



# **Funding & Financing Structures**

**Futurewise  
Innovative Financing and the Environment  
October 20, 2017**



# What Is WCX?

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- 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



# **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

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- 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

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- Focus on outcomes
- Risk allocation / transfer
- For the right projects, better value for the public

# PBI with Private Financing

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- 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?

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- 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

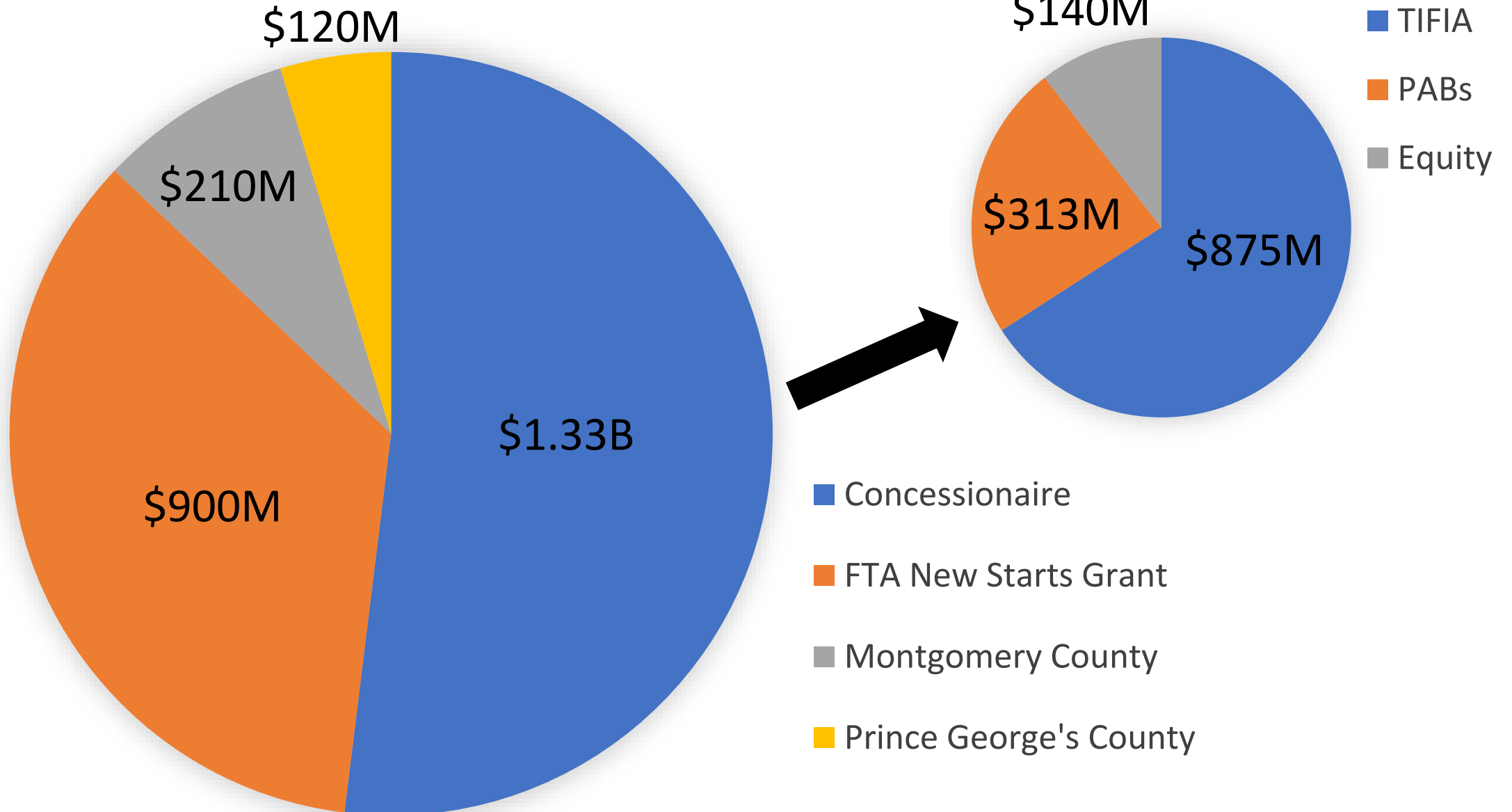
	Purple Line (2016)
<b>PABs</b>	\$312,945,000
<b>True Interest Cost</b>	3.27%
<b>Credit Rating</b>	BBB+
<b>TIFIA</b>	\$875,000,000
<b>Cost of Financing</b>	2.41%
<b>Weighted Cost of Debt</b>	<b>2.64%</b>
<b>Equity</b>	\$140,000,000
<b>Debt / Equity Ratio</b>	89% / 11%
<b>Total Weighted Cost of Capital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

Source: [Fitch Ratings](#)



# Maryland Purple Line

## Funding Sources



# PBI with Private Financing

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

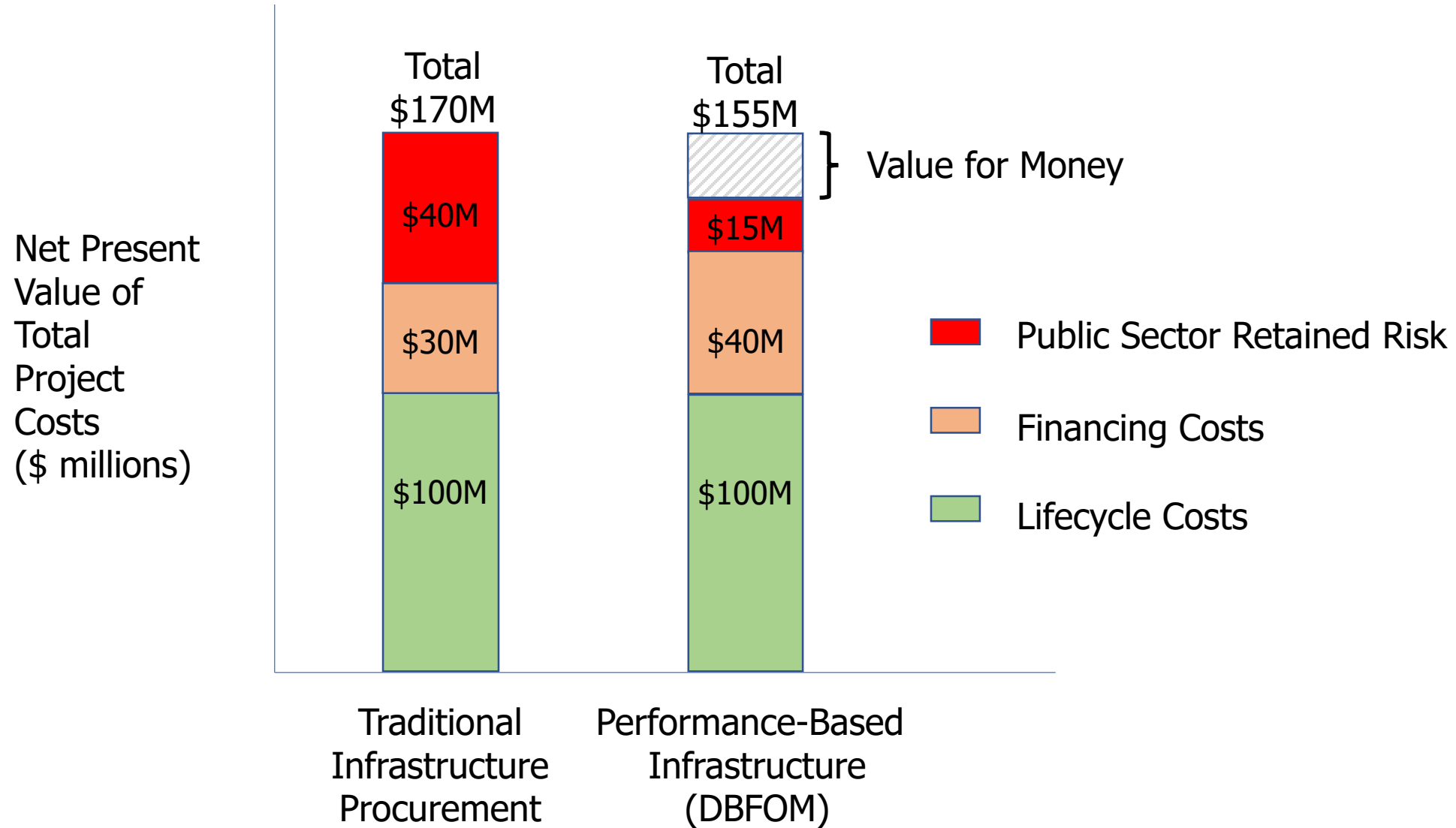
Source: InfraDeals

# Value for Money Analysis

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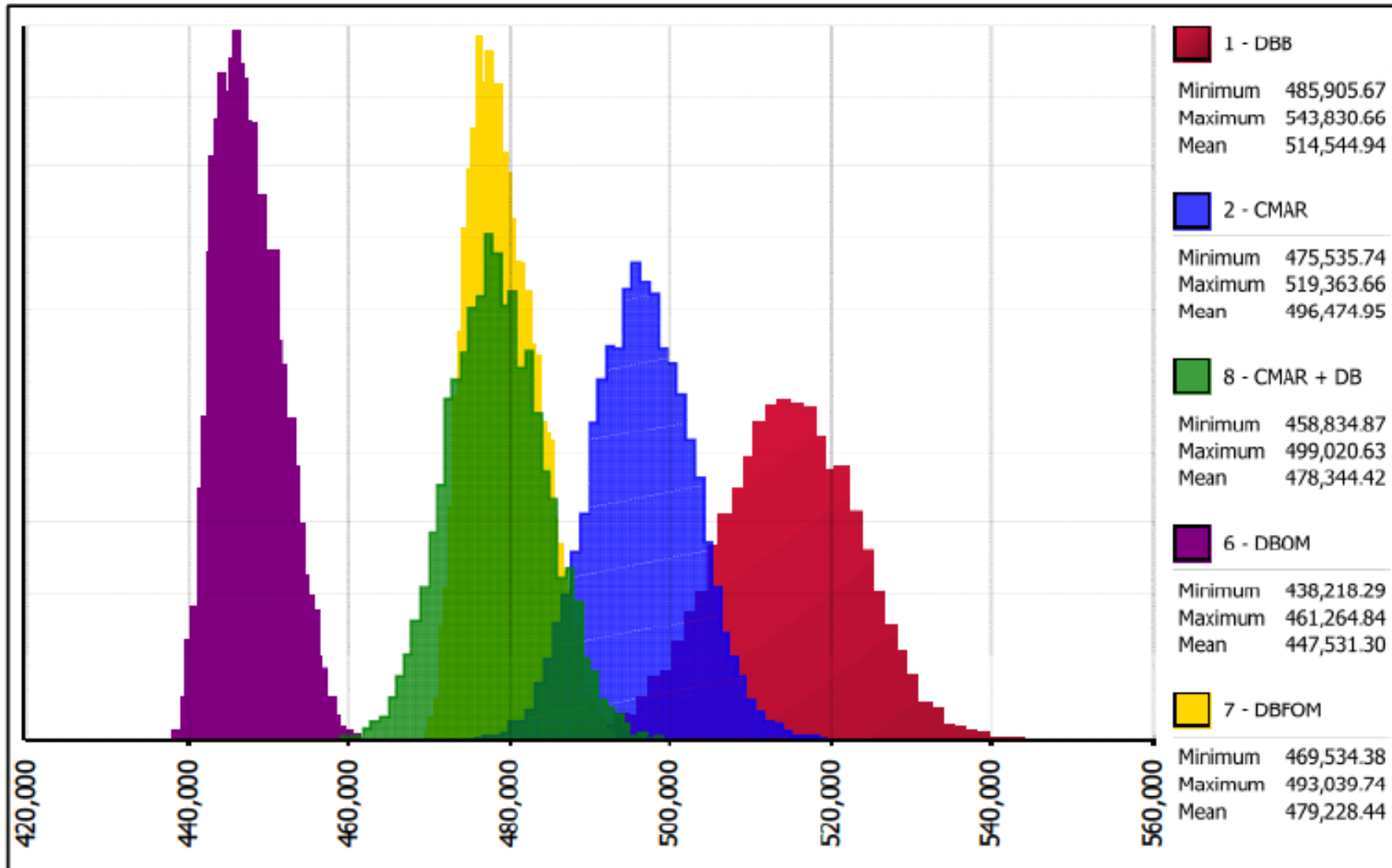
- An investment decision-making tool
- “Apples to apples” comparison of different delivery options, accounting for
  - Risk allocation
  - Full life cycle cost
- “What is my risk-adjusted, full-life cycle cost under traditional and PBI project delivery methods?”

# Value for Money: Illustration of Concept



# Value for Money: Monte Carlo Analysis

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





## Contact Information

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