IFC: PPP Transaction Advisory Services

Specialize in advising public sector on the introduction of private sector participation in the delivery of infrastructure services

- Contract Design
- Tender Process
- Project Financing
- Feasibility Structuring
- Investor Marketing
- Transaction Closing

- Service obligations/standards
- Sustainable risk allocation
- Monitoring mechanisms
- Dispute resolution
- Investor fair treatment
- Global marketing
- Transparent tender & evaluation criteria
- Service affordability
- Balanced payment
- Sustainable structure
- Potential IFC financing
IFC PPP Advisory

• Advisor to government clients to prepare infrastructure projects for implementation as PPP’s
• IFC takes full accountability for due diligence, preparation of structuring options and assists clients in carrying out competitive tender process/negotiated deal
• IFC also manages contracting in of external consultants such as technical, legal and E&S to support due diligence and tendering phases of project
• Fee-based services

• PPPs in all Infrastructure Sectors:
  • transport, energy, health and education, water and sanitation, and telecommunications sectors
• Our Staff are Transaction Specialists
  • Experienced in key elements of PPP transactions and sector expertise
• We undertake pioneering transactions
  • First, difficult, political, reform-based, innovative
Cities Face Vast & Growing Infrastructure Needs
Harnessing the Private Sector

**PPP**s present Cities with a tool to **harness private sector capital, expertise and innovation** to deliver key public services

Source: McKinsey
What is a PPP?
What is a PPP?

Preparation

Process

Partnership
PPP Benefits

✓ Single procurement processes

✓ Stronger incentive framework to minimize construction delays

✓ Single accountability point for the treatment performance

✓ Investor responsible for cost overruns, delays and operating performance

✓ Investor responsible for ensuring that operating costs and maintenance are funded
PPPs: How are they different to traditional procurement?

**Traditional delivery.** Public entity procures an asset.

**Alternative delivery.** Public entity procures a service.
Developing a PPP Pipeline

1. Establish project need and viability

2. What’s in it for the private sector?

3. Optimal allocation of project risks

4. Will it deliver Value for Money and best use of resources?
Key Constraints to PPPs

- Political Commitment
- Government Capacity
- Realistic Timeline & Expectations
- Legal & Regulatory Framework
- Lack of Sensible Risk Allocation
- Lack of Market Input & Consultation
PPP Prerequisites

Project Selection is Key: Projects must be **Bankable, Demonstrable, Simple**

- Technical Analysis – *Is it possible?*
- Financial & Economic Analysis – *How much will it cost & does it make sense?*
- Social & Environmental Analysis – *What are likely impacts (positive & negative) on people and environment?*
- Legal Analysis – *What is the legal basis for implementation & operation?*
PPP Considerations

- Identify Suitable Projects
- Stable Public Policy
- Output Based Standards
- Transparent Process
- Contract Management
- Loss of Control
- Conducive Legal & Institutional Environment
- Market Investment Opportunities
- Higher Transaction & Capital Costs
- Complex & Longer Preparation
Urban Rail PPP’s

Key Features & Main Approaches
LRT & Metro PPP’s: Introduction

- Cities around the world increasingly using rail transit – LRT & Metros – to solve urban transportation problems

- PPP model to leverage both public and private resources and expertise

- While roles and responsibilities of private and public sector partners may vary, government’s overall governance role and responsibilities do not change

- PPPs can serve as a model for delivering public services and infrastructure, are not a substitute for effective governance

- Government remains responsible for delivering services and projects in a manner that serves the public interest, regardless of the chosen method of procurement.
Numerous Models for LRT PPP’s

PPP models for urban rail and metros can range from full system concessions where private sector takes design, construction and operation risk to just outsourcing of O&M.
4 Main Approaches for LRT PPP’s

• #1 – private sector is responsible for all aspects of the project (civil works, electro-mechanical (E&M), rolling stock and O&M)

• #2 – private sector is responsible for E&M, rolling stock and O&M, where government finances and builds the civil works through traditional public procurement process

• #3 – private sector is responsible for O&M and rolling stock, where government finances and builds the civil works and E&M

• #4 – private sector is only responsible for O&M, where government finances and builds the civil works, E&M and rolling stock
4 Main Approaches for LRT PPP’s

• Pros & cons to each approach as well as hybrids

• External factors such as delivery capacity & risk appetite of government, availability of funding, and market appetite of private sector will dictate which approach makes sense in a given context

• Under all of the above PPP approaches, government is usually responsible for procurement and delivery of right of way (ROW)

• Government will also usually be responsible for any material adverse government actions (MAGA) that impact the project, and any other risk that cannot be quantified or mitigated

• PPP agreement (normally a Concession Agreement) will set out agreed risk allocation
Duration of LRT PPPs

- **Approach 1** - LRT & metro concessions contracts with 20-30 year duration

- In PPPs where private sector is only responsible for providing rolling stock and/or E&M (Approaches 2 & 3), market practice is also to provide a somewhat longer contract term (typically 10-15 years)

- For O&M PPP (Approach 4 above), duration not tied to debt repayment terms or return on investment. **Duration should allow sufficient time to develop O&M company, testing and commissioning** (approximately 12-24 months), & time for **full operations** (minimum of 5-7 years)
• Farebox is a function of **number of people projected to use the system on a daily basis**, and the **fare that they are required to pay**

• **Fare structure and strategy** for a LRT or metro system is normally the **responsibility of government**

• Requires the input of **experts experienced in the field of designing fare structures and strategy**

• **A willingness to pay survey** is often the first step in establishing the basis for a LRT and metro fare strategy, followed by **detailed demand** and **farebox revenue models**
• Fare charged to users is not reflective of the full cost (i.e. amortization of CAPEX plus O&M costs) of providing LRT or metro service.

• A fare level aimed to recoup full cost of service would likely be too high for most users to afford

• LRT and metro systems can usually only aim for a farebox that covers ongoing O&M costs of the system and hopefully some level of future renewals to the system

• It is also best practice for the fare to be automatically adjusted for inflation
Commercial Revenues

- Supplementary revenue streams from related commercial businesses within the system and from commercial real estate development on station or depot lands.

- Commercial revenues can reach 20-25% in a successful case particularly where there is transit oriented development potential.

- MTR system in Hong Kong derives a significant portion of its revenues (more than 35% in 2014) from related commercial and real estate activities.

- Most mass transit lines see commercial revenues in the 5% to 10% range (i.e. the vast majority of revenues still originate from the farebox).
Need for Government Support

- For **greenfield LRT and metro systems**, due to difficulty in predicting human behavior and optimism bias, the **level of actual ridership and its growth rate** (and corresponding farebox) has been lower (and in some cases much lower) than projected.

- Farebox and commercial revenues are normally **not sufficient to cover the full cost of the system**.

- As a result, most LRT and metro PPPs are implemented with a **high degree of government funding** (construction milestone payments, viability funding gap payments (VGF), annual or periodic availability payments, shadow fare mechanisms and/or combinations).
Need for Government Support

- Large government funding requirement does not mean that private sector financing cannot be utilized.

- Credible government funding mechanism to supplement farebox and commercial revenues can allow the entire (or a large portion of) capital costs of the project to be financed by the private sector through a combination of equity and debt financing.
Approach #1

• Delivery and integration risk for the entire system plus O&M risk is transferred to the private sector.

• Full responsibility for ensuring the system is fit-for-purpose and meets operational requirements specified in the concession agreement.

• PPP agreement will define minimum performance standards and specifications for the system, and leave it to the concessionaire to design and deliver a system on time and within budget that meets the pre-agreed specifications.
Approach #1

- **Primary government responsibility** under Approach 1 is timely delivery of ROW.

- **Failure of the government** to deliver ROW on time will result in time extensions for the concessionaire and may result in compensation.

- **Pros of Approach 1** - fully leveraging private sectors ability to deliver complex infrastructure projects on time and transferring risk of any construction and/or procurement cost overruns to private sector.
Approach #1

- Government also benefits from private sector expertise and incentives for O&M, and because private sector has designed and built system, government does not need to provide any operations related warranties.

- Design will usually look to minimize lifecycle costs to ensure efficient O&M of the system and minimize renewals over the long term.

- Primary drawback of Approach 1 is that transfer of most risks to private sector comes with a cost in the form of a higher required equity return.
Approach #1

• In addition to farebox, **government can provide funding for the CAPEX through VGF**, payments linked to **construction milestones**, an annual **availability payment**, or a combination of these

• If the farebox is given to the concessionaire, then the government will also need to define a **fare adjustment regime** in the concession agreement

• **Annual increase linked to inflation**, or a **shadow fare mechanism** where government pays difference between actual fare and fare needed to make project financially viable

• **Farebox is retained by government**, then all payments to concessionaire (except for commercial revenues) will need to **come from government**
Approach #2

• Similar to Approach 1 except government will be responsible for delivery of civil works components of the project (usually elevated viaduct, tunnels (if underground), stations and depot) through traditional public procurement.

• Since design and construction of civil works represents a large component of total project cost, delivery of this component by government reduces the amount of funding government will need to provide concessionaire (i.e. it can substitute for a VGF).

• Primary benefit to government of this approach is to leverage government’s lower cost of capital (or a bilateral source of funding) to deliver a large part of LRT or metro project without additional cost of private sector’s required returns.
Approach #2

• **Main drawback** for government of this approach is that it assumes **risk** of any delays and cost overruns for delivery of all civil works for project

• **Provide warranties to the concessionaire** for design and performance of the civil works component of project

• **Such warranties** can usually be “**back to back**” with warranties provided by government’s **EPC contractor**

• **Requisite expertise to manage delivery of a large and complex infrastructure project**, and there will need to be frequent coordination meetings with concessionaire to ensure compatibility of civil works with E&M, rolling stock and O&M
Approach #3

• Same as Approach 2 except government is taking on even further responsibility by delivering the E&M as well as all civil works

• Further reduce amount of project cost that needs to be financed by concessionaire

• Increasing government’s delivery risk (delays and costs overruns) and warranties to be provided to concessionaire
Approach #4

• Full responsibility and cost for delivering all components of project rests with government, and concessionaire is only responsible for O&M

• Rely entirely on government (or bilateral) funding and eliminate need for any private financing

• Government fully responsible for all delivery risk (delays and costs overruns), and government must provide a full set of warranties to concessionaire
Approach #4

• O&M PPP’s farebox risk is fully retained by government and O&M concessionaire is paid for delivery of pre-agreed service schedule

• Commonly used remuneration approaches for O&M PPPs are: (i) Production Fee per Train/km; (ii) Fixed Availability Payment; and (iii) Cost plus

• Incentivized to operate the LRT or metro in the most efficient manner, and provides government with flexibility to adjust service delivery levels to meet changes to passenger demands

• Important for a greenfield system in a city with no prior rail mass transit system where there is historical data on ridership growth
BRT PPP’S

Key Features & Main Approaches
Bus Rapid Transit (BRT)

- Bus Rapid Transit (BRT) is a bus based mass transit system
- It strives to replicate the performance and passenger experience of rail based mass transit systems
  - Comfortable, predictable and cost effective mobility
- Key technical features:
  - Exclusive right of way bus lanes
  - Enclosed stations
  - Quick boarding and alighting
  - Real time passenger information
  - Pre-board fare collection
Typical BRT PPP Structure
• Public entity is responsible for planning and control aspects and for providing infrastructure (busways and stations)
• Operations and fare collection are provided by private companies through concession contracts

However, contractual arrangements with private operators vary
• In Curitiba and some other Latin American BRT systems, a monopoly of the former bus operators was allowed to take control of the new business
• In Bogota, the new services were competitively tendered to four separate operating companies
• As a policy decision, contracts with private operators were structured to **insulate operators from the demand risk**

• BRT operators are paid per km in Curitiba and Bogota which means they are **paid a certain amount regardless of demand**

• Private control over operations **shields the system somewhat from the political process**

• **Bogota**

  • Profits from the BRT system cannot be diverted directly to other public funds.

  • City government gets only about 4% of the farebox revenue

  • Allowed to reduce passenger fare but operators then have to be compensated

  • Private operators are consequently protected against arbitrary tariff changes by government
Other BRT Considerations

• **Involvement of former operators** in planning process and offering them opportunity to be a part of new system

• **Finances for infrastructure development.** Latin American cases, financial resources came from fuel tax, local city revenues, credit from global and regional lending institutions such the World Bank, Inter-American Development Bank and CAF, and grants by the federal governments

• **To encourage modal shift from private cars to BRT**, Bogota’s local administration launched a structural change in public transport conditions with a view to reduce use of motorized transport
  - Measures included constructing pedestrian walkways and bikeways, imposing vehicle restrictions in peak periods, raising parking prices, and imposing day-long automobile bans.
  - Proper urban planning, compatible with the new BRT systems, is another contributing factor
Conclusion
Conclusion

• Purpose of a PPP for LRT and metro projects is to efficiently leverage the expertise of private sector to deliver a complex project.

• PPPs do not immunize them from all risks on the project - a tool to package a combination of tasks and allocate them to a private sector consortium better placed to manage them.

• For LRT and metro projects, PPPs can be an effective way of transferring the substantial challenge of integrating civil works, engineering equipment & systems, rolling stock, and O&M and preventative and lifecycle maintenance for the project, and aligning these matters towards a singular goal of achieving a reliable and punctual service for an efficient price.\(^1\)

\(^1\) Making light rail work PPP challenges and solutions, Norton Rose Fulbright, May 2015
Conclusion

- **PPP will not create a financially viable project** when project is intrinsically financially unviable.

- When sum of farebox revenue and commercial revenues is not **sufficient** to cover the cost of financing the CAPEX and covering O&M costs plus renewals for the project, **some form of government funding within the payment structure is required**

- As a result of the lack of success of many demand-risk rail sector projects in previous years, **most LRT and metro PPP schemes are now procured on an availability basis**¹

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¹ Making light rail work PPP challenges and solutions, Norton Rose Fulbright, May 2015
THANK YOU

www.ifc.org/ppp

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