PUBLIC PRIVATE PARTNERSHIPS (PPPs) IN INFRASTRUCTURES

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Outline

- Background and Problem Statement
- What is a PPP?
- Historical evolution of PPP
- Purposes, goals, and objectives of PPP
- PPP past experiences
- Concluding remarks
Phases of Asset Development Life-cycle

- Asset Termination (Demolition)
- Asset Maintenance/Rehabilitation
- Asset Monitoring
- Asset Operations
- Needs Assessment, Goals Identification etc.
- Asset Planning
- Asset Design
- Asset Installation/Construction
Background

Phases of Asset Development Life-cycle

Asset Planning

Needs Assessment, Goals Identification etc.
90 10

Asset Design

Asset Termination (Demolition)
5 95

Asset Maintenance/Rehabilitation
40 60

Asset Operations

Asset Installation/Construction
0 100

Asset Monitoring

95 5

Legend

Public % Private %
Problem Statement

- Need to acquire more information on PPPs
  - what they are
  - merits and demerits
  - experiences
  - types
  - a tool for selecting the best PPP type for a given project
What is a PPP?

- A contractual relationship between public and private sectors in infrastructure development.

- “... built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards.”

  -The Canadian Council
1956 - Eisenhower signed the Federal Highway Act,
- built 41,000 miles of road
- attracted to highway/infrastructure systems

Modern PPP originated in 1992
- private finance initiative in the UK
- evolved into the “value for money” policy in 1997
- adopted by World Bank and other countries
- US initially skeptical

PPP in US emerged due to need for addressing funding limitations

In 2005, the first privatization of a public infrastructure in the U.S. occurred- the Chicago skyway
Leverage the private sector for funding resources

Economic, effective and efficient delivery of gov’t services

Create opportunities for private sector growth

Serve the business sector and the community through an appropriate allocation of risks and returns between partners
Past Experiences

- **The biggest two PPP projects:**
  - The Chicago Skyway in 2005
  - The Indiana toll road in 2006

- **Other successful projects:**
  - Sandy Springs, 2005 – CH2M Hill won
  - Texas Transportation Commission-$3B, 40 mile toll road

- **The main unsuccessful PPP:**
  - Atlanta Water system
    - The quality of work was so bad, the city had to reclaim it before the contract was over
The Chicago Skyway

- 8 mile freeway
- Connects the Dan Ryan expressway in the west to the Indiana Toll road in the east
- 2005 - Chicago privatized their Skyway after 50 years ownership
  - Leased it for $1.83 billion for 99 years
  - 1st existing toll road privatization project in U.S.
In 2006, governor Mitch Daniels leased the Indiana Toll road for 75 years

2nd existing toll road privatization project in the U.S.

157 mile interstate

Leased for $3.8 billion
To implement PPP or in-house resources?

If PPP, then which type of PPP to select for a project?
- Warranties
- Design-bid-build
- Design-build-operate-transfer
- Performance-based contracting
- Traditional contracting, etc.

Criterion for selection: cost savings, time savings, etc.

This study included development of econometric models and decision-support software
Concluding remarks

- PPPs are becoming increasingly popular
- Agencies however need a decision-support tool to help in PPP type selection and consequences
- This ongoing study aims at addressing this need.


Thank you

Questions?
Reserve Material
Merits of PPP

- Private sector - it’s almost like a monopoly, it’s safer than high-grade bonds but with stock market returns
- Public sector - Receive a large lump sum of money up front, helps pay for other debt and put money in other needed areas
- Gives more of the risk to the private sector
In many cases, the state can make the same or a higher profit if they keep it.

Public feels ignored and external companies make all the profits at taxpayer expense.

The level of service (including work quality) for the road user is always uncertain.

Financial capability of the private sector not always guaranteed.

Lack of knowledge, experience, and methods for choosing most qualified private sector contractor for the PPP.