheritance.²⁰⁵ The sum of these attributes results in overall cost savings during the bidding process.²⁰⁶ Beyond the procurement process, the Guidelines also focus on key principles underpinning a successful P3 delivery.²⁰⁷

The Guidelines identify prerequisite commitments from all parties as critical components to a successful project delivery.²⁰⁸ As with all projects, planning and specification correlates to overall efficiency and quality of the result.²⁰⁹ The focus should be on the goals the government is looking to achieve and specifying the outputs required to achieve them.²¹⁰ Depending on how these outputs are defined, opportunities for private parties to be innovative in designing their inputs can vary.²¹¹ Careful planning then leads to appropriate resource allocation.²¹² Resources are allocated according to a preselected set of requisite skills

¹⁹⁸ *See id.* at 19.

¹⁹⁹ *See id.* at 18.

²⁰⁰ *See id.* at 18.

²⁰¹ *See id.* at 18.

²⁰² *See id.* at 18.

²⁰³ *See id.* at 19.

²⁰⁴ *See id.* at 19.

²⁰⁵ *See id.* at 19.

²⁰⁶ *See id.* at 19.

²⁰⁷ *See id.* at 5.

²⁰⁸ *See id.* at 7.

²⁰⁹ *See id.* at v.

²¹⁰ *See id.* at 14.

²¹¹ *See id.* at 21.

²¹² *See id.* at 14.

required for different parts of the project's timeline.²¹³ Accurate resource allocation reduces drags that may occur, which oftentimes results in cost overrun later in the project timeline.²¹⁴ A project's timeline can be defined if the private party identifies a commercial opportunity throughout the entire process, to ensure long-term management.²¹⁵ All parties are also expected to practice probity to the highest degree.²¹⁶ This encourages all parties to invest the time and ethical standards to produce all necessary information to one another.²¹⁷ Probity directly enables clarity in communication, maximizing overall timeline management and management of the project.²¹⁸ The Guidelines emphasize that these prerequisite commitments are all preliminary inputs to streamlining an efficient and effective risk allocation scheme.²¹⁹

True project VfM is achieved when risks are allocated to the party most capable of managing them.²²⁰ All P3s are expected to undertake a full risk analysis, which involves comprehensive risk identification, assessment, allocation, and mitigation strategies.²²¹ This process generates information for construction management, and most importantly, determines the payment and revenue mechanism.²²² Though the standardization of a risk matrices would minimize costs, risks must be considered on a case-by-case basis.²²³ The service focus of P3s presuppose that the private party bears the risks associated with the development and operation of the project.²²⁴ Over time, the government can take back those risks that it can manage for less than it would have to pay the private party to bear, maximizing long-term VfM.²²⁵ Consequently, risk allocation comes in three forms: (1) risk is retained by the government; (2) risk is transferred to the private sector; or (3) risk is shared by the parties.²²⁶ Risk allocation is ultimately determined based on the level of control between the parties.²²⁷ Governments must always

²¹³ *See id.* at 21.

²¹⁴ *See id.* at 12.

²¹⁵ *See id.* at 21.

²¹⁶ *See id.* at 21.

²¹⁷ *See id.* at 29.

²¹⁸ *See id.* at 29.

²¹⁹ *See id.* at 28.

²²⁰ *See id.* at 33.

²²¹ *See id.* at 33.

²²² *See id.* at 33.

²²³ *See id.* at 33.

²²⁴ *See id.* at 33.

²²⁵ *See id.* at 33.

²²⁶ *See id.* at 33.

²²⁷ *See id.* at 33.

consider that in the end, the risk will ultimately be transferred back to the government, so initial risk allocation must take into account the threshold for costs based on a limited term of risk exposure.²²⁸

The Guidelines are a framework that applies to all states, territories, and the Commonwealth of Australia.²²⁹ The contents of the Guidelines are meant to represent the current best practice in the delivery of P3 projects, and to promote consistency in the application of the P3 process and risk allocation models.²³⁰ This standardization creates cost efficiencies in the tender process for both public and private participants.²³¹ A national approach to determining P3 frameworks is not meant to regulate or enforce any limitations to infrastructure development, but to facilitate the different interests of the parties involved.²³²

V. CONCLUSION

As seen above, P3s have wide and varying uses ranging from infrastructure development to providing public services. While there are benefits and drawbacks to P3s, the existence of a national framework does not hinder or damage the current infrastructure market in the U.S. The implementation of a rigorous procurement regime can alleviate most of the drawbacks that may occur in P3 financing. Congress can draw data and information from existing enabling legislation from states, as well as the different P3 frameworks adopted overseas. Federal legislation enabling public-private partnerships was the first step towards a federal framework, but it does not normalize the P3 pipeline enough to encourage private sectors to engage in P3s.

The UK and Australia's vibrant P3 markets function due to the incentivization of private sector involvement.²³³ Alternative funding sources in those countries are assessed rigorously and empirically, providing an adequately balanced system for expediting the P3 pipeline. This is only possible due to the standardization of the procurement process. Implementing a standard process for procurement provides private sector players a template of risk allocation matrices, standard form contracts, and technical rules for performance guarantees.²³⁴

²²⁸ *See id.* at 33.

²²⁹ *See id.* at v.

²³⁰ *See id.* at v.

²³¹ *See id.* at v.

²³² *See id.* at v.

²³³ ERNST & YOUNG, *supra* note 162.

²³⁴ *Id.*

Reducing the effort required to produce documentation coupled with eliminating the wait time between bids, has made the overall bid structure cheaper and more accessible for private sector partners to shop. While standardization leads to easier and cost-efficient engagement, the U.S. Federal Government also needs to provide more information and research on P3s.

The political leadership must encourage public awareness of the relative costs, benefits and risks of P3s and conventional procurement.²³⁵ Popular understanding of P3s requires active consultation and engagement with stakeholders as well as involving end-users in defining the project and subsequently in monitoring service quality. “Community outreach, public presentations, and workshops with [end-users] are often required before government considers and approves [P3] projects.”²³⁶ “Governments, investors, developers, and operators alike would benefit from sharing more information in more structured ways.”²³⁷ Local knowledge received from the public-outreach process helps project design, function, and implementation. Clear guidelines and transparency in the procurement process can provide the private sector with early insight as the nuances of the proposed concession. Conversely, by standardizing the flow of information, the government is able to receive and collect information on the financial projections and feasibility of private sector involvement. Only if the political level is aware of and accepts the costs and benefits of using P3s, can the issues around P3s be tackled and balanced appropriately with stability and predictability.

Active consultation and engagement with stakeholders should be an integral element of the process. Even in the case of an unsolicited P3 concession, the public-sector party and the private-sector party “must plan to engage stakeholders and adjacent property owners to reach a shared vision with support for the project.”²³⁸ P3s may be used to introduce a more private-sector approach to service delivery in sectors that are traditionally government responsibilities. This can have effect on both working conditions, the culture of the work place and opportunities for advancement. Heightened level of engagement also encourages the government to engage in more communications with infrastructure and

²³⁵ Philippe Burger, Justin Tyson, Izabela Karpowicz & Maria Delgado Coelho, *The Effects of the Financial Crisis on Public-Private Partnerships* 144 (Int’l Monetary Fund Working Paper No. 09/144, 2009), <https://www.imf.org/external/pubs/ft/wp/2009/wp09144.pdf>.

²³⁶ Kasdin, *supra* note 73.

²³⁷ Duvall, Green & Kerlin, *supra* note 80, at 40.

²³⁸ Stephen B. Friedman & Clayton Gantz, *Creating Relationships between Developers and Public Bodies*, in *SUCCESSFUL PUBLIC/PRIVATE PARTNERSHIPS: FROM PRINCIPLES TO PRACTICES* 28, 29 (Stephen B. Friedman ed., 2016).

project finance professionals, beyond the normal procurement and solicitation framework.

Defining outputs in the P3 contract is essential. It should involve end-users in defining the project and its output specification, and subsequently in monitoring service quality once the project is operational. Defining outputs can be instrumental in achieving better alignment of service specification with user expectations and exert pressure on service providers to meet service standards. In addition, involving end-users in design and monitoring increases the likelihood of the effort being perceived as legitimate, fair and understandable. Independent public oversight of P3 implementation can also promote public agency innovation and better outcomes for the society as a whole through greater accountability and social control.

Key institutional roles and responsibilities should be maintained. This requires that private-sector actors, Congress, and sector professionals are entrusted with clear mandates and sufficient resources to ensure a prudent procurement process and clear lines of accountability. A number of institutional roles should be competently pursued to secure and maintain VfM: a sound procurement process, implementing the specific P3, fiscal and budgeting issues, auditing of the P3, and rule monitoring and enforcement.²³⁹ These roles can be maintained through a number of institutional set-ups. However, clear lines of separation must be established to maintain accountability. The authority that is procuring the P3 must have public responsibility to oversee that the project is meeting the performance standards set forth within the concession contract, by monitoring and advising private sector actors during the project life-cycle. The authority is responsible for preparation, negotiation and administration of the contract and for monitoring and evaluating contract performance during the different phases of the project. This is crucial for the government to retain value for money during the whole life of the contract.

Given the complexity of P3 concessions and their relatively infrequent use, critical skills to ensure value for money may need to be concentrated in a quasi-governmental agency that is made available to the relevant authorities. A P3 agency's function can be pursued by several complementary units. The P3 agency can fill gaps in terms of specific skills—a lack of coordination or high transaction costs. Institutional

²³⁹ Ana Corbacho & Gerd Schwartz, *PPPs and Fiscal Risks: Should Governments Worry?*, in *PUBLIC INVESTMENT AND PUBLIC-PRIVATE PARTNERSHIPS: ADDRESSING INFRASTRUCTURE CHALLENGES AND MANAGING FISCAL RISKS* 85 (Gerd Schwartz, Ana Corbacho & Katja Funke eds., 2008).

shortcomings should be addressed taking the country's needs and current institutional context into account. This role requires that the P3 Agency has the requisite in-depth financial, legal, economic and project management skills. This capacity should be used to assess the specific P3 compared to the traditional public investment route. The P3 Agency should support the authority in its endeavor to secure value for money both in the procurement and in the implementation phases. This agency should also make sure that procedural steps (gateways) are followed throughout. It is important that the role of the P3 Agency is clear and without conflicts of interest. While responsible authorities should draw on expertise from the P3 Agency where necessary, it should be emphasized that they remain ultimately responsible for the project. Importantly, although the P3 Agency should help the relevant authorities prepare and negotiate the P3 contract, it should not decide on whether the P3 should move forward. This green-lighting process should be effectively enumerated by Congress.

In line with the government's fiscal policy, Congress should ensure that the project is affordable, and the overall investment envelope is sustainable. An investment project is affordable if the expenditure and contingent liabilities it entails for the government can be accommodated within current levels of government expenditure and revenue

P3 frameworks must enable all parties to understand the goals and the considerations that are involved when undertaking a P3 concession. Public parties must realize that private parties expect revenues based on the amount of risk they are willing to take. Private sector parties must understand that the public agency is not profit-driven, but rather goal and performance driven. Best practices, as seen in the different frameworks above, provide guidelines for establishing a set of standards for P3 concessions. The Federal Government should take into consideration several key factors.

To show that a P3 can deliver the job at the right cost, and then develop a project that will convince lawmakers and investors, is not an easy task. Many government agencies lack experiences with P3s. While thirty-five states, along with the District of Columbia and Puerto Rico, have legislation enabling P3s, only eighteen states and Puerto Rico have

ever reached financial close on a P3.²⁴⁰ A dedicated P3 office centralizes expertise, responsibility, and decision-making capacity.²⁴¹

Although process inefficiencies and bid costs are a barrier to competition, the key issue identified within the U.S. P3 market is the sporadic nature of project pipeline, and the current inability of existing and potential new market participants to undertake an informed assessment of the likely opportunity in respect of P3 projects. Without guidelines set forth such as those in the UK or Australia, there is no commitment from the U.S. Federal Government in coordinating infrastructure projects with state executives. Should the U.S. P3 pipeline be standardized, many other issues regularly cited as key barriers to competition—such as complexity of process, magnitude of bid costs, lack of coordination, and the sporadic nature of projects brought to the market—would have less of an impact. Investors would have more information to assess the market opportunity and respond efficiently by either entering the market or growing existing teams to meet national infrastructure needs.

Specific laws may also be required to allow the public agency to contract with private bodies for the delivery of services hitherto provided only by the state. For user-fee P3s, private investors will also seek clarity about the government's commitment to adopt a price policy that will ensure the financial viability of the contract, accompanied by the adoption of transparent subsidies if the government decides that not all consumers can afford to pay cost-recovery tariffs. Furthermore, regulatory frameworks may be needed in many of the infrastructure sectors where P3s are most likely to be used. In some cases, sectors may be undergoing reforms, and the signature of the contract may precede the adoption of a broader sectoral framework. When the regulatory framework and institutions are already in place, private-sector investors will always assess features such as the technical capacity and autonomy of the regulators, the predictability of the decisions, and the transparency of the processes. The existence of clear monitoring mechanisms with which to supervise the project after it has been signed is also important because it increases predictability and transparency for all parties involved. In sum, governments must prepare for private sector

²⁴⁰ See *State P3 Legislation*, U.S. DEP'T OF TRANSP., <https://www.fhwa.dot.gov/ipd/p3/legislation> (last updated Aug. 16, 2018).

²⁴¹ *Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships*, ORG. FOR ECON. CO-OPERATION AND DEV. (May 2012), <https://www.oecd.org/governance/budgeting/PPP-Recommendation.pdf>.

participation by developing an appropriate legal, regulatory, institutional, and contractual framework.

There is often a balance to be struck between a fixed legal and regulatory framework, and a flexible one capable of responding to developments in best practice over time. In general, investors have a strong preference for certainty, detail, and clarity in the legislative framework, so long as it is good framework. It may sometimes be preferable to set out core principles based on market best practice in framework legislation, and to use administrative rules or regulations to set out more detailed rules that may respond logically and consistently to inevitable changes in policy and the market (so long as this does not lead to a panoply of conflicting and arbitrary rules and regulations). Therefore, there may be a case in those circumstances for having less flexibility and instead establishing clear but stable rules that would benefit from the growing body of international experiences in regulating infrastructure sectors and implementing P3 programs. It is important to remember that private finance—both debt providers and equity investors—will require contractual and, if applicable, regulatory certainty as a precondition of participation in a PPP in which their capital is exposed to risk, which is normally the case. Governments sometimes prepare standardized or model project agreements that encapsulate the obligations of the public and private parties in great detail, in effect reflecting the allocation of risks between the two parties. This may take the form of mandated contracts that are not open for negotiation (state practices) or it may be a more exegetic document—that is, a document that sets out and explains core principles with only certain key terms and mandatory conditions, like the UK Government with its standardized PFI contract.

A strong framework creates shared vision and public purpose with the different stakeholders. Economics of project finance can be controlled and standardized, which would encourage private sectors to engage the public agency in P3 bidding. Implementing prerequisite contributions in due diligence can maximize risk allocation, ultimately leading to optimized VfM and project performance. In order for the U.S. to improve its degrading infrastructure, the Federal Government must adopt a stronger presence and more involvement in empowering private sector capital and expertise for the mission.