The Commercial Law Development Program *Presents Public-Private Partnership Webinar Series*



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Introduction to Public Private Partnerships and Project Finance





About CLDP

- Mission: Improve the legal environment for business worldwide
 - Established in 1992
 - Provides legal technical assistance on behalf of the U.S. Department of Commerce
- What we do: CLDP partners with developing and post-conflict countries to implement commercial legal reforms that support U.S. foreign policy goals.
 - Government-to-government technical assistance helps host countries:
 - 1) Modernize their commercial legal environments
 - 2) Support their economic development



Today's presenters



James W. Head

- Partner, Energy & Infrastructure Team at Hunton Andrews Kurth LLP, an international law firm with attorneys in the United States, Africa, Asia, Europe, and the Middle East
- A decade of experience working on project finance and infrastructure, with a focus on public-private partnerships, both domestically and abroad



Diana Parks

- Partner, Chair of Infrastructure & P3 Group, Dorsey & Whitney LLP, an international law firm
- Over 20 years of experience in representing public and private clients in developing and delivering innovative infrastructure programs and projects



Matthew Fellmeth

- Director at BBGI a global infrastructure fund, focusing on transport and social infrastructure investments in North America, UK, Europe and Australia
- Over 12 years of infrastructure financing experience across geographies and asset classes;
 - Transport, social, traditional and renewable energy
 - North America, Caribbean, Europe, Africa, Middle East, and Asia Pacific



Today's agenda

1) Public Private Partnerships

- What is a public private partnership?
- Potential benefits
- Potential downsides
- Which is better, public sector or public private partnerships

2) Financing Models

- How can Governments finance infrastructure?
 - Host Government Financing
 - Resource-based Infrastructure Financing
 - Project Financing
- Which financing works with which projects?

3) Project Finance Bankability

- Market Risk
- User Fees/Tariffs
- Foreign Exchange
- Change in Law or Change in Tax
- Force Majeure
- Dispute Resolution
- Termination and Termination Payments
- Assignment & Direct Agreements
- Credit Support
- Interface Risks



What is a public private partnership?

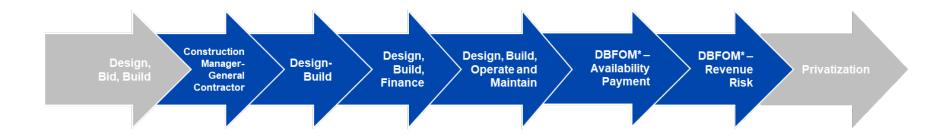
- There is no universally accepted definition, but the concept is well understood.
 - Kenya's PPP Act, 2013 defines a PPP as follows:

"public private partnership" means an arrangement between a contracting authority and a private party under which a private party—

- (a) undertakes to perform a public function or provide a service on behalf of the contracting authority;
- (b) receives a benefit for performing a public function by way of-
 - (i) compensation from a public fund;
 - (ii) charges or fees collected by the private party from users or consumers of a service provided to them; or
 - (iii) a combination of such compensation and such charges or fees; and
- (c) is generally liable for risks arising from the performance of the function in accordance with the terms of the project agreement;



Infrastructure Delivery Models

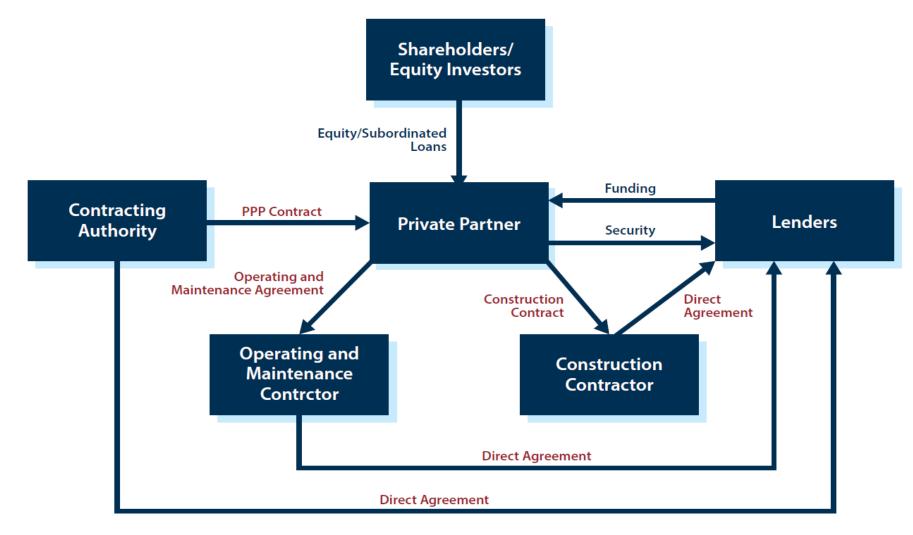


Moving from left to right increases the degree of private sector accountability, integrated delivery, risk transfer, and extent of private financing



Source: Squire Patton Boggs

What is a public private partnership?





Potential benefits - generally

Potential benefits include:

- Certainty over construction costs
 - Investors have a strong incentive to build assets on time and on budget because they bear the risk of cost and time overruns.
- Improved operational efficiency
 - Investors have a strong incentive to reduce long-term running costs over the life of a project at the outset.
- Higher quality and well-maintained assets
 - The PPP structure requires assets to be well maintained over the contract period (typically 20 to 30 years).
 - Leads to benefits to users and longer asset lives.
- Debt may be eligible for off-balance sheet treatment
 - PPPs can be structured so that the SPV's debts are not reflected on the host country's sovereign balance sheet.
- Transfers risks to the private sector
 - Allocation of risks is the key structural feature of a PPP.
- PPPs may be the only option available to a contracting authority
 - Contracting authorities are often constrained by budgets.



Potential benefits – case study on IPPs

Higher quality and well-maintained assets - a case study on IPPs in Sub-Saharan Africa

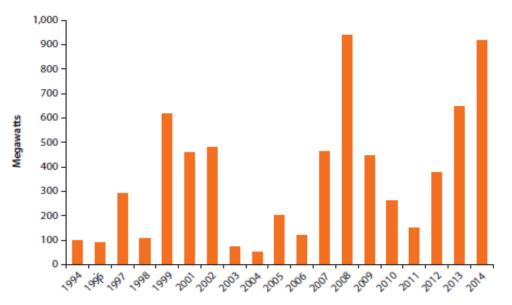
IPPs are present in 17 Sub-Saharan African countries (excluding South Africa)

• They account for approximately 25% of investment in additional generation capacity (excluding South

Africa)

 Currently, there are 59 projects (greater than 5 MW) in Sub-Saharan Africa (excluding South Africa), totaling \$11.12 billion in investments and 6.8 GW of installed generation capacity





Source: Compiled by the authors, based on utility data, primary sources, and the Private Participation in Infrastructure (PPI)

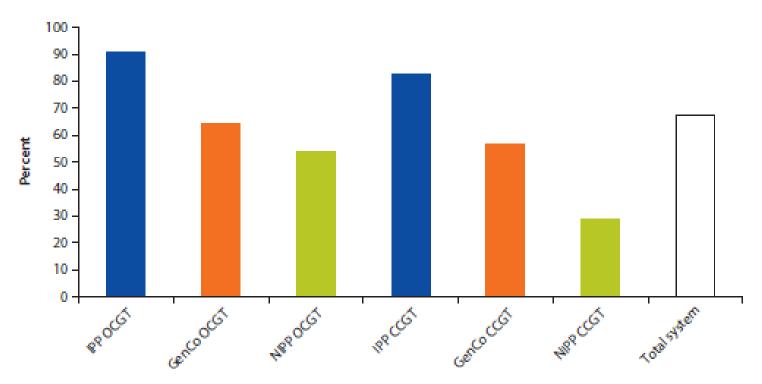
Note: No projects reached financial close in 1995 or 2000.



Potential benefits – case study on IPPs

• IPPs have gained traction in emerging markets because they can provide better technical performance than state-owned power plants...

Figure 7.8 Capacity Factors of Various Technologies and Owners: Nigeria, FY2012/13





Source: Compiled by the authors from system operator data.

Note: CCGT = combined-cycle gas turbine; GenCo = generation company; IPP = independent power project; NIPP = national integrated power project; OCGT = open-cycle gas turbine.

Potential benefits – case study on IPPs

... and because IPPs can provide that superior technical performance at a competitive price.

- Direct comparisons of cost are difficult.
- Even so, electricity prices for IPPs can be competitive with public plants (and lower in some cases)

Table 6.6 Electricity Prices of Public and Private Diesel Plants: Kenya, June 2015

Project	Technology	Location	Ownership	Price (K Sh/kWh)	Price (US\$/kWhb)
Iberafrica Power Company (plant 1)	MSD/HFO	Nairobi	IPP	22.82	0.25
Iberafrica Power Company (plant 2)	MSD/HFO	Nairobi	IPP	22.61	0.25
Temporary power plants (Aggreko)	MSD/HFO	Various	EPP	20.99	0.23
Gulf Power	MSD/HFO ^a	Near Nairobi	IPP	20.43	0.22
Thika Power (Melec)	MSD/HFO ^a	Near Nairobi	IPP	19.86	0.22
Tsavo Power Company Ltd.	MSD/HFO	Mombasa	IPP	19.84	0.22
Kipevu Diesel Power I	MSD/HFO	Mombasa	KenGen	17.70	0.19
Kipevu Diesel Power III	MSD/HFO	Mombasa	KenGen	15.86	0.17
Rabai Power	MSD/HFO ^a	Mombasa	IPP	12.74	0.14

Source: Based on data received from the Kenya Power and Lighting Company, May/June 2015.

Note: EPP = emergency power project; HFO = heavy fuel oil; IPP = Independent power project; KenGen = Kenya Electricity Generating Company;



K Sh = Kenya shilling; kWh = kilowatt-hour; MSD = medium-speed diesel.

a. Gulf, Thika, and Rabai have heat-recovery systems and thus greater efficiency rates.

b. Assuming the average conversion rate in April 2015 of \$1 = KSh 91.57.

Potential benefits – value for money analysis

- Most legal frameworks governing PPPs require a value for money analysis.
 - A value for money analysis is a quantitative assessment of the value of a PPP compared to a conventionally financed and delivered alternative (the public sector comparator).
 - More specifically, it is a:
 - present value,
 - risk-adjusted,
 - discounted cash flow analysis

comparing the cost of a PPP against the public sector comparator.

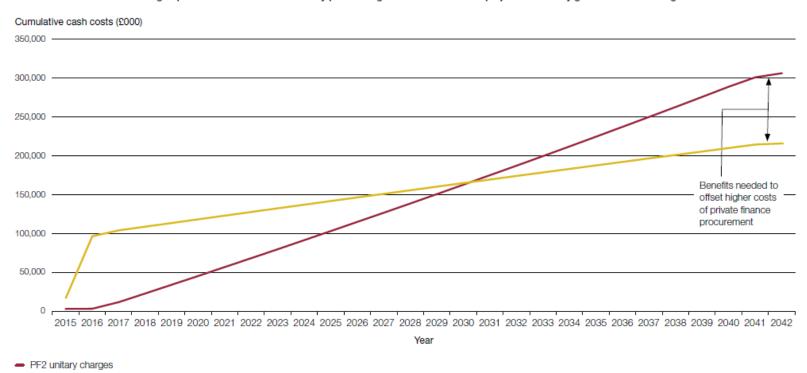


Potential benefits – value for money analysis

• Evaluating value for money in present value terms allows a comparison of the very different cash flows (example depicted below) resulting for which party initially pays capital costs...

Estimated cash flows of a privately and publicly financed project

The cumulative cash costs of a group of PF2 schools are around forty per cent higher than the costs of a project financed by government borrowing





Public sector comparator (PSC) with government borrowing costs

Potential benefits – value for money analysis

... but introduces some difficult decisions on which assumptions to use.

- Discount Rate
 - Cost of sovereign borrowing?
 - Some higher cost that reflects the sovereigns' limited ability to borrow?
 - Social time preference rate?
 - Used in the U.K.
 - Fixed at 6.09% (nominal, 3.5% real), which is significantly above the rate on 10 yr. Gilts.
- Optimism Bias
 - Is a fixed percentage increase on the estimated CapEx of the public sector comparator
 - Designed to recognize the reality that public sector projects suffer cost increases
 - Empirical basis not well developed
- Tax Adjustment
 - SPVs pay corporate and other taxes, which lead to income to the treasury.
 - The tax adjustment is an assumed increase to the cost of the public sector comparator.



Potential downsides

- Public private partnerships also introduce some potential downsides.
 - Borrowing costs
 - Debt makes up a significant percentage of capex
 - An SPV cannot borrow at the same rate as the sovereign
 - Insurance costs
 - Governments may be able to self-insure
 - SPVs are required to maintain comprehensive insurance
 - Cash management
 - Debt service reserve accounts are a poor use of cash
 - Fees to lenders
 - Arranging fees are typically in the 1% to 2%+ range
 - Cost of advisors
 - SPV management and administration fees
 - Lack of flexibility during operations



Which is better?

- There is no right answer.
 - Each project must be evaluated *quantitatively* and *qualitatively*.
 - Quantitative = VfM analysis
 - Qualitative = qualitative advantages and disadvantages
 - Example Higher availability for IPPs compared to state-owned generators
 - U.K. National Audit Office The U.K.'s auditor says qualitative outcomes matter.

The tendency for project teams to over-rely on the outputs of models: Financial models can be a useful aid to decision-making, for example to help test the sensitivity of costs under different scenarios. But the Treasury and NAO agree that no model can hope to capture all the features of the real world. And along with the Treasury, we would like to see project teams exercise greater use of judgement to match the needs of their project to the most appropriate contracting model, using models to aid decision-making rather than displace the use of judgement.



Pop Quiz: What is a PPP?



Pop Quiz: What are the benefits of PPPs? The downsides?



Financial models

Government financing

- Traditional path for the financing of infrastructure projects
- Government will raise debt through issuance of securities, or invest with any surplus within the budget
- Projects are on the Government's balance sheet, increasing pressure on the public balance sheet
- As balance sheet liabilities increase this reduces ability to borrow more

Resource-based financing

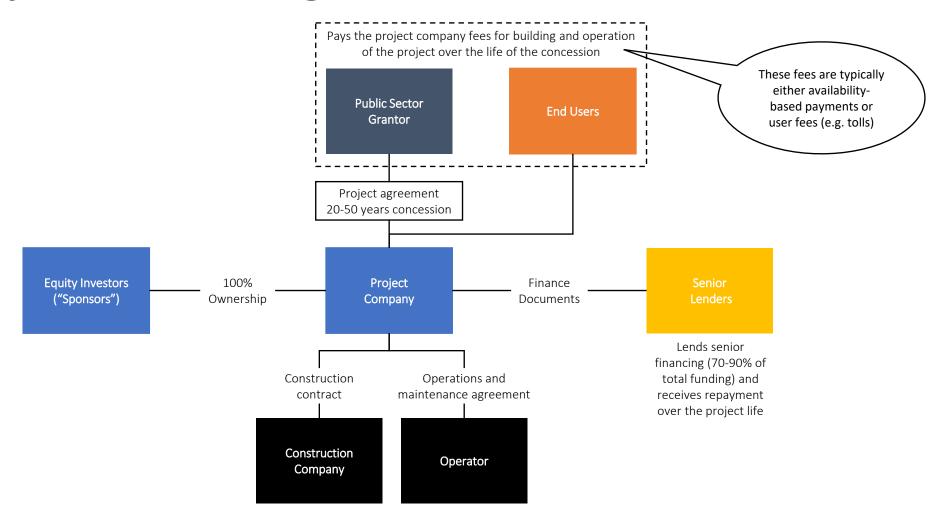
- Oldest form of private financing for capital intensive projects
- First used in the 1880s to finance the development of Baku oil fields
- Government receives a royalty from the extraction which can be used to finance further infrastructure
- Reliance on market demand and effective relationship with private partner

Project financing

- Began in the late 1970s financing Independent Power Plant
- Sets out a clear contractual relationship between public, private and financial stakeholders
- Offers Governments an avenue to build new infrastructure, limiting impact on public balance sheet
- Become the standard for private investment in infrastructure



Project financing





Financial models

When to use each method? Where do they work best?

Government financing

- Large capital projects with a societal benefit and/or inherent risks;
 - Entire metro networks
 - Complex urban highways
- Large capital projects with long-life benefits;
 - Initial airport runway construction
 - Port infrastructure (e.g. key walls, dredging)

Resource-based financing

- Traditional natural resource and extractive projects
- Infrastructure associated with these projects;
 - Rail links
 - Access roads / highways
 - Ports
- These needs to carefully studied and payments should be linked to underlying natural resource project

Project financing

- Clearly defined and stand alone projects;
 - Transportation (e.g. motorways, rolling stock, single metro links, airports, ports)
 - Social infrastructure (e.g. hospitals, schools and other public administration facilities)
- Limited amount of interface risk, environmental risk and community disruption



Pop Quiz: What are the basic financing models that are available for infrastructure?



Market risk

- Market risks can cover many broad and specific categories that can negatively impact an infrastructure project over the projects durations
- A few market risks are:
 - *Inflation;*
 - Given the long-term nature of infrastructure projects they will be exposed to inflation effects from an operational perspective
 - This risk is more often than not passed to the public sector to manage; i.e. the payment mechanism would adjust appropriately for changes in the benchmark(s) inflation rates
 - Deposit rates;
 - Infrastructure projects normally have large cash accounts (e.g. debt service reserve account, lifecycle reserve account) that earn interest for the benefit of the project
 - This risk is normally remains with the project company as any benefit is directly for the benefit of the Sponsors.
 - Demand;
 - Many commercial projects are exposed to the overall usage of the asset through payment of tolls, landing changes, port fees
 - This can be borne by the project company; however, there are many occasions where the public and private sectors share this risk.
 - Competition;
 - Most infrastructure project, especially demand-based, are structural / allowed / regulated monopolies with limited to no competition
 - This risk is managed by the public sector who grant the private partner a limited monopoly under specific conditions
 - Foreign exchange discussed later



User Fees

- User fees and revenue potential are critical elements in determining feasibility and ability to fund the project/investment. Important elements in determining financing viability are:
 - Reliance on historical data
 - Potential growth in fees
 - Ability to control and/or adjust user fees
 - Determining who takes the risk of user fees and any revenue sharing

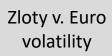


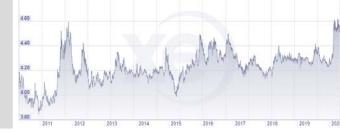
Foreign exchange

- Foreign exchange plays a critical role in infrastructure projects when;
 - A long construction timeline with major capital items procured in the international market
 - Operational costs cannot be priced in the national currency
 - Capital and bank markets are not "deep" enough to provide the necessary financing (both duration and amount) in the national currency
- There are ways to mitigate foreign exchange exposure;
 - Construction forward hedging agreement or incentivize contractor to "purchase early" (this risk can normally be transferred to the private partner)
 - Operations incentivize the operator to develop the national supply chain / skills (this risk can normally be transferred to the private partner)
 - Financing many markets are unable to finance large infrastructure projects in the national currency which leaves the largest portion of revenue exposed to market changes (this risk can be "owned" by the public sector with the possibility of limited risk sharing with the private partner)

Managing foreign exchange risk – a Polish example

- Poland joined the EU in 2004 and embarked on an ambitious infrastructure program
- One critical risk the Government had to address was foreign exchange risk against a benchmark currency
- The Government focused on structuring a mechanism that ensured an equitable split
- The mechanism adjusted for changes in exchange rate to ensure debt service and minimum equity returned was maintained; however, other costs (and income) were not adjusted meaning the Project retained the exchange rate exposure







Change in Law

The extent to which the project could be delayed, significantly changed, or canceled due to a change in law during the project term is an exposure and risk that needs to be managed and carefully articulated in the project agreements. Triggers for a Change in Law could include:

- Regulatory interpretations/requirements
- Tax implications
- New laws/additional regulations



Force Majeure

A concession agreement should excuse non-performance (with the exception of payment obligations) as a result of events reasonably beyond the control of the Project Company. Allocation of risk under Force Majeure depends on certain factors (e.g., availability of insurance, the degree of political risk in the host country)

- 1. Force Majeure is *not* a Term of Art at Common Law
 - Force Majeure Events and their consequences should be carefully defined
 - Exhaustive clauses
 - attempt to define every event that could constitute a Force Majeure Event
 - are enforceable under English law, New York law
 - if event is not covered, look to doctrine of frustration (English law), doctrine of impossibility or impracticability (New York law)
 - Non-exhaustive clauses include language such as "or other events outside the reasonable control of a party".
 - Under English law non-exhaustive language construed to have its natural meaning no implication that other events are limited to similar events *unless* the language so indicates
 - Under New York law, the opposite is true



Force Majeure (cont'd)

- 2. Common Categories of Force Majeure Events
 - Local Political Force Majeure Events
 - Foreign Political Force Majeure Events
 - Natural Force Majeure Events
- 3. Force Majeure Events are typically defined as events or circumstances (or the effects thereof) that:
 - are outside the reasonable control of a party; and
 - materially and adversely affect the performance by that party of its obligations, but *only to the extent that*:
 - the event or circumstance cannot, despite the exercise of diligence, be prevented, avoided or overcome by the affected party;
 - the affected party has taken reasonable precautions, due care, and measures (i) to avoid or overcome the effect of the event or circumstance, and (ii) to mitigate the impact of the event or circumstance; and
 - the event or circumstance is not the result of (i) negligence by the affected party, (ii) a breach or failure by the affected party to perform under the agreement or another project document, or (ii) a failure by the affected party to comply with applicable law.



Dispute Resolution

An effective and efficient dispute resolution process is an important element in project financing and overall financial viability to the private partner.

- Dispute Resolution Panels how is the outcome treated
- Mediation vs. Arbitration when in the dispute process can this happen
- Time periods for claims/disputes do all claims need to be resolved before Final Completion and final payment
- Can certain claims over specific amounts be expedited otherwise the contractor is often financing large amounts of project change orders
- Are there any gaps in DR process need a seamless process that doesn't have the potential to break down and stop the DR process



Termination and Termination Payments

- Most public contracts provide for a termination for convenience, with specific provisions on notification and payment terms. Investors will look for payment terms that discourage public owners from exercising a TFC; providing payment terms back to developer that would be difficult for a public owner to take on.
- Lenders and equity investors look for default and termination event provisions that allow them to step in and cure default prior to termination. Cure periods need to be commercially reasonable and ability to post additional performance security is an additional layer of security to investors/lenders.

Assignment & Direct Agreements

Lenders universally require counterparties to the project agreements to enter into a Direct Agreement with a security agent/intercreditor agent. These agreements complicate termination scenarios.

Principal obligations under a Direct Agreement:

- 1. Counterparty acknowledges and consents to security over project agreement
- 2. Counterparty agrees to pay all amounts payable under project agreement into a "proceeds account"
- 3. Lenders have the right during a Standstill Period to appoint an Additional Obligor (under a Step-In Notice) that is jointly and severally liable for Project Company Defaults
- 4. Counterparty may not exercise its right to terminate until:
 - the Step-In Decision Period under the Direct Agreement has expired without action by Security Agent; or
 - (x) Additional Obligor has stepped out and a substitute has not been appointed, or (y) an event of default remains uncured or a new event of default has occurred



Credit Support

- Depending on the size of the project, creditworthiness of the contracting authority, credit support may be required for the project to be bankable.
 - A contracting authority without investment grade credit will require credit support for the project to achieve reasonable debt terms
 - This is not an emerging markets issue.
 - OECD countries reduce interest rates (which increases value for money) by offering some form of sovereign credit support
- Investment grade credit support may take the form of:
 - 1. Sovereign Guarantee;
 - 2. Letters of Comfort;
 - 3. Put/Call Option Agreement;
 - 4. Liquidity Letters of Credit; and
 - 5. Liquidity Escrow Accounts.
- Third Party credit support may take the form of:
 - 1. DFI Guarantees;
 - DFI Guaranteed LC Structures;
 - Political Risk Insurance.



Interface Risks

Interface Risks pertain to the risk of multiple parties transitioning into different phases of the Project. This "overlap" has to be managed so that negligence, actions or inactions of these multiple parties do not translate into liability to a non-negligent party.

- Design/Build Contractor phasing out
- Owner's other third party contractors on site
- Projects that remain in operation while being re-built
- O&M Contractor



Upcoming Webinars

PPP or Traditional Procurement: Screening Projects

The PPP process requires a significant amount of time and resources. To ensure that those resources are well spent, it is important to ensure that the appropriate projects are selected to be included in the PPP pipeline. In this webinar, we will learn about the essential first steps in determining whether a PPP is an appropriate structure for a specific project. Experts will discuss the different steps from project identification to approval of the project to be developed as a PPP.

PPP Business Case Development

The PPP process requires a significant amount of time and resources. To ensure that those resources are well spent, it is important to ensure that PPPs have the requisite business case and make financial sense in order to move forward. In this webinar, we will learn about how to structure the business case for a PPP.

PPP Pre-Feasibility and Feasibility Studies

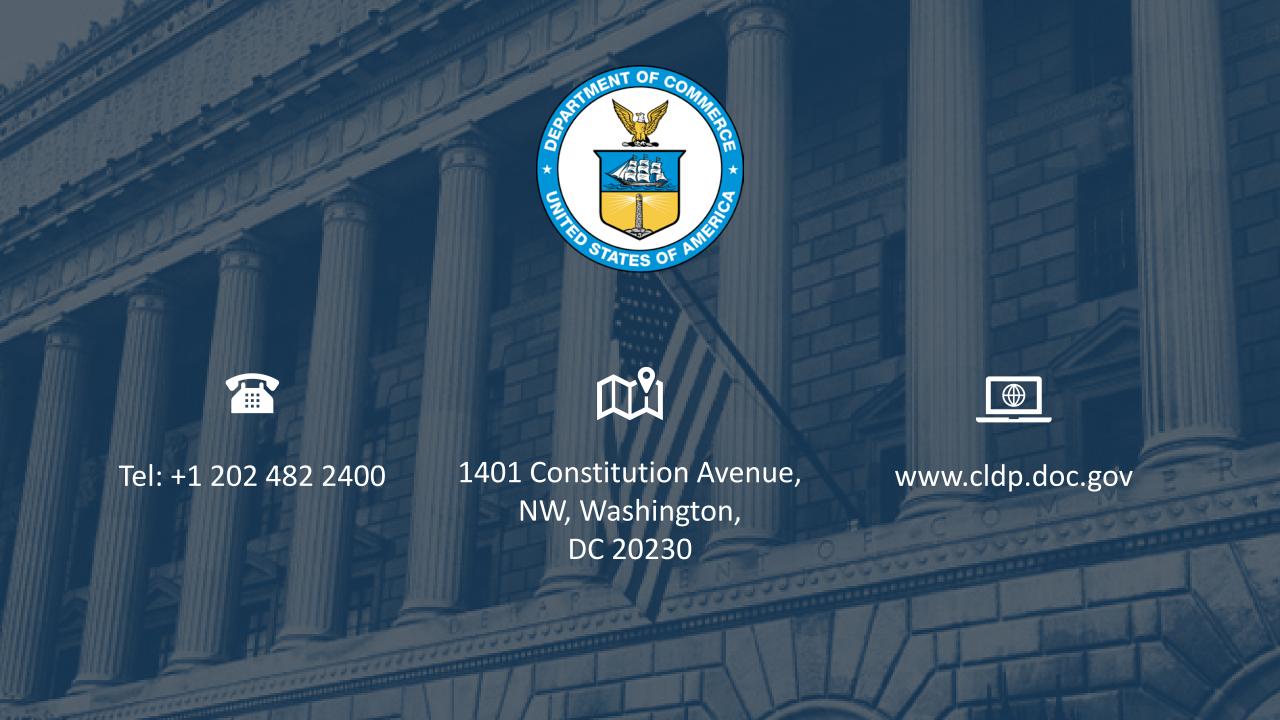
The PPP process requires a significant amount of time and resources. To ensure that those resources are well spent, it is important to ensure that a project is feasible. There are two different steps for feasibility. The first is a pre-feasibility study that feeds into the business case for a PPP. The second is the more complex feasibility study as part of the tender and bid process.

PPP Pre-Qualification and Evaluation

The PPP process requires a significant amount of time and resources. To ensure that those resources are well spent, it is important to have well established pre-qualification and evaluation procedures for the RfP process. Governments often run into difficulties in the pre-qualification and evaluation phase. This webinar will walk participants through how to design the evaluation process to ensure the best bid is selected.

Unsolicited Proposals

Unsolicited proposals when used properly are a way for the private sector to propose innovative solutions to problems. The webinar would provide an overview of how to implement procedures at the agency level, prioritizing or limiting the types of proposals received, confidentiality policies, transparent evaluation procedures, and fair reimbursement of costs for an accepted proposal.







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