Local Government Priorities

1. Demand on resources/budget limits
2. Fiscal Space/debt capacity
3. Efficiency of procurement, governance/performance orientation
4. Admin procedure/decision processes

Lenders

Government

Project
Institutions working together

Public and private working together

Public and public working together

Community
Why PPP?

- Deliver more: Use private capital to increase the amount of infrastructure that can be delivered within the same fiscal space.

- Deliver better: Private companies do some things better, e.g. innovation, service delivery, commercial orientation, operational efficiency – leverage the distinct incentives and capabilities of private partner to create “win-win” arrangements.

- Optimize value: Well designed / managed PPPs can deliver high-quality infrastructure at a better cost to the municipality as compared to traditional, public delivery.
Municipal PPP Framework

- Guidance Note
- 20 Modules
- 100 Project Summaries

www.thegpsc.org
www.worldbank.org/ppplrc

Modules:
1. Municipal Readiness
2. Project Concept Assessment Tool
3. Sample Project Concept Note
4. Feasibility Study
5. Managing Consultants
6. Sample Consultant ToRs
7. Procurement
8. Sample RFQ
9. Sample RfP for Single-Stage Bid Process
10. Sample RfP for Two-Stage Bid Process
11. Sample Municipal PPP Agreement
12. Contract Management
13. Capacity Building
14. Communication Strategy
15. Sector Issues
16. Harnessing Land Value Capture
17. Capturing Commercial Value
18. Community Engagement
19. Private Sector Context
20. Summary Practical Advice for Decision Makers
(Un)Common Interests

Government

Need for Government support
Cost of service
Quality of service
Time to completion

Project

Investor

Construction risks/returns
Equity returns
Control of project
Political/country risks

Financier

Certainty of revenue stream
Cushion in returns
Political/country risks
Protection in extremis
(Un)Common Interests

- **Community**
  - Leverage existing services
  - Mobilize new services
  - Support evolution of community, eg jobs

- **Sectors**
  - Different sector needs/opportunities
  - Leverage between sectors
  - Interfaces

- **Investors**
  - Space where investor can influence success
  - Scope of delivery – get creative
  - Consortia

- **Commercial actors**
  - Leverage existing commercial opportunities
  - Mobilize new commercial opportunities
We are in this together
A divorce is messy and expensive.
The Alphabet Soup of PPP

- **Joint Venture**
  - Lease contract, Affermage
  - Management contract, Franchizing, O&M, Performance contract
  - BOT, BOOT, RLT, ROT, DBFO, DCMF, IPP, BOO
  - Concession, Output contract, Outsourcing
- **Divestiture**
  - Cooperative, Twinning

### Management of Service provider
- **Public**
  - Municipal or Provincial Authority
- **Mixed**
  - Corporatisation
- **Private**
  - Public Water Co.

### Control of Assets
- **Public**
- **Mixed**
- **Private**
## Understanding PPP – Myth vs. Reality

<table>
<thead>
<tr>
<th>Myth</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPP is not “free money”</strong>&lt;br&gt;• <em>Someone</em> will pay – users, other beneficiaries, government</td>
<td><strong>Revenue is the lifeblood of a PPP</strong>&lt;br&gt;• Carefully select the fairest, most sustainable revenue source(s) – tariffs, ToD, public contributions/support</td>
</tr>
<tr>
<td><strong>PPP is not “cheap” or “easy”</strong>&lt;br&gt;• Project preparation – time and cost&lt;br&gt;• Direct and/or contingent liabilities for public partner</td>
<td><strong>PPP can and should be better</strong>&lt;br&gt;• Compared to other options for delivering the project, i.e. “value-for-money”</td>
</tr>
<tr>
<td><strong>PPP is not “privatization”</strong>&lt;br&gt;• Project assets are owned by government or ultimately revert to government ownership</td>
<td><strong>PPP transfers significant, long-term control to the PSP</strong>&lt;br&gt;• Cannot be undertaken lightly&lt;br&gt;• Requires strong engagement/communication with affected communities and stakeholders</td>
</tr>
</tbody>
</table>
Proper risk allocation is at the heart of a good PPP

Transferring risk to the PSP (financing, construction, demand) is a key benefit to the Municipality

But transfer too much risk and it may lead unduly increase the cost of capital and/or lead to project failure

Project structure largely dictates the risk allocation

As the PSP’s control over the project increases, so too does the amount of risk it may be asked to bear (and vice versa)
Country and Political risk
Who takes which risk?

**Project Specific Risks**
“non sovereign risks”

- **Completion Risk** (engineering & construction cost, time, performance, defects)
- **Operational Risk** (technology, quality, cost, technical & operational know-how)
- **Environmental and Social Risk** (future liabilities, project delays, costs overruns)
- **Credit Risk** (project leverage)

**Country (Economy wide) Risks**
“sovereign risks”

- **Political Risk** (expropriation, political violence, Gov’t breach)
- **Regulatory Risks** (pricing formulas, right of way, currency convertibility & transfer)
- **Legal Environment** (rule of law, judicial system, access to justice and arbitration)

---

**Environmental Risk** (past liabilities)

**Pricing Risk** (regulated and non-regulated)

**Financial Risk** Inflation, refinancing risk, interest rate and exchange rate fluctuations
# Sample risk allocation matrix for PPP projects

<table>
<thead>
<tr>
<th>Types of risk</th>
<th>Public sector</th>
<th>Private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Location risk</td>
<td>Typically mostly public</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>Land acquisition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land condition (including pollution and environmental safety)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Design, construction and operational test risk</td>
<td>Typically mostly private</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>3. Sponsor risk</td>
<td>Typically mostly private</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>Includes default of sponsor, contractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Financial risk</td>
<td>Typically mostly private</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>Includes failure to reach financial close, interest rate, exchange rate and inflation fluctuation (non-extreme)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Operational risk</td>
<td>Typically mostly private</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>Includes provision of the facility, wrong estimation of O&amp;M costs, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Market risk</td>
<td>Could be either</td>
<td></td>
</tr>
<tr>
<td>Related to users’ affordability and willingness lower than the feasibility level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Network connectivity risk</td>
<td>Typically mostly public</td>
<td>Typically mostly public</td>
</tr>
<tr>
<td>8. Interface risk</td>
<td>Typically mostly public</td>
<td>Typically mostly public</td>
</tr>
<tr>
<td>9. Political risk</td>
<td>Typically mostly public</td>
<td>Typically mostly private</td>
</tr>
<tr>
<td>Currency inconvertibility and non-transfer, expropriation, changes in legislation including on taxes and permits, GCA default</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasonable changes in legislations</td>
<td>Typically mostly private</td>
<td>Typically shared</td>
</tr>
<tr>
<td>10. Force Majeure risk</td>
<td>Typically mostly private</td>
<td>Typically mostly private</td>
</tr>
</tbody>
</table>

Each project needs a unique structure which meets its specific needs: there’s no ‘set’ risk allocation

Source: Adapted from Infrastructure procurement approaches – Engaging with the private sector by Ernst & Young
Know Your Context

Module 1: Municipal Readiness Assessment - framework for assessing a municipality’s readiness to implement PPP

Module 19: Private Sector Context - in-depth discussion of private sector concerns

Planning/budgeting systems, internal capacity (HR, funding), credit-worthiness, legal & institutional framework, outside assistance

Distinct concerns of importance to private investors – what makes a good investment?
## Project Appraisal: Viability Factors

<table>
<thead>
<tr>
<th>Description</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signify the project’s ability to generate sufficient cash inflows to meet all its cash outflows, and provide for future growth</td>
<td>Usually assessed via (i) net present value analysis, (ii) internal Rate of return analysis, (iii) payback period calculation, and (iv) debt service cover ratio calculation, (v) Sensitivity analysis</td>
</tr>
<tr>
<td>Signify public “profitability” and the developmental effect of the project on the society/economy as a whole</td>
<td>Usually assessed using (i) economic rate of return analysis, (ii) laws and regulations analysis, and (iii) current demand and demand growth analysis</td>
</tr>
<tr>
<td>Signify the project’s basic design, availability of raw materials, basis of the cost estimation, construction schedule, implementation plan, performance and output specification</td>
<td>Usually assessed by technical experts/advisors relating to specific technical parts of the project</td>
</tr>
<tr>
<td>Verification that this is the optimum solution</td>
<td>Usually assessed using (i) environmental impact analysis, (ii) social impact analysis for the surrounding community, and (iii) land clearing planning</td>
</tr>
<tr>
<td>Signify the identification of environment and social characteristic and the project’s impact towards them</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Infrastructure procurement approaches – Engaging with the private sector by Ernst & Young
Recall that *someone must pay* (users, taxpayers) – so allocate cost in the most equitable, sustainable manner possible.

**Tools**

**Module 16: Harnessing Land Value Capture**

**Module 17: Capturing Commercial Value**
- Information on maximizing revenues from a PPP project

1. Sustainable revenues from direct beneficiaries (e.g. tariffs)
2. Capture a portion of any land value increase (LVC)
3. Maximize potential commercial revenues (e.g. advertising)
4. Consider public support (grants, payments, guarantees)
Think differently about infrastructure

- Don’t focus on the asset, think about the opportunity.
- Consult with all stakeholders, without getting bogged down
- Get the right partners
- Don’t let the financing lead
- Show me all of the money
  - Service revenues
  - Other service revenues
  - Land value capture
  - Commercial value capture
- Other public benefits

“"I think you should be more explicit here in step two."
Intercity Bus Terminal - Amritsar, India

Demolishing the existing terminal building and complex and development of a modern state of the art Intercity Bus Terminal.

Under operation by a private operator since 2005 after an initial construction period of 2 years with a concession period of 11 years and 5 months.

Revenue streams

- Collection of “adda fees” i.e. charges payable by buses for use of terminal facilities,
- Revenue from commercial rentals from shops located within Terminal complex
- Other sources of revenue - sale of advertising rights, parking fees.

Forecast 2000 to 3000 buses / day, actual average of 1,100 normal buses and 600 mini buses a day, about 80-100 buses are parked overnight. Some buses started operating from outside the bus terminal to avoid paying adda fee.
A BUS TERMINAL

✓ Bus operations
✓ Maintenance, petrol, bus parking
✓ Hotel, restaurants, cafes
✓ Commercial facilities – warehouses, chillers
✓ Transit hub – modes, logistics, efficiency
✓ Advertising, residential, office space, parking, entertainment, solar generation
✓ Public services – post office, tax office
✓ Green space, public facilities
Mandaluyong (Philippines) Public Market

The previous Mandaluyong (Philippines) Public Market was razed by fire. The lot remained idle, creating congestion, waste and flooding problems. Public Market would cost Php 100 million, ie annual outlay of more than Php 10 million. The City Government ruled out huge loans.

The developer provided a public market at the ground floor under the control and supervision of the City Government. The City Government in turn leases the building except the Public Market to the developer, including parking, theatres, restaurants, bowling, etc.

The project provides for a Public Market controlled and supervised by the City Government and **additional income of 20 Million (instead of debt service of more than 10 million/annum)**

Employment through new commercial district

Traffic, flooding, pollution and garbage problems solved.
James F. Oyster Bilingual Elementary School, Washington DC

In 1993, the school was in danger of closure due to an inadequate building and lack of public capital. Led by concerned parents, a PPP was formed between DC Public Schools and a national real estate development firm. They divided the school property in half to make room for a new school and a new residential development.

The District of Columbia issued a thirty-five-year, USD 11 million tax-exempt bond for the construction costs, to be repaid entirely with the revenue generated by the private apartment building. The private partner agreed to pay USD 804,000 a year for thirty-five years to repay the bond. The school facilities included a computer lab, library, gym and classrooms designed to accommodate the school’s bilingual programme and office space.
Redevelopment of Library and Fire Station in Washington, D.C., United States

Washington, D.C. needed to refurbish the West End Library and West End Fire Station, and develop additional, centrally located low cost housing. The library and fire station were almost functionally obsolete; their renovations would be extremely costly. D.C. was able to acquire new, modern facilities while also providing affordable housing by leveraging the air rights above the library and fire station. The high-end family sized condominiums provided additional tax revenue.

D.C. awarded, through a competitive bid process, a concession to EastBanc WDC Partners. The proposal included US$149 million of investment in a new fire station and library, approximately 150 condominiums, 52 low-cost rental units, and retail space. Financial assistance was provided by D.C. to build affordable units.

Source: www.dmped.dc.gov; www.dcclims1.dccouncil.us
Image sources: https://alankarchmer.com/ten-arquitectos
Availability payments work well for projects where the user revenue stream is uncertain, or the government has a comparative advantage relative to the private sector in ensuring demand materializes.

- Project remains financially viable for investor regardless of the actual amount of services delivered. The fees from users goes to the government, government compensates shortfall, receives upside.

- As the revenue obtained from user fees is unpredictable, there arises an unbudgeted portion of the subsidy which represents fiscal risk for the government.
Punjab Grain Silo Project, India

- The project consists of **4 fully equipped silos of 12500 MT** each for a total capacity of 50000 MT, to store grain for the government food subsidy operations.
- The private party is also responsible for procuring land for the project.
- 30 year concession period. **Total cost of $7 million**

The Authority is responsible for making payments based on **fixed and variable charges**. It is also responsible for setting standards and specifications, monitoring and verification of performance, and contract management.

**Savings to government of $6 million due to reduction in wastage and retention of grain quality.**

The project needs to be of a size sufficient to ensure coverage of all costs and reasonable returns to the investor over a reasonable period of time without unreasonably increasing the tariff level.

**Standard contract document for silos needed.**

Financing is difficult to come by even with availability payments.
Bhubaneswar Street-lighting Project, India

Private party finances and installs retrofits, operate and maintain the city’s street-lighting system for 10 years for 20,000 street lights. **Total cost $4.8 million.** IFC supported.

Public authority sets standards and specifications, monitors and verifies performance.

Payments made based on the savings realized - 90% of energy savings realized plus an Operation and Maintenance fee for each light pole.

**Annual savings to government of $100,000** by way of decreased energy consumption, operation and maintenance costs and emissions savings.

The project needs to be large enough to be viable and to realize sufficient savings in energy.

Capacity issues at local level: government, equity investors, service providers and financiers, standardizing documents, process.
Gandhinagar Rooftop Solar Project, India

Finance and install solar photovoltaic panels on the rooftops of public buildings and connect to grid. **Total cost of $ 9 million** for a population served: 12000

Public Authority provides access to rooftops of public buildings; facilitates Power Purchase Agreement (PPA); monitors performance standards

The local power distributor buys the power according to the PPA and tariff set through bid.

Emissions savings of 6000 tonnes

Multiple agreements needed: rental agreements with residential owners and with public entities;

No standardized documents – for example appropriate rental agreements for renting rooftop space had to be developed from scratch for this project.
How to Make PPP Work
Choose project carefully

The public investment framework needs to leverage private financing systematically

Usual approach: Project identification asks first which projects should be publicly funded, then which should be funded with public and private and lastly whether to use fully private – the inverse of best practice

Projects are submitted for public funding based on little preparatory work and inconsistent screening

Decisions on private financing options are made too early, before much is known about the project

Need to Flip the Pyramid
Process is **fluid**
- Expect / allow projects to move back and forth between stages
- Continually ask: **Is this project a good deal for the municipality?**

- Be flexible, responsive and patient as new information comes in
  - Good PPPs do not happen overnight
  - There is no “one size fits all” solution

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**Overview of the PPP Project Cycle**

- **Selection**
- **Development**
- **Procurement & Award**
- **Implement**

**Tool**

**Module 7: Procurement**
- Process to deliver a PPP project

**Module 20: Lessons Learned**
- Key success factors for delivering PPP
Project Selection – Screening

- Uniform evaluation and screening of all projects, using common and objective criteria

Core Project Screening Criteria
- Strength of rationale (need, cost benefits)
- Institutional and project readiness
- PPP Suitability

Remark
This may require changing, even reversing, established / customary approaches to infra investment planning and budgeting

Tool
Module 2: Project Concept Assessment Tool
Module 3: Sample Project Concept Note

Caution
Beware the temptation of new build
Small projects can be viable – but small size does not necessarily mean small liability
The amount / quality of data is likely to be limited at this phase, final decisions should not be made with preliminary data, with a view to repeating / revising project assessment as new data is accessible.

Remark

Of the potential projects, prioritize in view of:
- Development priorities
- Capacity to deliver (staffing and funding),
- Market appetite and trajectory – is not infinite

The decision to pursue a potential PPP should include a decision to provide funding for project preparation

- Municipal resources
- Regional / national extra-budgetary support (PPP units, project development funds)
- National / bilateral / multilateral development banks and donors
How to be the perfect partner
The better and more complete the feasibility study, the more sustainable the project will be – don’t cut corners

- Comprehensive assessment of all aspects of the project
- Options analysis to determine best delivery model / risk allocation
- Potential revisions to project scope/design

**Remark**

Even large, well-staffed municipalities will usually require help from an external adviser or firm to complete the feasibility study

**Tools**

- Module 4: Feasibility Study
- Module 5: Managing Consultants
- Module 6: Sample Consultant ToR
Speak to potential investors (market consultations) to understand:

- Project structures that meet market requirements
- Market appetite for the project

Proactive engagement with affected communities (direct and indirect) on key issues:

- E.g. affordability, resettlement, employment, service delivery standards
- Address any aspects unique to potentially underrepresented groups (poor, women, minorities, disabled, elderly)

Tools

Module 14: Communication Strategy
Module 18: Community Engagement
Choose partner carefully

Decide which projects are to be PPP, and stick with it
Don’t compromise, make them compete – no side deals!
Keep it simple, not too many institutions or approvals

How to find the perfect partner
Procurement and Award – Overview

Rate qualifications, technical / financial proposals, etc., using criteria that embody municipality’s aims for the project.

One-stage or two-stage, depending on project requirements:

1. Prep bidding documents
2. Open tender
3. Evaluate bids
4. Award
5. Negotiate final PPP Agreement
6. PPP Agreement signing
7. Commercial close
8. Financial close
9. Loan agreement signing
Module 6: Sample Consultant Terms of Reference

Module 7: Procurement
  • Detailed discussion of issues related to procuring a qualified PSP

Module 8: Sample Request for Qualifications (RfQ)

Module 9: Sample Request for Proposal (Single-Stage)

Module 10: Sample Request for Proposal (Two-stage)

Module 11: Sample Municipal PPP Agreement

Remark
As with the FS, municipalities will usually need help from external advisers to complete procurement.
### Project Implementation — Overview

#### Municipal roles in implementation

#### Remark

A good relationship between the public and private partners is key to the long-term success of a PPP. Generally, PPP is flexible and can adapt to crises, changes in circumstances and other unexpected events, provided both partners are willing to proactively work together to manage disputes, avoid defaults, and deliver public services.

<table>
<thead>
<tr>
<th>1. Pre-construction</th>
<th>• Land acquisition, design review, permitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Construction</td>
<td>• Supervise/verify progress, testing, commissioning, payments due</td>
</tr>
<tr>
<td>3. Operation</td>
<td>• Performance monitoring/reporting, contract events, payments due, renegotiations, refinancing, disputes</td>
</tr>
<tr>
<td>4. Handback</td>
<td>• Test asset condition, maintenance and refurbishment plan, handover of the project assets to the municipality</td>
</tr>
</tbody>
</table>
The municipality must decide how services will go on after termination of the PPP, to ensure uninterrupted service delivery.
Invest in success

Do not “try” PPP; do it

- Invest **time and money** in preparing PPP - best transaction advisers
- Monitor progress
- Create, staff and fund a PPP Node/team
Obtain the Capacity Needed to Succeed

Identify any weak points and make a plan for overcoming them

Tool

Module 13: Capacity Building – guide to implementing a municipal PPP capacity building program

Look for help - fiscal (project development funding) and technical (advisory services)

• National / regional PPP units and other gov’t entities w/ PPP experience
• Global / regional multilateral and bilateral development partners
How to be the perfect partner
If you want to go fast, go alone.

If you want to go far, go together.

-African Proverb
Municipal PPP Framework

- Guidance Note
- 20 Modules
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20 Summary Practical Advice for Decision Makers


• Delmon, Jeffrey, Private Sector Investment in Infrastructure: Project Finance, PPP Projects and PPP Programs (3ed., Kluwer International, 2016)

• Delmon, Jeffrey, Public Private Partnership Programs: Creating a framework for private sector investment in infrastructure (Kluwer International 2014).
Big projects
Program of projects
Financing
Implementation
Selection
Preparation funding
Legal/regulatory/guidelines
Institutions/ people
Creating an enabling environment through sound PPP policy framework

From Toolkit on PPP in Highways
Why Project Finance

1. Limited recourse - No direct liability to Government or Lenders
2. Debt on-balance sheet for SPV but off balance sheet for Government and Shareholders
3. Stable revenue stream securitized
4. Lower WACC given high leverage on the back of securitized revenues
Construction represents risk intensive phase of project

1. Drawdown of all debt and equity

2. Assets under construction - EPC

3. Payments out, little or no revenues

4. Rolled up interest during construction (IDCs)/Grace period

Milestone Payments

Construction Contractor
Operation Phase

1. Project now generates revenue if properly built

2. Repayment of debt including IDCs – if revenues sufficient

3. Equity earns return ... eventually

4. Potential for refinancing and IPO

Operating Costs

Return on Equity

Revenue Stream

Purchaser/Market

Operator/Supplier

Shareholders

Lenders

Debt-Servicing

Operation represents shift in project risk burden; cost of debt
Cash Flow Waterfall

- Gross Revenues
- Proceeds Account
- Debt Service
- Permitted Payments
- Debt Service Reserve Account
- Maintenance Reserve Account
- Tax Reserve Account
- Other Reserve Accounts
- Distribution Account
- Dividends
- Repayment of Shareholder Loans
Recipe for success

**Monitoring and implementation** – partnership maintenance

**Government buy-in**, change in perspective capacity building

**Clear PPP processes** – legal, regulatory, institutional framework

**Spend money and time on preparation** – use top, experienced transaction advisers

**Select projects** based on viability and value for money

**Open, transparent competitive bidding** – avoid distractions from direct negotiations and unsolicited bids
Leverage

Debt v. Equity – debt is cheaper, but has no up-side (only down-side) making it risk sensitive.

Debt/Equity – how much cushion do lenders need? Based on project, sector and country risks. 90:10 to 50:50

Allows limited investor capacity to finance a large project

Weighted Average Cost of Capital (WACC)

project IRR is combination of Equity IRR and cost of debt:

IRR of 10% is low for investors, but if D:E of 75:25 and debt at 7%, then equity return is 19%, a significant leverage effect.
DSCR

Cash flow available for debt service

Time post completion

Revenues available for distribution or other use (Cushion)

Revenues available for debt service

DSCR = Revenues available for debt service / principal + interest