

# Making Municipal PPPs Work

Craig Sugden  
Infrastructure PPPs Guarantees



**WORLD BANK GROUP**

# Overview

A taste of muni PPPs from Brazil

More flavors from Mexico

India's experience with muni PPPs

Canada's Infrastructure Bank

Final thoughts

---

# Brazil's Muni PPPs

# Public Schools in Belo Horizonte

Name of the project: Public Schools in Belo Horizonte, Minas Gerais

Duration of the projects: 20 years.

Payment mechanism: monthly availability payments.

PPP delivery model: DBfO

Funding and financing: Public and Private financing



# PPP Hospital do Subúrbio in Salvador de Bahia

Name of the project: PPP Hospital do Subúrbio, Salvador de Bahia

Duration of the projects: 10 years, with a renewal possibility of 10 years.

Payment mechanism: monthly payments, with 70% on quantitative indicators, 30% on 31 performance indicators

PPP delivery model: O&M

Funding and financing: Public and Private financing



# Arena Mineirão and Arena Fonte Nova Stadiums

Name of the projects: Arena Mineirão Stadium, and Arena Fonte Nova Stadium.

Duration of the projects: Arena Mineirão 24 months, Arena Fonte Nova 39 months.

Payment mechanism: monthly availability payments.

PPP delivery model: BOO

Funding and financing: Minas Gerais, 100% private; Bahia, 61% public and 39% private.



---

# Mexico's Muni PPPs

# Integral Sanitation of Wastewater of Saltillo

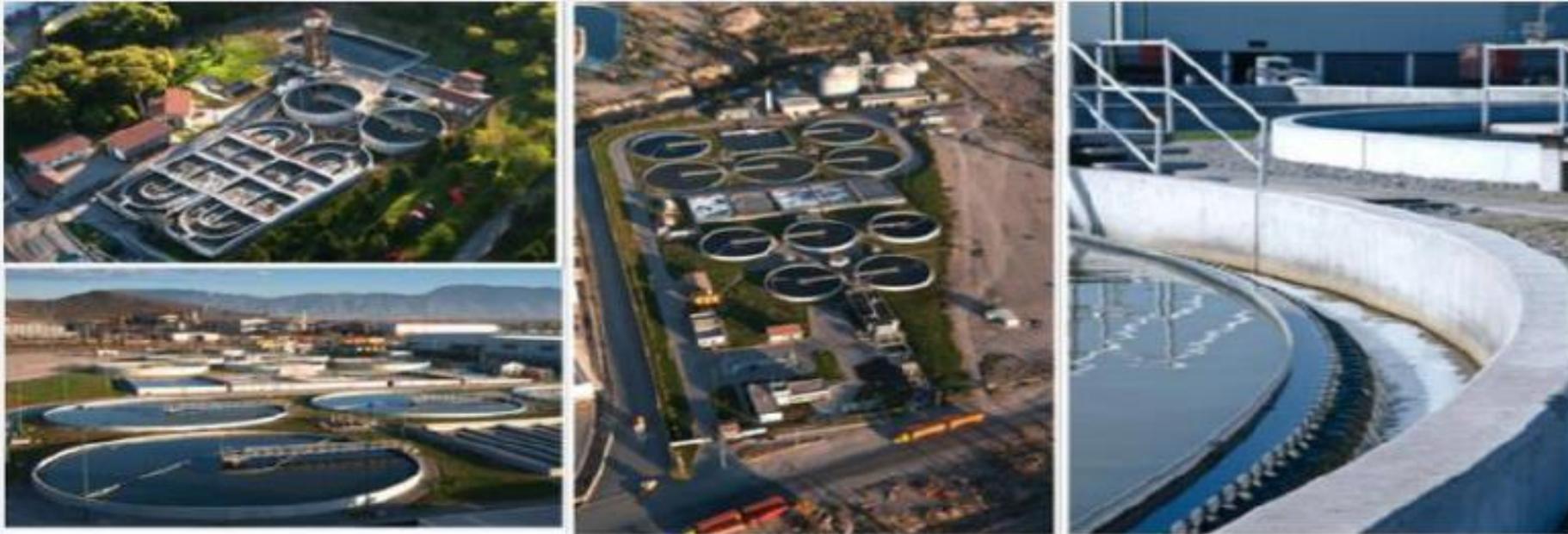
Name of the project: *Integral Sanitation of the waste-water of the municipality of Saltillo, Coahuila.*

Duration of the project: 20 years from start of construction

Payment mechanism: monthly availability payments

PPP delivery model: BOOT

Funding and financing: 29.4% public & 70.6% private.



# Administrative Complex in Tlajomulco de Zuñiga

Name of the project: Administrative Complex in Tlajomulco de Zúñiga

Duration of the project: 30 years

Payment mechanism: Availability payments

PPP delivery model: Project for Service Provision (PPS)

Funding and financing: Funding: 10% equity, 90% other financing (including 2 Mexican public financial institutions).



# Street lighting in Mexico City

Name of the project: Street lighting in Mexico City

Duration of the project: 9 years

PPP delivery model: Project for Service Provision (PPS)

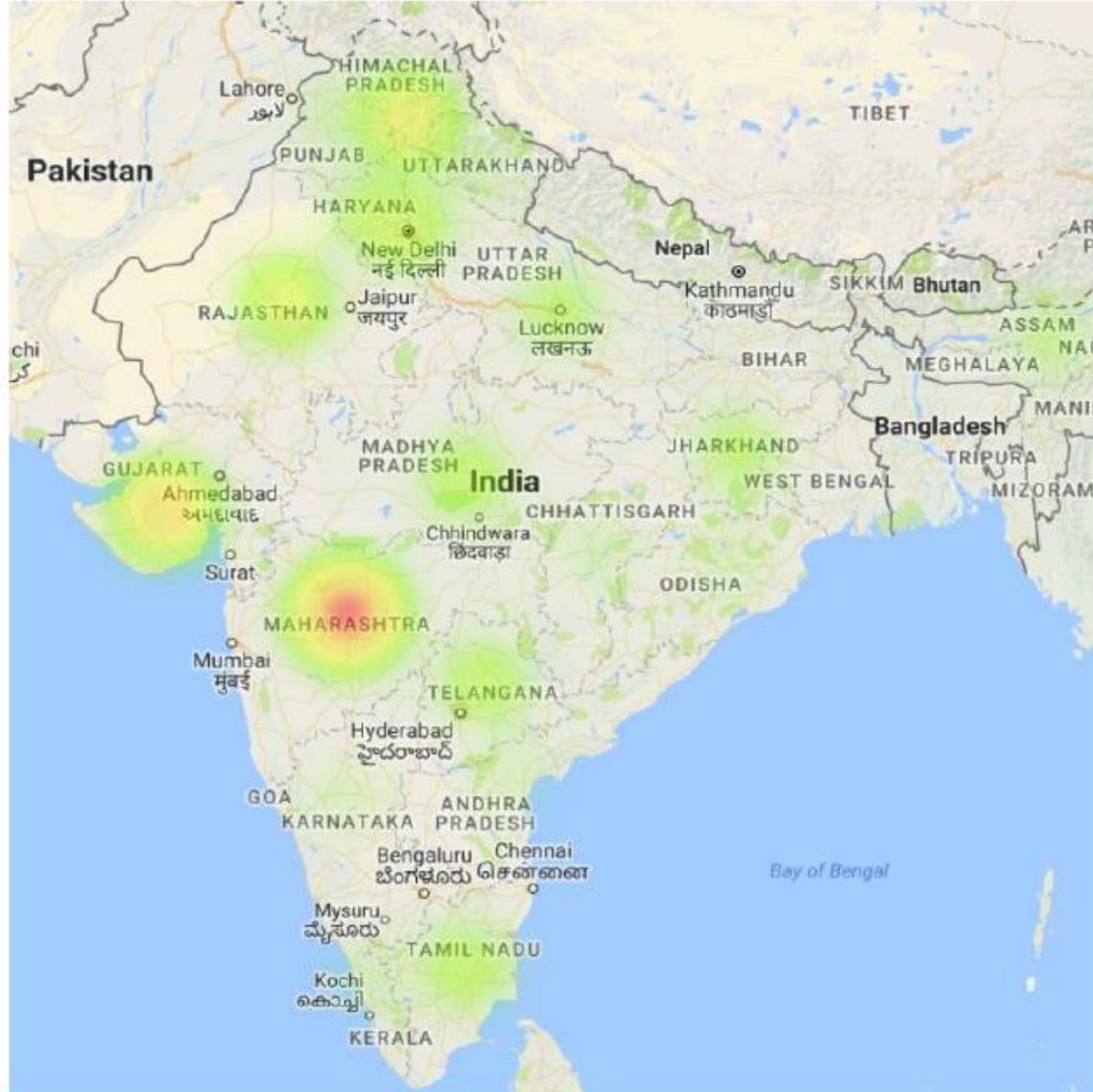
Funding and financing: 100% funded by the contractor



---

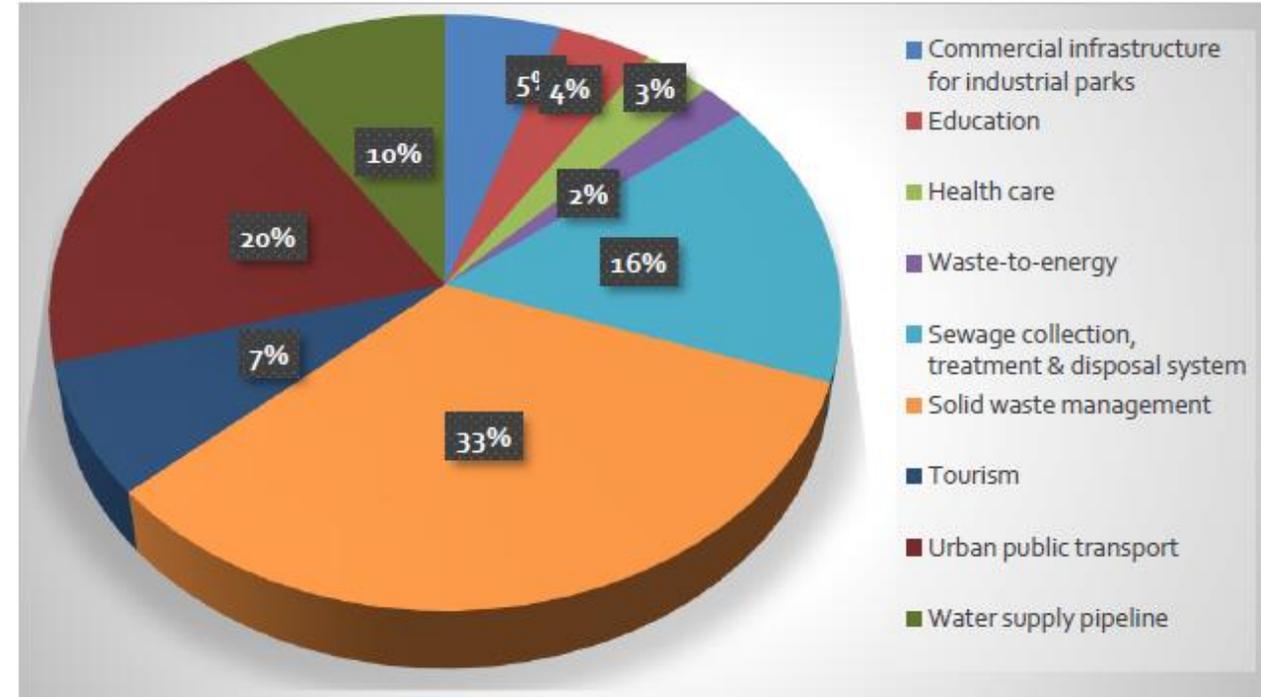
# India's Muni PPPs

# India's Municipal PPPs



Source: Derived from data extracted in: <https://www.pppinindia.gov.in/infrastructureindia>

## Sector Shares



# Types of PPPs

## Build-Operate-Transfer (BOT)

- Most common: 28 of the 96 municipal PPPs (29%)
- Most tourism infrastructure projects (86%)
- Most education infrastructure projects (75%)
- Most water supply projects (33%)

## Design-Build-Finance-Operate-Transfer (DBFOT)

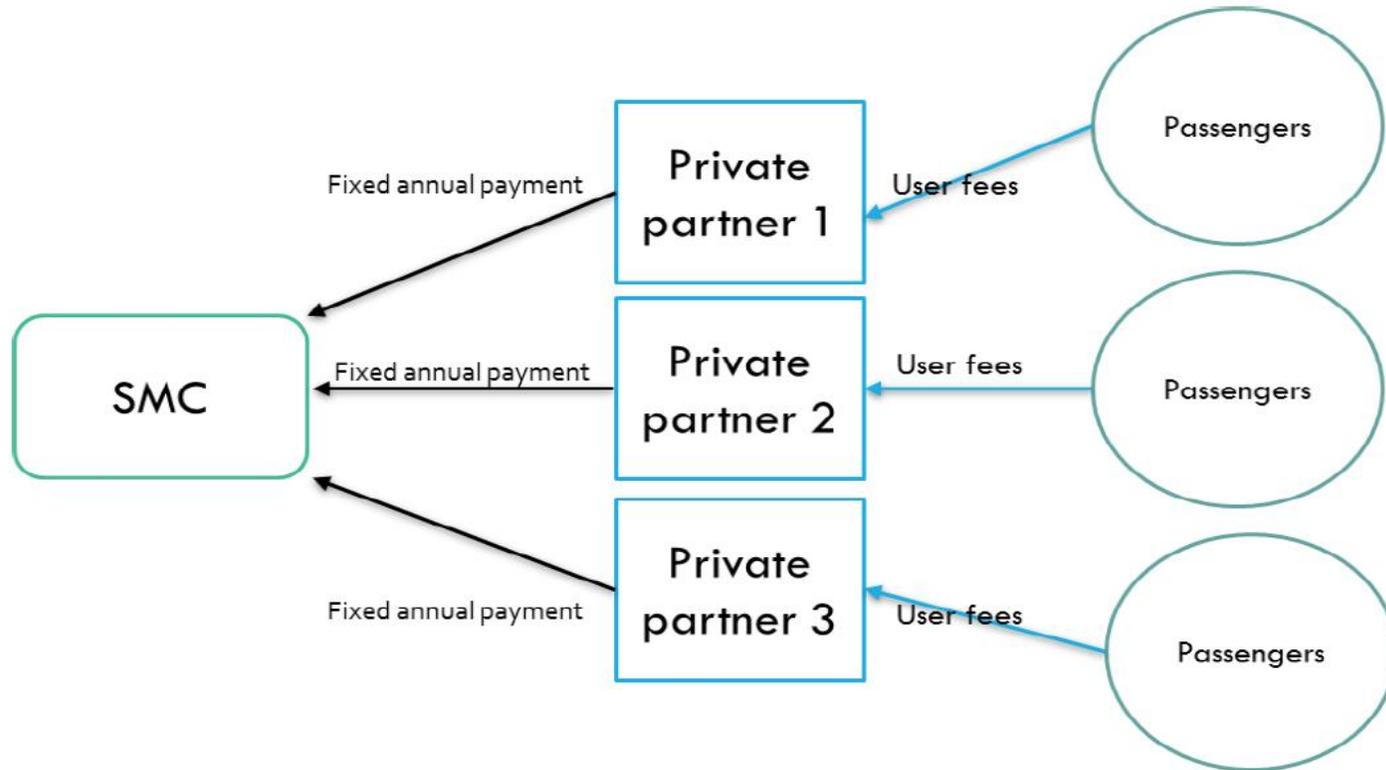
- 21 of the 96 municipal PPP projects (22%)
- Most sewage collection, treatment and disposal system projects (20%)
- Most urban transport projects (47%)

## Build-Own-Operate-Transfer (BOOT)

- 14 of the 96 municipal PPP projects identified (15%)
- Most solid waste management projects (22%)

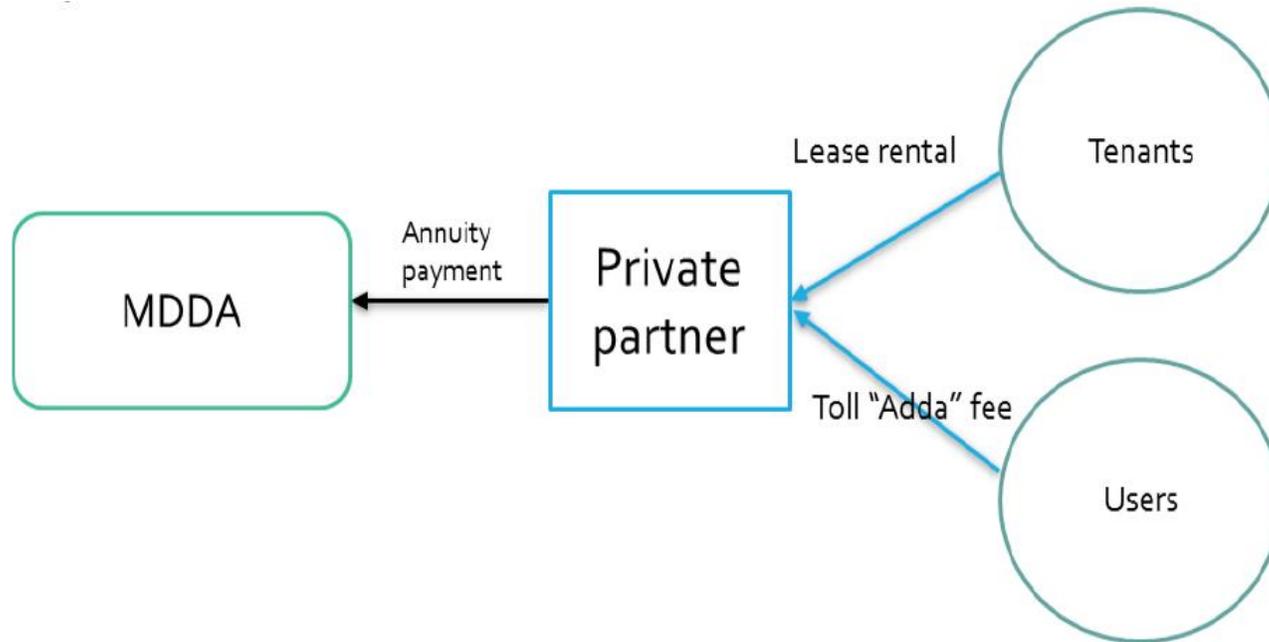
# City Bus Service in Surat

For a booming city with high air pollution and congestion



- Buses are procured, owned, operated and maintained by the private sector
- Government corporation set the bus routes, bus stops and fare structure
- 3 private bus operators
- 5 year BOT
- Built on the city's prior experience with PPPs for bus stands, pay and use toilets

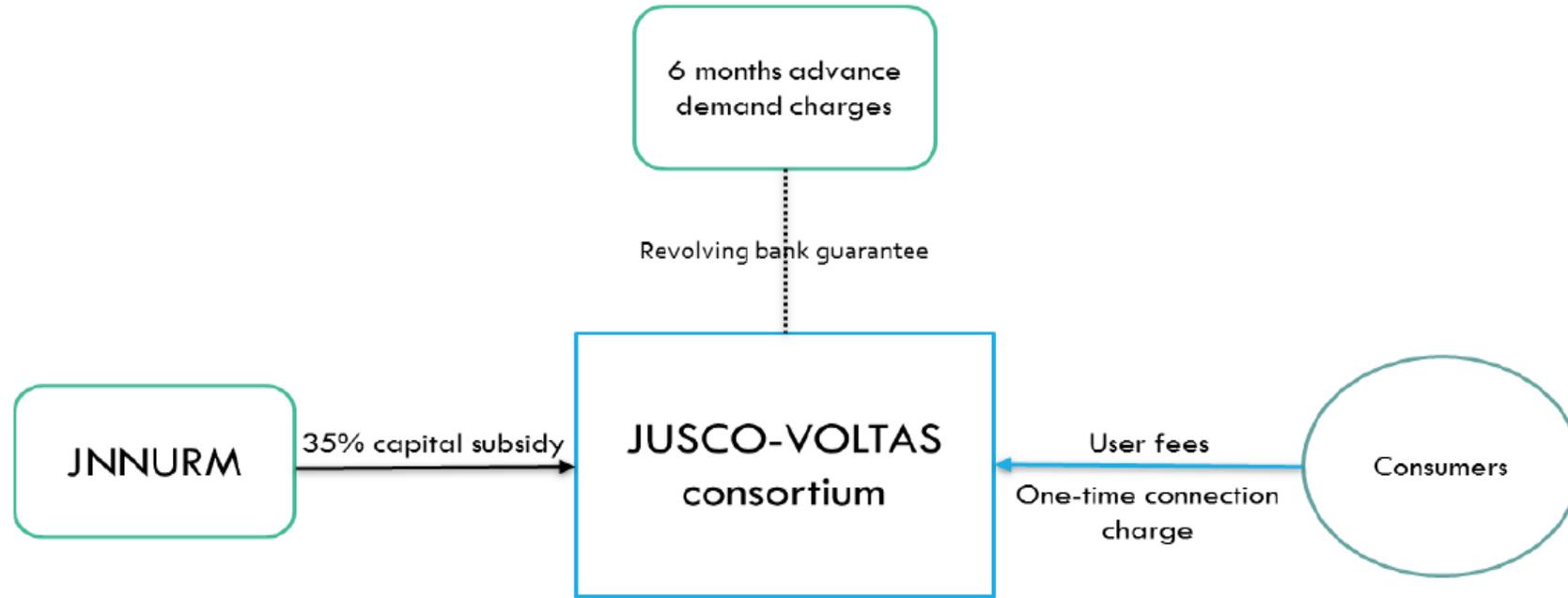
# Interstate Bus Terminal in Dehradun



## 1<sup>st</sup> ISBT PPP

- Design, finance, build, operate & maintain a modern interstate bus terminal for 20 years, extendible to 30 years
- MDDA (the muni) receives an annuity payment from the private partner for the lease of the land
- Private partner can charge Adda fee from the buses that use the terminal
- Plus earns lease and other forms of commercial revenue and user fees from value added services

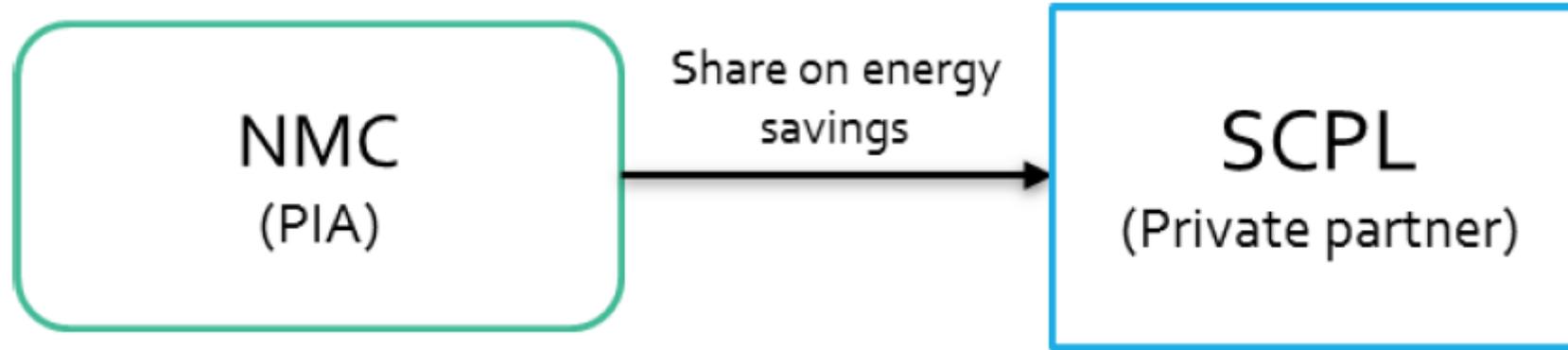
# Kolkata Salt Lake Water Supply and Sewerage PPP



To serve a growth center for IT industries in West Bengal

- BOT for a elevated reservoir, 3 km tunnel, 10km of sewer lines, sewage treatment
- JUSCO levies water supply and sewerage charges to premises and can collect 6-months of Demand Charges in advance through a revolving bank guarantee
- Capital subsidy to the private sector made the project financially viable and affordable to the municipality; a win-win for both parties

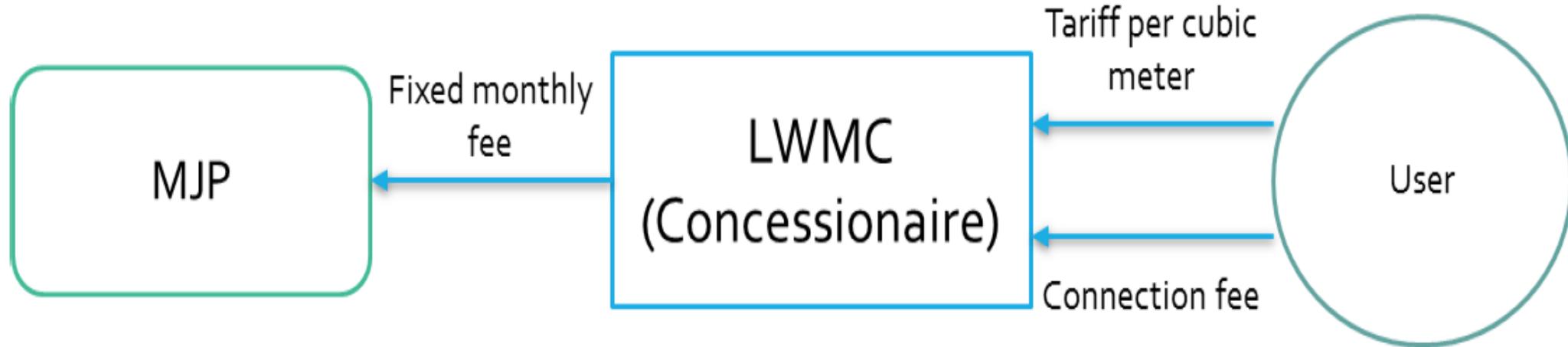
# Nasik Street Lighting PPP



Serves a city of 1.2 million to ease power shortages

- Paying for street lighting was one of the city's major costs items
- The private partner is responsible for design, manufacture, supply, install and commissioning energy saving devices including all the required supporting infrastructure
- In return, the city will pay the private partner a percentage of the actual energy savings
- NMC (the muni) entered a tripartite agreement with the private partner and lender
- Reduced electricity usage by 32% p.a. on average, with savings redirected to health, education, etc.
- 5 year BOT

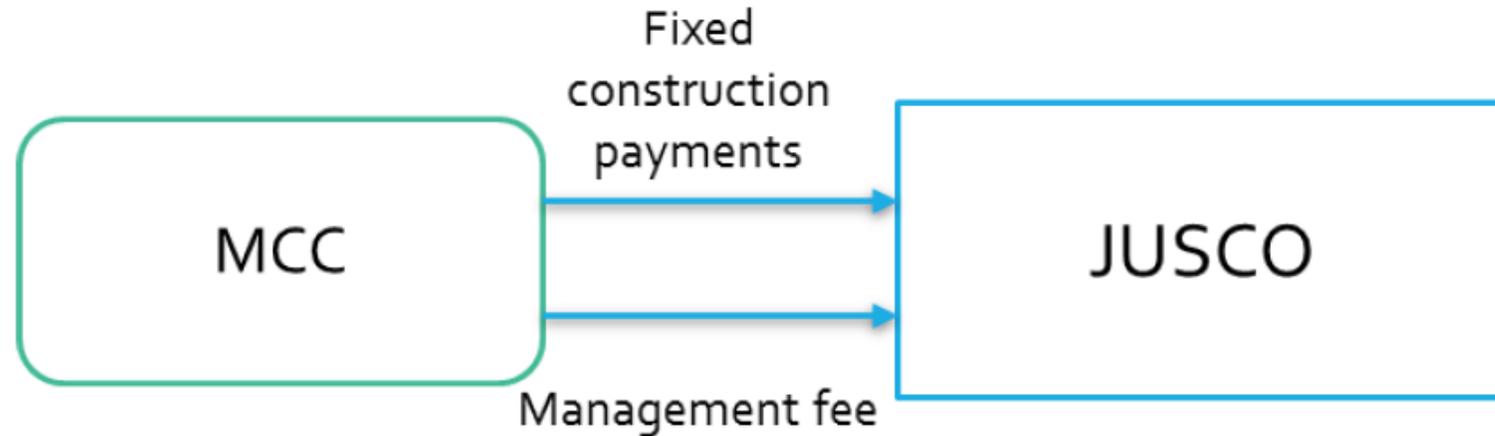
# Latur Integrated Water Management Project



## A troubled project that highlights the importance of stakeholder engagement

- City lacked the ability to operate and maintain the water supply scheme, faced high non-revenue water (NRW) and low collection efficiency and fiscal challenges
- Private partner was given the right to operate the water supply scheme for Latur City for 30 years
- Included the operation, maintenance and repair of the system
- Required reduce NRW and network expansion
- MJP (the muni) undertook a campaign to educate the population of the new metering policy and the “privatisation” of the water supply
- The project was not successful. An opposition formed, LWMC officers were vandalized
- Due to the strong opposition, the transfer of assets to LWMC did not take place

# 24x7 Water Supply Project in Mysore City



Envisaged to be a model project in water supply for the whole of India

- Rehabilitation of the distribution system and O&M of the water supply scheme for a city of 1 million; 80% are poor
- 6 year O&M contract
- 52% of O&M expenditures is recovered from the water tariff, the remainder is paid by the city's budget
- Grant funds were obtained to meet capital costs
- Majority of payments to JUSCO were performance-linked; 50% of management fees and 70% of operating costs
- Actual length of network pipelines of 1,910km and connections of 174,000 was far above estimates
- The project was undertaken without political support, a champion or a dispute resolution mechanism
- Delays resulted from the extra works and difficulty in obtaining extra financing

# Payment risk

## Typical mechanisms used to address payment risk

- Revenue intercept mechanism via escrow accounts or debt service reserve accounts
- Subsidies (with ceiling)
- Separate sewer account distinct from general budget
- State-level guarantees
- Take-or-pay conditions
- Revolving letter of credit for annuity payments issued by Scheduled Banks in India

# Sources of Muni Financing for PPPs

PPPs often need government financial support

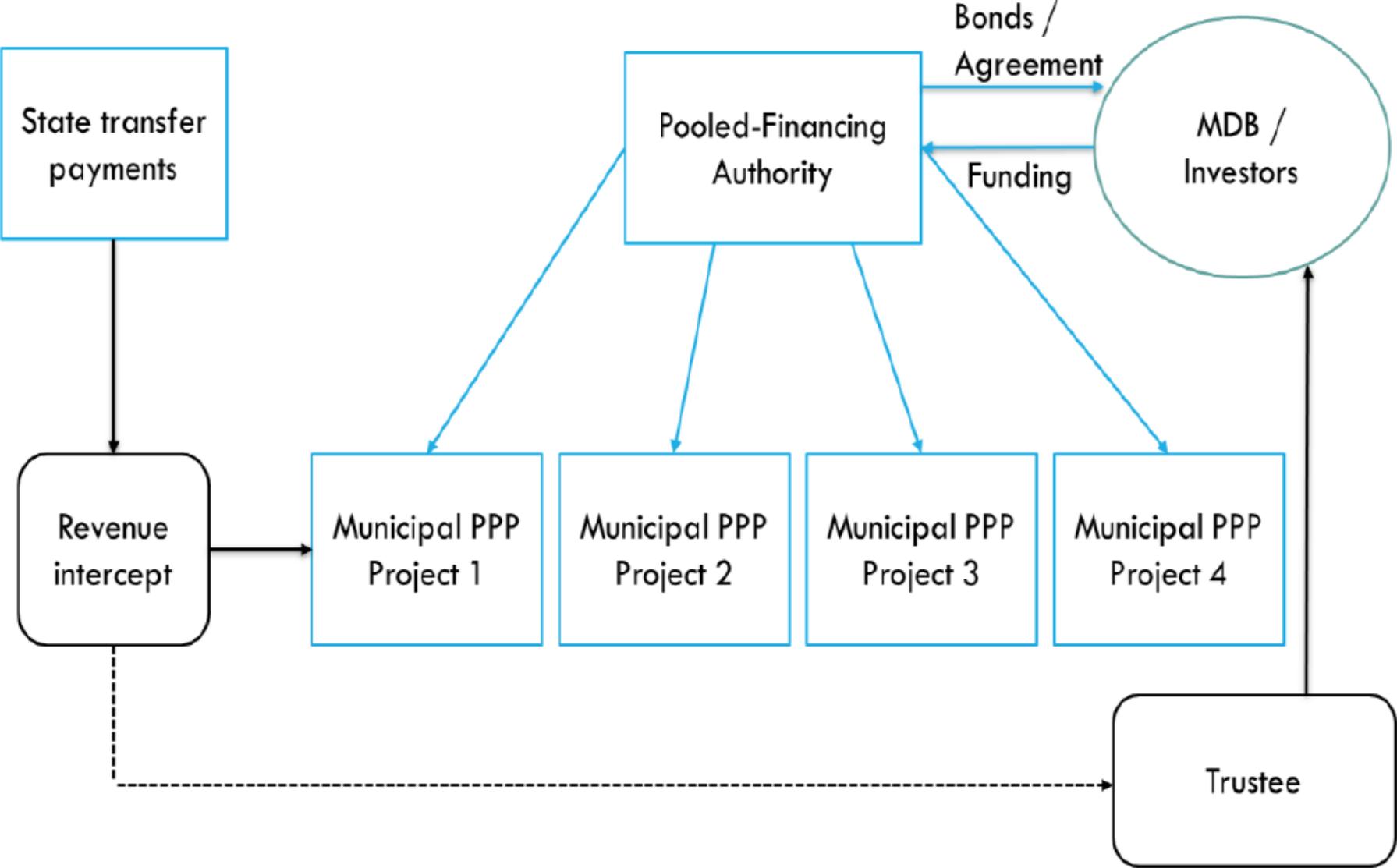
- Direct investment through the municipality's budget (sourced from the national budget allocation as well as from local taxes collected)
- National level funding support (i.e. Viability Gap Funding and the India Infrastructure Project Development Fund)
- Funding support through special programmes/missions (i.e. the JNNURM, AMRUT, Smart Cities Mission, National Mission for Clean Ganga)
- State level funding support (i.e. state level infrastructure funds, PDFs and VGFs)
- Debt financing through the India Infrastructure Finance Company Limited (IIFCL)
- Municipal bonds
- Funding from multilateral partners

# e.g. Namami Gange Programme

An Integrated Conservation Mission for cleaning, rejuvenation, and conservation of the Ganga River

- In January 2016, the Government of India approved a “hybrid annuity PPP model” for the development of waste water treatment plants in the Ganga river basin
- The winning concessionaire is expected to put up 100% of the investment
- 40% of which will be reimbursed during construction and upon commission. The remaining 60% will be paid in annuities during the concession period (estimated 15 years) along with O&M
- Several PPP projects have already been implemented

# e.g. Development Financial Institution (DFI)



# Lessons

India has a robust PPP program, yet its muni PPPs faces familiar challenges

- Lack of Proper Institutional Mechanisms for Implementing PPPs
- Inadequate Incentive Structures
- Poor Project Preparation
- Commitment and Ownership to the Municipal PPP Project
- Limited Access to Capital Markets

---

# Canada's Muni PPPs

# Financing Innovations

## Building Canada Fund

- C\$1.2 Bln fund which supported projects in the provincial and municipal levels
- A crown corporation created in 2008
- Requires a robust assessment of the project prior to approval of funding
- Supported more than 20 P3 projects, and leveraging C\$6 Bln in capital expenditure within six provinces and territories and 13 municipalities by 2013
- Ceased operations in December 2017

## Canada Infrastructure Bank (CIB)

- To invest, and seek to attract private sector (including institutional investors) investment in infrastructure projects to generate revenue while ensuring that public interest is maintained as well as to bolster economic growth
- Can provide sovereign guarantee to loans with ok of the Minister of Finance
- To invest C\$35 billion to infrastructure projects
- Provides capacity support to implementing agencies and M&E

---

# Final thoughts

# Muni PPPs make sense

Muni PPPs can be a valuable addition to a country's PPP program

- Proven capacity to deliver municipal services
- Well suited to delivering new and innovative services
- Can bring in expertise and finance that munis do not have
- Can, in some cases, provide a new source of revenue to munis

Muni PPPs share the same success factors as other PPPs

- Munis need the capacity to prepare and implement PPPs
- A robust PPP framework is critical
- Political buy-in and champions are precursors to success
- Many PPPs will require government financial contributions
- There are many examples of how to provide that support well

# Sources

---

This presentation is based on the early results from the World Bank's Municipal PPP Framework Project.

Resources for Municipal PPPs are available from the World Bank at:

<https://ppp.worldbank.org/public-private-partnership/ppp-sector/sub-national-and-municipal-ppps/sub-national-and-municipal-ppps>

---

# Thank You