Funding & Financing Structures

Futurewise
Innovative Financing and the Environment
October 20, 2017
What Is WCX?

➢ 501(c)(3) non-profit

➢ Formed by Oregon, Washington, & California

➢ Advised by British Columbia

➢ A publicly-funded resource to public agencies exploring Performance-Based Infrastructure (PBI) options
What Is Performance-Based Infrastructure?

An infrastructure delivery method that...

- Consolidates responsibility for the key aspects of a project’s full lifecycle into a single, performance-based contract with a private partner
  - Design
  - Construction
  - Long-term Maintenance

- Can include, but does not require, elements of private sector financing and operational responsibility
PBI Key Concepts

➢ Public ownership / control

➢ Emphasis on full life cycle costs

➢ Pay-for-performance model with guarantees

➢ Asset management / long-term capital maintenance as contractual deliverable
PBI Key Concepts

➢ Focus on outcomes

➢ Risk allocation / transfer

➢ For the right projects, better value for the public
PBI with Private Financing

➢ What are we talking about when we speak of PBI with private financing?

➢ Debt & Equity

➢ Debt

  ➢ Can be tax exempt for certain types of projects

  ➢ Bankruptcy protections

➢ Equity

  ➢ No bankruptcy protection

  ➢ More expensive than debt
Why Consider Private Financing?

➢ Debt constraints

➢ Project acceleration

➢ Private financing can be tax-exempt and mixed with extremely low-cost public financing sources

➢ Additional scrutiny of performance

➢ Security for long-term performance / turnback provisions
## PBI with Private Financing

<table>
<thead>
<tr>
<th></th>
<th>Purple Line (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PABs</strong></td>
<td>$312,945,000</td>
</tr>
<tr>
<td><strong>True Interest Cost</strong></td>
<td>3.27%</td>
</tr>
<tr>
<td><strong>Credit Rating</strong></td>
<td>BBB+</td>
</tr>
<tr>
<td><strong>TIFIA</strong></td>
<td>$875,000,000</td>
</tr>
<tr>
<td><strong>Cost of Financing</strong></td>
<td>2.41%</td>
</tr>
<tr>
<td><strong>Weighted Cost of Debt</strong></td>
<td><strong>2.64%</strong></td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>$140,000,000</td>
</tr>
<tr>
<td><strong>Debt / Equity Ratio</strong></td>
<td>89% / 11%</td>
</tr>
<tr>
<td><strong>Total Weighted Cost of Capital</strong></td>
<td><strong>3.10% - 3.62%</strong></td>
</tr>
</tbody>
</table>

Source: Fitch Ratings
Maryland Purple Line

Funding Sources

- **Concessionaire**: $1,330,000,000
- **FTA New Starts Grant**: $900,000,000
- **Montgomery County**: $210,000,000
- **Prince George's County**: $120,000,000
- **TIFIA**: $140,000,000
- **PABs**: $313,000,000
- **Equity**: $875,000,000
## PBI with Private Financing

<table>
<thead>
<tr>
<th></th>
<th>Poseidon Desal 2014</th>
<th>Woodland Davis 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit Rating</strong></td>
<td>BBB-</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Tax Exempt Bonds ($)</strong></td>
<td>$734M</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Cost of Financing (%)</strong></td>
<td>4.78%</td>
<td>1.75%</td>
</tr>
<tr>
<td><strong>Favorable SRF Financing ($)</strong></td>
<td>N/A</td>
<td>$228M</td>
</tr>
<tr>
<td><strong>Cost of Financing (%)</strong></td>
<td>N/A</td>
<td>1.75%</td>
</tr>
<tr>
<td><strong>Weighted Cost of Debt</strong></td>
<td>4.78%</td>
<td>1.75%</td>
</tr>
<tr>
<td><strong>Debt / Equity Ratio</strong></td>
<td>82% / 18%</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Weighted Cost of Capital</strong></td>
<td>5.60%</td>
<td>1.75%</td>
</tr>
</tbody>
</table>

Source: InfraDeals
Value for Money Analysis

➢ An investment decision-making tool

➢ “Apples to apples” comparison of different delivery options, accounting for
  ➢ Risk allocation
  ➢ Full life cycle cost

➢ “What is my risk-adjusted, full-life cycle cost under traditional and PBI project delivery methods?”
Value for Money: Illustration of Concept

Net Present Value of Total Project Costs ($ millions)

Traditional Infrastructure Procurement
- $100M
- $30M
- $40M

Performance-Based Infrastructure (DBFOM)
- $100M
- $40M
- $15M

Total
- $170M
- $155M

Value for Money
- Public Sector Retained Risk
- Financing Costs
- Lifecycle Costs
Value for Money: Monte Carlo Analysis

Figure 1 - Total Risk-Adjusted Project Cost Estimates ($NPV, thousands)

1 - DDB
Minimum 485,905.67
Maximum 543,830.66
Mean 514,544.94

2 - CMAR
Minimum 475,535.74
Maximum 519,363.66
Mean 496,474.95

8 - CMAR + DB
Minimum 458,834.87
Maximum 499,020.63
Mean 478,344.42

6 - D8OM
Minimum 430,218.29
Maximum 461,264.84
Mean 447,531.30

7 - D8FOM
Minimum 469,534.38
Maximum 493,039.74
Mean 479,228.44

Source: Deloitte – City of Regina Wastewater Treatment Plant Expansion & Upgrade Project: Delivery Model Assumption
Contact Information

Scott Boardman  
Executive Director  
(503) 477-9259  
scott.boardman@westcoastx.org