

FTA/NCPPP

Implementation of PPPs for Transit Canada Line Case Study Chicago, IL

May 20, 2009



Canada Line Case Study

- Project Summary and Objectives
- Project Timeline
- Governance Structure
- Partnership Structure
- Financing
- Key Challenges
- Key Success Factors

Project Summary – A Complex Rail Deal

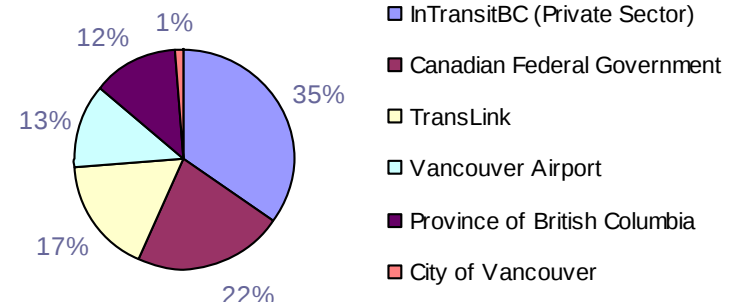


Project Attributes

- Driverless Automated Light Rail System
- 19 km (12mi) / 16 stations
- 3 water crossings, 2 bridges, 9 km tunneling
- Estimated 100,000 riders daily by 2010
- Public/private partnership (P3)
- Design-Build-Finance-Operate (DBFO)
- 35-year concession agreement
- November 2009 expected completion

Project Financing

US\$1.47B Total Project Cost (2003\$) [%Total]

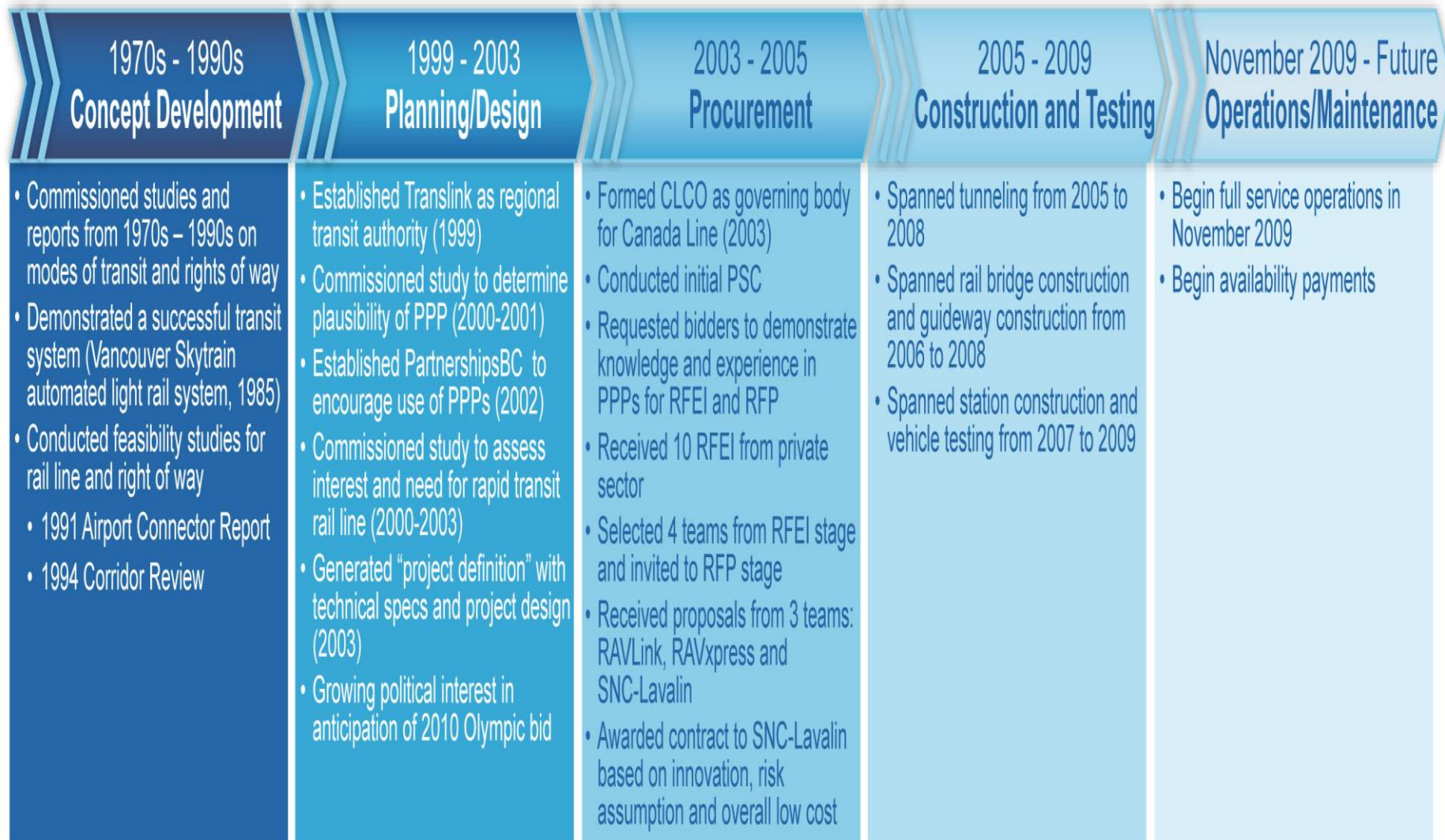


Strategic Objectives

Significant growth in population and employment has resulted in a need for added transit capacity.

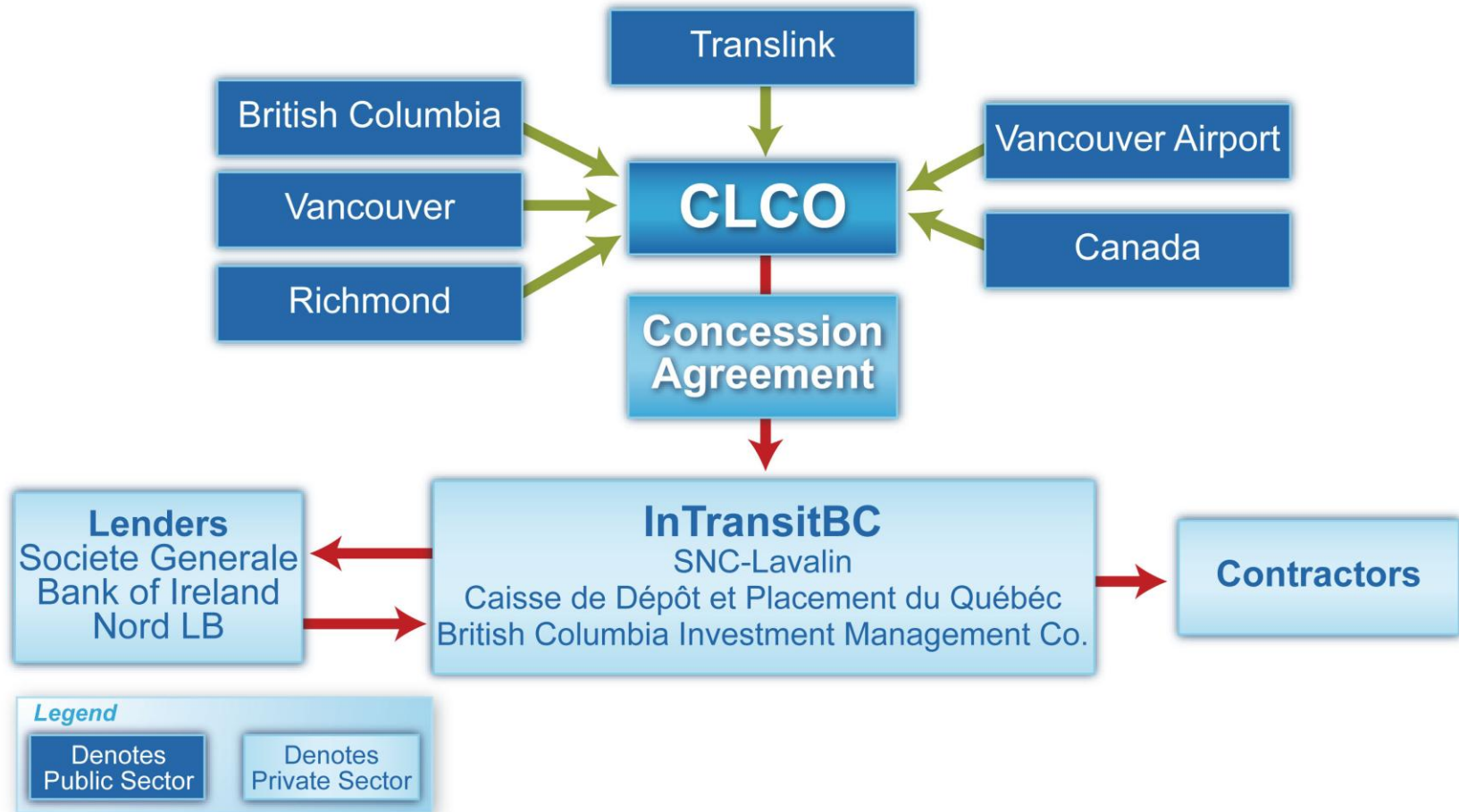
- Alleviate congestion and improve transit between region's job centers and the Vancouver Airport
- Accommodate expected population and job growth
- Create strategies to maximize potential for transit-oriented-development (TOD)

High-Level Project Timeline



Key Public and Private Sector Stakeholders

Project is governed and managed by Canada Line Rapid Transit Co. (CLCO) and involves several equity partners and lending institutions.



Public Sector: Canada Line Rapid Transit Co. (CLCO) Attributes

- Separate independently governed subsidiary of Translink tasked to oversee procurement, design, construction, and implementation of project
- Represents public funders:
 - Canadian Federal Government
 - Province of British Columbia (BC)
 - Translink – Vancouver regional transit authority
 - Vancouver Airport Authority
- Governed by Board of Directors comprised of 9 members, selected by public entities with no elected officials, 5 selected board members must be independent of their public nominator
- Appointed a former BC deputy attorney general as independent auditor to review and ensure fairness in all stages of procurement from bid evaluation to final contracting

Public and Private Sector Obligations and Responsibilities

Translink (Public)

- Owns fixed assets in the form of the actual line and stations
- Will set and collect fares
- Canada Line ownership split between Translink and Vancouver International Airport

InTransitBC (Private)

- A special purpose vehicle (SPV) formed in 2005 with the sole purpose of construction and operation of the Canada Line
- Responsible for construction of the “Line”
- Will own non-fixed assets such as signals and rail cars
- At end of concession, assets will be transferred back to CLCO with some elements being purchased by CLCO at market rate and others at a nominal price

Lenders (Private)

- Have step-in rights to remove or replace sub-contractors for nonperformance or insolvency under the concession agreement

Risk Transfer/Allocation During Design & Construction

Risk Allocation Matrix (RAM) illustrates how design/construction risks are shared between CLCO and InTransitBC.

Risk	Public Sector (CLCO)	Private Sector (InTransitBC)
Design & Construction		
Delays in final approval of detailed design	X	
Schedule (delay in completion)		X
Cost Overruns		X
Environmental (design of civil works / electrical and mechanical equipment)		X
Environmental (land)	X	
Environmental (during construction)	Shared	
Utilities risk	Shared	
Failure to integrate physical systems (Civil Works and Electrical/Mechanical systems)		X
Unsatisfactory quality of construction work		X
Change in requirements from Agencies	X	
Force Majeure	X	
System commissioning tests are not conclusive		X
Vehicle Supply (initial procurement)		X

Design & Construction Risk Transfer/Allocation Highlights

- **Construction Schedule** – risk transferred to InTransitBC; payments based on completing construction milestones, penalties and incentives
- **Construction Cost Overruns** – fixed-price contract transferred risk to InTransitBC to cover any cost overruns
- **Quality of Construction** – risk transferred to InTransitBC; during construction, lender's independent engineer would: (1) check the design; (2) confirm the Project Manager's quality control; and (3) check working drawings to ensure information going to the site is compatible with signed-off designs
- **Utilities** – risk shared; the public sector responsible for the initial identification of utilities on the site; the private sector responsible for managing the construction process and accommodating identified utilities; if undisclosed utilities are discovered and increase construction costs, private sector would be compensated
- **Environmental (Land)** – risk remains with public sector if land condition is not adequate; chemical or other environmental contamination should have been addressed prior to project commencement

Risk Transfer/Allocation During Operations and Maintenance

Risk Allocation Matrix (RAM) illustrates how operations and maintenance risks are shared between CLCO and InTransitBC.

Risk	Public Sector (CLCO)	Private Sector (InTransitBC)
Operations and Maintenance		
Fare revenues lower than forecast	Shared (90/10)	
Operating and maintenance do not meet performance specifications		X
Electrical and Mechanical equipment defects		X
Service level and quality		X
Change requirements from Agencies	X	
Change in law with significant operational and financial impacts	X	
Force Majeure	Shared	
Vehicle Supply (on-going maintenance)	X	
Environmental		X
Physical damages to the rapid transit system/security issues in stations	Shared	
Inadequate condition of the assets at the end of concession period		X

Operations Risk Transfer/Risk Allocation Highlights

- **Revenue** – although 10% of InTransitBC's monthly payment during operation phase will be tied to meeting ridership threshold, much of ridership risk is held by CLCO and Translink
- **Vehicle Supply (on-going maintenance)** – due to uncertainty in vehicle availability and price changes in the future, risk maintained by CLCO and Translink
- **Environmental** – risk borne by InTransitBC per concession agreement; compliance with environmental requirements rigorously assessed during commissioning
- **Physical damage to transit system / station security** – risk shared; InTransitBC has comprehensive insurance package over transit system; if security issues are not adequately handled by InTransitBC, public sector will take over security controls
- **Inadequate condition of asset at end of concession** – risk borne by InTransitBC; inspection mechanism to be included in concession agreement

Risk Transfer/Allocation During Financing

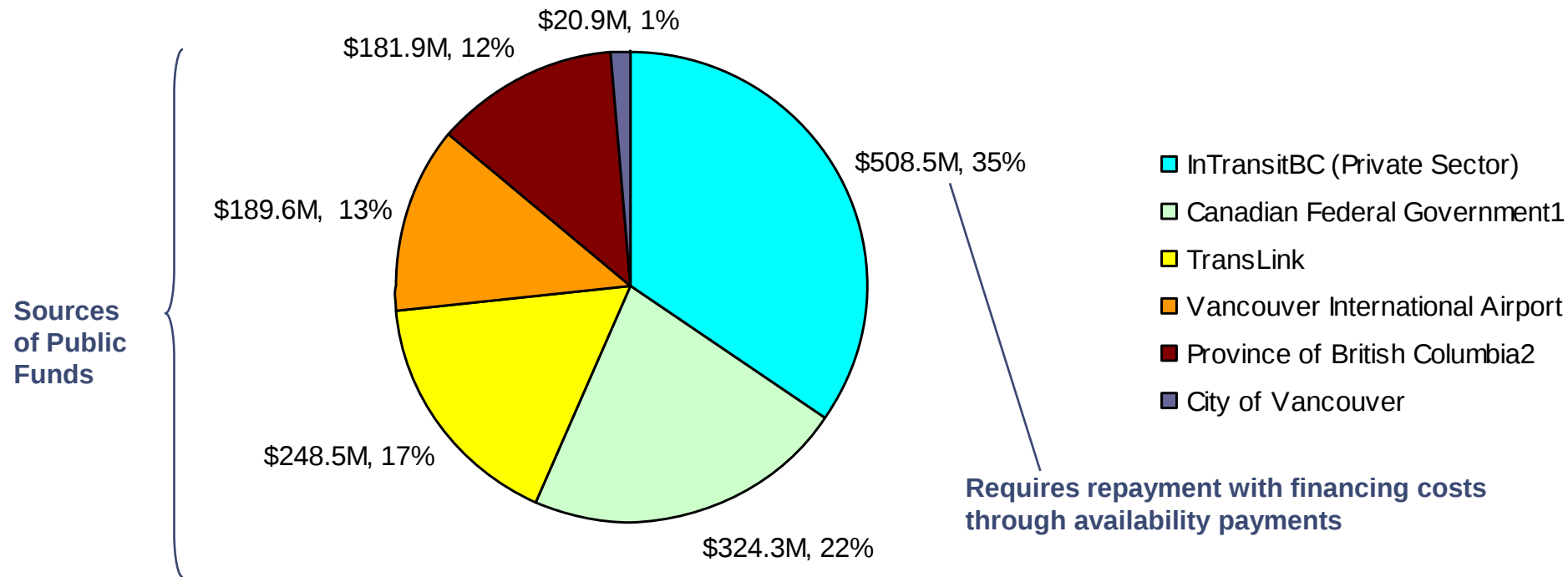
Risk	Public Sector (CLCO)	Private Sector (InTransitBC)
Financing		
Interest Rate Risk (during procurement)	X	
Interest Rate Risk (design/construction)		X
Interest Rate Risk (ops)		X
Variation in CPI (design/construction)	Shared	
Variation in CPI (ops)	X	
Differential inflation (design/construction)		X
Differential inflation (ops)		X
Exchange rate higher than forecast		X
Cost of commercial insurance (construction/ops)		X
Un-insurable risks (ops)	X	

Financing Risk Highlights

- **Variation in CPI (design/construction)** – risk borne by private sector; typical pricing index of an average basket of goods not always the most accurate indicator to predict price fluctuations of material costs such as steel or cement
- **Exchange rate higher than forecast** – risk borne by private sector; risk due to financing from foreign lenders (\$ CAN vs. € Euro); dependent on global economic forces and difficult to predict

Financing Overview

Final Fixed-Price Contract (\$1.473B Total, 2003 nominal US\$)



Debt/Equity Mix

85% debt financed by Bank of Ireland, NORD/LB, Société Générale

15% equity held by InTransitBC: 1/3 SNC-Lavalin, 1/3 bcIMC, 1/3 CDPQ

¹ Federal contribution total of up to \$348.3M by FY2010, contract stipulates Federal funds are used solely for project construction

² Total potential Provincial contribution is up to \$336.7M through FY2009

Overview of Payment Mechanisms

Payments to InTransitBC from CLCO during Construction

- Milestone payments:
 - Based on completion certification of an independent engineer who reports monthly to CLCO on construction tasks completed
 - Due to high rates on initial construction financing and costs, public sector made a small percentage of funding available in the form of progress payments during construction

Payments to InTransitBC from CLCO during Operations

- Annual availability payments based on:
 - Vehicle availability and staying on schedule (70%)
 - Quality of service - passenger accessibility, comfort and convenience, and maintenance and upkeep of vehicles and stations (20%)
 - Meeting ridership thresholds (10%)

Payments to Lenders from InTransitBC

- Service payments during full service operation goes to debt servicing, dividend payment to equity partners, and actual operating costs

Key Takeaways

Pre-Procurement/Procurement:

- ☑ RFP sent to pre-screened bidders
- ☑ Bidders down-selected, with remaining bidders invited to participate in Best and Final Offer stage
- ☑ Bids were evaluated in terms of value for money
- ☑ CLCO received constructive feedback from bidders during procurement process

Governance:

- ☑ Single point of contact to interface between public and private sector entities
- ☑ Creation of a Special Purpose Vehicle which contracts directly with the public sector

Partnership:

- ☑ Key risks transferred to private sector through the concession agreement:
 - Schedule
 - Vehicle Supply
 - Construction
 - Service Level & Quality
 - Financing – Exchange Rate
 - Financing – Interest Rate

Financing:

- ☑ Arranged by private sector participants
- ☑ Payments to the private sector are based on achieving key milestones during construction
- ☑ Availability Payments to private sector during operations and maintenance are based on system availability, maintenance and upkeep, and ridership

Key Challenges Experienced During PPP Deal

Key Challenges

- ✓ **New Partnership Agreement Required After SNC-Lavalin Partner Dropped Out**
- ✓ **Validity of Ridership Estimates Questioned**
- ✓ **Canada Line Rail Technology Did Not Integrate with Existing Infrastructure**
- ✓ **Public Consultation Was Time Consuming**

Key Success Factors of PPP Deal

Key Success Factors

- ✓ **Political Leadership Supported Project**
- ✓ **Formation of CLCO Specifically for Canada Line Project**
- ✓ **Legal and Financial Expertise Sought Upfront**
- ✓ **Due Diligence and Expertise of Lenders**
- ✓ **Key Risks Transferred to the Private Sector**
- ✓ **Open Dialogue with Vendors During Procurement**
- ✓ **Independent Reviewers Helped Ensure Project was On-Track**

Questions?