Public-Private Partnerships (P3s) — The International Experience

Jon McDonald & Jon Tindall
Agenda

• What is P3?
• Making the Case
• Key Considerations
  • Maintaining State of Good Repair
  • Delivery
What is a P3?

• Jon Tindall
Public-Private Partnership (P3) is a long-term risk-sharing relationship between the public and private sectors based upon a shared aspiration to bring about a desired policy outcome.

- Risk transfer to private sector
- Long-term concession
- Output specification
- Global
P3 – Typical structure

1. **Grantor**: AUTHORITY
2. **Concession Contract**
3. **Concessionaire DEVELOPER**
   - **Construction DESIGNER/ENGINEER**
   - **Operation & Maintenance MANAGER**
4. **Lenders**
5. **Shareholders EQUITY HOLDER**

Atkins’ typical roles
P3 – Railroad projects

- Expensive to build and operate
- Few railroads are self-financing
- Many stakeholders
- Multidisciplined
- Providing a transport service
- Revenue risk
- Whole-life cycle considerations
- Systems engineering
P3 – Railroad projects

- Docklands Light Railway, UK
- Manchester Metrolink, UK
- London Underground, UK
- Arlandabanan Railway, Sweden
- High Speed Rail, France
- GSM-Radio, France
- Kuwait Metro
- High Speed Rail, Norway
- Thameslink Rolling Stock, UK
- Ottawa LRT, Canada
- Eagle P3 Commuter Rail, Colorado
Making the Case

• Jon Tindall
Need for Robust Planning

• Key for any railroad/transit project – size of the funding gap
• Financial Advice important BUT not just financial advice on how to bridge the gap
• Technical input to optimise the scheme – holistic approach to scheme planning to minimise costs and maximise revenues

• Detailed Feasibility study to understand costs (CAPEX and OPEX) and revenues
• More certainty around Costs/Revenues – confidence in this can reduce Risk Pricing
Source of Revenues

- Government Subsidy funded by Taxes/Bonds
- Farebox
- Tax on Land Value Increases
- Selling advertising/naming rights
- Transit Oriented Development
Transit Oriented Development

• ‘Holy Grail’ of Railroad/Transit System planning
• Sell land and development rights around station OR develop and lease
• Use of Railroad to drive planning of Urban Form
Issues around Farebox Revenues

- Public Transport seen as a ‘social good’. Often a ‘last resort’ mode for those without a car
- How does this square with maximising farebox revenues?
- Political issues around ceding control of fares
- Tendency of promoters to over-estimate ridership and revenues
- Lack of Private Sector control over externalities
- Many recent PPP deals do not contain Revenue Risk. Instead payment made on availability basis
Key Considerations

• Jon McDonald
Key asset management considerations for P3s

• For the transit authority:
  – Minimizing long term cost of asset ownership
  – Ensuring assets are not “run down” during the concession period
  – Ensuring value-for-money for passengers while providing a safe, secure, reliable, and sustainable transit service

• For the concessionaire:
  – Minimizing cost of ownership and maximizing ROI
  – Robust estimation of revenue and costs over the concession period
  – Optimizing maintenance and minimizing performance penalties
  – Understanding asset degradation and optimizing asset renewal programs to meet end-of-concession handback requirements
  – Demonstrating stewardship of assets

• Asset management provides a transparent mechanism for achieving a fair and equitable sharing of costs and risks between the client and the concessionaire
Atkins is a thought leader in asset management
We have led or contributed to the development of the following standards:

ISO 55000
Asset Management
(draft)
It is critical to understand the life-cycle costs and plan for their funding


All significant and relevant initial and future costs and benefits of an asset, throughout its life cycle, while fulfilling the performance requirements

- Revenue Streams
- Whole Life Cost
- Performance Penalties

Construction Costs
- Infrastructure Service Charge
  - Govt. Subsidy?

Operating Costs
- Availability Payments
  - Fare Box Revenue?

Maintenance Costs
- Availability Payments

Renewal Costs
- Lifecycle Fund
  - Fare Box Revenue?

Disposal Costs
- Lifecycle Fund

Upgrade Costs
- New Infrastructure Service Charge
  - Govt. Subsidy?

It is critical to understand the life-cycle costs and plan for their funding.
Systems engineering and the PPP requirements

- Multiple reasons for many activities
  - Address capacity, asset condition, and operating costs together
- No single discipline can achieve requirements by itself

SE is the glue that holds all of the other disciplines together.
Lessons learned

• Need Government Commitment
• Strong Leadership Required
• Must involve all Stakeholders
• Appropriate Contract Structure
• Appropriate Payment Mechanism
• Appropriate Risk Transfer
  – Construction, Maintenance and Renewal
  – Operation and Traffic/Revenue
• Encourage innovation/VFM
• Adapt the Model to Suit