



Public-private partnerships for infrastructure investment: a global perspective

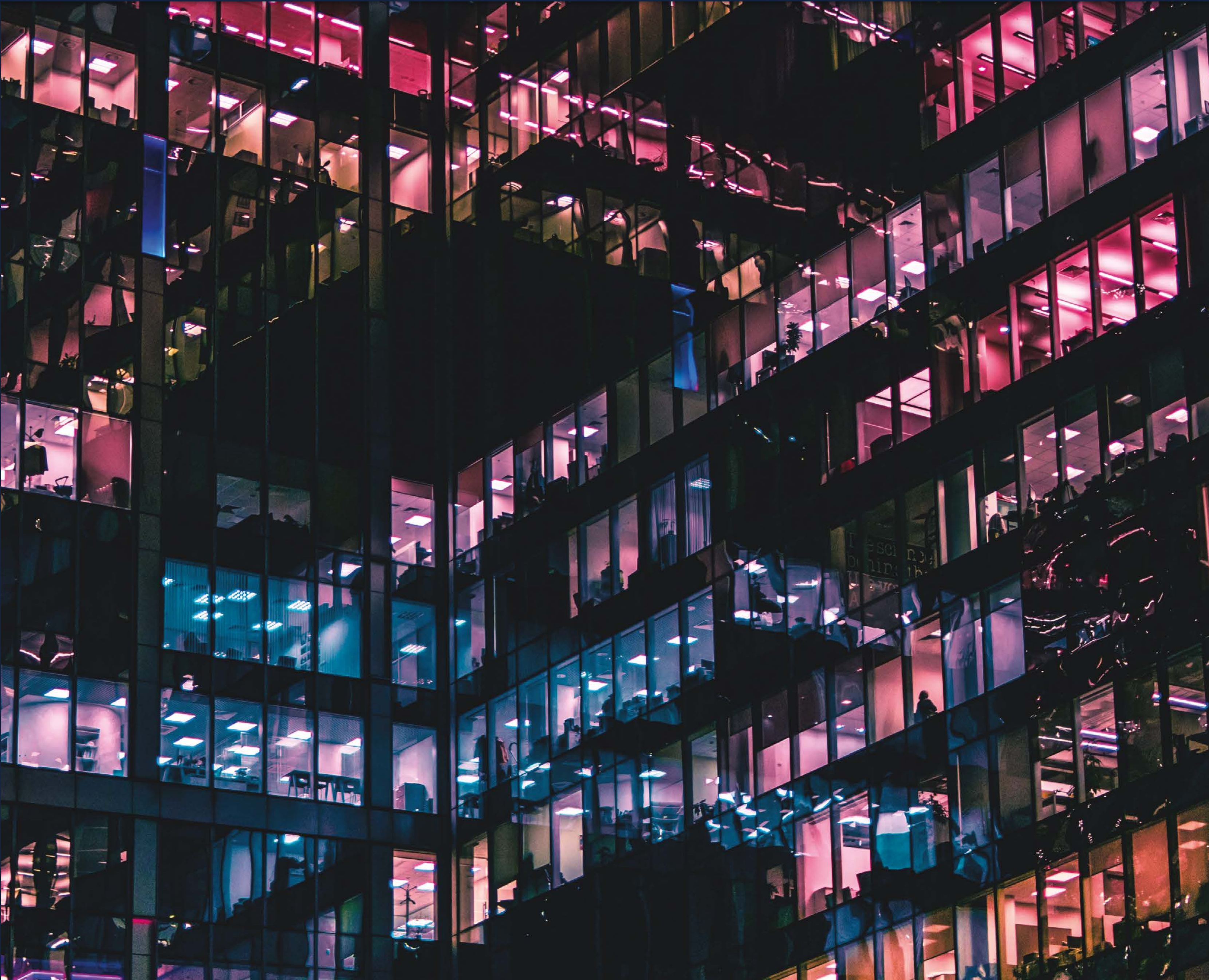
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Foreword

As we emerge from the global pandemic, investing in infrastructure is viewed as even more critical to the development of our global economy and achieving our environmental and social objectives. It is clear to all that governments need to translate political rhetoric into reality.

The UN's Sustainable Development Goals highlight the importance of investing in infrastructure to increase productivity and incomes as well as deliver improvements in health and education outcomes. Many governments worldwide have stated their resolve to prioritize infrastructure projects in order to help their economies to recover post-pandemic. However, the G20-backed Global Infrastructure Hub identified a USD15 trillion gap in the USD94 trillion investment that will be needed by 2040 to fund global infrastructure. It is clear that governments alone cannot bear the financial burden. A reappraisal of the role of private sector investment and appropriate funding models internationally, including various forms of Public-Private Partnerships (PPP) by whatever name, is both vital and timely.

Against this background, global law firm DLA Piper has worked with the Global Infrastructure Investor Association (GIIA) to prepare this report which sets out the case for PPPs backed by multijurisdictional analysis in the global infrastructure investment market. With our leading global projects and infrastructure practices and in-depth sector experience, we have been able to leverage the expertise of our projects and infrastructure partners on the ground in each of these jurisdictions to assess the case for PPPs and compare different models.

We have also gathered insight from leading infrastructure investors, who are fellow members of the GIIA, to test our findings, and we are grateful for all the input we have received from:

- Michele Armanini (Greenfield Managing Director, InfraCapital)
- Michael Botha (Managing Director, Infrastructure, Brookfield)
- Stéphane Duhr (Director, Infrastructure, 3i)
- Nigel Middleton (Partner, UK / Infrastructure, 3i)
- Andreea Militaru (Analyst, IFC)
- Darryl Murphy (Managing Director, Infrastructure, Aviva Investors)
- Gijs Voskuyl (Partner, Head of Infrastructure, DIF)

Our thanks also go to Jon Phillips from GIIA for his counsel throughout the development of this report, and finally to Inframation, a leading news and data provider to the infrastructure, energy, power and renewable energy sectors, for supplying relevant charts and analysis.

We hope that this report will assist governments and investors in their strategic planning for infrastructure projects going forward. If you would like more information or to discuss in more detail any of the issues covered by this report, please get in touch with either of us or any of the other contacts listed in this report.



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Sponsor overviews



DLA Piper

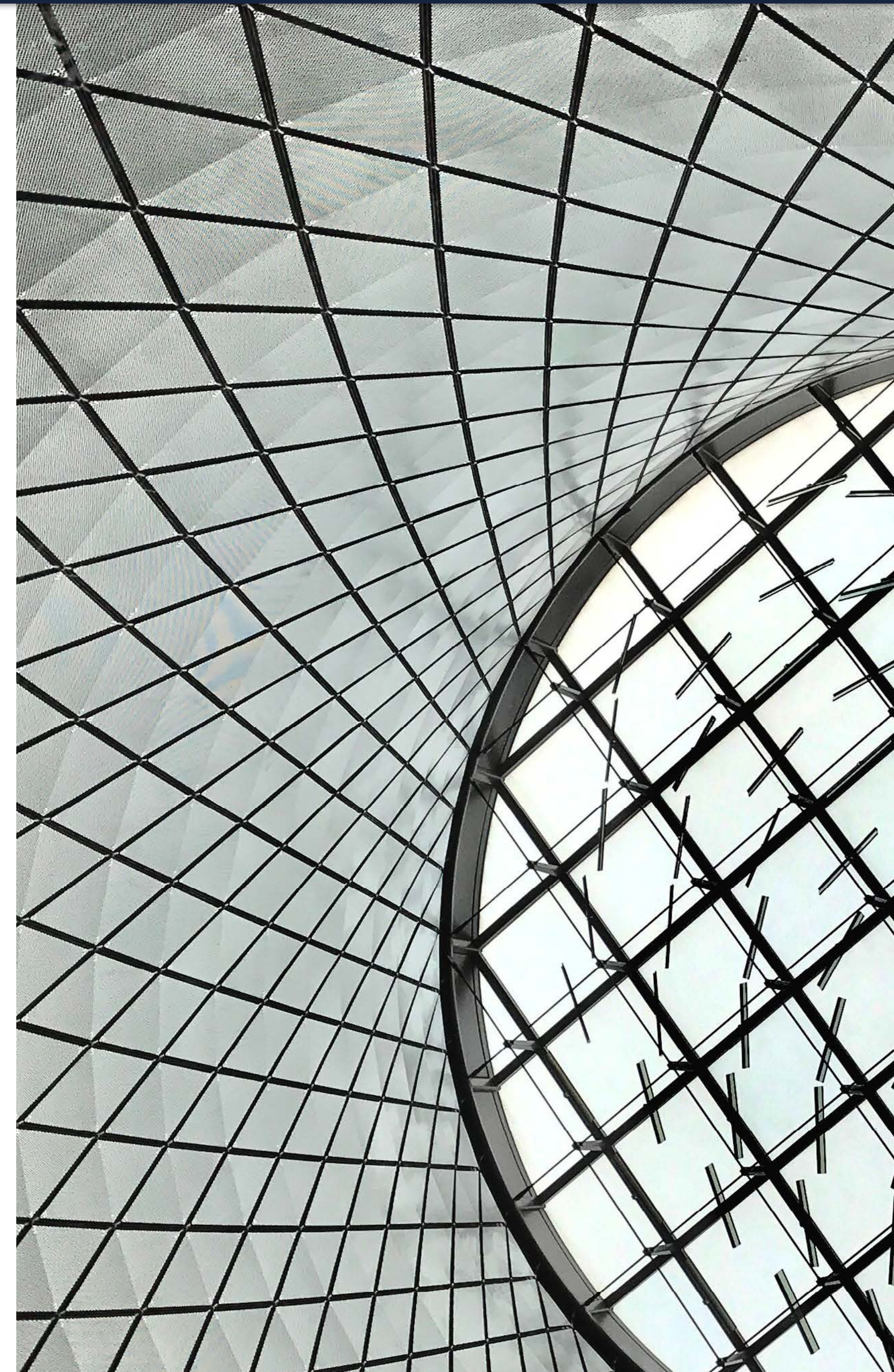
DLA Piper is a global law firm with lawyers located in more than 40 countries throughout the Americas, Europe, the Middle East, Africa and Asia Pacific, positioning us to help clients with their legal needs around the world. We strive to be the leading global business law firm by delivering quality and value to our clients. We achieve this through practical and innovative legal solutions that help our clients succeed. Our clients range from multinational, Global 1000, and Fortune 500 enterprises to emerging companies developing industry-leading technologies. We also advise governments and public sector bodies.



Global
Infrastructure Investor
Association

Global Infrastructure Investor Association

GIIA is the membership body for the world's leading investors in infrastructure, and advisors to the sector, who collectively represent nearly USD1 trillion of infrastructure assets under management across 55 countries. Our members, ranging from fund managers, pension funds, insurers and SWFs, are investing today to provide the smart, sustainable and innovative infrastructure needed for our communities and economies to thrive.





Public-private partnerships for infrastructure investment: a global perspective

There are a number of absolutes in our society that are rarely questioned:

- Infrastructure is essential both to ensure good living standards and to improve and support economic growth.
- Infrastructure is resilient and able to help meet global climate change targets.
- The private sector has a pivotal role in the development and delivery of infrastructure, offering expertise, innovative solutions and private finance.

What is sometimes less clear is how much certain models of private investment in infrastructure offer real value for money. In certain countries, Public-Private Partnerships (PPPs) have come under intense levels of scrutiny and criticism, while in other countries they are seen as the key model enabling delivery of infrastructure policies – the range of views held inside and outside the industry is astonishing, but very little analysis has been completed to assess the cause. So what is the truth about PPPs?

DLA Piper, in partnership with the Global Infrastructure Investors Association (GIIA), has undertaken a comparative review of the approach to PPPs in the following countries:

- | | |
|-------------------|-------------------------------|
| • Australia | • Norway |
| • Canada | • The Kingdom of Saudi Arabia |
| • Colombia | • The UK |
| • The Netherlands | • The US |

As mentioned above, we have also spoken to key investors in PPPs to get their inside insight into whether time is running out for PPPs, or whether they still have a place in infrastructure investment.



Source: Inframation

HAVE PPPS OUTGROWN THEIR USEFULNESS?

In short, no.

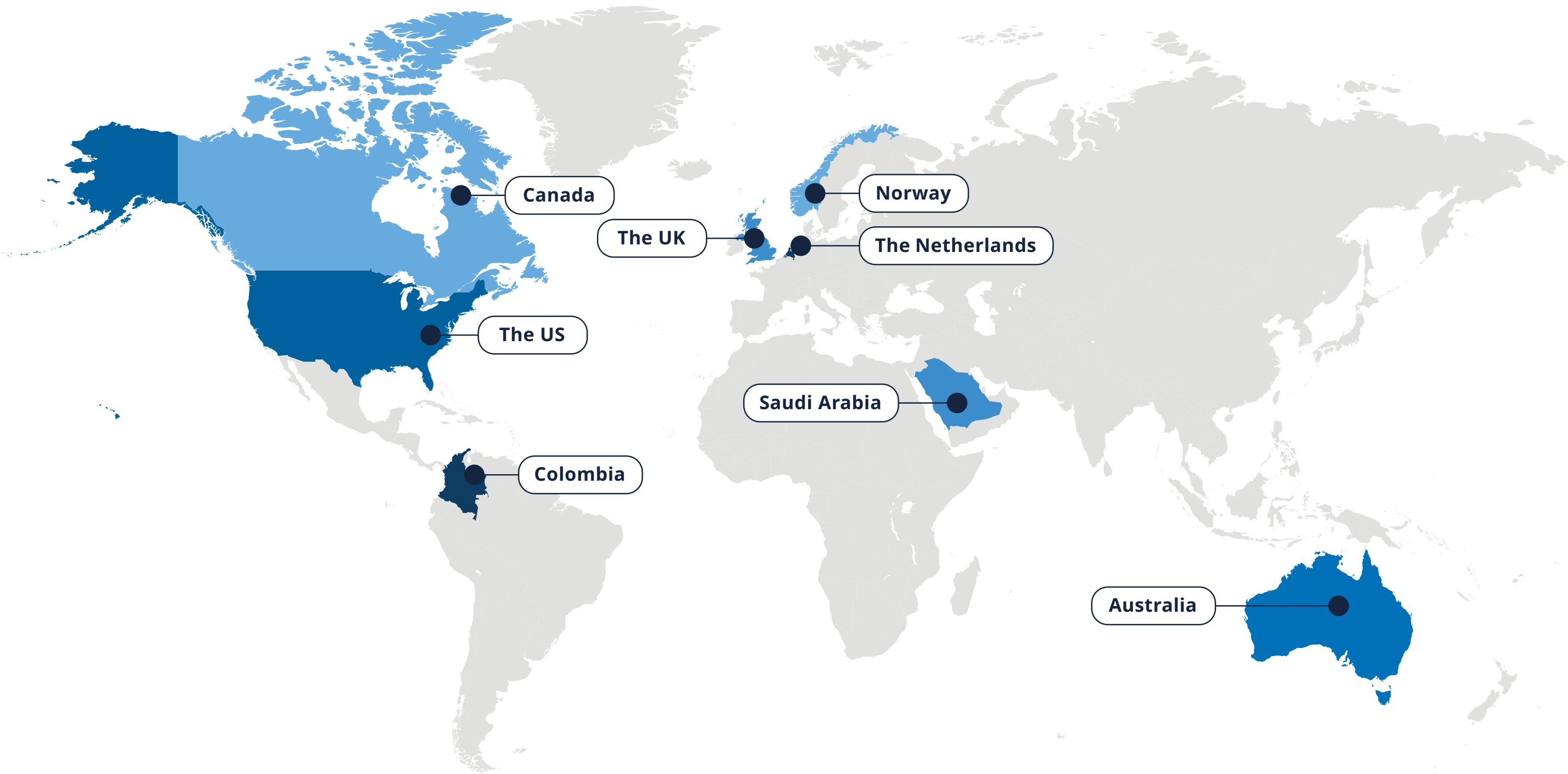
Andreea Militaru of the IFC describes the role of governments very succinctly: **“A government’s role in providing infrastructure has two distinct elements: (i) guaranteeing certain services to its population and shaping what infrastructure is needed; and (ii) ensuring funding for, and delivery of, those services and infrastructure.”**

There are very few models that offer long-term maintenance of infrastructure assets on a risk-transfer / whole-life cost basis. PPPs do.

What this means for governments is that (i) they don’t need to worry about risk management on a complex asset, as the key risks that can be managed by the private sector are allocated to the private sector, which manages them on an integrated construction / operations basis; (ii) they don’t have to worry about budgeting for high-value assets, given that a financial model does this for them, providing a high degree of visibility on future spending; (iii) they can take comfort in value for money and the robust structuring of the PPP given the levels of scrutiny and forward-looking discipline applied to these structures before they are implemented and on an ongoing basis (including by senior debt funders). These elements drove the establishment and development of the model and resulted in its early praise.



COUNTRIES COVERED IN THIS REPORT



Our analysis clearly demonstrates that PPPs have a number of advantages that cannot easily be replicated with other models:

- **Projects run to time and budget:** there is a recognition that, on the whole, PPP projects tend to be delivered on time and on budget when compared to alternate procurement models. This is largely due to the risks associated with delays and cost overruns being placed on the private sector; a clear and objective way in which to assess the model and garner public support.
- **Better risk management:** the principle that risks are allocated to the party that is best placed to manage them enables better risk management and mitigation. Relevant recent examples include the provision of project continuity even with high-profile supply chain insolvencies. This maximization of expertise is a strategic way to harness “best in class” delivery.
- **Delivery of value-for-money efficiencies:** evaluating on a value-for-money basis allows governments to make certain cost / capability trade-offs to realize a solution that may not be the cheapest, but does offer the end-user a better value asset overall. The key here though is data to support the premise.
- **Innovation:** the government operating on an output basis and contracting a full-life service enables the private sector to realize efficiencies not only during the construction phase, but also ensuring assets are well maintained and operated to meet handback / usable life requirements. It also paves the way for flexibility and a dynamic evolution of the model and, in turn, the infrastructure itself.

WHY THE CRITICISM THEN?

It is important to recognize the criticisms, however, which include the following:

- **Higher financing costs:** it is generally accepted that the cost of private finance is higher than public finance. It is worth recognizing, however, that in many jurisdictions this is accepted as a price worth paying for the advantages a PPP brings.
- **Margin pressures / insolvency risk:** to combat some of the criticism around the cost of PPPs and to justify the approach, in evaluating tenders / awarding contracts, governments have generally required cheaper solutions from bidders (without the corresponding reduction in risk). These lower margins have, in some instances, caused issues leading to insolvency and project failures; notably, the collapse of Carillion in the UK which saw the majority of assets operate with service continuity (due in part to the PPP model), but was not without its challenges for both the public and private sectors. Additional developments of the model incorporating “lessons learned” from operational projects could help with mitigating this issue, but reflective learning has been limited (at industry level) to date.
- **Insufficient flexibility:** given the length of time that PPP contracts are in place (typically 25-30 years), there is a degree of inflexibility as it is not always easy to foresee, and provide for, all possible variations / eventualities in the project documents. Change protocols provide a degree of flexibility, but changes to complex assets can often be expensive and time consuming given the wider project structure. There is a “real life” element missing in some of the models which do not reflect the realities of infrastructure as a living, breathing part of society, but this could of course be addressed in future iterations. It is worth recognizing, however, that there aren’t many models (involving private sector and public sector parties working alongside one another) that provide greater flexibility than PPP projects.

- **Structuring / procurement costs:** the number of parties involved in the project structure (and each of their advisors), as well as the complexity and value of the assets in question add additional costs. The criticism being that this leads to layering of cost and time and bureaucracy, while not necessarily recognizing the benefits that this also brings.

From our analysis and discussions with the investor community, there is no doubt that these criticisms can be overcome through best practice and a number of key ingredients to deliver a winning solution.

WHAT MAKES A SUCCESSFUL PPP?

Preparation, support and planning

With any infrastructure project, the first decision that will need to be made by a procuring authority is which model to adopt for the project – considering its size, complexity and sector. While not suitable for every project, there is a consensus that PPPs are still a good model for a number of asset classes, but it is the preparation in the structuring and competition of the project that helps realize the true benefits.

Global markets have shown that the importance of thorough, considered and consistent preparation across all government agencies before launching any project or pipeline is key for all infrastructure projects, but, given the number of stakeholders involved and their complexity, this is particularly relevant for PPPs. **“For the public sector, this preparation should involve an element of front-loading to produce a robust business case that has considered the longevity and future demand and use of the asset(s) in question,”** says **Darryl Murphy (Managing Director, Infrastructure, Aviva Investors)**, as well as the relevant sector strategy and budget. Despite being cited as a key benefit of the model, **“an authority’s decision to pursue a PPP is rarely based purely on a lack of immediately available public finances to meet**



the capital expenditure,” explains **Andreea Militaru (Analyst, IFC)** (as the public sector will typically be able to access cheaper financing itself), rather the expertise, innovation and additional scrutiny that comes with private sector involvement.

“Those jurisdictions that have de-politicized PPPs have seen the most public acceptance of the model,” observes **Gijs Voskuyl (Partner, Head of Infrastructure, DIF)**. However, it is important to have political champions to drive PPP policy and pipeline because **“this ensures there is sufficient political memory as to why an asset was procured as a PPP in the first place,”** says **Michele Armanini (Greenfield Managing Director, InfraCapital)**. Political issues are compounded at local government level,



as politicians are closer to the users, which can in part be combatted by **“a well-formulated plan that sets clear expectations (for each of the government, users and private sector),” according to Michael Botha (Managing Director, Infrastructure, Brookfield)**. It is this clarity of stakeholder involvement, and collaboration between local authorities (and central government) to realize efficiencies and share experience, that is helpful in achieving the necessary partnership in delivering PPPs.

Creating the right level of competition

Establishing strong competition for a project is not confined to the structuring of an individual project's procurement process, but rather starts long before any negotiations with the development of a robust and supported (financially and politically) pipeline of projects, with clear milestones and commencement dates that do not stop and start. This allows the private sector to plan its investment and bidding strategy effectively and consider which opportunities it is best suited for (rather than present sub-optimal solutions for a large number of projects to preserve its pipeline of business). This practice of “pipeline preservation” was compounded by the 2008 global financial crisis, as contractors wanted to retain workforce, knowledge and long-term income at any cost, so bidders became more aggressive and margins became lower compared to the size of the risks that the private sector was assuming.

This is not to say that each project needs to have a high number of bidders to succeed. As **Gijs Voskuyl (Partner, Head of Infrastructure, DIF)** argues, **“authorities should be mindful not to encourage competition to be too high (on for instance price or acceptance of risk). Ultimately, any model should also be beneficial for the private sector and too much competition in PPPs has led to (significant) losses later in projects’ lifecycle and, therefore, a decrease in perceived attractiveness by key market participants, which is not helpful in the long term.”** Instead, having experienced individuals managing the procurement processes to ensure those bidders that do participate are best in class (and do so on a sustainable basis) can result in better outcomes for taxpayers.

“The best solution is unlikely to be produced where bidders feel they are in a lose/lose situation – they fear incurring wasted bid costs if they are not successful and, therefore, the bid price submitted to hopefully secure the project is too low to generate sustainable returns.” – Stéphane Duhr (Director, Infrastructure, 3i).

This lose/lose situation can be avoided (for both the private and public sector) through PPP evaluation criteria steering away from simply favoring the lowest price bid. **“PPPs are a spectrum of collaboration and risk across the financing, construction and management phases,”** observes **Andreea Militaru (Analyst, IFC)**. Often, more sustainable solutions that achieve better outcomes will come at a bottom-line cost, but ultimately represent good value for money (VfM). Supported by advisors in structuring and calibrating the competitive procedure, it is an evaluator's role to identify these trade-offs so the most optimum solution prevails. However, there is a resounding consensus in the market that there is a lack of tangible, quantitative data illustrating the through-life value that PPPs deliver to support this VfM evaluation, particularly as there are limited comparable directly procured projects to act as appropriate comparators. Data is key and is severely lacking in the PPP industry.

The role of data capture in demonstrating value for money

There is a wealth of data points built into the PPP model; monthly payment and performance reports, condition surveys, lenders' technical advisors reports (and many more) all evidence the management and performance of an asset (whether over- or under-performing). It is vital, therefore, that any reporting and contract management systems are robust to ensure that performance regimes are monitored correctly, while allowing changes to be implemented more efficiently and issues to be rectified smoothly, all to optimize the asset and realize the maximum potential benefit to the taxpayer.

One of the biggest challenges to the success of PPPs is public perception and support, and it is becoming increasingly necessary to present tangible

evidence and demonstrate the community and mutual benefits of PPPs and improve stakeholder involvement and transparency. With a more comprehensive data set, both the public and private sectors will have a larger pool of empirical evidence to look to when reporting on the realized benefits of PPPs (both economic and social value). Capturing and analyzing this data will help illustrate the positives of PPPs that those in the industry have known for some time and highlight that the PPPs that truly fail are in the minority. Data should be clear, crisp and easily digestible by the end-users of the infrastructure asset.

Governments can find it challenging in a fast-evolving technological society to predict infrastructure needs in 10-20 years' time, and it is possible that PPPs may not be best suited to the most complex assets which require significant modifications on a frequent basis; shorter-term arrangements (possibly redeveloping and/or repurposing assets which are approaching handback in the near future) may be more appropriate. However, good change mechanics (the results of which are well documented) and adopting best practice in operating projects does allow an appropriate level of flexibility in contract and operational management, enabling procuring authorities to reap the benefits of a true partnership between the public and private sectors. As **Nigel Middleton (Partner, UK / Infrastructure, 3i)** concludes, **“Instead of ‘inflexibility of PPPs’, you could read ‘detailed scrutiny of the genuine risks of making variations which the private sector is expected to take on’. These risks exist in delivering and maintaining a variation whether through a PPP or through conventional procurement. Arguably, the careful analysis of such risks should be a feature of planning a variation no matter how procured....”** Indeed, there is a strong argument that having the continuity of a provider that is aware of integration issues can make variations easier, more intuitive and quicker to implement. Increased communication across the industry could exponentially increase the sharing of best practice evolution, adding a further layer of benefit.

The true benefits of PPPs are seen when all stakeholders bring their respective strengths to the table to create an ecosystem – from the private sector, as the custodians of these assets, these include:

- contractors providing a competitive construction phase that produces an asset that has through-life maintenance integrated into its core systems;
- equity investors offering a long-term view that is based on preserving the asset to generate sustained, predictable returns; and
- lenders bringing additional checks and balances with their more risk-averse level of oversight and scrutiny.

These perspectives are not merely additional layers of complexity and bureaucracy, but are intended to culminate in a project that has optimized the risk transfer and harnessed the very best construction and long-term asset management and lifecycle expertise to realize a through-life, value-for-money asset for the public sector and taxpayer users. It is acknowledged that the private sector also shares in the success of an infrastructure asset, and the rates of return are often subject to media scrutiny, but **“benchmarking provisions should help to assure clients that services are being provided at market costs,”** says **Michele Armanini (Greenfield Managing Director, InfraCapital)** and there is certainly some comfort that can be taken from the fact that **“ultimately a PPP is a financial cycle – the benefactors of equity returns generated by an asset are often funds that rely on the stable low-risk returns to safeguard the pensions of the users of the very asset that generated them,”** adds **Darryl Murphy (Managing Director, Infrastructure, Aviva Investors)**.

There have been criticisms of PPPs mortgaging future generations, but with a well thought-out procurement pipeline, a considered risk-transfer matrix and properly structured, calibrated operational lifecycle model that passes ongoing management to the private sector experts on a strongly-competed, innovative basis, today's PPP assets can deliver real value for tomorrow's society.

Yes, lessons must be learned from early iterations of the model; changes and developments will be needed (and should be encouraged not feared) to enable it to evolve to mirror and support the way high-quality infrastructure evolves to suit its purpose and the society it serves. However, at its heart, the concept of the private and public sector collaborating and combining knowledge and expertise to maximize the benefits and minimize the risk presented by complex construction and operation is surely an ambition that everyone operating in the infrastructure industry should aspire to deliver and commit to achieve in a sustainable way to support the needs of global society.



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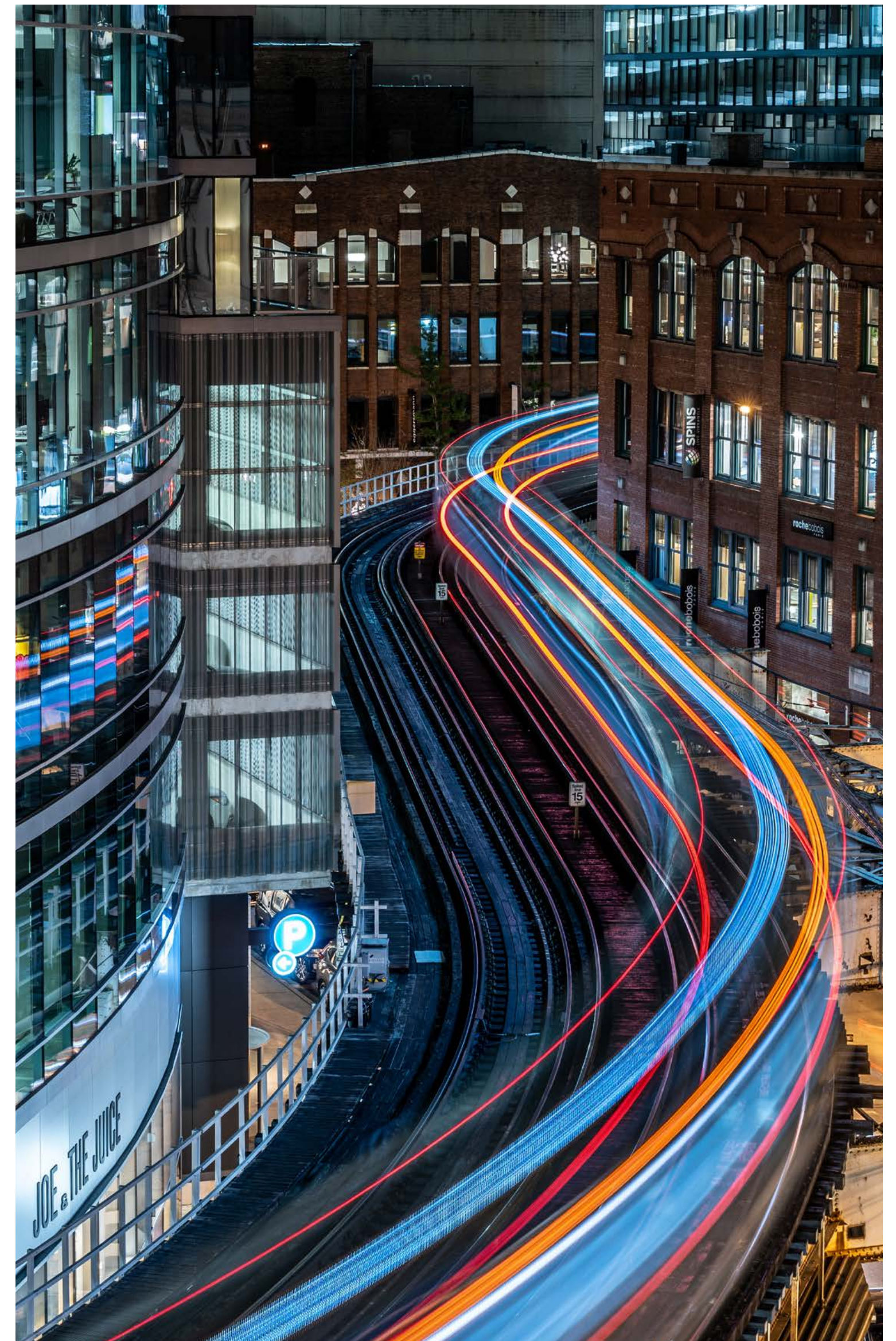
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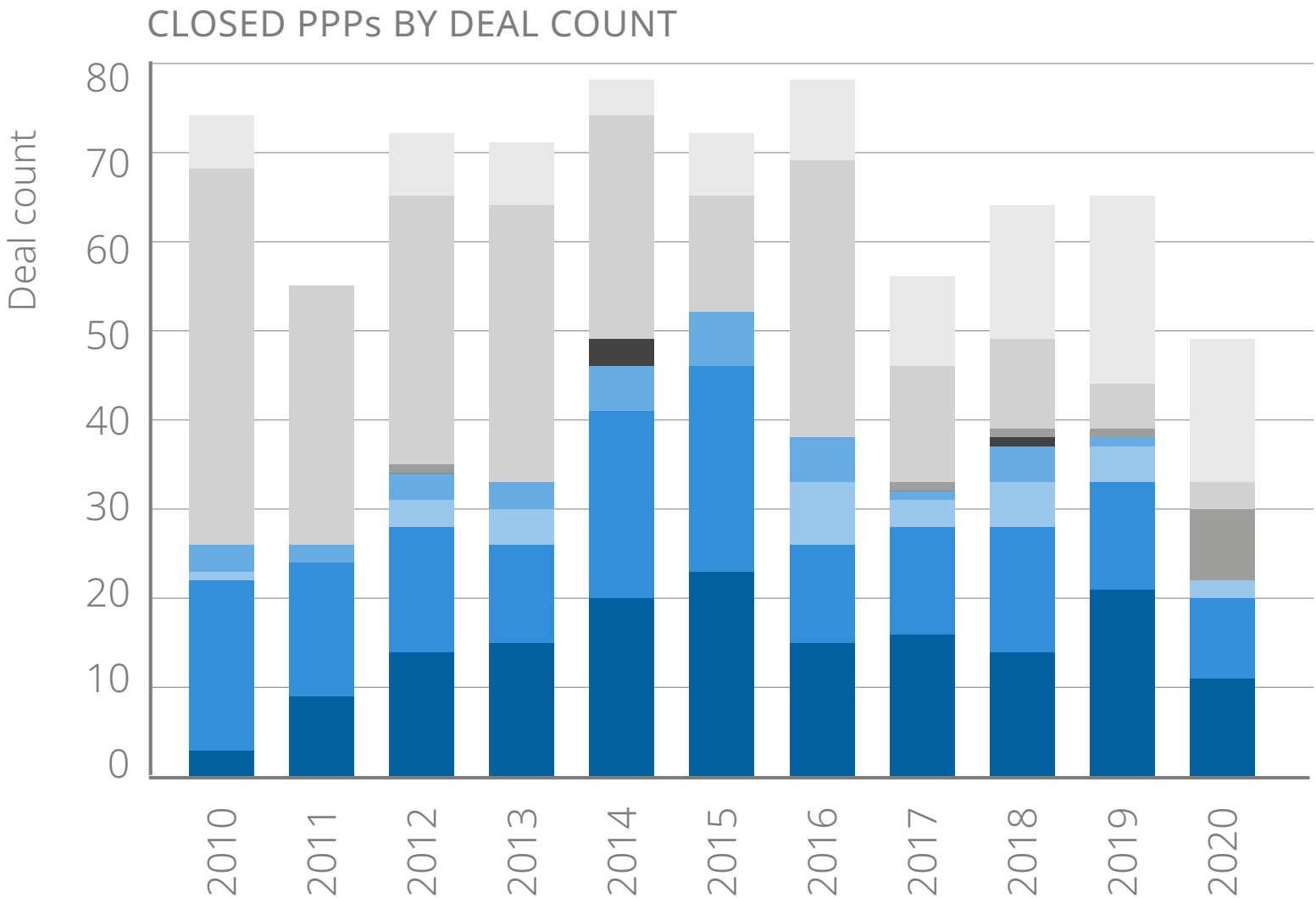
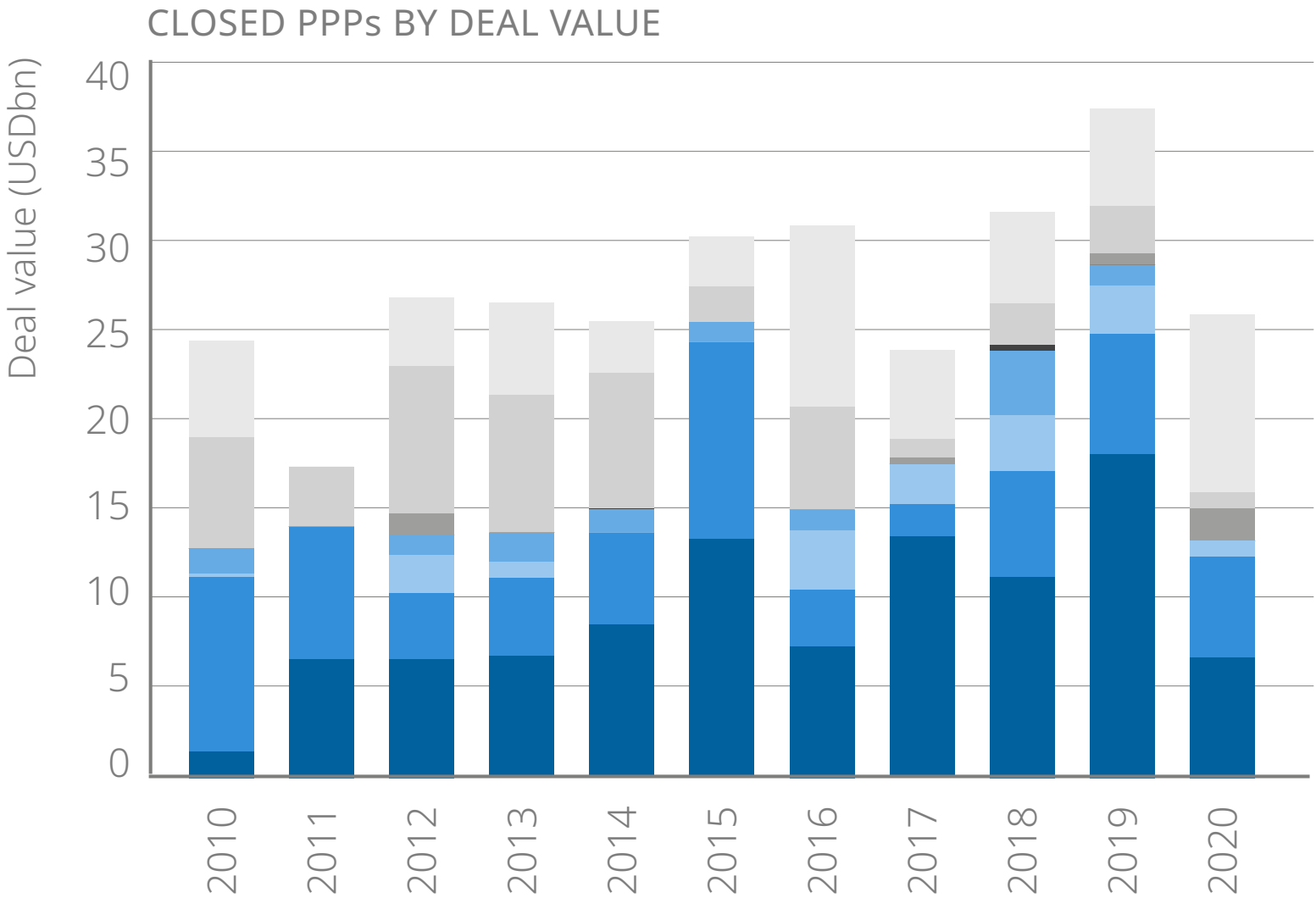




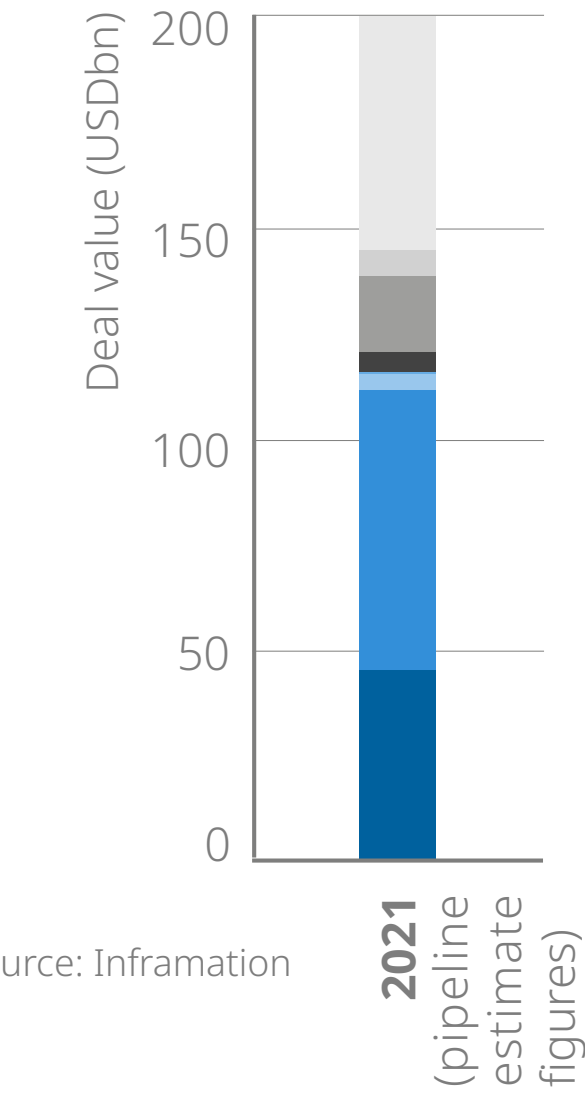
GLOBAL COMPARISON OF PPP BY COUNTRY

We have selected eight countries with various levels of experience in PPP financing: some are well-established, and some are new markets for PPP. We have posed a series of questions to our projects and infrastructure lawyers on the ground in these countries, in order to draw out the similarities and differences around the PPP model in those markets and to draw some conclusions.

- Australia
- Canada
- Colombia
- Netherlands
- Norway
- Saudi Arabia
- UK
- USA

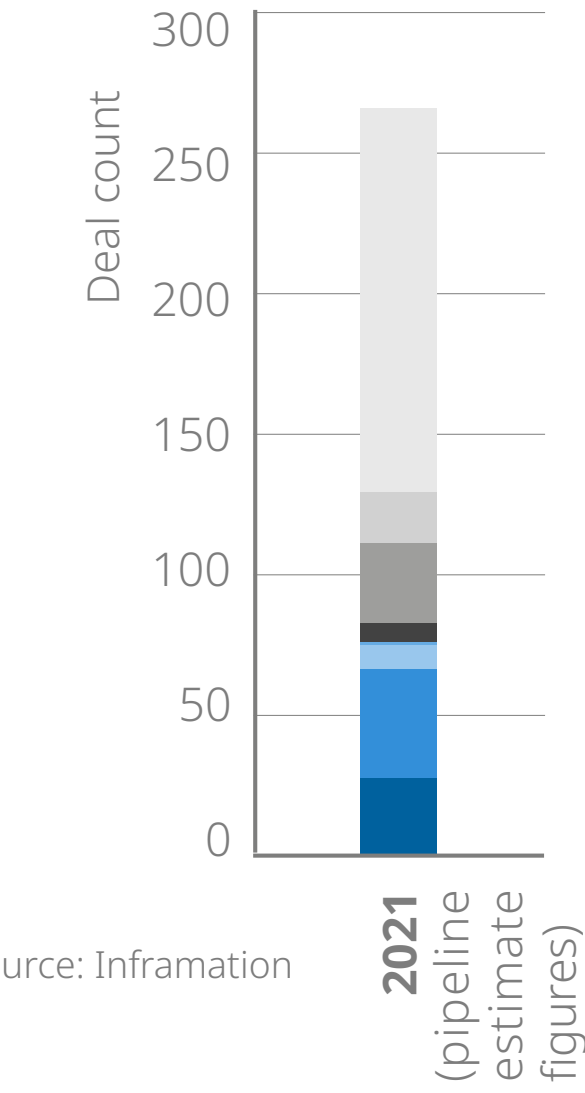


PIPELINE PPPs BY DEAL VALUE



Source: Inframation

PIPELINE PPPs BY DEAL COUNT



Source: Inframation



Australia



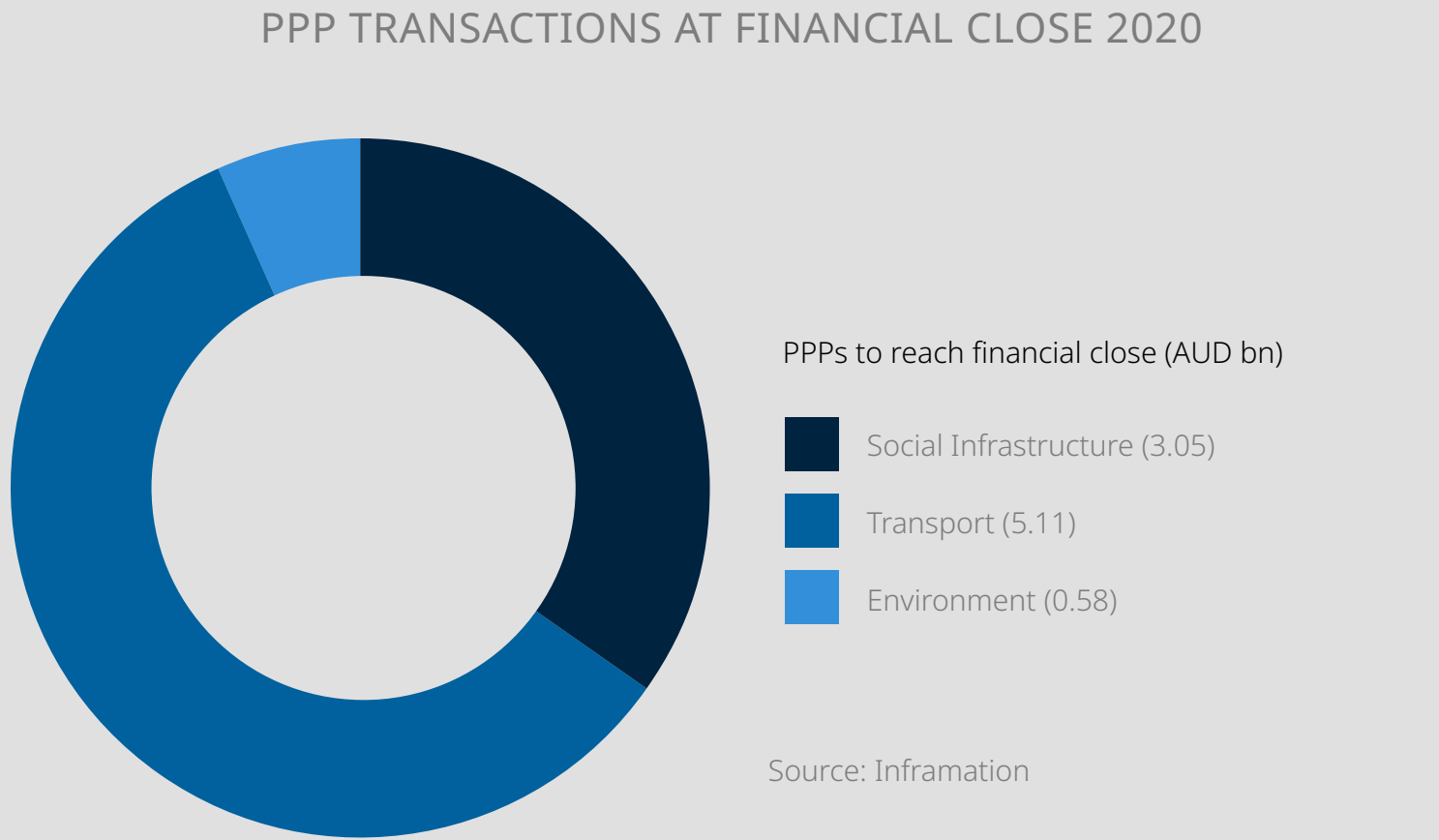


**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

PPPs tend to represent less than 10% of total government infrastructure procurement in Australia. The greatest use of PPPs is in New South Wales and Victoria, the two most populous states in Australia, at about a 10% on average.

Since January 1, 2017, there have been 12 PPP projects in Australia, all of which have been greenfield projects. The total value of these 12 projects is USD22.55 billion, with each transaction averaging USD1.88 billion. The highest valued PPP transaction was the Sydney Metro City & Southwest project, valued at USD7.88 billion.

PPP projects have focused on investing in the social infrastructure and transport sectors, specifically the development of new schools, rolling stock and rail projects, prisons, hospitals and aged care facilities.



**WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN
YOUR JURISDICTION?**

Privately financed projects have been taking place in Australia for a long period of time. In modern times, the Sydney Harbour Tunnel, completed in August 1992, was the first notable PPP project implemented in Australia. The term “PPP” was only first introduced into the Australian market in 2000 when the Victorian Government implemented its “Partnerships Victoria” policy.

**WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR
JURISDICTION? VERY BRIEFLY, WHY IS THAT?**

PPPs have generally been viewed favorably in Australia. Historically, state and federal governments are open to entering into PPP contracts where they consider it to be the best value for money procurement methodology.

The prevailing view throughout Australia is that governments are more inclined to adopt a PPP contract with private companies where the projects display the following suitable characteristics:

Risk allocation

The project involves risks which the private sector is prepared to take at a value for money price. The government also sees value in the “buffer” that the SPV’s equity investors and debt financiers provide against the risk of contractor insolvency or default for which the contractor’s liability is limited.

Stable requirement

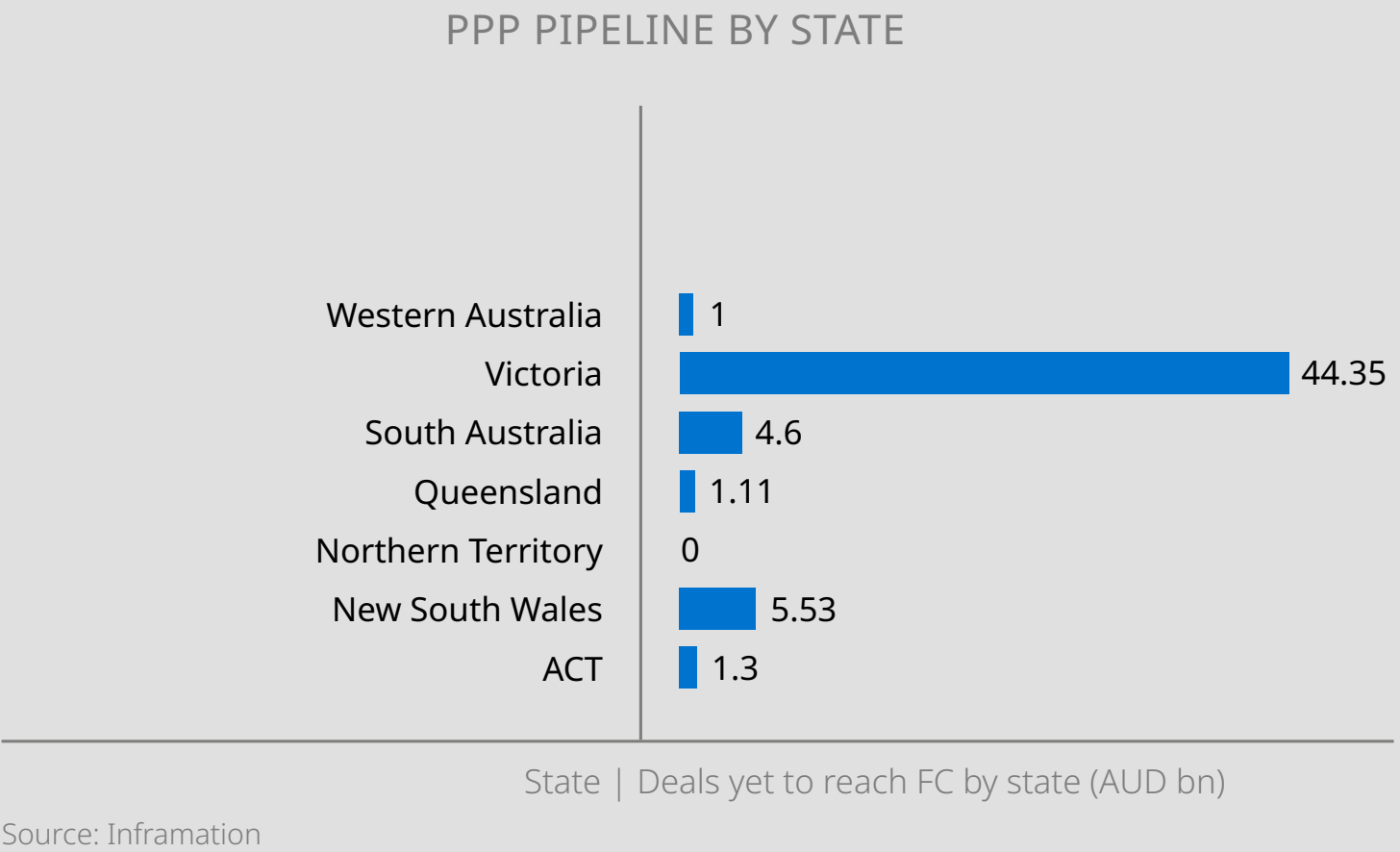
The project involves the provision of infrastructure and services which are likely to be required, without substantial change, for the duration of the contract.

Cost certainty

The government wants a high level of certainty regarding the total cost of the project at the time it contractually commits to the project.

Complexity and public interest

The project is complex or unique, and therefore likely to benefit from the additional due diligence which private sector investors and financiers will perform.



**BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION,
AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC
INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”).
PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.**

Australian PPP policies tend to limit the term “PPP” to transactions where private finance is provided and the design, construction, operation and/or maintenance services are bundled into a single contract.



The two main forms of privately financed PPPs used in Australia are:

1. Service-payment PPPs – also referred to as a “social infrastructure PPP”, these PPPs consist of the private sector’s primary revenue stream taking the form of a service payment from the government. For example, these projects often include infrastructure such as schools, hospitals and prisons.
2. User-charge PPPs – also referred to as an “economic infrastructure PPP”, these PPPs involve the private sector’s source of revenue being generated from charges paid by users of the infrastructure, such as tolls paid by the users of a toll road.

The reality, however, is that a broad range of PPP models are used in Australia, including:

Operating franchise

Where there is performance-based remuneration, the transferring of O&M risks and government retention of ownership and revenue risks.

DBM contracts

Involving new or refurbished infrastructure, government funding of capital costs, performance-based O&M fees, transfer of DBM risks and government retention of ownership and revenue risks.

Privately financed DBM contracts

DBM contracts with private financing.

Long-term lease

Involving existing infrastructure or privately financed new infrastructure, transfer of commercial risks and government retention of regulatory oversight.

Ownership

Where there is no transfer of ownership back to the government, but the government retains a critical role, such as being a counterparty to a primary off-take agreement or regulatory role.

EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

Ordinarily in PPPs, all the risks that the SPV assumes under the contracts with government in relation to the design, construction, operation and maintenance of the infrastructure asset will be passed through to the SPV’s D&C and/or O&M subcontractor. Typically, the only risks that remain within the SPV, and to which its equity investors are therefore exposed, on service-payment PPPs are:

- the risk of a subcontractor to the SPV not being legally liable to the SPV for a breach of its obligations, because of a cap on or exclusion to its liability;
- the risk of a subcontractor to the SPV becoming insolvent;
- the risk of the SPV not being able to refinance its debt on terms consistent with those assumed in the financial model;
- the risk of an upstream change of control occurring in respect of an equity investor in breach of the PPP contract;
- the risk of the SPV being liable to a subcontractor (or a third party) for an amount in excess of what the SPV can recover from the government – for example, because the SPV has independently done something wrongful toward a subcontractor (e.g. incorrectly rejected its design documentation) for reasons unrelated to a corresponding wrongful act of the government;
- the risk of the SPV being liable to the government (or a third party) for an amount in excess of what the SPV can recover from its contractors; and
- the risk of a “gap” arising in the pass-through of rights or obligations via its subcontracts.

For a user-charge PPP, demand or revenue risk can also be added to this list.

“Australian PPP policies tend to limit the term “PPP” to transactions where private finance is provided and the design, construction, operation and/or maintenance services are bundled into a single contract.”

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

1. Better value for money – for suitable projects, a PPP can deliver superior value for money for government than any alternative delivery model. This outcome can be achieved in various ways but is usually from a combination of a better infrastructure solution and better outcomes, less risk for government, and/or a lower cost for government, when assessed over the period the infrastructure asset is used.
2. Superior cost, time and service outcomes – comprehensive studies undertaken in Australia in recent years have shown that PPPs experienced average construction cost overruns of 4.3%, compared with 18% for traditionally procured projects. The average construction phase delay for the PPPs was 1.4%, compared to 25.9% for traditionally procured projects. Further, 95% of service providers, such as school principals, doctors, wardens and contract management staff using the PPP assets to deliver a service to the community, stated that the PPP projects have delivered on the service delivery outcomes promised by the government.
3. Greater budgetary certainty – PPPs can provide a higher level of budgetary certainty than more traditional contracting models for the entire project at the time government enters into the first major contract for the project. Alternative contract delivery models often involve government separately



contracting different parts of the project, such as O&M, progressively. However, circumstances and project scopes often change between the time government enters into the first major contract for a project, and its last one, leading to higher final costs than anticipated. PPPs avoid this situation by requiring all necessary contracts to design, build, operate and maintain the project to be signed before the government becomes bound by the PPP contract, thereby providing the government with more budgetary certainty at the time it contractually commits to the project.

4. Improved project scoping and risk assessment by government – the long-term nature of the PPP contract makes the procuring government agency think carefully about the service outcomes that the project should achieve. Consequently, the tender documents for PPP projects tend to be more output-focused – they specify the services that the government agency wants delivered, rather than the means by which those services are to be delivered. The end result is that the procuring agency's objectives, requirements and specifications for the project are better developed at the time when tenders are called. This results in fewer government-initiated contract variations after the contract is awarded. The level of risk assessment by government agencies prior to contract award is much greater on PPPs for the same reasons. The risk analysis that underpins the agency's cost estimate tends to far exceed the risk analysis performed by government agencies for cost estimates for traditional procurements. This additional analysis makes the government agency a more informed purchaser, and better able to interrogate the pricing and risk assumptions of bidders.
5. Innovation and focus on outcomes – the output/performance focus of government specifications for most PPPs provides greater scope for the private sector to bid innovative solutions which can deliver the required services at a lower whole-of-life cost. As government is more concerned about service levels and outcomes over the applicable period of time rather than the form of physical assets used to deliver them, bidders have

an opportunity to think laterally and identify opportunities to provide the required services in new ways that improve outcomes and/or reduce costs. A key to greater innovation is to give thought to framing the project objectives in such a way that bidders may come up with a variety of different means to achieve the desired objectives. A contracting model that bundles operation and maintenance into the contract, such as a PPP, can help drive operator-led innovations.

6. Source of funding, if user-charge – PPPs can expand the funding available for public infrastructure, but this is only true in the case of user-charge PPPs. Service-payment PPPs simply substitute government borrowings for a different liability – a commitment to pay a service payment to the SPV. However, where there is a significant contribution to the funding of a project from its user charges, a PPP does expend the funding available to government.
7. Risk Transfer – a key benefit of PPPs is that they achieve significant risk transfer from the government to the private sector. Australian PPPs seek to allocate risks to the parties best able to manage them. Optimal risk allocation is the goal, where risks are allocated in a manner that minimizes the aggregate cost of managing the risks over the term of the contract. Only those risks that the private sector can manage at a lower cost than the government should be allocated to the private sector.

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

Using private finance adds additional/higher costs

The use of private finance adds additional costs that typically do not arise under a public-funded contract delivery model, as the SPV will need to pay interest on the debt finance (which is almost certainly at higher rates than the government can borrow), and will also be expected to provide an equity return to its equity investors. The SPV will need to recover the cost of this capital via:

“The use of private finance adds additional costs that do not arise under a public-funded contract delivery model, as the SPV will need to pay interest on the debt finance, and will be expected to provide an equity return to its equity investors.”

- the service payment; or
- the user charges.

Accordingly, the SPV's financing costs will be passed through to:

- government (taxpayers), via larger service payments; or
- users, via higher user charges (or a longer concession period).

PPPs are regularly criticized on the basis that governments can borrow finance more cheaply than the private sector. In order to access the cheaper finance, however, governments need to borrow on a “full recourse basis”, and agree to repay the loan regardless of whether or not the net revenues generated by the project are sufficient to repay the loan. Accordingly, the government ends up bearing the risk of poor project performance.

In contrast, when a SPV borrows debt for a project, it does so on a “limited recourse” basis (i.e. on the basis the debt financiers can only have recourse to the assets of the SPV (i.e. the project's assets and revenues), and cannot have recourse to the SPV's equity investors, or to government).

Accordingly, the lenders end up sharing the risk of the poor project performance meaning they will charge a higher interest rate when lending to SPVs, on account of the higher credit risk.



Failed (insolvent) PPPs

Most of the so-called failed PPPs in Australia have been user-charge PPPs, where the revenue generated by the project was well below that forecast by the consortium’s investors, leading to the insolvency of the SPV. Very few service-payment PPPs in Australia have resulted in an insolvent SPV.

Notably, it has generally been the equity investors only that suffer loss when the SPV becomes insolvent. Sometimes the debt financiers have also suffered a loss. Governments and other participants in failed (insolvent) PPPs have generally received what they bargained for.

A downside for the government of these failed PPP projects has been the loss of appetite by equity investors and debt financiers for demand risk on greenfield projects, forcing government to use contractual delivery models under which government bears more demand risk.

Insufficient flexibility

PPPs are not a two-party contract that can be varied by agreement between the government and its contractor. Rather, in the most basic of PPP structures, there are at least four separate private sector groups (i.e. equity investors, debt financiers, the D&C contractor and O&M contractor) each with different commercial interests in the project. Generally, before the SPV can agree to a change to the PPP contract with the government, it must obtain the agreement of the other private sector groups, which can prove challenging where the interests of private sector parties are adversely affected and obligations on private sector parties are increased.

Furthermore, PPP contracts involve long-term commitments, often 30 years plus, and exiting a PPP contract early can be expensive, as counterparties will (depending on the termination circumstances) be entitled to be compensated for the return they would have derived from the contract. This lack of flexibility is especially problematic when a PPP asset forms part of a broader network. Government can find that the PPP contract not only impairs its ability to make changes to the PPP asset, but it also impairs government’s ability to make changes to the broader network. In these situations, government may be better served by a more traditional contracting model that might more easily accommodate future changes.

HOW FLEXIBLE ARE THE KEY MODELS?

Flexibility in a PPP contract is essentially the government or any party’s ability to change the terms of the PPP contract once the project is underway. Privately financed PPP models have historically proven to be less flexible than publicly funded delivery models.

As mentioned above, the primary reason privately financed PPPs lack flexibility is because of the number of parties with an interest in the contract. The most basic forms of PPP contracts will still involve at least four private sector groups – equity investors, debt financiers, D&C contractor and O&M contractor – each with different commercial interests. Each private sector party has only agreed to the PPP contract based on the contractual arrangement at the time they signed the contract. When government or the SPV seek to change any provisions in the PPP contract, all private sector parties have to agree to these revised terms. Achieving flexibility then becomes challenging when each private sector group’s commercial interests could be adversely affected as a result of changes to the PPP contract.

More information on this issue can be found in DLA Piper’s, [“Flexing PPPs”](#) report.



ANY OTHER RELEVANT POINTS TO NOTE.

New risk sharing models are being explored in Australia. More information can be found in:

- [New risk sharing models for privately finance projects](#)
- [Improving public private partnerships](#)



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Canada





**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

Canada has continued to enjoy a robust PPP market with projects in virtually all major sectors. These projects span the full spectrum of the PPP model, from DBFM, DBFO, DBFOM and DBF to Build-Finance.

There are approximately 111 PPP projects across all sectors and regions which are currently either in the planning or procurement phase or under construction. Estimated project values have been made publicly available for only 65 out of the 111 projects. Those 65 projects have an aggregate estimated project value of CAD55.1 billion, but the total value of all 111 projects is far greater. The balance of Canada’s PPP projects are spread across energy, technology, government building, justice, education and other social infrastructure projects, with justice and education projects being the most significant. Transportation (predominantly light rail, subway and transit, but also including highways, bridges and tunnel projects), health, and water and wastewater projects have, in that order, ranked highest in Canada by volume and estimated project value.

**WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN
YOUR JURISDICTION?**

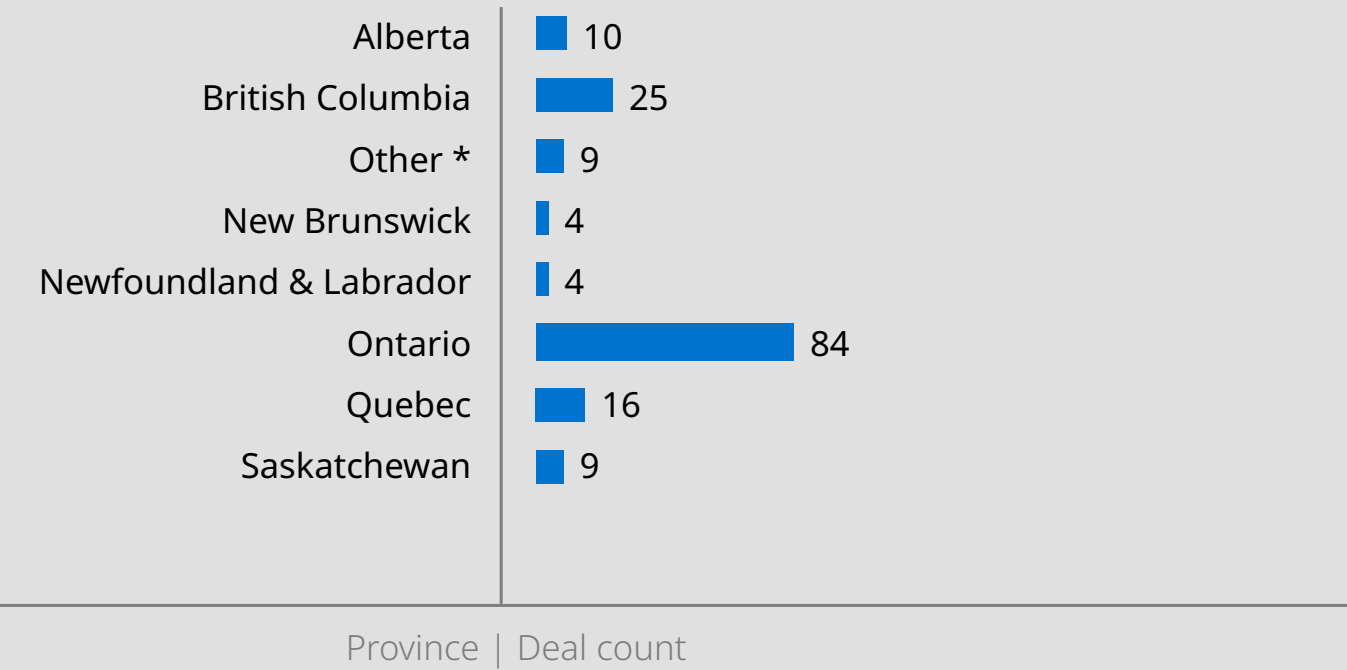
While the late 1990s is sometimes identified as the point in time in which PPPs first appeared in Canada, it was not until the early 2000s that Canada’s PPP market commenced in earnest.

Two pilot DBFM projects were procured starting in around 2002 in the acute healthcare sector, the William Osler Health System and a large acute care facility in Ottawa, the nation’s capital. These projects largely used UK documentation, adapting it to meet specific Canadian federal and provincial requirements. As those projects reached financial close in 2004, other provinces started to use the PPP model, notably British Columbia.

Projects were procured in both the transport and healthcare sectors, with projects such as the Canada Line, Sea to Sky Highway, Kicking Horse Canyon, Okanagan Lake Bridge and Golden Ears Bridge. In Ontario and British Columbia, market documentation and procurement models began to consolidate into standard form with the evolution of two agencies, Infrastructure Ontario in Ontario and Partnerships BC in British Columbia and the expertise created within these agencies assisted significantly in the development of contractual and financing structures readily accepted by the private sector and both domestic and international lending institutions.

The Province of Alberta then joined the market and rapidly added a series of ring road and bundled school projects to the mix. Since then, the federal government and numerous other provinces and territories, including Manitoba, Saskatchewan, Nunavut, Quebec, Newfoundland and Labrador, Nova Scotia, and New Brunswick, have all undertaken PPP projects, adopting and adapting the structures developed by the prime mover provinces.

AT FINANCIAL CLOSE SINCE 2010



* Manitoba, Northwest Territories, Nova Scotia, Nunavut

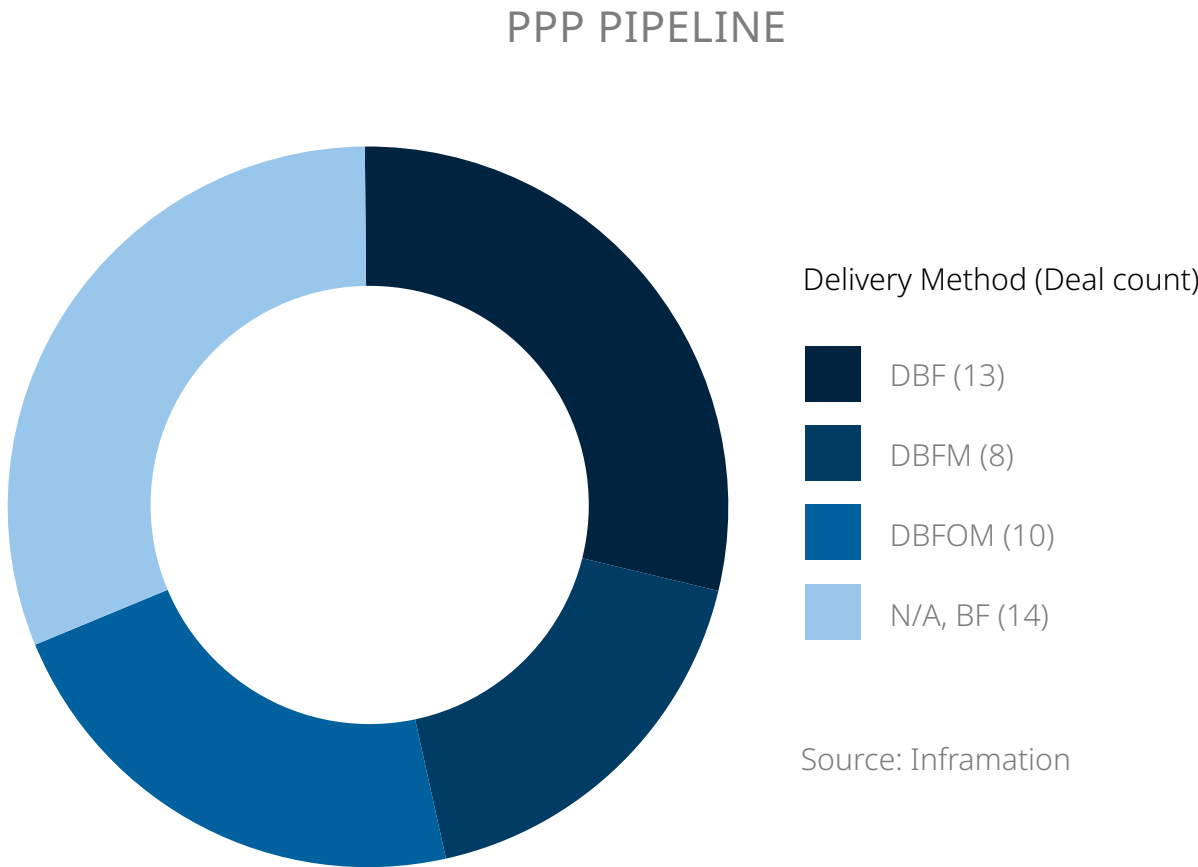
Source: Inframation



WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR JURISDICTION? VERY BRIEFLY, WHY IS THAT?

The use of PPPs in infrastructure projects is generally viewed very favorably in Canada. The PPP model has been used to successfully deliver dozens of high-value, high-profile social, transportation, water and wastewater and energy projects in Canada and generally there has been a good track record of delivering the relevant projects on time and on budget. Although there have been concerns raised regarding the increased cost of relying on private-sector capital, the outsourcing of jobs to non-unionized work forces and the potential for private-sector “windfalls” at the expense of taxpayers, on the whole the model has garnered and continues to receive support from governments of various political stripes across Canada and from the general public.

One of the aspects of Canadian PPPs which supports their popularity is that they are based, for the most part, on availability payments rather than revenue-based payment mechanisms that require the market and its lenders to assume volume risk. As such, end users do not have to pay for their individual use of the infrastructure, which aligns more closely with how Canadians think about government-sponsored infrastructure projects as constituting public goods. As well, transferring the design, construction and materials procurement risk to the private sector, while the public sector focuses on output specifications and major permitting risks, allows for each side to do what they do best, thus increasing the overall efficiency of the process. Finally, as the PPP model has evolved in Canada, government infrastructure procurement agencies have refined their agreements and risk transfer mechanisms and have encouraged the entry of more participants into the bidding process in order to ensure that there is more opportunity for the public-sector to participate in potential upsides and to drive leaner, more competitive bids from private-sector participants.





BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

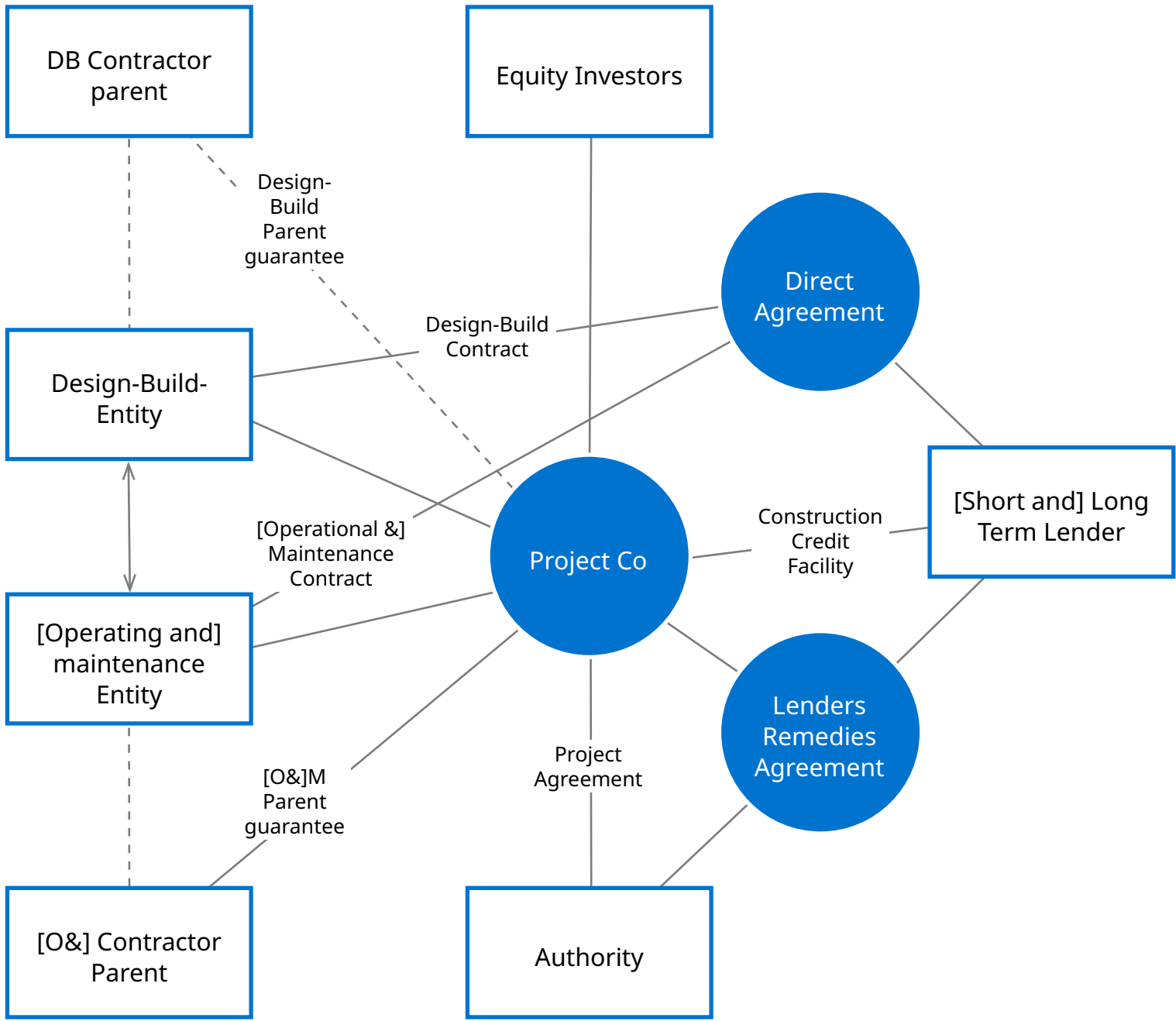
The most common model for social infrastructure PPP projects in Canada remains DBFM, although some highway and recent light rail projects have used the DBFOM model. Increasingly, we are seeing a number of DBF projects, where the asset will be subsequently operated and maintained by the public sector. As noted in the response to the previous question, most PPPs in Canada have been developed on the basis of availability payments or equivalent and, accordingly, there are insufficient economic infrastructure projects to provide any statistically relevant guidance.

Financing for infrastructure projects in Canada follows a number of models. For DBFM or DBFOM projects, financing usually takes the form of a hybrid bank/bond or occasionally short-term bond/long-term bond financing. Until the global financial crisis, European commercial bank lenders were willing to lend on a long-term basis to Canadian projects, but now the principal sources of long-term debt are bonds or notes, either broadly marketed issuances under a Confidential Offering Memorandum or unrated private issuances, but with the ultimate investors in either case usually being financial institutions looking for steady, long-term returns to match their own investor profile, often Lifecos or similar. For the short-term finance component, this can be provided either through commercial bank debt, with the “Big Six” Canadian banks very active in this market along with Japanese and some European lenders. The short-term debt can be repaid in one of two ways – either through a

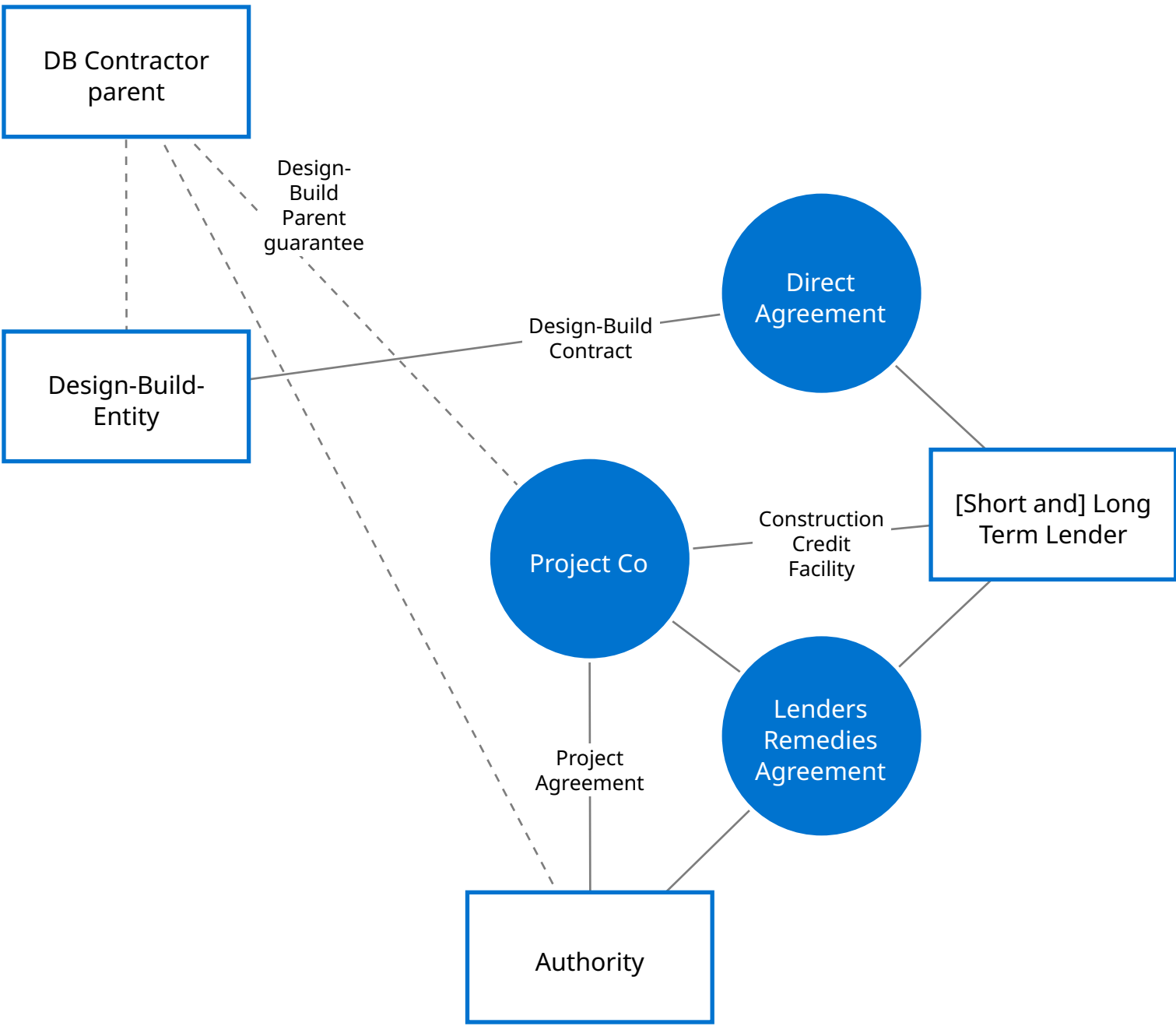
limited number of large milestone payments during the construction period (sometimes a single bullet payment on substantial completion) or through a value achieved mechanism, where the lenders’ technical advisor or other payment certifier will allow funds to flow from the public authority on value achieved against a series of milestone events or sub-tasks under specific credit rules applicable to the project. Similar short-term financing mechanisms are used for DBF projects where long-term finance is required.

“The use of PPPs in infrastructure projects is generally viewed very favorably in Canada.”

DBF[O]M STRUCTURE



DBF STRUCTURE





EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

The risks for equity investors in both a DBFM and DBFOM project are substantially the same. Generally, equity investors are reluctant to take on risks that they cannot manage, and they therefore subcontract the substantive risks of design and construction, and operations and maintenance. The remaining risks taken by equity include:

- financing – equity is responsible for obtaining the financing, managing the relationship with lenders, obtaining necessary consents during the life of the project, etc.;
- managing the relationship with the public sector owner;
- insolvency – if one of the main contractors becomes insolvent, equity is responsible for finding a replacement contractor and obtaining the necessary consents to their involvement;
- equity’s own acts and omissions;
- equity’s own costs and loss of equity return for certain no-fault events where the project agreement provides relief, but no compensation; and
- losses in excess of any capped liability from the primary contractors.

Increasingly in Canada, the market has moved from one where “pure” equity investors predominated to a market where the contractors (both construction contractors and O&M providers) take equity positions in the SPV, such that there is identity of ultimate ownership between equity and one or more of the key contractors. Originally, this was perceived as a mechanism to have a “seat at the table” in relation to risk allocation issues, but in a number of instances, the involvement of contractors has now led to those entities developing capital vehicles that look to secure some of the upside ownership benefits of equity investment in the relevant projects. A significant number of Canadian

and international contractors active in the Canadian market now have development arms. In these cases, equity may be willing to take on additional risks, such as meeting certain financing costs during no-fault delays, where this might present a more cost-efficient solution.

Generally, there is no equity on Canadian DBF projects.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

The main benefits associated with the social infrastructure “Key Model” are:

- leveraging private sector efficiencies and innovation;
- delivering projects on time and on budget;
- ensuring a holistic approach is taken to design and construction of the relevant facility, so that a whole life design approach is adopted;
- where there is a long-term maintenance element, ensuring both regular maintenance and long-term lifecycle work is undertaken;
- transferring risks to the private sector to increase value for money; and
- doing all the above under a model which allows maximum gearing to reduce the amount of equity required to be invested in the project and thereby reduce the overall cost of the project to the public purse.

Community benefits are often included as key contractual commitments of the private sector in the project documents. In particular, these regularly include apprenticeship programs and work and training opportunities to Indigenous communities. Recently, British Columbia has introduced a Community Benefits Agreement into certain projects, which includes a focus on using labor from under-represented groups.

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

Public sector risk allocation - currently one of the key challenges to the PPP model, generally in Canada, is the perception among contractors that the risk allocation in large-scale complex transit projects has moved too far in favor of the public sector. For example, there have been a number of high-profile project delays and disputes, primarily stemming from a failure to allow adequately in the relief regime for delays caused by issues with permits/ consents, geotechnical conditions and failures of utility entities to carry out activities under their areas of responsibility in a timely fashion, leading to overall delays. In addition, some longstanding concerns about a lack of clarity in risk allocation provisions in PPP project agreements, which private sector participants and their advisors have long requested infrastructure agencies to clarify, have crystallized into real disputes. This has all occurred on top of a recent high-profile insolvency of a UK entity that had multiple Canadian projects which required co-investors to respond, which they broadly did. Disputes stemming from the COVID-19 pandemic have added to the general perception that the lack of adequate risk contingencies forced out of projects by competitive tension between bidders and an ever-increasing emphasis of pricing over other evaluation factors have caused a withdrawal from the market of a number of contractor participants who no longer wish to bid on fixed price construction contracts.

Inflexibility - linear PPPs, especially transit PPPs, are constrained by restrictions imposed by lenders, preventing necessary variations or the ability to extend or interconnect with other projects without costly and complex negotiations. This is leading to the development of new forms of collaborative or alliance-based contracting with greater emphasis on risk sharing between all the participants in the process. Both Ontario and British Columbia have developed or are in the course of developing project documentation for collaborative or alliance based contracting and it is likely that this trend will continue.



HOW FLEXIBLE ARE THE KEY MODELS?

As noted above, the social infrastructure Key Model prevails in Canada to the exclusion of economic infrastructure and there is little sign of this approach changing. There is little appetite for “user pays” infrastructure and, in all likelihood, there will be even less appetite in a post-COVID-19 environment, where the market will react with concern to suggestions that volume or ridership risk should rest with the public sector. Furthermore, it appears likely that even availability models may come under scrutiny where the original projects were structured on the basis of the assumption that ridership would increase and therefore that the private sector could look forward to increasing service levels and demand for services, whereas, at least in the short term, it looks as though service levels will likely remain static for some considerable time until passenger demand begins to increase towards regaining pre-pandemic levels.

Nonetheless, the success of the Canadian model over the last 18 years or so and the ability of the contractual PPP model to incentivize particular behaviors and public sector objectives through specific performance regimes and payment mechanisms provide strong evidence that the model will continue to be one of the preferred approaches of the public sector to encourage private sector participation in the delivery of public facilities and services.

“At the current time, one of the key challenges to the PPP model generally in Canada is the perception among contractors that the risk allocation in large-scale complex transit projects has moved too far in favor of the public sector.”



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Colombia



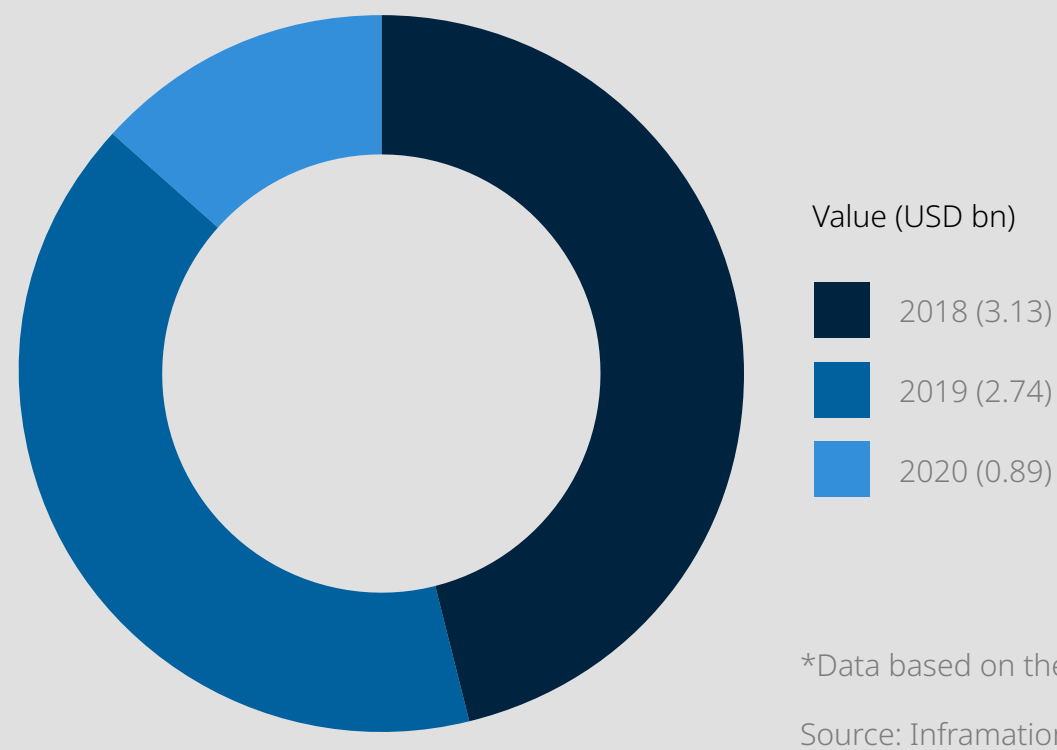


**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

Colombia’s PPP market has been dominated by the development of transportation PPPs (through the historic 4G and recently launched 5G programmes), which have been identified by the government as the preferred means to increase the competitiveness of the country; specifically, investment has focused on the road, airport and rail sectors. However, social PPPs are now starting to be awarded, for example the first hospital PPP, the USD302 million Bosa Hospital, was awarded toward the end of 2019 and is expected to be operational by 2023.

Colombia’s 4G concession road program proposed 52 projects of which 29 were finally awarded and are ongoing, representing an investment of USD25 billion. The government recently launched three procurement processes for the first wave of the 5G infrastructure program. The first stage (expected to be awarded within the term of the current government, which ends in 2022) includes 12 PPP projects (six road, three airport, one rail and two waterway projects) valued at approximately USD4.71 billion. The second stage is currently being structured, but is anticipated to include 11 PPP projects valued at approximately USD7.92 billion including 10 roads and the expansion of Bogotá’s airport system.

GREENFIELD PPP PROCUREMENT* 2018 – 2020



**WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN
YOUR JURISDICTION?**

PPPs were introduced by Law 1508 of 2012 (the PPP Law), which significantly expands the types of infrastructure projects which may receive private investment, as the previous legal framework limited private investment to only certain public works projects. The first significant implementation of the PPP figure was the 4G concession road programme, which started implementation with the first project awards in 2013-2014 and finished in 2018. This has been built on by the recently launched 5G program.

This new program is composed of projects which seek to be more sustainable on four different levels: institutional (by applying better standards of governance and collaboration amongst public bodies); environmental (by including projects which are resilient to climate change); socio-economic (by promoting better engagement of the communities surrounding the projects); and financial (by seeking a better allocation of risks and adequate conditions for the retribution of the concessionaire with less usage of public funding).

It is important to note that outside of the PPP Law, large infrastructure projects were structured using other, historic models that allowed private participation in infrastructure. For example, Colombia’s largest infrastructure investment, the first line of Bogotá’s metro system, worth USD3.4 billion that is about to start its construction phase, has been structured using the public work concession model, as well as the 1G, 2G and 3G road concessions and the current concession of El Dorado Airport in Bogotá.

**WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR
JURISDICTION? VERY BRIEFLY, WHY IS THAT?**

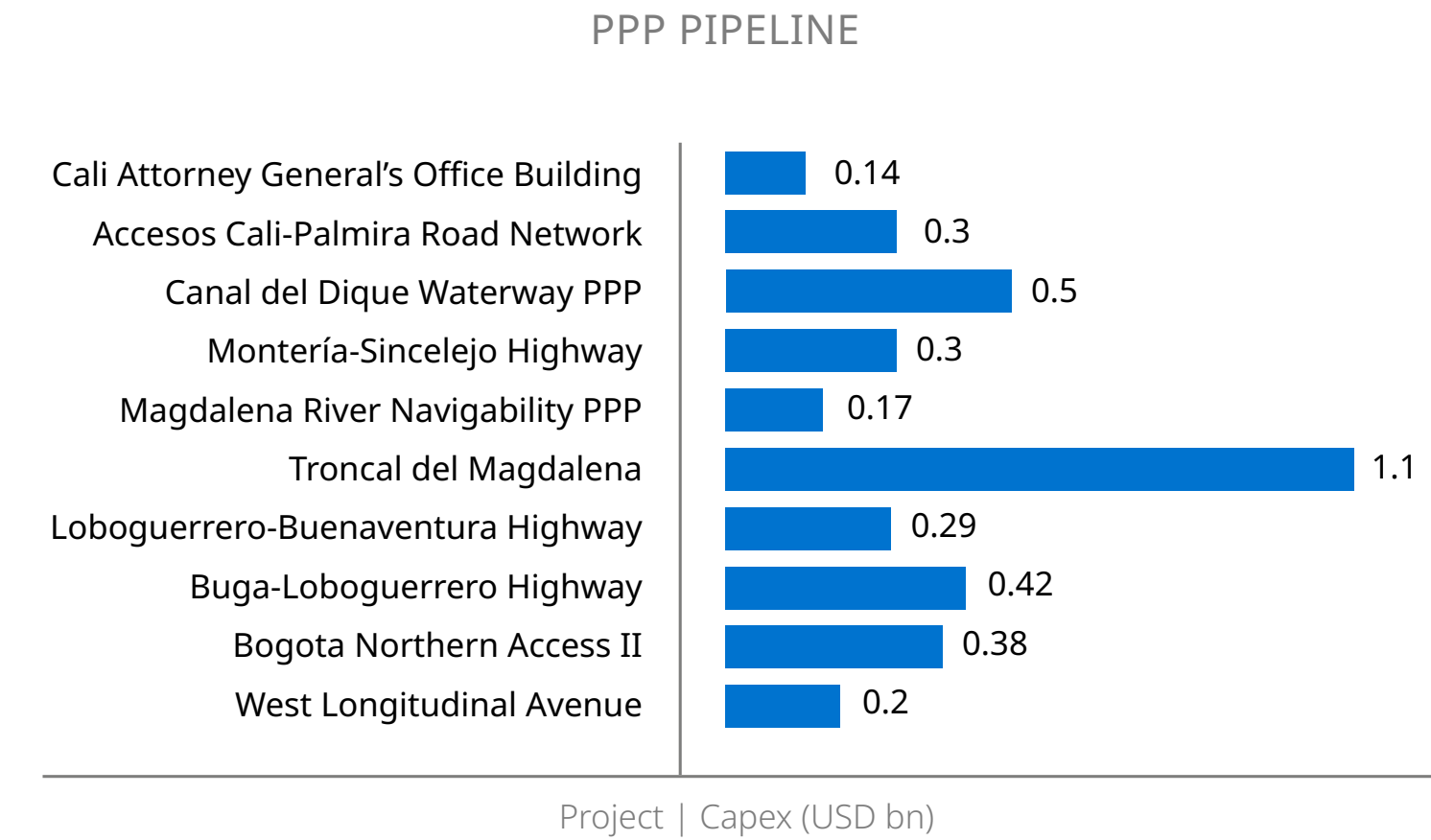
PPPs are generally viewed favorably, as they are a sophisticated contractual mechanism which has introduced the project finance model and helped standardize contractual documentation, which in turn has brought on legal stability and investor confidence, thus creating new opportunities for participation of international financial institutions in infrastructure investments.

Also, the introduction of availability payments has mitigated risks of delays caused by poor planning and wrongful investment of advance payments to construction companies, which has improved spending and public perception of project development.

Another important measure implemented by the government that favors PPPs was the enactment of Law 1882 in 2018 (particularly article 20), which contains a disposition explicitly recognizing outstanding payment obligations to third parties acting in good faith in circumstances where a contract is declared null and void, in which case the termination payment formulas of the contract don’t apply. Such disposition was declared constitutional by the Constitutional Court of Colombia, on the basis that the investment made by third parties of a contract such as lenders must be protected, except for “break-up” fees.



However, questions regarding the limitations of the model when structuring social PPP projects have arisen, such as the division of projects into functional units which seem to work best for roads or the limitation in the use of public funds in unsolicited PPPs for projects which don't generate enough revenue on their own.



Source: Inframation

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.¹

There are several figures which allow private participation in infrastructure which have been present in Colombia since the early 1990s, such as the public work concession figure defined in Article 32.4 of Law 80 of 1993, (the general public procurement Law); port concessions, which are defined by Article 5.2 of Law 01 of 1991, and the supply of public utilities by private parties established by Law 142 of 1994, among others.

PPPs, as defined by the PPP law, are “an instrument of engagement of private capital, materialized in a contract between a public entity and a legal private law person, for the provision of public assets and their associated services, which involves the retention and transfer of risks between the parties and payment mechanisms related to the availability and service levels of the applicable infrastructure and/or service.”

Their maximum duration is 30 years, unless otherwise approved by the National Economic and Social Policy Council (CONPES).

PPP projects, where possible, are subdivided into “functional units”, which are defined by Decree 1082 of 2015 as engineering structures that may provide services with functional independence from the rest of the project (Functional Units). The availability payment to the concessionaire of the PPP project is calculated based on the participation amount of each of the Functional Units of the Project in the total revenue with the Functional Unit’s compliance with performance standards.

Public initiative PPPs are those projects which are structured and launched by public entities. These projects do not face a limit in percentage of public investment, have to be procured following a public tender process through which a private developer is selected by the contracting entity, and, in order to launch the procurement process, the public entity must have the studies that support the project; the value for money evaluation, the reasons that justify contracting the project via a PPP model and the risk assessment.

Unsolicited PPPs are those projects which are structured by a private developer at their own risk and presented to a public entity for their evaluation and eventual development, following pre-feasibility and feasibility phases during the structuring of the project. In the pre-feasibility phase the private developer describes the project with general information including initial designs demand studies, estimated cost and resources. In the feasibility phase, the private developer goes into detail describing the financial model, the project, its phases, duration and risk assessment among other details.

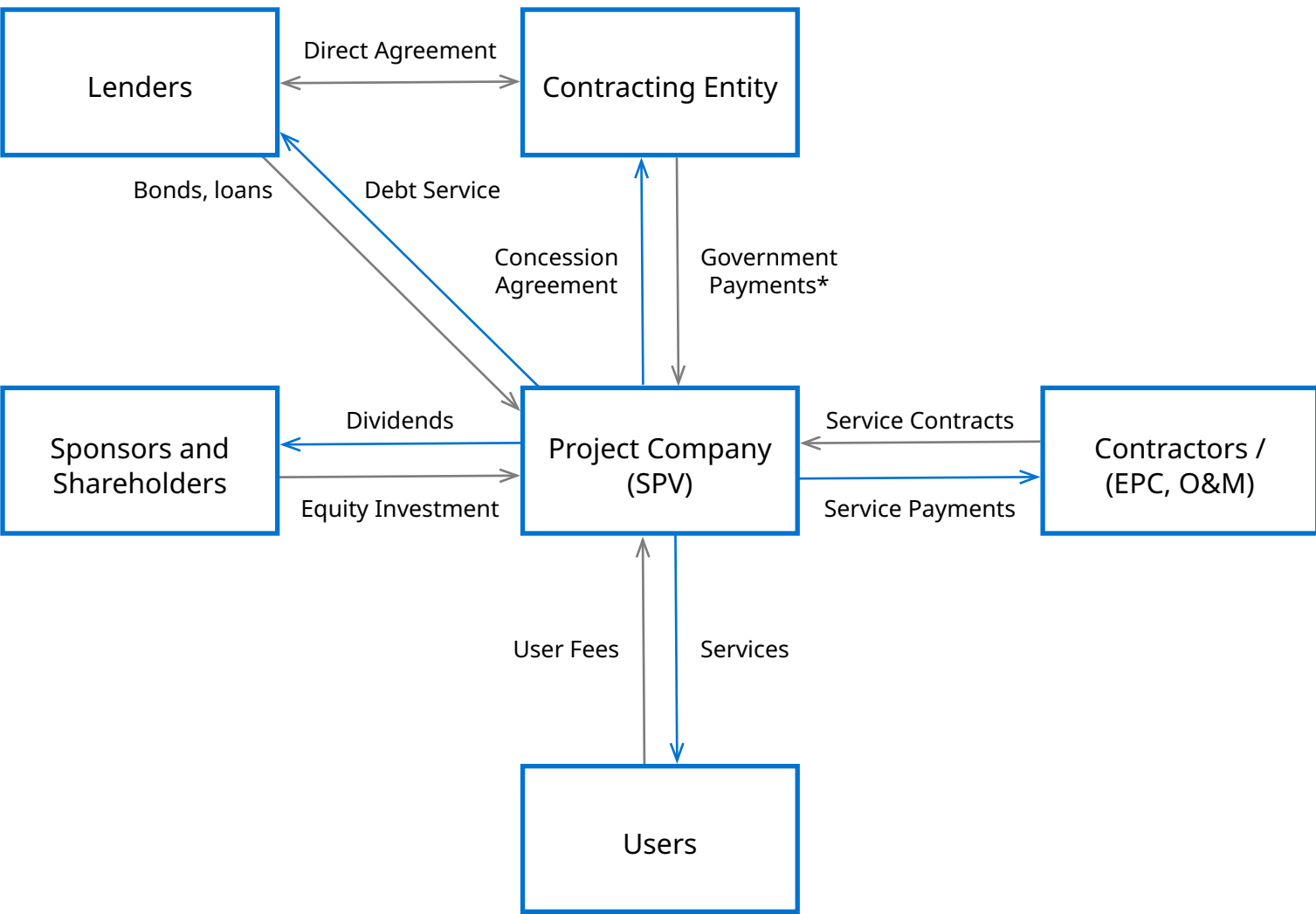
These projects face limits in the percentage of public funds they may use, at 30% for all projects except roads, which may only use 20% of public funding with respect to total contract value. Additionally, if they don't involve public funding, they are procured using an expedited procurement procedure.

Both for economic infrastructure and social infrastructure, the most widely used Key Model is the public initiative PPP; however, many economic PPP projects have been structured as unsolicited PPPs. It must be noted that using the unsolicited PPP Key Model when structuring a social PPP may prove difficult, as social PPPs tend to be less financially sustainable than economic PPPs. As such, the 30% limit on public funds leaves little possibility for those projects which don't generate enough revenue on their own and require public funds to cover project costs, debt service and the concessionaire's remuneration.

¹ Apartes de la respuesta basados en Inter-American Development Bank, Fundamental Principles in PPP Laws in Latin America, https://publications.iadb.org/publications/english/document/Fundamental_Principles_in_PPP_Laws_A_review_of_Latin_America_and_The_Caribbean.pdf, artículo en línea, consultado el 13.10.2020



The basic contractual scheme of a PPP under Colombian law is the following:



* Up to 30% of the Contract Value for Unsolicited PPPs

EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

Risk allocation

Article 4 of Law 1150 of 2007 states that public entities should identify, estimate and assign foreseeable risks contained in proposed contracts. A contractual risk is generally understood as any circumstances that may arise during the development of a contract and can alter its financial balance.

CONPES has established various guideline documents for risk allocation in infrastructure contracts which involve private participation, including CONPES documents 3107 and 3133 of 2001, 3714 of 2011, 3760 of 2013 (as modified by CONPES documents 3800 and 3807 of 2014), and 3961 of 2019. In general, CONPES documents allocate risks to the party which is better poised to assume and manage a risk.² A general risk matrix as established by CONPES guidelines can be the following:

RISK	PRIVATE	PUBLIC
Operational	✓	
Economic	✓	
Financing	✓	
Nature	✓	
Environmental	✓	
Socio-Political		✓
Technology	✓	

However, risk allocation may vary in certain projects regarding their features, as CONPES documents don't exist for every project mode.

A widely used example of allocation of risks in PPPs is CONPES document 3760 of 2013 (modified by documents 3800 and 3807 of 2014), which establishes the main risk allocation guidelines for 4G projects, including the following rules:

Land acquisition risks:

- (a) any cost overruns up to 120% of the expected cost will be borne by the Concessionaire;
- (b) any cost overruns from 120% but not exceeding 200% of the expected cost will be distributed in a 70/30% ratio between the contracting entity (in this case, the Agencia Nacional de Infraestructura, ANI) (70%) and the concessionaire (30%);
- (c) any cost overruns exceeding 200% will be borne by ANI.

Regulatory risks:

ANI only assumes regulatory risk when, as a consequence of a regulatory change, the concessionaire's profits are affected beyond a deviation parameter as stipulated in the contract.

Environmental risks:

- (a) any cost overruns up to 120% of the expected cost will be borne by the Concessionaire;
- (b) any cost overruns from 120% but not exceeding 200% of the expected cost will be distributed in a 70/30% ratio between ANI (70%) and the concessionaire (30%);
- (c) any cost overruns exceeding 200% will be borne by ANI.

² Ver "The Projects and Construction Review – Colombia", <https://thelawreviews.co.uk/edition/the-projects-and-construction-review-edition-10/1228793/colombia> artículo en línea, consultado el 13.10.2020



A specific CONPES document establishing guidelines for 5G projects has not yet been published.

Limitation of liability and force majeure

Parties to a transaction are free to agree on its terms and conditions including limitations to liability. However, certain public law rules stipulate that liability cannot be limited in public contracts in cases of gross negligence or willful misconduct, or in a way which may allow one party to breach its obligations under a certain contract.

Additionally, in PPP contracts, as in all contracts under Colombian law, a party will be excused from performing its obligations under force majeure events (according to Article 64 of the Colombian Civil Code, events which are unforeseeable and irresistible to one or both of the parties).

In PPP contracts, certain special force majeure events (called Liability Exoneration Events or LEEs) are agreed upon by the parties in accordance to the specificities of each project. For example, projects which require land acquisition include LEEs when land acquisition proceedings take longer than legally stipulated for judicial or administrative expropriation decisions, projects which require interference with pre-existing public utility networks include LEEs related to the unavailability to negotiate the intervention of the network with the owner, and environmental LEEs related to environmental authorities taking longer than legally stipulated for issuing an environmental license or permit are also included.

Political risks

The Colombian Constitution stipulates that there will be no expropriation without indemnification.

Early termination payments – Recognition of investment

In accordance with Article 32 of the PPP Law (as modified by Law 1882 of 2018), PPP contracts must include a compensation formula pursuant to which the contracting entity is required to compensate the concessionaire for the then present value of all capital investments made in the Project plus operational and maintenance expenses incurred with respect to the Project up to the termination date, net of (i) any Project Revenues already received by the Concessionaire prior to the termination date and (ii) penalties imposed and not paid. Even if the PPP contract is declared null and void by a judicial or administrative decision, a compensation calculation must be carried out to recognize outstanding payments between the parties taking into account certain special conditions.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS.³ ARE COMMUNITY BENEFITS FACTORED IN?

- The ability to develop more projects using fewer public funds.
- Transfer of knowledge and technology from the private sector.
- Projects are less prone to delays and cost overruns.
- More value for money due to adequate risk transfer.
- PPPs diversify the economy as they make the country more competitive.
- PPPs complement the limited capacity of public entities to administer infrastructure assets by handing design, construction, operation and maintenance to private parties.
- New PPP projects, especially 5G projects, are thought to be more sustainable, and thus engage surrounding communities to bring greater benefits.

³ Ver World Bank Group, “Objetivos del Gobierno: Beneficios y Riesgos de las Asociaciones Público Privadas” <https://ppp.worldbank.org/public-private-partnership/es/asociaciones-publico-privadas/beneficios-riesgos>, artículo en línea, consultado el 13.10.2020



WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

- Higher costs of structuring, procuring and development.
- Higher cost of financing.
- Risk management regarding social, environmental risks.
- Difficulty in identifying all possible contingencies and problems which may arise during the development and operation of the project, due to the long term of PPP contracts.
- Public funding limits to unsolicited PPPs make them difficult to use for social infrastructure projects.
- Difficulty in applying PPP model in second-level entities, knowledge and technology transfer is very limited.

HOW FLEXIBLE ARE THE KEY MODELS?

Although leaning towards transportation, and especially road project PPPs, the Key Models are being used on other modes of transportation infrastructure, as well as on social infrastructure projects. Some developments such as the introduction of a new definition of Functional Unit, designed to give the Key Models more flexibility have been introduced by legislation, but have not yet been regulated.



ANY OTHER RELEVANT POINTS TO NOTE.

Colombia has been ranked by The Economist’s Intelligence Unit 2019 Infrascope Report as the country with the best legal framework in Latin America to develop PPPs, and No. 2 overall for PPP development, only behind Chile and tied with Peru.⁴



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⁴
De acuerdo con https://infrascope.eiu.com/wp-content/uploads/2019/04/EIU_2019-IDB-Infrascope-Report_FINAL-1.pdf, documento en línea, consultado el 13.10.2020



The Netherlands





**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.⁵**

The vast majority of PPP projects in the Netherlands, including private financing (DBFM(O)), is tendered by the central government. A distinction is made between infrastructural PPP projects (motor highways, floodgates, tunnels, etc.) and accommodation PPP projects (court buildings, hospitals, prison complexes, central government offices, museums, etc.). Furthermore, decentralized authorities, such as provinces and municipalities, manage PPP projects related to social, healthcare or public institutions accommodation.

Infrastructural PPP projects represent a majority of the investment recently seen in the Netherlands, and have included 2 highways, 1 motorway, 1 tunnel and 1 dam with a total investment of approximately EUR4.79 billion.

An overview of local and regional PPP projects by several government entities and PPP projects initiated by the central government can be found on the website of PPP Network the Netherlands. Please note, in Dutch the acronym PPP is referred to as PPS or *Publiek-Private Samenwerking*.

<https://www.rijksoverheid.nl/onderwerpen/publiek-private-samenwerking-pps-bij-het-rijk/pps-projecten/pps-infrastructuurprojecten>

The Central Government Real Estate Agency (*Rijksvastgoedbedrijf*) is responsible for all large PPP housing projects of the central government and its agencies. An overview of these PPP housing projects can be found on:

<https://www.rijksoverheid.nl/onderwerpen/publiek-private-samenwerking-pps-bij-het-rijk/pps-projecten/pps-huisvestingsprojecten>

An overview of local and regional PPP projects by several government entities and PPP projects initiated by the central government can be found on the website of PPP Network the Netherlands.

<https://www.ppsnetwerk.nl/onderzoeksprojecten/>

**WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN
YOUR JURISDICTION?**

The possibility of private financing of infrastructural projects was first considered around 1990. However, in the next decade hardly any projects were realized with private finance. In 1998, the central government announced to give a new impetus to investment projects based on PPP⁶ and in 1999 the DBFM(O) model was introduced.⁷ Since 2005, the central government has executed a “public private comparator” for projects with an estimated value above EUR25 million (housing) and EUR112.5 million (infrastructure) to decide whether or not to structure a project as a PPP.

Around 2004, the use of PPP was still incidental and not structural.⁸ By 2007/2008, a structural development of DBFM(O) contracts was in place, especially with regard to infrastructural central government projects and certain types of housing projects. However, there was little progress in the use of PPP for the education and healthcare sectors.⁹

In order to reduce the (high) transaction costs involved compared with traditional contracts, the introduction of model contracts for PPP projects was encouraged. In 2010, the first government-wide DBFM(O) model was introduced which, from the beginning, contained an infrastructure module and a housing module.

Around 2014, DBFM(O) was fully institutionalized in large central government projects, but decentralized government authorities still made very little use of PPP, partly because of lack of knowledge and fear of complex and costly tender procedures. A roadmap “DBFM for decentralized government authorities” was then introduced.¹⁰ Since then, PPP projects have been initiated more and more in several sectors.



⁵ Projects which had financial close in the respective year.
https://www.eib.org/attachments/epec/epec_market_update_2017_en.pdf,
https://www.eib.org/attachments/epec/epec_market_update_2018_en.pdf,
https://www.eib.org/attachments/epec/epec_market_update_2019_en.pdf

⁶ <https://www.pianoo.nl/sites/default/files/documents/documents/rapportnieuwefinancieleinstrumenteninpps.pdf>.

⁷ Nieuwe financiële instrumenten in publiek-private samenwerking, 3 juli 2002 (by the General Court of Auditors, *Algemene Rekenkamer*).

⁸ Kamerstukken II 2004-2005, 28 753, nr. 4, Annex.

⁹ Kamerstukken II 2007-2008, 28 753, nr. 12, Annex.

¹⁰ <https://www.pianoo.nl/nl/document/9378/reisgids-dbfmo-voor-decentrale-overheden>.



WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR JURISDICTION? VERY BRIEFLY, WHY IS THAT?

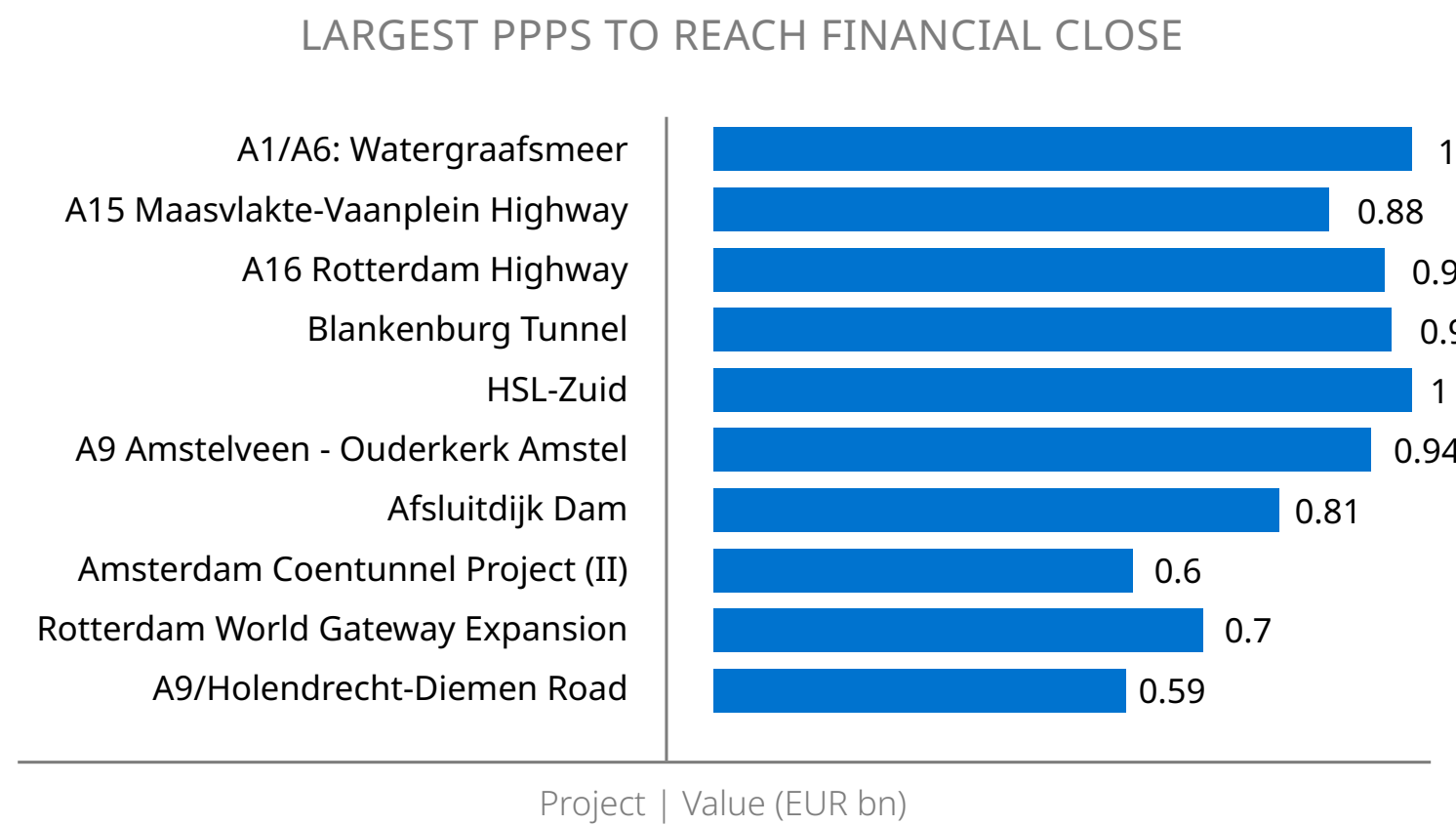
In the Netherlands PPPs have been implemented with varying degrees of success.

According to the most recent PPP progress report of the central government (2016-2017) the added value of DBFM(O) is, from a financial perspective, 10-15%.¹¹ In a very recent (October 2020) report on 15 years of infrastructural DBFM projects by *Rijkswaterstaat*, it was concluded that, particularly in respect of the aspects of time and availability, limited extra work costs, quality, optimizations, process innovations and life cycle, the average performance of DBFM(O) contracts is better than that of other types of contract. Furthermore, the financial performance for investors, banks and other financiers is extremely reliable and DBFM(O) offers the government stability and predictability in relation to long-term investments.¹²

On the other hand, some structural problems have been identified; for example, in relation to lack of flexibility, the scale of the projects and the high risks resulting therefrom, unbalanced risk distribution, (still) high transaction costs, and continuity within the project.¹³

Especially in the infrastructure sector, the problems have gained the upper hand in recent years. Dutch contractors have increasingly dropped out of tenders for large infrastructural projects and have complained more and more about the distribution of risk and extreme budget overruns. The most recent infrastructural project (A9 Badhoevedorp – end of 2019) was even awarded to a consortium which only existed of foreign contractors/investors.

In 2019 consultancy firm McKinsey was commissioned by the Minister of Infrastructure and Water Management to carry out a study into the problems and possible solutions. One of McKinsey’s main conclusions was that the central government put too much risk on the contractors, which made the contracts unmanageable.¹⁴ Subsequently, the Minister announced a plan of approach for a necessary transition in the infrastructure sector which will, among other things, involve material adjustments in the contract models used. The need for a transition follows from the amount of large and complex infrastructural projects expected for the coming years, relating to bridges, tunnels and highways.¹⁵



Source: Inframation

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

In the Netherlands there are three key models in PPP available which are commonly used:

Integrated contracts: DBFM(O)

The structure below shows the main framework (in which, of course, variations are possible, although the model basically follows this structure): the contracting authority on top (*Publieke opdrachtgever*), concluding the DBFM agreement with the private contractor (SPC). On the left side of the contractor are the shareholders (*Aandeelhouders*) providing funding, and on the right side the external financiers (*Financiers*). The contractor concludes subcontracts with a subcontractor for design and build /EPC (*Onderaannemer voor ontwerp en bouw*) and with a subcontractor for maintenance and exploitation (*Onderaannemer voor onderhoud en exploitatie*).¹⁶

11 <https://www.pianoo.nl/sites/default/files/documents/documents/voortgangsrapportage-dbfm-2016-2017-oktober2016.pdf>.

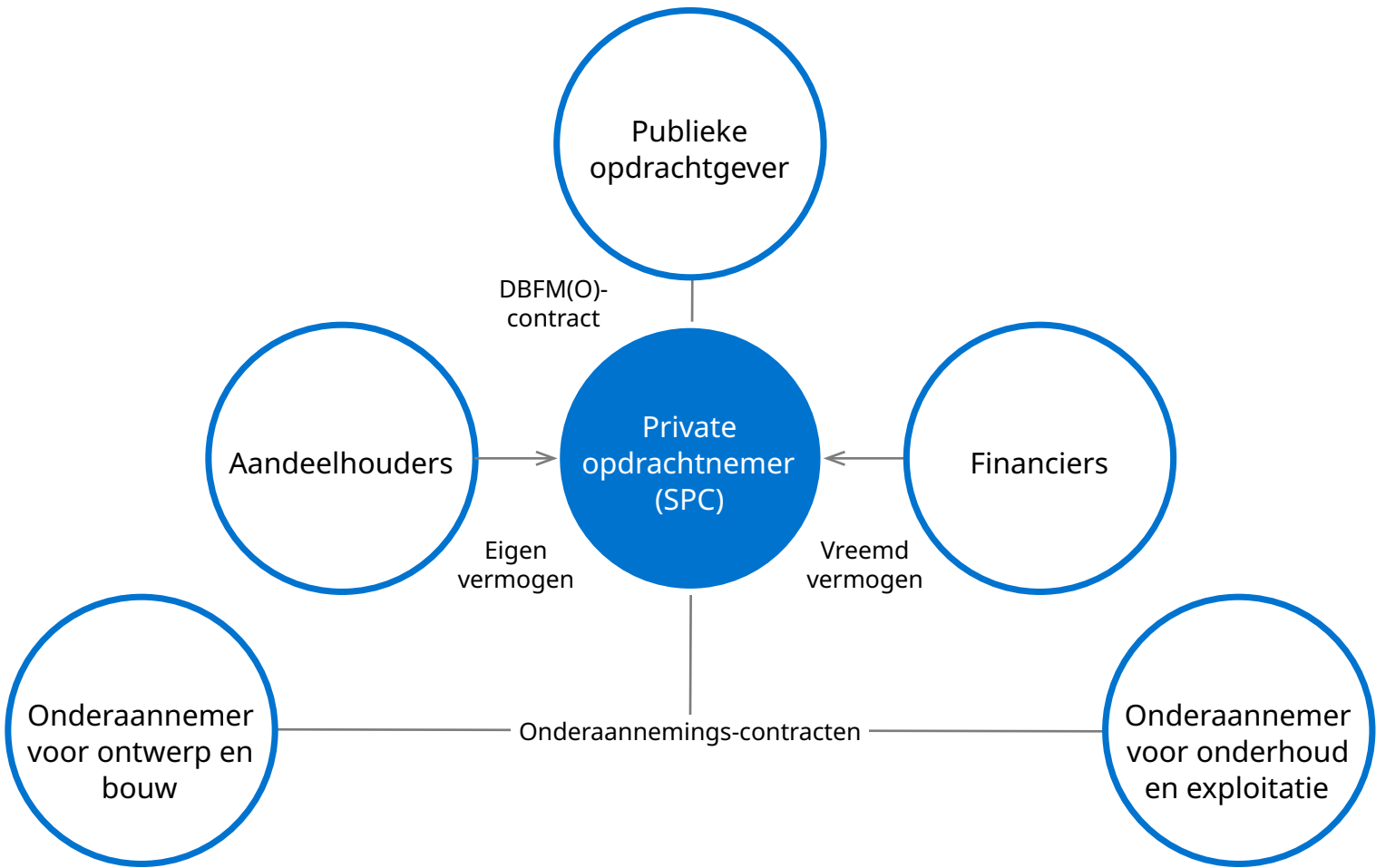
12 <https://www.eur.nl/essb/nieuws/publiek-private-samenwerkingen-van-rijkswaterstaat-onderzocht>.

13 <https://www.eur.nl/essb/nieuws/publiek-private-samenwerkingen-van-rijkswaterstaat-onderzocht>.

14 <https://www.rijksoverheid.nl/documenten/kamerstukken/2019/06/11/toekomstige-opgave-rijkswaterstaat-perspectief-op-de-uitdagingen-en-verbetermogelijkheden-in-de-gww-sector>.

15 <https://www.rijkswaterstaat.nl/nieuws/2018/01/minister-van-nieuwenhuizen-geeft-afttrap-voor-grote-onderhoudsopgave-infrastructuur.aspx>.

16 <https://www.pianoo.nl/sites/default/files/documents/documents/reisgidsdbfmvoordecentraleoverheden.pdf>



The central government uses two government-wide DBFM(O) Model Agreements (*Rijksbrede Modelovereenkomst* DBFM(O)): the model DBFM(O) for infrastructure projects and the model DBFM(O) for housing projects:

<https://www.rijksoverheid.nl/onderwerpen/publiek-private-samenwerking-pps-bij-het-rijk/documenten/richtlijnen/2016/06/01/dfbm-overeenkomst-rijkswaterstaat>

<https://www.rijksoverheid.nl/documenten/richtlijnen/2016/04/01/rijksbrede-modelovereenkomst-dbfmo-huisvesting-rijksvastgoedbedrijf>

PPP in relation to development practice (*Gebiedsontwikkeling*)

Area development projects in the Netherlands mostly entail overlapping interests of public and private parties; for example, with regard to ownership of land or government authorities wishing to incorporate community facilities into commercial project developments. Therefore these area development projects require integration of public and private parties. In the contracting phase, parties make agreements with respect to responsibilities, the deployment of resources, the distribution of risks, the legal interpretation and the cooperation. This can be done by means of a contractual PPP as well as an institutionalized PPP.

Alliances

If projects involve technically complex or innovative work, collaboration in an alliance may increase the quality of the works. In alliances, the contracting authority and the private market party perform one or more tasks of the construction process jointly and share the associated risks. A variation of an alliance is joint research and development for innovative solutions. A good example is the innovative partnership for innovative solutions not yet available on the market, which has been acknowledged as a way of cooperation between government authorities and private parties in the latest procurement directives.

EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

In respect of DBFM(O) projects, the risk allocation among the parties can be considered as being in line with common international practice for this type of contract. This means that the DBFM(O) contract will provide for certain limited authority risks, a form of relief for Force Majeure, and allocating the remaining risks to the SPV. The SPV will on its side typically push all these risks (design, construction, late delivery, etc.) to the EPC and O&M parties with which it will sub-contract the works and maintenance obligations, on a back-to-back basis. Given that it is usual that the EPC and O&M contracts foresee in certain limitations on liability (such as caps), the SPV and therefore the equity

“In respect of DBFM(O) projects, the risk allocation among the parties can be considered as being in line with common international practice for this type of contract.”

investors retain a certain level of residual risk, although shorter termination triggers will allow the SPV (eventually in consultation with the lenders) to replace defaulting EPC and/or O&M contractors at a certain stage in order to save the project. For the sake of completeness, the financing risk (attracting and retaining the necessary financing) is primarily an equity investor risk, although if the underlying circumstances giving rise to issues are risks borne by the authority or the sub-contractors, the equity investor should be covered through that risk allocation.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

The 2016-2017 central government progress report on PPP mentioned how the business principles used in PPP contribute to a responsible and efficient use of public funds, by:

- a life cycle costing approach, taking into account all costs and risks during the life cycle of the project and optimizing these costs and risks;
- risk management;
- performance measurement and performance incentives; and
- efficiency benefits and disciplining effect with regard to the achievement of objectives and the fulfilment of agreements through private financing.



Furthermore, the following positive aspects can be mentioned:

- most DBFM(O) projects are executed within budget, on time and according to the output required by the client;
- the quality and consistency of Dutch DBFM(O) projects and policy being praised by national and international market players, who consider the Netherlands as one of the frontrunners on DBFM(O);
- central-government-wide standardization by the use of two model DBFM(O) agreements;
- focus on value for money, not regarding DBFM(O) as a goal in itself, but only using DBFM(O) in case this results in value for money for the taxpayer; and
- a well-filled and reliable pipeline of projects in the coming years, particularly in the field of infrastructure.

Please be also referred to the benefits that were identified in the 2020 report on DBFM projects (answer to question 3).

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

Especially in the infrastructure sector, the market dynamic and the way risks are allocated in the key model restrict market forces. Market players are becoming more and more hesitant to participate in large projects, resulting in less bids submitted in tenders for EUR250 million + projects.

Furthermore, the challenges identified in the very recent report¹⁷ on 15 years of DBFM are the:

- long-term nature of the contracts is at odds with the need on the client's side to respond to new developments. The current contract terms do not seem to be suitable to respond to this policy need for flexibility;
- transaction costs (tender costs) are considered to be high;

- scale of the project and the resulting high risk profile are challenging. The scale and complexity are often a main cause for problems that arise during design or execution. Risks are large and difficult to manage in case they materialize;
- distribution of risks between parties is suboptimal and the joint handling of (and joint sense of responsibility for) risks and problems is (too) limited; and
- long-term nature of the contracts has consequences for the continuity within the project and the integrity of project management. Personnel changes and changes between the teams in the various project phases have implications for the transfer of expertise

In addition to the aforementioned contract-related issues, other challenges are mentioned in McKinsey's report on the infrastructure sector:¹⁸ price pressure and a too large focus on price (compared to quality, sustainability, etc.) results in the profit and risk margin priced in by tenderers turning out to be insufficient to cover major risks. This has resulted in occasional major financial setbacks that put pressure on the financial position of market players. There is insufficient innovation, limited productivity growth and lack of long-term perspective, at times resulting in failure costs.

HOW FLEXIBLE ARE THE KEY MODELS?

In general, the model DBFM(O) contracts are not considered to be very flexible; lack of flexibility is one of the concerns of parties working with the models. The models do contain a flexibility mechanism in the form of a comprehensive arrangement for implementing changes, whereby a distinction is made between minor changes and other changes (Annex 5 to the model). However, given the long term of the contracts, it can be questioned whether this mechanism provides for sufficient flexibility; for example, in relation to innovations and new sustainable solutions to be incorporated in the project.

At the same time, the applicable tender rules following from the European procurement directives limit the possibility of making (substantial) changes to the contract terms during the contract period.

For the other types of PPP contracts, in general no standard models are used, leaving more space for flexible arrangements dependent on the nature and the scope of the project.



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¹⁷ <https://www.eur.nl/essb/nieuws/publiek-private-samenwerkingen-van-rijkswaterstaat-onderzocht>.

¹⁸ <https://www.rijksoverheid.nl/documenten/kamerstukken/2019/06/11/toekomstige-opgave-rijkswaterstaat-perspectief-op-de-uitdagingen-en-verbetermogelijkheden-in-de-gww-sector>.



Norway





**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

The use of PPP as delivery model for infrastructure projects has been a highly debated and politically charged topic for the better part of the last 30 years in Norway with Conservative governments arguing positive effects of PPPs through mainly better value for money and increase of efficiencies in the delivery of infrastructure projects, while labour/left governments reject the idea of private finance in public infrastructure as a more expensive option for Norway.

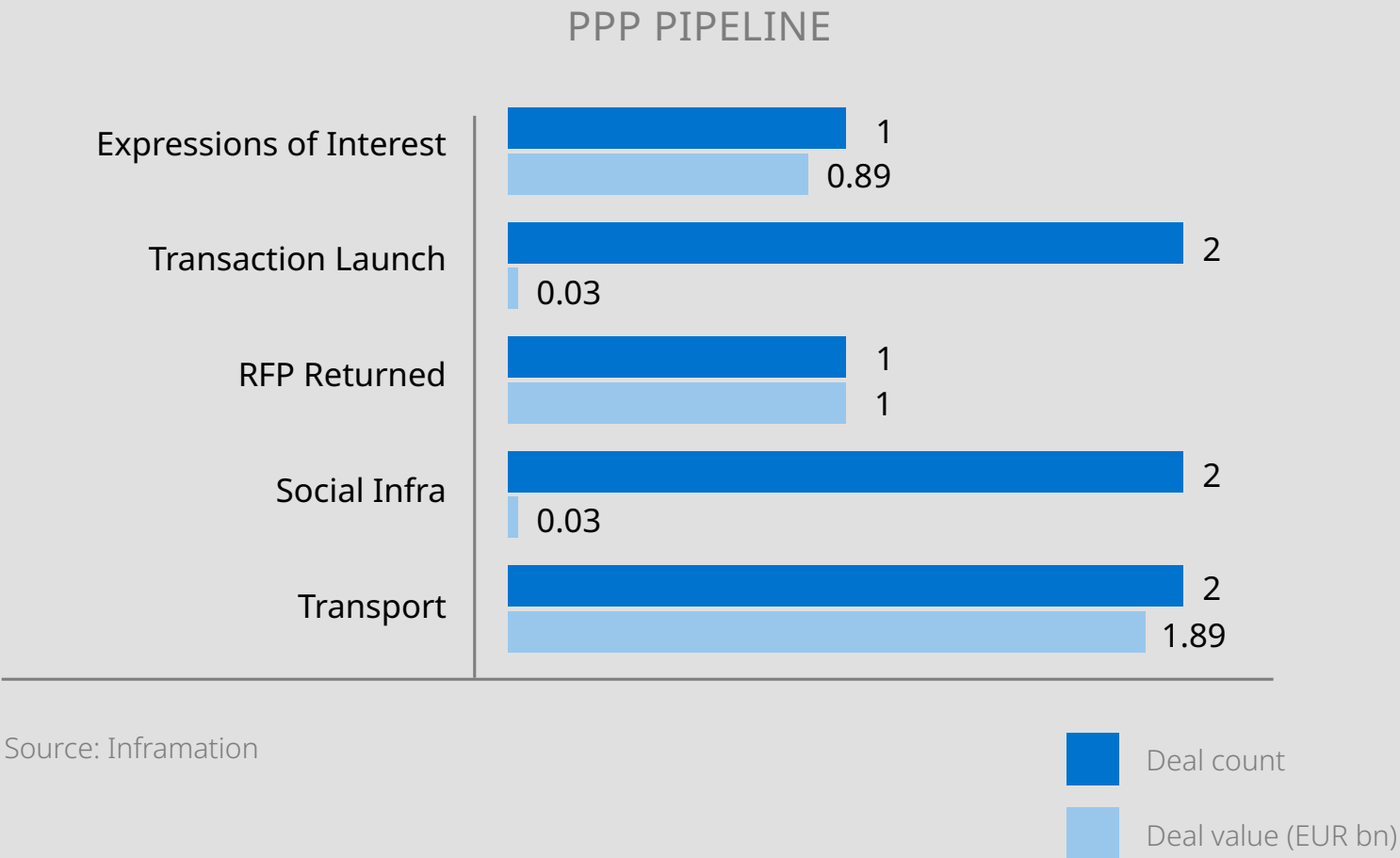
At a national level, PPP projects have historically been limited to the transport sector (highways). In the municipalities, PPP projects have been used for schools and other social infrastructure.

While there is an established, relatively long-term plan in place at a national level, there is no coordinated steer or effort (nationally) at the municipal level – the decision on the delivery model for appropriate projects being left to the individual municipalities. Both at national level and municipal level, PPP serves as an addition to the standard delivery models only, and is not widely used.

While a political compromise (at national level) has led to a new pipeline of PPP highway projects at a national level, that pipeline is still limited, and it is uncertain whether it will be expanded to additional highway projects or to other infrastructure classes. At municipal level, projects are relatively few, low value and arbitrary (about 30 projects in total in the last 10-year period, ranging in value between NOK10-20 mill (approx. EUR1-2 million / GBP800,000-900,000) to a high of approx. NOK100 million (approx. EUR9 million / GBP8 million), and in terms of contractual framework they are more akin to “finance leases”.

The new national pipeline comprises three highway projects (preceded by three projects reaching financial close during the period 2001 to 2006); details of which are provided in the below table.

Sector	Name	Approximate Forecasted Investment	Developer / Bidder
Infrastructure (Highway)	Rv 3 and rv 25 Ommangsvollen–Grundset/Basthjørnet (Løten–Elverum) in Hedmark County	EUR510 million / GBP460 million	Skanska consortium as preferred bidder
Infrastructure (Highway)	Rv 555 Sotrasambandet (the Sotra connection) in Hordaland County	EUR920 million / GBP830 million	Bidder to be appointed 1Q / 2Q 2021
Infrastructure (Highway)	E10 and rv 85 Tjeldsund–Gullesfjordbotn–Langvassbukt in Nordland and Troms counties	EUR640 million / GBP580 million	TBC



WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN YOUR JURISDICTION?

The first notable PPP projects were highways, implemented in the period 2001-2006. While PPP as a delivery method exists as an alternative in Norway, its use is limited in the context of total infrastructure and infrastructure construction volume.

WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR JURISDICTION? VERY BRIEFLY, WHY IS THAT?

The PPP projects that have been implemented at a national level in Norway have all been very successful – at least from a government point of view (but also for the bidders/project companies, save possibly in the case of one project). All previous projects have come in on or before time and on or below budget for the government. The collaboration between the government and PPP project companies has also been widely reported to be good, pragmatic and efficient.



Despite the positive track-record, the use of PPPs today for delivery of public infrastructure both at a national level as well as in municipalities, continues to be the subject of intense political debate and public scrutiny – acceptance/rejection of the PPP model often depends on politics.

Politically, the prevailing conservative view is that private ownership and project finance stimulates efficiencies and provides good value for money for the public sector. The prevailing labour/left view is that PPPs do not deliver anything that cannot be procured by the public sector under other, traditional forms of public contracting schemes; private enterprise and capital income in respect of public sector initiatives is generally not desirable and private (project) finance will constitute a much more expensive option for the Norwegian public sector compared with sovereign and directly applied public debt.

The current pipeline of new highway PPP projects were accepted by the labour/left parliamentary wing as a compromise on the condition that the projects and any private funding will be paid for by the users through private sector (toll) money. All of the projects use availability payments (no volume risk is assumed by the PPP company) and the tolling is collected by the government and paid-back through public accounting (eventually finding its way through to the availability payments).

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

All Norwegian PPPs – whether at a national or municipal level – are availability based and use a classic, simple PPP/contract structure i.e. the remuneration for the private partner does not take the form of charges paid by the users of the works or of the service, but of regular payments by the public partner based on the level of service provided (including construction cost).

EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

Ordinarily in PPPs, all the risks that the SPV assumes under the contracts with government in relation to the design, construction, operation and maintenance of the infrastructure will be passed through to the SPV’s D&C or O&M subcontractor. Typically, the only risks that remain within the SPV, and to which its equity investors are therefore exposed, are:

- the risk of a subcontractor to the SPV not being legally liable to the SPV for a breach of its obligations, because of a cap on or exclusion to its liability;
- the risk of a subcontractor to the SPV becoming insolvent;
- the risk of the SPV not being able to refinance its debt on terms consistent with those assumed in the financial model;
- the risk of an upstream change of control occurring in respect of an equity investor in breach of the PPP contract;
- the risk of the SPV being liable to a subcontractor (or a third party) for an amount in excess of what the SPV can recover from the government;

“PPPs involve long-term commitments. Breaking a PPP contract early can be expensive, as counterparties will be entitled to be compensated for the return they would have derived from the contract had it run its course.”

- the risk of the SPV being liable to the government (or a third party) for an amount in excess of what the SPV can recover from its subcontractors; and
- the risk of a “gap” arising in the pass-through of rights or obligations from its contract with the government to its subcontractors.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

Better Value for Money (VfM)

Better VfM and the efficiencies of PPPs have been the key drivers for PPP projects in Norway. Norway has wanted to provide for a mix of delivery models, where PPPs represent only one alternative. Owing to Norway’s robust economy, access to funding to implement or improve infrastructure has never been a factor in Norway’s use of PPPs as delivery model.



Superior cost, time and service outcomes

Studies undertaken in Norway for the pilot pipeline of PPP projects implemented in the period 2001 to 2006 showed that these projects experienced superior cost, time and service outcomes compared with traditionally delivered projects. There was some debate regarding the cost of funding, i.e. private sector (project) finance versus sovereign debt cost of funds. Overall, the studies concluded that Norwegian sovereign debt would have a lower all in cost on an isolated basis.

Risk transfer

A key benefit of PPPs is that they achieve significant risk transfer from the government to the private sector. In Norway, the risk transfer aspect of PPPs is viewed as an additional benefit alongside better VfM and cost, time and service outcomes.

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

Using private finance adds additional cost

On an isolated basis the use of private finance adds additional costs that do not arise under a publicly-funded contract delivery model, as the SPV will need to pay interest on the debt finance, and will be expected to provide an equity return to its equity investors. This aspect of PPPs has been mitigated in the new pipeline of national highway PPP projects in Norway by the use of large milestone payments from the government on or shortly after construction completion (hence only a minor portion of project finance debt needs to be carried and amortized by the project company through the project life-cycle).

Insufficient flexibility

PPPs involve long-term commitments. Breaking a PPP contract early can be expensive, as counterparties will be entitled to be compensated for the return they would have derived from the contract had it run its course.

HOW FLEXIBLE ARE THE KEY MODELS?

For the national level PPP contracts in Norway, the government retains a fair degree of flexibility in that it can, comparatively liberally, instruct the PPP project company to undertake changes.



ANY OTHER RELEVANT POINTS TO NOTE.

The new Norwegian national highway PPP project pipeline spans very diverse projects both in terms of value as well as complexity. This has created different challenges for the market and in terms of agreeing the PPP Contracts (as a “one size fits all” concept is difficult to get to and where the government may need to show additional flexibility, also due to new challenges as a result of COVID-19).



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Saudi Arabia





BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION (REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS OF INVESTMENT.

The most active PPP market in the Gulf Cooperation Council (GCC) is Saudi Arabia. This is primarily due to Vision 2030, a strategic framework to reduce Saudi Arabia’s dependence on oil, diversify its economy, and develop sectors such as health, education, infrastructure, recreation, and tourism. It is envisaged, that the use of PPP financial models will enable the Kingdom to effectively undertake the initiatives under the Vision 2030 framework on an expedited basis.

There is a large focus on the utilities sector: current renewable energy and water PPP projects include 2 power, 3 desalination and 3 wastewater projects with a combined value of approximately USD2.735 billion and renewable energy and water projects that are currently in the procurement phase include 10 power, 3 desalination, 1 water storage facility, 3 wastewater and 1 water transmission pipeline with the combined value of approximately USD4.68 billion.

PPP outside utilities

Although evolution of established utilities models was the order of the day for the first Vision 2030 PPP schemes, social infrastructure PPP projects are beginning to gain traction. Substantial numbers of building and facilities management projects are currently under procurement. The first phase (60 schools in the Jeddah area) has been awarded and future phases are expected shortly as the Kingdom works towards its initial objective of procuring 300 PPP schools. The tendering process for the Alansar Hospital PPP has also begun. Alansar is viewed as a pathfinder project, with multiple hospital PPPs to be undertaken in the near future for both facilities and clinical services. At the core of the healthcare PPP agenda are stated goals to increase hospital capacity by 25% and substantially increase the size of the private healthcare industry.

Saudi Arabia is co-procuring a new causeway linking the Kingdom to Bahrain. The first causeway was built in the 1980s to serve road traffic. The new causeway will serve both road and rail and will operate on a PPP basis.

Finally, it is important to note that Saudi Aramco procures a wide range of projects on a BOT basis that shares many of the structural features of typical PPP projects. Although power and cogeneration (power / water / steam) are common technologies procured on a BOT basis, the BOT model has also been adopted for accommodation projects and carparking.

Beyond Saudi Arabia, PPP experiences in the GCC differ although the basic premise remains the same. For the most part closed PPP deals are confined to the utilities sectors. In those sectors PPP models have been applied extensively since the late 1990s, with some markets such as Abu Dhabi and Oman being prolific procurers of private utility projects.

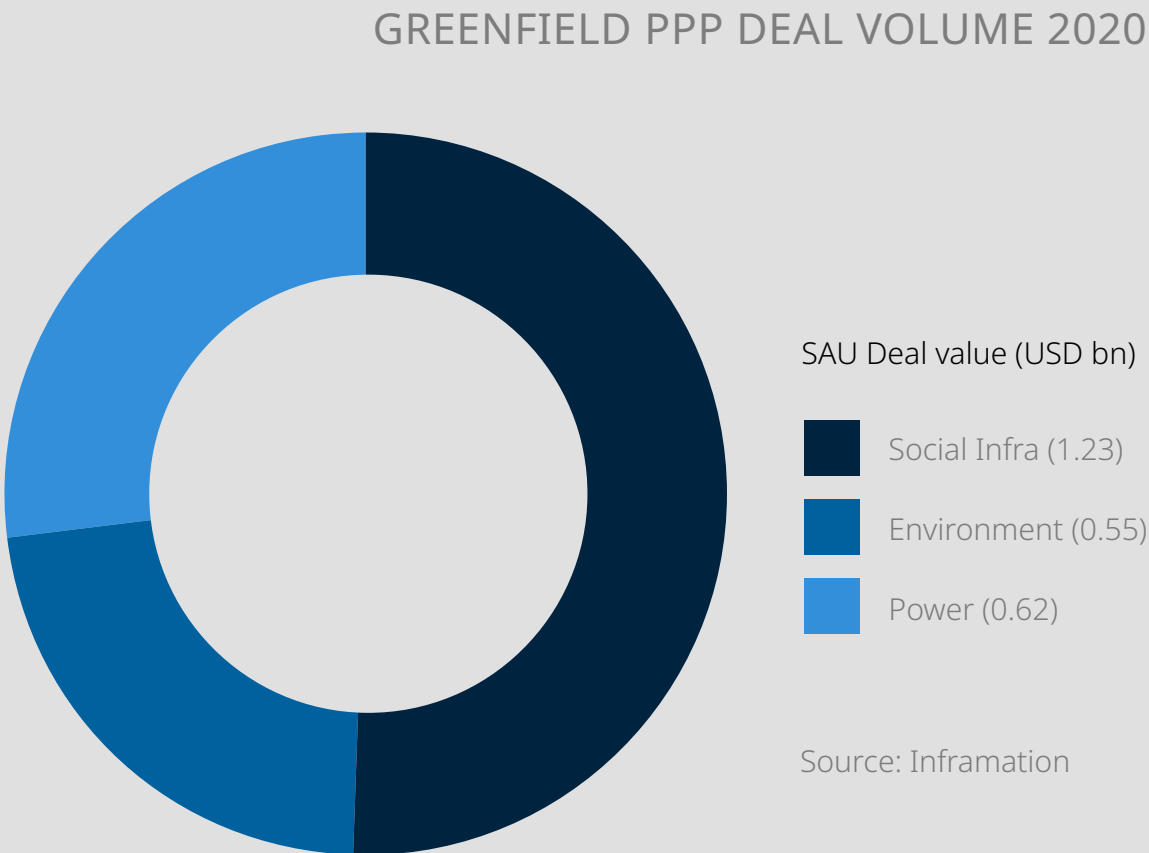
Outside of utilities, PPP projects have been procured on an ad-hoc rather than centralized basis. Accordingly volumes have been low and there have been a range of failures. In recent years steps have been taken to address these issues, with PPP-units and PPP laws put in place to begin the roll-out of PPP structures.

“Finally, it is important to note that Saudi Aramco procures a wide range of projects on a BOT basis that shares many of the structural features of typical PPP projects.”

WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN YOUR JURISDICTION?

The current wave of interest in Saudi Arabian PPP projects is an evolution of the power and water models that were introduced in Saudi Arabia in the 2000s. Saudi Arabia's first utility power and water projects were procured through a joint venture procurer co-owned by the national power and desalinated water utilities. That IWPP model was later adopted by other utility companies in Saudi Arabia, including by Marafiq for power and water cogeneration (2005-2010) and Saudi Electricity Company for conventional power generation (2008-2015), Saudi Electricity Company again for renewable energy (2015-2017), the Ministry of Energy's Renewable Energy Project Development Office for solar and wind project (2017-ongoing) and finally for various water infrastructure schemes (Saudi Water Procurement Company (2018-ongoing).

PPP structures were adopted for a range of infrastructure projects prior to Vision 2030. However, these schemes had mixed success. Certain projects were awarded after prolonged bidding processes (Medinah Airport (2009)). Others were cancelled, delayed, scaled-back or converted to conventional procurement. Notably Saudi Landbridge, a cross country railway, was first tendered on a PPP basis in 2008 and is currently proceeding on a conventionally procured basis. “Colleges of Excellence” began in 2013-2014 as a means of bringing overseas technical education providers to Saudi Arabia. Following the additional RFP round in which a number of PPP agreements were signed, we understand that providers can now provide unsolicited proposals. Accordingly no further tender rounds are expected.





Outside Saudi Arabia and beyond utilities, the successful projects that come to mind as genuine PPP structures are the social housing projects we have seen in Bahrain and Kuwait and a bus PPP in Bahrain. These projects began to come to market in the mid-2010s. Recent projects elsewhere in the region include carparking and streetlighting.

WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR JURISDICTION? VERY BRIEFLY, WHY IS THAT?

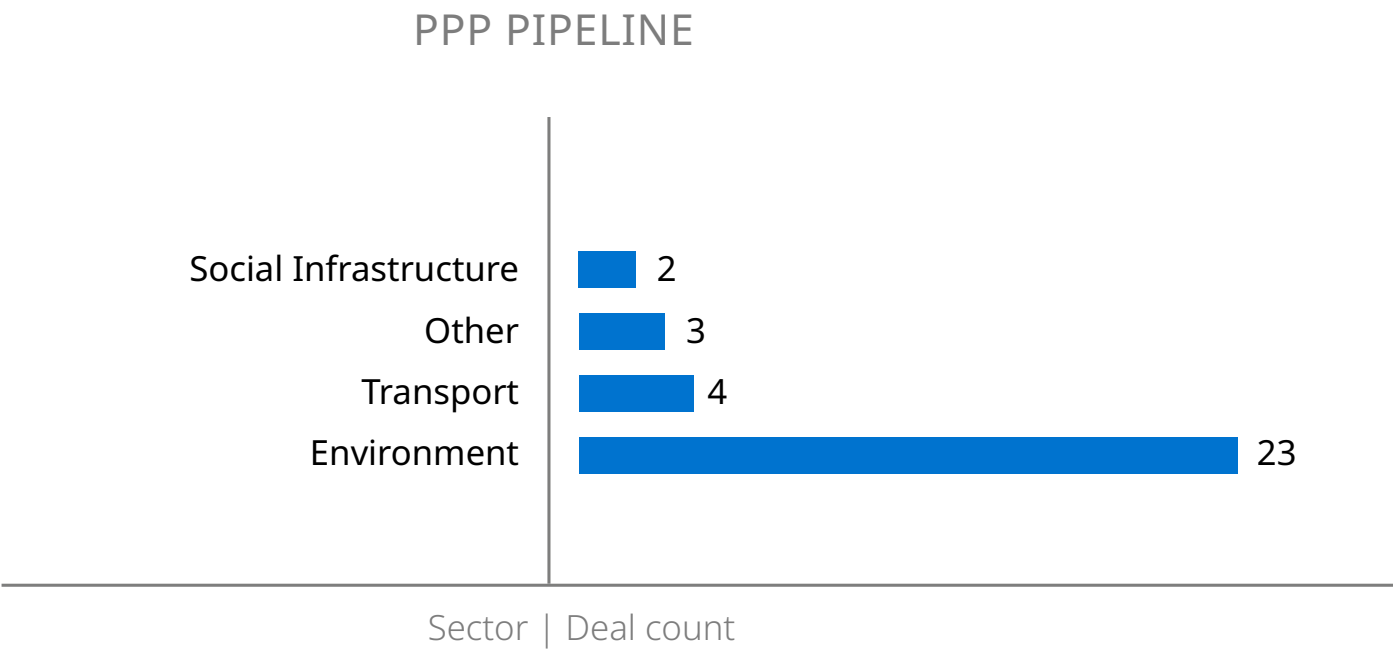
In Saudi Arabia PPP models are critical to the achievement of Vision 2030. Accordingly there is substantial support for PPP in the Kingdom. However, the successful PPP programs to date have for been evolutions of existing programs rather than new programs.

On the whole, the PPP programs in Saudi Arabia that have gained traction so far have been viewed positively. Beyond simply delivering the relevant assets and services, they have also assisted in broader social and economic development. For example, in most cases there are contractual requirements for employment of nationals that are in excess of statutory requirements. Further, PPP projects typically require minimum levels of “local content.” Local content compliance was first introduced in the renewable energy program and required bidders to undertake to deliver a minimum amount of local content through both the construction and operation periods. Compliance is measured and audited by licensed third-party auditors. Substantial penalties are common for failing to meet the requisite levels of local content. A national local content authority has been established to standardize local content requirements and monitor compliance with these contractual requirements.

Looking across the region, there is renewed interest in non-utility PPP projects:

- Kuwait established the Partnerships Technical Bureau in 2008 and by virtue of its 2014 PPP law established the Kuwait Authority for Partnership Projects (KAPP). KAPP has progressed a municipal waste facility and accommodation projects. A rail PPP is contemplated.
- Bahrain has ongoing PPP procurement in the form of the Metro PPP and the joint venture procurement of the Saudi-Bahrain causeway.
- The Emirate of Abu Dhabi has had a PPP manual for five years and introduced PPP related laws in 2019. Managed services contracts are already common in Abu Dhabi across a range of sectors. The Abu Dhabi Investment Office will undertake PPP project procurements. Separately, the Ghadan 21 program was announced recently under which approximately USD2.5 billion of PPP projects are being considered across the social infrastructure and transportation sectors.
- Dubai has had a PPP law since 2015 and in 2017 introduced a PPP manual. In addition to managed services contracts, authorities have commenced procurement exercises under the Dubai PPP law.
- Qatar has recently introduced a PPP law and its Public Works Authority is expected to procure up to 12 PPP projects including transport and social infrastructure.
- Oman established the Public Authority for Privatisation and Partnership and allocated approximately 40 projects to it for consideration on a PPP basis.

The key message here is that PPP is becoming seen as the preferred procurement route for infrastructure across the GCC. If we were asked this question in 2025, we would expect to say that the steps taken at the end of the last decade have provided frameworks under which the public and private sectors can deliver successful projects on a consistent basis.



Source: Inframation

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

Availability payments

Considering the general evolution of PPP models from the successful utility structures, it shouldn’t be surprising to see most PPP models are structured on an availability payment basis under which the government authority will make an availability payment sized to suit the CAPEX and fixed OPEX obligations of the project company plus a further output payment to compensate the project company for its variable OPEX. At the core of this is a belief that it is not possible to transfer demand risk to the private sector. Although this may be the case in respect of the first projects to be procured in particular sectors, Saudi Arabia is a large country with a large percentage of Saudi nationals in its population. Accordingly, demand risk should begin to



pass to the private sector over time. Demand risk transfer will be more difficult in other GCC countries where expatriate workers make up large amounts of the population. Their residency in the GCC is linked to employment and therefore a substantial aspect of the bankability case for any project is the threat that expatriates leave due to failing employment markets.

Government support

In lieu of implicit demand driven bankability cases, projects in the GCC have relied on government guarantees. As government contingent liabilities have grown, efforts have been made to soften the nature of the guarantees on offer.

In lieu of an express guarantee, bankability cases have been established due to support agreements between the client and a government-owned investment grade credit. In such support agreements the investment grade credit agrees to provide the client with funds if it is ever unable to fund its liabilities. However, no direct contractual relationship exists between the investment grade credit and the project company or lenders.

The success of the Omani electricity sector law in removing express guarantees should not be understated. In essence the Omani Electricity sector law provides that the Omani government will support the electricity sector. This approach has been considered for a range of other sectors both in Oman and elsewhere although we are not aware of an equivalent law.

Government shareholdings

Government equity interests were historically a feature of the Saudi Arabian IPP/IWPP projects. However, Vision 2030 structures have tended not to have a government shareholder. Rather, project development agreements and project implementation agreements are commonly executed by the client and the sponsors as a means of creating contractual obligations that historically would have been ensured through shareholders' agreements in structures that included a government shareholder. As one would expect, an SPV is established for undertaking the project.

Quasi-PPP

There are also a wide range of programs and private developments both within Vision 2030 and outside that, although not strictly PPP, will deliver similar benefits to PPP. For example, the Red Sea Development Company (RSDC) is owned by the public investment fund (PIF). RSDC is constructing a 16 hotel resort that will have 3,000 beds in its initial phase. The Red Sea project will employ circa 30,000 people and will be responsible for its own infrastructure. Contracts have been let for certain construction works and a private sector owned utilities concession has been awarded under which power, water, wastewater, district cooling and telecoms services will be provided. In essence a master-planned city, the Red Sea resort will see substantial amounts of public services constructed, owned and operated by the private sector.

The Neom city-state is also being developed by PIF. It will deliver many of the traditional benefits of PPP. Similar to RSDC, it will tender many of its own PPP and joint venture projects. At its core however, Neom will be an incubator of emerging technologies, providing a publicly procured environment for growth businesses in the technology and energy sectors. Neom has already announced the procurement of a pilot project, a concentrated solar dome-desalination plant and a USD5 billion joint venture with ACWA Power and Air Products in the green hydrogen sector.

EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

EPC and O&M

Given the starting point for many PPP structures in Saudi Arabia are the IWPP/IPP models in which the government held 50-70% share of project company equity, PPP structures for the current wave of PPP projects tend to be sponsor friendly from an equity perspective and conservative as to the extent of risk that project companies are allowed to take.

“In lieu of implicit demand driven bankability cases, projects in the GCC have relied on government guarantees. As government contingent liabilities have grown, efforts have been made to soften the nature of the guarantees on offer.”

RFP requirements typically require lump-sum turnkey construction contracting, with minimum bankable terms included in the RFP. At bid submission bidders must evidence a full-form EPC contract and draft contract. From a construction risk therefore, equity risks are relatively limited. Procurers would expect to see funded and unfunded contingencies in bid models. The nature of the assets being procured and the contracting structures means that the likelihood of ever relying on unfunded contingencies is limited.

Similarly for O&M, minimum terms are provided in the RFP with signed term sheets and draft contracts a minimum. The O&M company could reasonably be expected to be an SPV established by the sponsors. Caps on liability are typically structured on both an annual and aggregate basis such that sponsor equity investments to support the O&M company are unlikely.

Financing

From a financing perspective, at bid submission bidders are generally expected to show that they have limited recourse finance models with substantial signed commitments for senior debt (50% of senior debt is the lowest we are aware of). Limited recourse finance can be mini-perm structured. However, in only one recent project has a hard mini-perm been allowed. There has been a trend of clients requiring a share of any gains from refinancing that are not established in the initial financial model. Soft mini-perm related refinancing benefit is not shared, however.



Concession risk allocations

Concession agreements provide all of the typical project company protections including change of law/regulation and political force majeure events. Increased cost relief and extensions of time are the typical means of compensation pre-commercial operation. Post-commercial operation, deemed payments and increased cost relief are common.

Termination payments are sponsor and lender friendly compared to more established markets. Following a project company event of default, the client has the right but not the obligation to purchase the project for outstanding debt. Termination for prolonged force majeure will result in compulsory acquisition by the client for outstanding debt plus the costs of termination. Other than one example of which we are aware, termination for client event of default, political force majeure and convenience (in some models) leads to full repayment of debt, termination costs and modelled equity returns. Models that provide for a lender haircut are unlikely to be supported in the GCC. Accordingly, there is no risk that sponsors would have to gross-up lenders due to a termination payment haircut.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

To facilitate Vision 2030, Saudi Arabia established the National Centre For Privatisation (NCP). Pursuant to NCP’s establishing regulations and handbook, NCP is the stated procurer of PPP projects. However, in practice procurement activities were performed by the relevant sectoral government authority, subject to NCP’s review and approval. Due to this oversight, projects have been structured and approved for release with common goals in mind. In summary, these goals are:

- rapid infrastructure roll-out with little capital expenditure;
- timing and budget control passed to the private sector;
- development of local private sector capabilities through local content requirements; and
- exposure of key sectors to international best practice.

As noted above, the PPP-unit concept is not only applied in Saudi Arabia. Kuwait has had the Kuwait Authority for Partnership Project for some time and Oman introduced the Public Authority for Privatisation and Partnership recently too. In many cases, however, (both currently and before the introduction of PPP-units) a country’s Ministry of Finance retains a central role in the procurement of PPP structures. Accordingly, in those countries it is reasonable to expect that community benefits have lesser significance than financial fundamentals.

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

Local experience

Considering most of the sectors earmarked for PPP have not had foreign direct investment in the Kingdom, coming to terms with the legal and commercial landscape is a substantial challenge for many participants that are new to the market. It should be of little surprise that the initial projects under the Vision 2030 program have been won by companies and consortia that have experience in Saudi Arabia. In particular, supply chain (for local content), and the availability of Saudi national employees are commonly quoted examples of challenges for overseas developers.

“Privatization is on the agenda for other GCC states. Kuwait is planning to privatize a power and water plant in the near future.”

Tax

Tax equalization (or lack thereof) is another oft-quoted challenge for international investors in Saudi Arabia. A project company’s tax liabilities are assessed pro-rata to the domicile of their shareholders. Profits attributable to Saudi shareholders attract Zakat at an effective 2.5% whereas profits attributable to overseas shareholders attract corporation tax at 20%. Further, withholding tax is payable at 5% on profits remitted to overseas entities. Accordingly, structuring a consortium with Saudi ownership is often seen as critical to offering a competitive financial proposal while maintaining reasonable equity IRR.

Public policy considerations

Across the GCC, a substantial challenge for developers has been the nascent nature of the market. Procurements have been stop/start as countries have wrestled with the various options on how to proceed with infrastructure procurement. In some cases, procurements have been too optimistic in terms of:

- the size of the procurement exercise;
- the complexity of the project structure; and
- transfer of risk.

Companies with a longer term view of the region and involvement in multiple sectors have tended to ride the waves of public policy better than those that have targeted specific opportunities because they have not been over reliant on any particular project.



HOW FLEXIBLE ARE THE KEY MODELS?

PPP projects in the GCC tend to follow a procurement method in which financial, technical and legal advisors to the client develop a form of RFP document and model contracts against which bids will be evaluated. As highlighted elsewhere, the client and the RFP document are subject to review and approval of the relevant PPP-unit and/or the Ministry of Finance. Accordingly, efforts are made to ensure that PPP models are appropriate. However, in doing so flexibility is limited.

The successful bidder generally submits the lowest cost compliant proposal. Although it is common for bidders to mark-up documents in their bids, few procurers have issued a pre-release of bid documents for market comment or allowed bidders to “price” the effect of a deviation from the RFP. Therefore, bidders do make amendments to project documentation in their proposals and the suitability of such mark-ups are taken into account during the bid evaluation phase of the projects. The client’s rejection of deviations from the RFP does not allow bidders to vary their proposals, accordingly the bidder is expected to maintain its price and remove such deviations or be disqualified.



ANY OTHER RELEVANT POINTS TO NOTE.

PPP is one of many components within the Vision 2030 framework. Vision 2030 also provides for privatization of government-owned companies and corporatization of many public services. NCP is also responsible for managing the privatization and corporatization processes and is expected to deliver the same social benefits that are expected from the PPP programs. The first privatizations have begun to take place through the break-up and sale of Saudi Grains Organisation (the Kingdom’s state-owned flour mills) and the privatization of Ras Al Khair power and water project.

Privatization is on the agenda for other GCC states. Kuwait is planning to privatize a power and water plant in the near future. Abu Dhabi’s state-owned oil company ADNOC has undertaken transactions in which equity investors will purchase 49% interests in assets such as real estate portfolios and pipelines.

Healthcare is an example of a corporatization. Existing healthcare assets operated by the state will be packaged into businesses with the intention of allowing the businesses to compete in a regulated market. It is conceivable that at some point ownership of the businesses will be transferred to the private sector.



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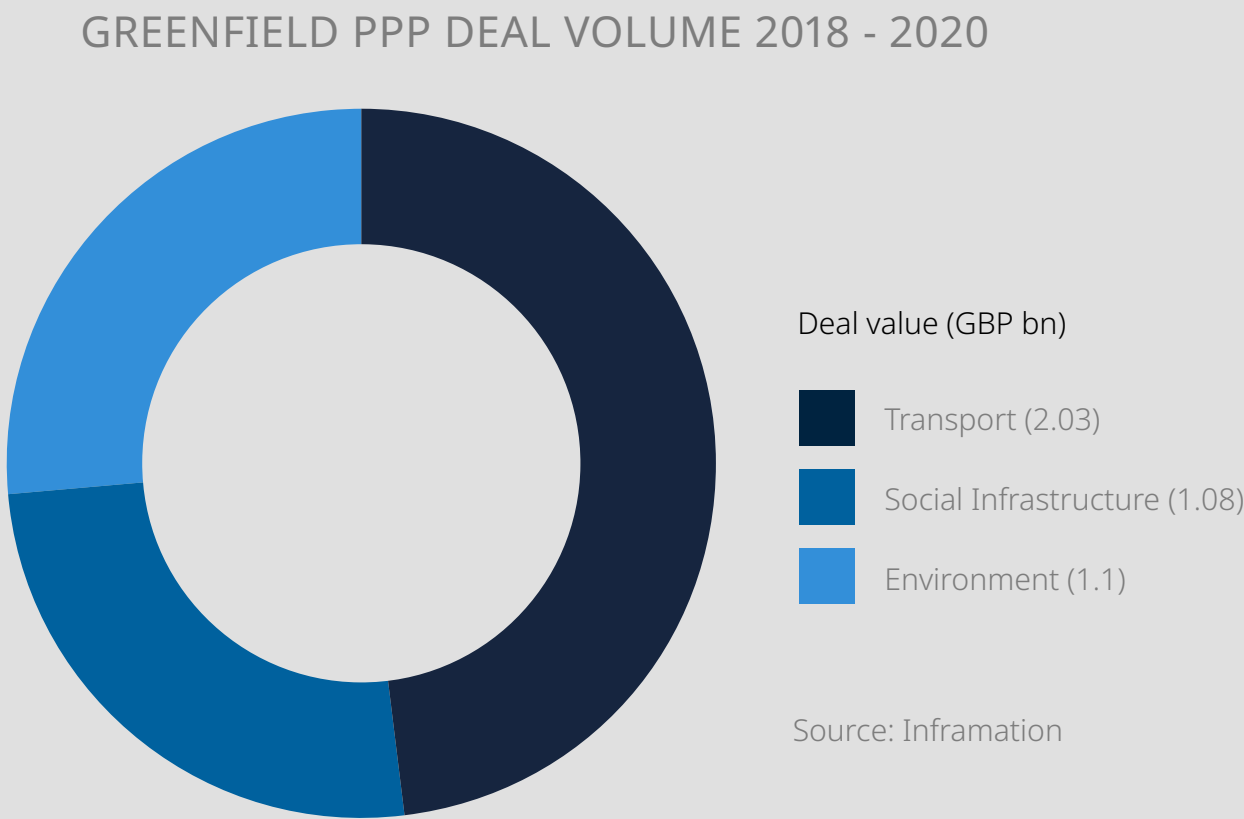




**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

Since their introduction, the UK government capital investment using the Private Finance Initiative (PFI) and its successor Private Finance 2 (PF2) has typically averaged approximately GBP3 billion a year.¹⁹ There are currently more than 700 operational PFI contracts in place in the UK with a nominal capital value of GBP57 billion across the entire spectrum of asset classes and sectors.²⁰ In Autumn 2018, however, the UK government reported that the PFI and PF2 had not been used since 2016 and would no longer be used for new infrastructure projects in England.

New delivery models have started to emerge in devolved administrations (e.g. the Mutual Investment Model (MIM) which, in 2020, has seen the Welsh Ministers appoint a private sector delivery partner for the GBP1.5 billion 21st Century Schools and Colleges Band B program and financially close the GBP1.3 billion development of the A465 Heads of the Valleys road), showing there is still an appetite for private investment in delivering public infrastructure, but central government has yet to announce a proposal for a “PF2 replacement.”



**WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN
YOUR JURISDICTION?**

PPP was first introduced to the UK infrastructure market in the early 1990s, following the launch of PFI by conservative Prime Minister John Major in 1992 as a means to take debt off government balance sheet while securing the infrastructure that the country badly needed. After a relatively slow uptake from both the public and private sectors, PFI took hold in the late 1990s and grew steadily (in number of projects and breadth of sector) over the next 15 years, with a number of standardized document suites developed on the principles (e.g. Standardization of PFI Contracts Version 4, MOD PAV2, Building Schools for the Future).

With the 2008 global financial crisis increasing the cost of private finance, and political pressure following a number of criticisms of PFI, an independent review of PFI was conducted by HM Treasury in 2011, which led to the launch of PF2 in December 2012. The fundamental principles of the PF2 model were the same as PFI, but PF2 sought to combat some of the concerns surrounding PFI by establishing a common understanding of the key risk allocations, reducing time and cost of negotiating contracts and bringing a consistency of approach.

It is these principles that have formed a strong basis to export the PFI model internationally, with other jurisdictions building on the success stories. Perhaps, in developing any PF2 successor, the UK government can take comfort from these lessons learnt to help it develop a new, sustainable model that will meet the country’s growing infrastructure needs as well as contributing to the government’s target of net zero by 2050.

**WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR
JURISDICTION? VERY BRIEFLY, WHY IS THAT?**

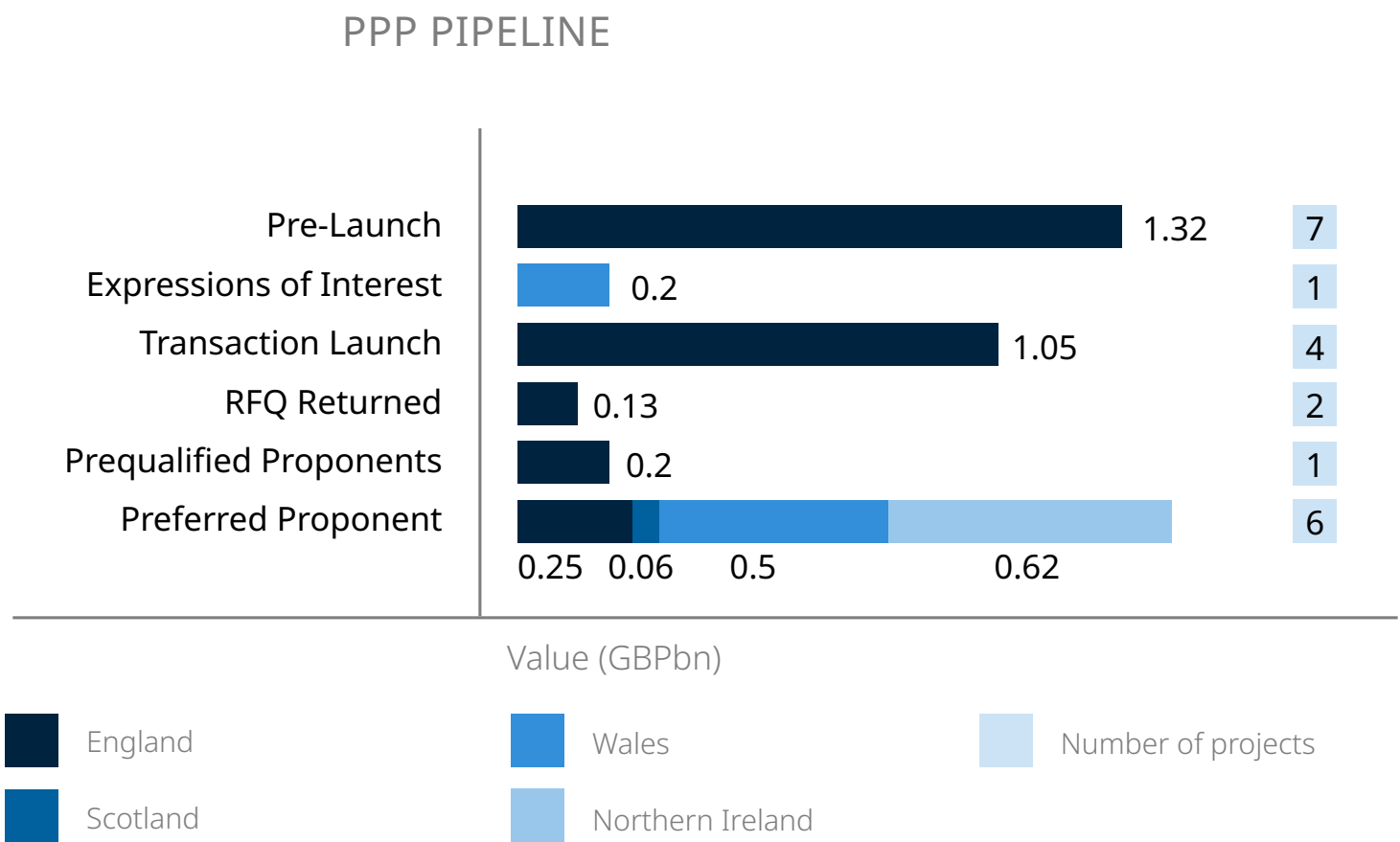
While there are a number of benefits associated with the PPP model (please see question 6 below, as well as the other jurisdictions addressed in this report), as noted above, PFI was subject to a number of criticisms and political discussion, including:

- the model’s perceived inflexibility (please see question 8 below for further discussion of this topic);
- the terms and length of the government’s financial commitment to service payments (e.g. private finance interest rates in excess of the government’s cost of borrowing and the payment of unitary charge payments well into the future); and
- complexity and inefficiencies.

PF2 sought to address some of these concerns, but the model still received criticism that it resulted in additional cost for the taxpayer (e.g. insurance costs, higher cost of borrowing, lenders fees and SPV management fees) and was not as efficient as its proponents suggested, something that was compounded by the high-profile insolvency of Carillion in January 2018.

¹⁹ National Audit Office, PFI and PF2, January 18, 2018 - <https://www.nao.org.uk/wp-content/uploads/2018/01/PFI-and-PF2.pdf>

²⁰ National Audit Office, Managing PFI assets and services as contracts end, June 5, 2020 - <https://www.nao.org.uk/wp-content/uploads/2020/06/Managing-PFI-assets-and-services-as-contracts-end.pdf>



Source: Inframation

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

A “PPP” refers to transactions where the government places a contract with the private sector for the design, construction, operation and/or maintenance services associated with an infrastructure asset, with private finance secured to fund the initial capital expenditure (typically a split of 80% debt and 20% equity).

Social infrastructure

PFI / PF2 (and the related sector-specific standard documentation) were the traditional models for procuring social infrastructure in the UK; these PPPs are typically “accommodation based” and the private sector’s revenue stream takes

the form of a unitary charge from the government which will be calibrated to take account of any availability or performance related deductions. Notwithstanding the withdrawal of PF2, many government departments and local authorities have sought to use the PPP structure for a broad range of social infrastructure projects, which has resulted in a number of models being adopted. These include:

- **MIM** – where the Welsh government takes an equity stake in the SPV and there is a greater focus on the project delivering community benefits;
- **HUB** – the delivery of new community facilities by five hub companies across Scotland that is centered around continuous improvement to realize better value for the taxpayer;
- **LIFT** – a type of pre-procured PPP devised to redevelop and replace primary care facilities which is based on a “lease plus” or “land retained” agreement.

Other tools are available to assist with funding infrastructure projects in the UK; for example, the UK Guarantee Scheme (which operates on a commercial basis but allows certain projects to benefit from government-backed support at lower rates where there may be a funding shortfall), Housing Guarantees (to support the development of residential housing in target areas), Co-investment Funds (private sector funds in new technologies e.g. digital infrastructure and charging infrastructure – where the government co-invests to accelerate, roll-out and scale such projects, while gaining a commercial return as investor) and the Public Works Loan Board (a statutory body which issues government loans to local authorities to finance infrastructure investment).²¹

Economic infrastructure

While there are more social infrastructure PPP projects in the UK by number, economic infrastructure PPP projects are still prevalent in the UK; for example, the Mersey Gateway bridge. These models are reliant on payments from users for a proportion of the finance repayment.

In addition, and while not traditional PPPs, the Regulated Asset Base (RAB) model is used for projects with regulated revenue streams (i.e. where an element of risk has been transferred to the users, similar to the economic infrastructure model), which can result in a reduction to the cost of raising finance, and the concession model gives the private sector an exclusive right to the operation and maintenance of an asset for a finite time period.

The RAB model has been adapted successfully for the Thames Tideway Tunnel project which, together with the benefit of a government guarantee, enabled it to gain an investment credit rating and therefore draw finance from pension funds and other long-term institutional investors.

There are some industry participants that want to see the RAB model expanded to social infrastructure, but it is difficult to see this being adopted on a large scale as the assets do not lend themselves to a “user charge” model, so there is no income stream to regulate.

The Chancellor’s 2021 Budget promised GBP40 billion for a new National Infrastructure Bank based in Leeds, which is certainly encouraging for the country and the infrastructure sector. To realise the true benefits of this opportunity, there needs to be the prospect of real capital being injected into projects from an institution that provides confidence to the market. To achieve this, the new bank needs to be independent from Government and not just an extension of HM Treasury – a new bank with full banking and borrowing powers, led by experienced bankers. We look forward to further details on how the National Infrastructure Bank will operate and interface with the private sector.

²¹ DLA Piper, The UK has signalled the demise of traditional models of PPP – will we follow suit in New Zealand?, March 29, 2019 - <https://www.dlapiper.com/en/newzealand/insights/publications/2019/04/the-uk-has-signalled-the-demise-of-traditional-models-of-ppp/>



EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

The general principle adopted in UK PPPs is that the majority of the risks that the SPV assumes under the contract with government in relation to the design, construction, operation and maintenance of the infrastructure asset will be flowed down to the D&C and/or O&M subcontractor. Typically, in social infrastructure projects the only risks that remain within the SPV, and to which its equity investors are therefore exposed (subject to the limited recourse nature of the contracting structure), are:

- the risk of a subcontractor to the SPV not being legally liable to the SPV for a breach of its obligations, because of a cap on or exclusion to its liability (e.g. latent defects risks that arise after the D&C contractor’s liability period has expired);
- the risk of a subcontractor to the SPV becoming insolvent;
- the risk of an upstream change of control occurring in respect of an equity investor in breach of the PPP contract;
- the risk of the SPV being liable to a subcontractor (or a third party) for an amount in excess of what the SPV can recover from the government – for example, because the SPV has independently breached the relevant sub-contract (e.g. incorrectly rejected its design documentation) for reasons unrelated to a corresponding wrongful act of the government;
- the risk of the SPV being liable to the government (or a third party) for an amount in excess of what the SPV can recover from its contractors; and
- the risk of a “gap” arising in the flow-down of rights or obligations via its subcontracts, which may be because a sub-contractor is unwilling to accept the risk under the PPP contract (e.g. ad hoc contractors are very unlikely to accept a full flow-down of availability/deductions risk on a contract with a comparatively small value).

For user-charge PPP projects, demand or revenue risk can also be added to this list.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

Despite the criticisms of PFI, PPPs are generally accepted (by both the government and the private sector) to offer benefits to the public sector and end users, which center around achieving the best value for money for the taxpayer.

Risk allocation

As mentioned above, PPP allocates a large number of risks to the private sector (whether at the SPV or the sub-contractor level) based on the general principle that a risk should be borne by the party that is best placed to manage it, which should ensure it is managed in the most efficient manner.

Cost certainty

Given that the private sector bears the risk of cost overruns, the government has certainty over the construction costs and, subject to benchmarking/ market testing, through-life costs of the asset. While this cost may not be lower than the government could secure outside of a PPP model, the government is mitigating its risks of supply chain issues (e.g. insolvency or increased material costs) and other cost overruns (e.g. caused by delays).

Quality

By adopting an output-based specification, the government secures the private sector’s expertise and innovation in building and managing the infrastructure asset, and with it shifts delivery and quality/availability risks, including the risk of rectifying latent defects.

Operational efficiency

The maintenance and lifecycle obligations, and handback considerations, require the private sector to ensure its assets are well maintained and operated, which, in addition to having a fully managed service, can realize usable life benefits for the government.

“Despite the criticisms of PFI, PPPs are generally accepted (by both the government and the private sector) to offer benefits to the public sector and end users, which center around achieving the best value for money for the taxpayer.”

Off balance sheet

The debt finance raised to build PPP infrastructure assets is off balance sheet and therefore reduces the level of government spending and allows the government to spread the cost of the asset across multiple budgetary years and invest in additional/different capital projects over that time.

Community benefits

The introduction of MIM and HUB models, as well as some of the themes explored in the Cabinet Office Green Paper ‘Transforming public procurement’ (December 2020)²², has seen a greater focus on community benefit. In MIM, not only does the government benefit in the “upside” of the project by having an equity stake, a key evaluation criteria in awarding the project and something which is contractualized into the project agreement is the realization of community benefits, including (i) workforce initiatives, focusing on employment and training opportunities for disadvantaged people and specific target groups; and (ii) supply chain initiatives, designed to maximize opportunities for smaller and more local businesses.

²² Cabinet Office, Transforming public procurement, December 2020 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943946/Transforming_public_procurement.pdf



WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

From the public sector’s perspective, in light of the criticism that PPP contracting involves **additional costs, public and political appetite** for PPP projects under the PFI/PF2 model was one of the biggest challenges that eventually led to the model being withdrawn. This is in part due to the higher cost of financing already mentioned, but also because **project lenders** will want to ensure that future cost models are not underestimated and there is **sufficient buffer** in the cash flows to provide for the risks that are retained by the SPV (as noted above) as well as providing for adequate lifecycle maintenance. Given this, it is necessary for any procuring authority to satisfy itself that the higher costs associated with the PPP model are offset by achieving the potential cost savings in the construction or operation of the project, or through the delivery of a qualitatively superior project (for which it is challenging to provide direct/meaningful comparators in ‘traditionally’ procured projects).

In addition, across the UK, 328 authorities are responsible for PFI contracts. These authorities are at various levels within government and are, therefore, receiving different **levels of support** in procuring and, ultimately, managing these contracts on a day to day basis. This differential combined with **budgetary constraints** around **resource allocation** simply means that the government can become overwhelmed by the contractual management of its PFI contracts and seek additional support from the private sector in areas that weren’t envisaged at the time of procuring the project.

The insolvency of Carillion highlighted a real issue with bidders underpricing contracts and accepting a **disproportionate risk allocation** to secure a “win” in a competitive tender process. Operating at such low margins and taking on some potentially financially significant risks means that, should one of these low-probability, high-impact risks materialize, the contract (and the project) is at risk of collapse or becomes undeliverable for the remainder of the term.

The government has sought to address these risks, in part, through the introduction of alternative models that provide additional benefits to the public and publication of the Outsourcing Playbook, which is designed to improve the working relationship between the private, public and third sectors and provides guidance on how government and private sector will continue driving forward innovation.

HOW FLEXIBLE ARE THE KEY MODELS?

Given the length of time that PPP contracts are in place for (typically 25 to 30 years), there is an inherent degree of inflexibility as it would not be feasible to foresee, and provide for, all possible variations/eventualities in the project documents. Because of this, PPP contracts do have change mechanisms built into the drafting to accommodate changes and provide a limited degree of flexibility that may not be present in stand-alone D&C or O&M contracts (with the latter typically operating on the assumption of a number of shorter, successive contracts procured by the relevant authority).

These change mechanics are well placed to deal with day-to-day operational changes to the running or management of simpler accommodation-based PPP projects, as they can often be dealt with by the contract management team and fall under *de minimis* consent thresholds. Larger, more complex assets/variations that involve significant CAPEX or the introduction of new risks (e.g. a new configuration or construction requirement) will require a greater level of due diligence by all project parties (including the lenders) and the respective professional advisors to implement the change, which will add time and cost to the process to reflect the additional scrutiny and expertise afforded to the change.



ANY OTHER RELEVANT POINTS TO NOTE.

As 72 PFI contracts will be ending over the next seven years in England, amounting to assets with an estimated capital value of GBP3.9 billion reverting to public sector ownership,²³ the question of “what next?” for infrastructure projects in the UK is integral for not only new procurements (in respect of the model adopted and contracting/financing solution), but how existing projects will continue to be operated, managed and financed in the future.

At DLA Piper we are actively considering the handback possibilities with both the public and the private sector, with a view to start a collaborative dialogue between all stakeholders to uncover the benefits/areas for improvement of the existing project arrangements measured against the wants/needs of the government for the asset’s future (not necessarily constrained by the current contractual arrangements).



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²³ National Audit Office, Managing PFI assets and services as contracts end, June 5, 2020 - <https://www.nao.org.uk/report/managing-pfi-assets-and-services-as-contracts-end/>



The US





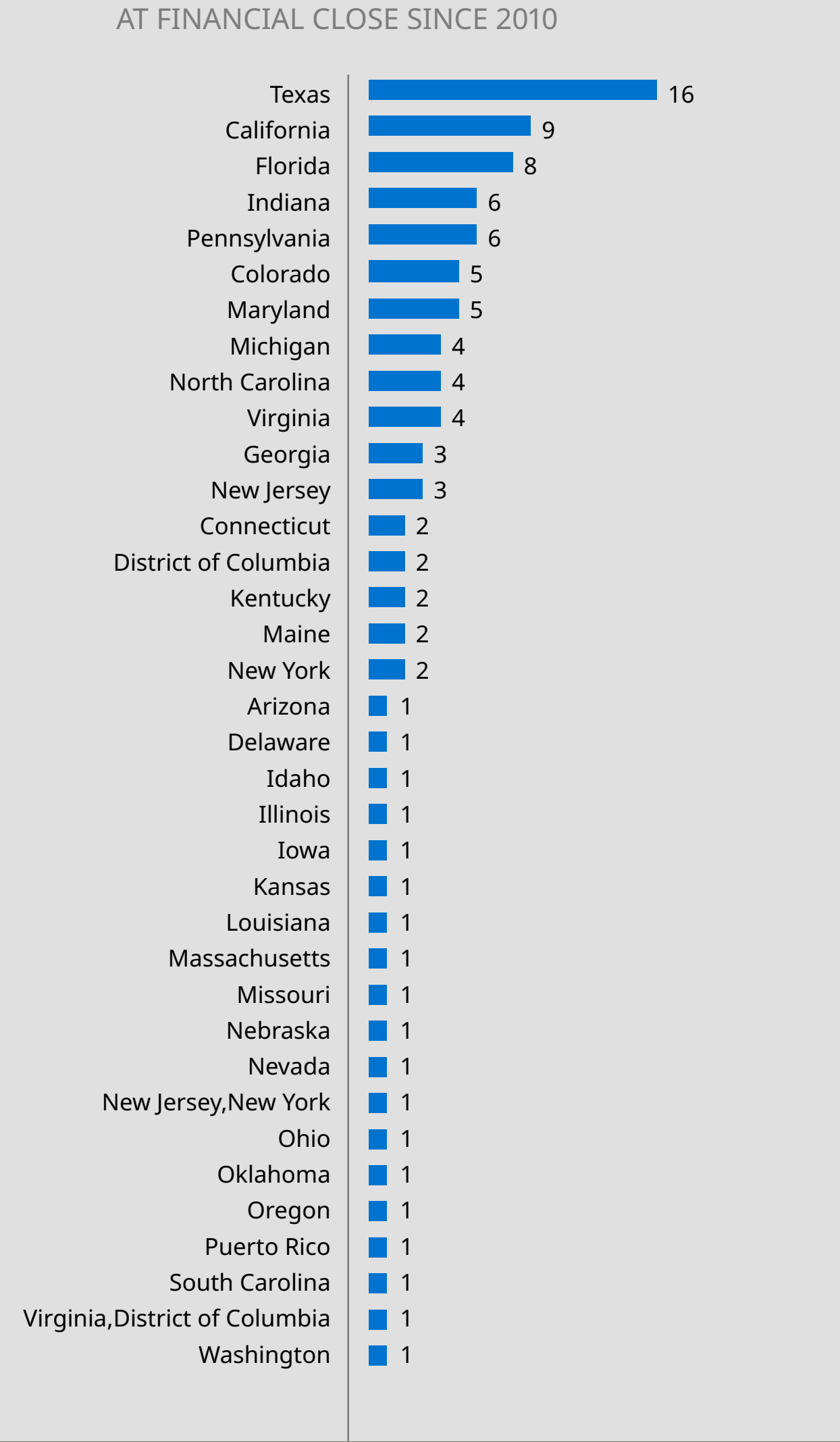
**BRIEFLY DESCRIBE THE PPP MARKET IN YOUR JURISDICTION
(REFERENCING THE LAST THREE YEARS, IF POSSIBLE): BY (A) VOLUME
OF TRANSACTIONS, (B) VALUE OF TRANSACTIONS, AND (C) SECTORS
OF INVESTMENT.**

There is currently no uniform statutory definition of PPP in the US, therefore, the US PPP procurement system is less formally structured than other jurisdictions. The scope of transactions that each US state may use to procure from, or partner with, the private sector for the delivery or operation of infrastructure varies from state to state; some states operate at the state level, using a procurement agency, while other states procure PPPs at local jurisdictional levels. Given this, multiple procurement agencies can exist in a single state – and the laws can vary from state to state – which makes it more challenging for project participants to use standardized approaches and documents. In some cases, some infrastructure-related procurement laws have not permitted the typical forms of contracts used in PPPs, requiring, for example, the separation of the procurement of the design and construction elements of a project. Most notably, this has been the case in the state of New York, but policies towards design-build procurement have changed in recent years. Some states, such as Florida, have adopted specific PPP statutes. Some authors trace back the development of the modern form of PPP to the power purchase agreements developed in the US during the 1980s, which provided for a two-component compensation system: a capacity availability payment and an actual usage payment.

“There is currently no uniform statutory definition of PPP (or P3 as it is known in this market) in the US, therefore the US PPP procurement system is less formally structured than other jurisdictions”

The US has recently vaulted itself to number one in the world by deal value for greenfield PPPs. Ten deals reached financial close by 1H20 valued at USD10.03 billion, including most notably the John F. Kennedy (JFK) Airport Terminal One Development (USD7.3 billion) and the University of Iowa Utility System project (USD1.5 billion). Many state legislatures have taken steps to make PPPs more palatable for stakeholders. Thus, the number of US projects adopting a PPP structure has increased, from 7% of closed greenfield deals in 2017 using PPP to 8.7% of greenfield deals using PPP in 2019. In 2020, this percentage has increased to 11.5% as of 1H20.

Deal activity for PPP projects over the last three years is below. Based on data from Inframation, activity for PPPs has increased in 2020, as previously indicated, despite COVID-19: ten greenfield PPP deals reached financial close during the first half of 2020 compared to only seven in 1H18 and eight in 1H19.



Source: Inframation



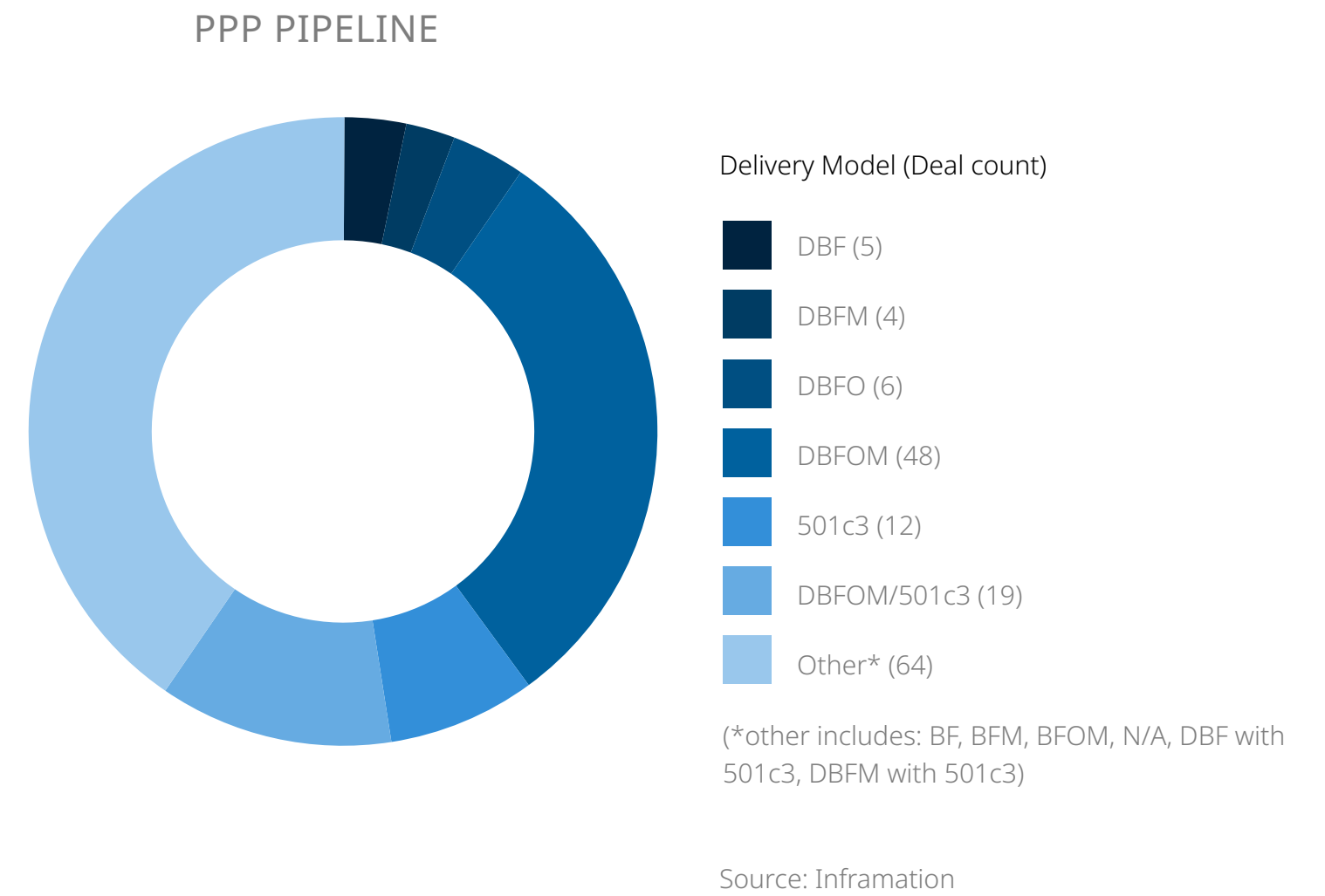
WHEN WERE PPPS FIRST IMPLEMENTED IN SIGNIFICANT NUMBERS IN YOUR JURISDICTION?

The market for PPP transportation projects began to develop in the 1990s with the SR-91, Dulles Greenway and Camino Colombia projects. However, when these projects ran into financial difficulty, the market for this kind of PPP project froze for several years. It was only in the mid to late 2000s that the transportation PPP market in the US began gaining new momentum. However, many PPP projects at the municipal level had existed long before that, mainly in the water and wastewater sectors. Correctional services companies have also built prisons and offered their services to all levels of government for several years. Social infrastructure projects such as court houses, educational facilities and convention centers are more recent. The PPP market in the US is behind many European markets and Canada, although toll roads and rail projects have garnered investor interest.

WOULD YOU SAY PPPS ARE GENERALLY VIEWED FAVORABLY IN YOUR JURISDICTION? VERY BRIEFLY, WHY IS THAT?

Notwithstanding some high-profile defaults and no-bid situations, PPPs are generally viewed favorably in the US and have been instrumental in getting some key projects operational. The market recognizes the ability of state and local governments to shift certain risks (design, construction, maintenance and cost of materials, supplies and labor) to the private sector while allowing ownership to remain with the public. As a general rule, in addition to the risk transfer benefit, the public gets price and scheduling certainty, more innovative and efficient design and construction, a higher standard of maintenance and freed up bond capacity for other projects. A big issue is who should accept the risk of ridership, volume, use, and the like. The markets generally prefer an availability payments approach. Conceptually, the PPP model allows for projects to be brought to fruition more expeditiously and at a lower cost to taxpayers, which are particularly important at a time when COVID-19 has stretched the budgets of many public sector entities.

On the Federal level, President Donald Trump’s USD1 trillion infrastructure plan did not materialize during his term. Although the House passed a USD1.5 trillion infrastructure bill in July 2020, President Trump opposed the plan. The Senate, likewise, passed a bill in July called “American Infrastructure Bonds” to improve upon the model of “Build America Bonds (BABs)” that were issued after the 2008 financial crisis to attract more investment in public infrastructure, but nothing has occurred since the bill was introduced. Democratic President Elect Joe Biden’s platform includes USD2 trillion to upgrade US infrastructure, but PPPs are not a material part of the plan. Thus, to date, the US still does not have a national, cohesive strategy for PPP infrastructure.



“The public benefits from the creativity and lack of bureaucracy afforded by the private sector while avoiding much of the risk.”

BRIEFLY DESCRIBE THE PPP MODELS AVAILABLE IN YOUR JURISDICTION, AND WHICH ARE MOST COMMONLY USED FOR (A) ECONOMIC INFRASTRUCTURE AND (B) SOCIAL INFRASTRUCTURE (THE “KEY MODELS”). PLEASE INCLUDE CONTRACTING STRUCTURES DIAGRAMS WHERE POSSIBLE.

The most common model is the Design-Build-Finance-Operate and Maintain (DBFOM) model. The use of availability payments is preferred by investors over mechanisms that shift the revenue risk to the private sector. In addition, we believe “best practices” include milestone payments during the construction phase. This is the model that shifts the greatest amount of risk to the private sector.

The Design-Build-Finance (DBF) approach involves the public sector retaining the O&M risks and responsibilities.

The Design-Build (DB) model transfers the design and construction risks to the private sector while allocating the O&M and financing responsibilities with the public.



EXPLAIN THE RISKS COMMONLY TAKEN BY EQUITY INVESTORS IN THE KEY MODELS.

Ultimately, risks should be allocated to the party in the best position to mitigate, manage or price that risk. This is a significant factor in the success of PPPs globally. Inexperienced or overaggressive advisors can often determine the successful outcome of a PPP project in the US.

- **Managing the procurement process.** Investors must be prepared to efficiently and effectively manage the DBFOM process to deal with the inevitable contingencies that will arise.
- **Construction delays and defects.** This risk is appropriately borne by the private sector. The same goes for the interface risk among the private sector parties. If there is a problem, the public does not care if it arose from poor design, faulty construction, bad operation or improper maintenance. That is for the private sector team members to address among themselves.
- **Handback requirements.** Being able to fulfill the handback requirements. Properly value the long-term repair / replacement of capital components of the asset.
- **The political risk.** It is not unusual to see an otherwise viable PPP deal fail due to a lack of or change in political leadership, sometimes after hundreds of thousands of dollars have been invested with no method to recoup such funds.
- **The cost of financing.** Most deals involve a mix of debt and equity. It is not unusual for a private sector party to be involved at all levels of a transaction, for example (i) provider of equity; (ii) provider of a portion of the debt; (iii) the sponsor; and (iv) O&M provider.
- **Bankruptcy/insolvency.** The bankruptcy/insolvency risk of a key member of the private sector team or vendor.

NAME THE KEY BENEFITS TO YOUR GOVERNMENT / LOCAL AUTHORITIES OF ADOPTING THE KEY MODELS. ARE COMMUNITY BENEFITS FACTORED IN?

The primary benefit is the transfer of key risks (design, construction, cost of supplies / material / labor) to the private sector while obtaining the efficiencies of the private sector which should result in the project being completed on an expedited basis. The public benefits from the creativity and lack of bureaucracy afforded by the private sector while avoiding much of the risk. If handback provisions are appropriately addressed, the public receives the benefit of the project being returned to the public in a well maintained condition with years of useful life remaining. In short, the public receives a better, value engineered project, on an expedited basis and at a lower overall cost to the taxpayer. In addition to the benefits listed, additional community benefits should be considered. Local job creation is often touted as a benefit and virtually every PPP requires the engagement of minority and women-owned businesses as well as disadvantaged businesses. Transit oriented development projects often increase the tax base.

WHAT ARE THE BIGGEST CHALLENGES WITH THE KEY MODELS?

The number one challenge in PPP in the US is the political risk. All too often, projects fail because there is not a strong project champion or zealous advocate on the government side. Elections have consequences and more than one PPP has failed based on a change of elected officials. Florida's experience with high speed rail is but one example, as well as the recent Honolulu Rail Transit Project (H RTP) – the last two segments of which were proposed to be built based on a PPP model. The fate of the H RTP project via a PPP model was influenced by internal politics. In addition, we have seen a number of no-bid scenarios, based on what the private sector has viewed as an unfair and unrealistic risk-shift by the public sector. The private sector has viewed certain projects as being unbankable and has refused to bid.

Risk must be allocated to the party in the best position to mitigate, manage or price it and should be manageable or, history shows, the private sector will refuse to participate.

HOW FLEXIBLE ARE THE KEY MODELS?

At the moment, the models are not particularly flexible. The New Biden Administration focus on infrastructure will be a part of the next phase of economic stimulus. At the moment, however, largely because of the political repercussions and the reputational risk to advisors, PPP deals tend to be based on prior project agreements. All too often, we have seen parties simply copy, paste, and take precedent from one project to the next without understanding and reflecting on the inner workings of the deal and the objectives to be attained. That said, because of the differences in enabling legislation among the 50 states, a saying in the industry in the US is "If you have done one PPP deal... then you have done one PPP deal." Particularly in light of COVID-19, we expect the public sector will increasingly be expected to assume the use / volume / ridership / revenue risk.



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Glossary

Where concepts or models are common to a number of the jurisdictions this report examines, we have set out a summary of that concept/model below.

D&C	design and construction
DBF	design, build and finance
DBFM	design, build, finance and maintain
DBFO	design, build, finance and operate
DBFOM or DBFM(O)	design, build, finance, operate and maintain
DBM	design, build and maintain
O&M	operation and maintenance
SPV	special purpose vehicle



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