



Breaking New Ground  
Innovative Financing Strategies for Municipal Infrastructure Projects

BMO Capital Markets  
Infrastructure Banking

February 21, 2014



# Infrastructure Financing: Key Terms and Concepts

## Monetization vs. Development

- Extracting upfront cash in exchange for a future revenue stream is **monetization**
- **Development P3s** build or rehab an asset(s)
  - These include “greenfield” (i.e., new construction) and “brownfield” rehab/reinvestment projects

## Aggregation and Standardization

- Experience has led other jurisdictions to develop a coordinating entity staffed to design the “template” and assist state/local governments evaluate projects and execute selected P3 approaches
- Standardizing protocols and documentation can substantially lower costs and clarify/streamline process for all parties
  - Infrastructure Ontario screens projects greater than \$20 mln
- Aggregating multiple projects can broaden the pool of potential investors, but requires additional coordination

## Financing and Funding

- **Financing** is the mix of debt and equity capital that provides sufficient monies for a capital project. Options include tax-exempt/taxable bonds, bank loans, government financing programs (TIFIA, PABs, etc.), funds on hand (Pay-Go) and private sector equity
- **Funding** is the underlying source of revenue supporting an asset’s upfront construction and ongoing maintenance/operating costs
  - P3s require an adequate funding source(s)
  - Governmental sponsor(s) can make payment from the project’s revenues (“self-supporting”), general revenues (“availability payment”), or both

## Maximizing Resources

- A P3 approach can maximize the long-term resources applied to infrastructure
  - Access to debt and equity capital
  - Private sector project management and risk assumption encourage new technology application and innovative management techniques
    - A 2010 Canadian study reported 17 of 19 projects using a P3 approach delivered early or on time<sup>(1)</sup>
  - Risk assumption for maintaining the asset (including “hand back”) encourages lifecycle/rehabilitation planning

(1) The Conference Board of Canada, “Dispelling the Myths: A Pan-Canadian Assessment of Public-Private Partnerships for Infrastructure Investments” (January 2010)

# Why Governments Use P3 Methods

## Four Main Benefits of P3

### Risk Transfer

- Ability to transfer key risks to the private sector owner/operator
  - Revenue/demand risk
  - Construction risk
  - Technology and performance risk
  - Operating and maintenance risk
  - Lifecycle/capital reinvestment risk

### Private Sector Expertise

- Access to top international best practices in private sector
  - New technologies
  - Innovative management techniques
  - Cost innovation in lifecycle/rehabilitation planning
  - Innovative designs to reduce cost and enhance performance

### Additional Resources

- P3 projects maximize the capital proceeds which can be raised against infrastructure asset
  - Access to debt **and equity** capital
  - Competitive bid process ensures most attractive valuation
  - Leasing of existing assets often bring large upfront sums
  - Brings outside personnel to supplement agency staff

### Timing & Certainty of Delivery

- P3 structures can accelerate the delivery of the asset by years
  - Private firms often submit multiple design alternatives to speed permitting and construction timeline
  - Construction price is fixed at financial close
  - Delays past the guaranteed delivery date result in penalties being assessed

Risk transfer, accelerating delivery and tapping equity capital for infrastructure are drivers of P3 rationale

# Typical Risk Transfer in P3 Structure

The following chart summarizes the risk transfer to private parties compared to a traditional design-bid-build procurement

Risk	Traditional Approach	P3 Approach
Construction Cost	Government/Contractor	Contractor
Design Scope	Government/Designer	Designer
Environmental	Government	Government/Contractor
Financing	Government	Equity/Lenders
Inflation	Government	O&M Contractor/Government
Lifecycle	Government	O&M Contractor
Maintenance	Government	O&M Contractor
Operations	Government	O&M Contractor
Permits	Government	Contractor
Property Acquisition	Government	Government/Designer
Revenue	Government	Equity/Lenders
Schedule	Owner/Contractor	Contractor
Site & Soil Conditions	Owner/Contractor	Contractor
Utilities	Government	Contractor/Designer

In a P3 structure, private entities manage key project risks



# Examples of Infrastructure Investors

## Strategic Investors (Water asset investors as an example)



AMERICAN WATER



## Infrastructure Funds / Private Equity



Brookfield Infrastructure Partners



# History of Canadian Public-Private-Partnerships

- As government debt levels rose in the 80's and early 90's, governments sought to increase private investment in infrastructure
- P3s were introduced as a way to transfer risk and take advantage of the private sector expertise
- Private Finance Initiative (PFI) template introduced in the U.K. in 1992 to promote P3s and reduce public sector borrowing
- Canadian P3 market is based on the UK's PFI template but has developed its own characteristics
  - Ontario, Quebec and British Columbia have strong P3 programs with dedicated agencies to manage the procurement process
- Canadian P3 Financing History
  - Initial source of long-term financing for P3s was European bank lending
  - During credit crisis European bank funding capacity substantially reduced and spreads rose rapidly
  - Increase in spreads and reduced capacity made bond financing attractive
  - Over C\$9 bln of P3 bonds issued
  - Long-term European lending back in the market but not at same aggressive terms as pre-crisis
- Large C\$1+ bln projects are getting done
- Financing readily available from banks, bonds, and equity



Highway 407 East Extension



City of Brampton SWQR Project



Pan American Games  
Athletes Village



Billy Bishop Airport  
Pedestrian Tunnel

# Key Success Factors of the Canadian Model

- A number of items have led to the success of the Canadian P3 model
- Not all of them were intentional and came from improving on initial errors or from private sector feedback
- Success has been at the state level – municipalities and the federal government are only now considering widespread adoption

<p><b>Procurement Agency</b></p> <ul style="list-style-type: none"> <li>• A separate agency to shepherd project – avoids legacy department politics</li> <li>• Non-political leadership – senior staff drawn from private sector and career Government employees</li> <li>• Build project teams that focus on expertise (accountants not doing capital markets)</li> <li>• Use Value-for-Money (VFM) studies and fairness advisor to further emphasize transparency to public and bidders</li> <li>• Ministry department is the client</li> </ul>	<p><b>Existing Template</b></p> <ul style="list-style-type: none"> <li>• Use existing (European) template to maximize both bidder and global lender interest</li> <li>• Complete new projects using the same standardized docs and experienced staff – matches private sector experience</li> <li>• Collaborative approach (Bidder meetings) to identify risk transfer savings – improve on existing documents and refine to local market</li> <li>• Release final documents to the public with only major commercial terms excised</li> </ul>
<p><b>Project Selection</b></p> <ul style="list-style-type: none"> <li>• Start with relatively simple, well-supported projects</li> <li>• Work out the ‘kinks’ before trying more complex projects</li> <li>• Initially avoid projects where you can’t fully direct process</li> <li>• Create a transparent pipeline of projects which attracts bidders to set-up locally</li> </ul>	<p><b>Focus on Construction</b></p> <ul style="list-style-type: none"> <li>• Public support comes from perceived problems with cost overruns</li> <li>• Projects are not introduced as a way to reduce or outsource staff</li> <li>• Support of construction unions mutes opposition of private sector unions</li> </ul>

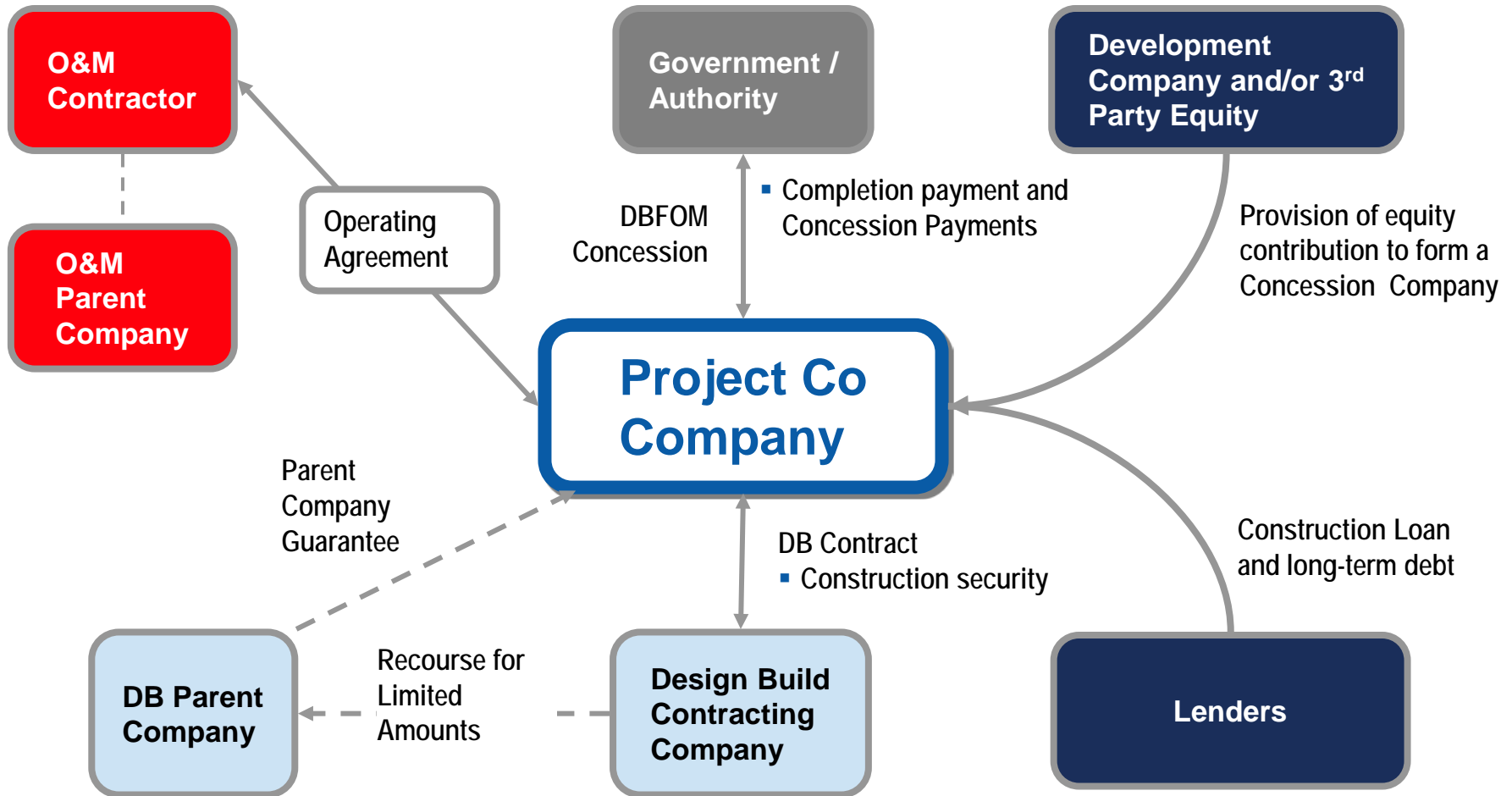
Success has been focused at the state level

# P3 Procurement Options

	P3 Alternative	Description	Government Retained Risks		
Risk Transfer to Private Sector ↑ 0% ↓ 100%	Design – Build	<ul style="list-style-type: none"> <li>Traditional procurement</li> <li>Government contracts for the design and construction of assets directly</li> <li>Mix of interim and completion payments</li> <li>Government to manage and operate assets</li> </ul>	<ul style="list-style-type: none"> <li>Construction (mitigated through time-certain, fixed-price contract)</li> <li>Financing, operations, maintenance, residual</li> </ul>	Unadjusted Cost to Government ↑ low ↓ high	
	Design – Build w/ Operating Contract	<ul style="list-style-type: none"> <li>Traditional procurement with an operating contract with Private sector for operating the assets post construction</li> <li>Often operating contract includes a payment penalty mechanism to ensure performance</li> </ul>	<ul style="list-style-type: none"> <li>Construction, financing, maintenance, residual</li> <li>Operations outsourced to Private sector with payment penalty mechanism</li> <li>Often used with already constructed assets or Governmental services</li> </ul>		
	<b>Private Financing Required</b>				
	Design – Build – Finance	<ul style="list-style-type: none"> <li>Government contracts with Private Developer to deliver newly constructed assets</li> <li>Payment at completion or paid over time as lease</li> <li>Government to manage and operate assets</li> </ul>	<ul style="list-style-type: none"> <li>Private sector takes construction and financing risk</li> <li>Government retains ownership risks including operating, maintenance and residual</li> </ul>		
	Design – Build – Finance – Operate – Maintain	<p style="text-align: center; color: red;"><b>Concession (or Lease) Model – Standard P3 Procurement</b></p> <ul style="list-style-type: none"> <li>Government contracts with Private Developer to deliver newly constructed assets and operate under a long-term “concession” agreement</li> <li>Government can (a) pay fixed “availability payments” quarterly or (b) grant rights to the Private Developer to collect fees or tolls</li> <li>30 to 99 year operating period post-construction</li> </ul>	<ul style="list-style-type: none"> <li>Private sector takes all risks except residual as assets typically revert to Government at end of concession term</li> <li>Government must either (a) make availability payments over time or (b) forego asset revenues from tolling and/or user fees</li> </ul>		
Asset Sale / Full Privatization	<ul style="list-style-type: none"> <li>Government sells constructed assets to Private sector</li> <li>Government may retain some monitoring and enforcement rights</li> </ul>	<ul style="list-style-type: none"> <li>Private sector takes all risks including residual</li> </ul>			



# Typical DBFOM Structure



# Infrastructure Ontario: Police Facilities Modernization Project

The Ontario Provincial Police (OPP) Modernization project applied a P3 approach to the construction of 18 new facilities in 16 communities across Ontario.

The new facilities replaced several that had exceeded their useful life and substantially upgraded Ontario's policing and justice system infrastructure.

With environmentally-sustainable construction practices and energy efficiency in mind, the new buildings were designed and built to meet the Canada Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standards.

For more information, go to <http://www.infrastructureontario.ca/What-We-Do/Projects/AFP-Projects/> and follow the link for the "OPP Modernization"

The screenshot shows the Infrastructure Ontario website. The header includes the logo, navigation links (Skip to Content, Change Contrast, Contact Us, Français), and a search bar. The main navigation menu lists Home, About Us, What We Do, Doing Business With Us, Careers, and News. The page content is titled "OPP Modernization" and includes a breadcrumb trail: Home > What We Do > Projects. A sidebar menu on the left lists various project categories: AFP Business Development, Procurement, FAQs, AFP Projects, Value for Money, Special Projects, and Loans. The main content area features a photograph of a modern police detachment building. To the right of the image, key project details are listed: Location (16 communities across Ontario), Project Type (DBFM - Design Build Finance Maintain), Infrastructure Type (Justice), Price of Contract (\$292.7 million), and Estimated Value for Money (\$51.3 million). Below this, an "About the Project" section contains two bullet points describing the project's scope and the benefits of the new facilities.

**Location:** 16 communities across Ontario  
**Project Type:** DBFM - Design Build Finance Maintain  
**Infrastructure Type:** Justice  
**Price of Contract:** \$292.7 million  
**Estimated Value for Money:** \$51.3 million

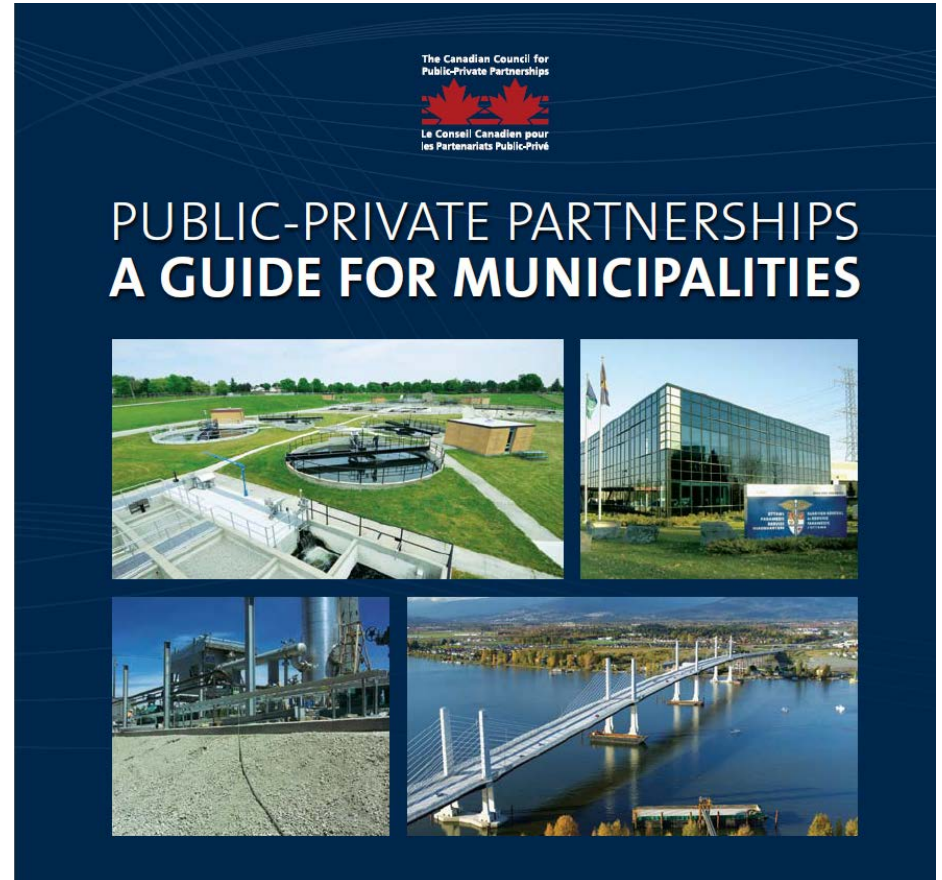
**About the Project:**

- The project involves the construction of 18 new Ontario Provincial Police detachments, regional headquarters and forensic identification services in 16 communities across Ontario.
- The new facilities, which in many cases are replacing buildings that have exceeded their useful life, will feature up-to-date amenities to better support the demands of modern police operations and meet the needs of the community.

# A Guide for Canadian Municipalities

The Canadian Council for Public-Private Partnerships, in partnership with PPP Canada, developed a guide that describes P3s and discusses issues key to Canadian municipal governments, many of which are relevant to U.S. local governments as well.

More information and resources can be found at:  
<http://www.p3canada.ca/information-and-resources.php>



<http://www.p3canada.ca/files/file/Information%20and%20Resources/P3%20Guide%20for%20Municipalities%20-%20English%20-%20Final.pdf>

# Myths and Misconceptions

## Perception

## Clarification

P3 and “Privatization” are the same

Privatization is just one form of P3 in which an existing asset is contractually transferred to the private sector for compensation

P3s “enrich” the private sector to the detriment of the taxpayers

P3s should be procured through a competitive process with contractual terms that share potential upside and preclude windfall gains by the private party

P3s are too complex

Governments contemplating P3 transactions should retain advisors with expertise in both process and the respective asset type

P3s are more costly than traditional procurement approaches

Tax-exempt borrowing is nearly always less expensive for upfront financing of construction; however, comparing the full lifecycle costs of maintenance, repair and operation, P3s can often be less expensive on a risk-adjusted basis in the long-term

P3s are only for massive projects

Large-dollar P3 projects have been far more prevalent to date because these could absorb higher transactions costs; with its standardized process and documentation, Infrastructure Ontario (I/O) suggests evaluation of projects as “small” as \$20 million

P3s provide funding when the public sector cannot

For availability payment P3s, the government must provide annual payment; P3s, however, can provide upfront funding for projects for which public sector bonding would not be possible

The public sector loses “control” in these deals

Governments “control” their assets through contract design, including provisions for minimum performance standards, events of default, and handback requirements

P3s will negatively impact jobs

Governments can stipulate in the contract requirements for use of labor groups, prevailing wage, local hiring, MBE/WBE, etc.

Source: The Canadian Council for Public-Private Partnerships; “Public-Private Partnerships: A Guide for Municipalities”;  
[http://www.p3canada.ca/\\_files/file/Information%20and%20Resources/P3%20Guide%20for%20Municipalities%20-%20English%20-%20Final.pdf](http://www.p3canada.ca/_files/file/Information%20and%20Resources/P3%20Guide%20for%20Municipalities%20-%20English%20-%20Final.pdf)





## Appendix A: Case Studies

# Case Study: CSS FSCC Partnership

## Project Overview

The new FSCC facility will be a modern forensic and coroner's complex, which will represent a significantly improved facility over the existing forensic and coroner's facilities in Toronto - Established by the Ministry of Community Safety and Correctional Services to provide a modern consolidated forensic laboratory, autopsy facility and coroner's courts complex for use by the Centre of Forensic Sciences and the Office of the Chief Coroner and procured through Ontario's AFP program as a design, build, finance, maintain project by Infrastructure Ontario with a 31-month construction and 30-year concession

Facility will be a building of 5 storeys, with underground parking to provide 247 underground parking spaces, plus an additional 53 above-ground parking spaces for a total of 300 parking spaces.

 <b>\$115 million</b> Construction Loan Due 2013  Lead-Arranger June 2010	 <b>\$190.3 million</b> 32-year Amortizing Notes Due 2042  Sole-Bookrunner June 2010
--	---

## BMO Capital Markets' Role

BMO Capital Markets was retained by Carillion to act as Financial Advisor on the project, Lead Underwriter for the project bond and Lead Arranger for the construction loan

### Financial Advisory

- Supported negotiations with lenders/IO
- Provided financial advisory throughout the RFQ/RFP submissions
- Created and managed the bid financial model including updating, reviewing, running scenarios and sensitivity analysis
- Provided strategic advice on funding options, substantiated with financial model results
- Managed the model audit process

### Rating Agency

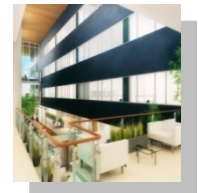
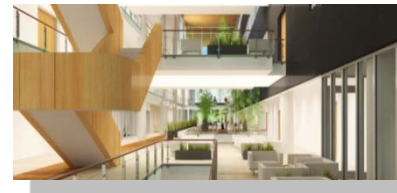
- Managed the rating agency process and achieved A- (S&P) and AL (DBRS) ratings for the project
- Advised on the security package in order to achieve the desired ratings

### Financing

- Sourced debt and secured required commitments, including running of a global funding competition
- Advised & supported on terms and conditions and sources of financing (including pricing, financial covenants, reserving requirements and Sponsors support package)
- Analyzed responses from potential lenders, and identified competitiveness of pricing and terms
- Structured bank and bond facilities including covenant package
- Provided committed financing for bid

### Execution

- Managed the marketing documents and process
- Managed the financial close process
- Distributed bonds to a group of diversified buyers and placed the bond into the DEX bond index
- Syndicated construction loan to high quality lenders
- Reinvested bond proceeds on behalf of the project partnership
- First P3 project in Canada where single financial institution underwrote entire financing for both short-term and long-term requirements



# Case Study: Pan American Games Athletes Village

## Project Overview

Infrastructure Ontario, Waterfront Toronto and the Ontario Realty Corporation are working with Toronto 2015 to develop a section of West Don Lands that will be home to the Athletes' Village ("Village"). The Village will house the 10,000 athletes and officials of the 2015 Pan/Parapan American Games ("Games"). Following the Games, the Village will be converted into a range of housing developments including affordable housing and new condominiums units to be sold by the developer as part of Toronto's waterfront revitalization.



### BMO CM Role

- Combined effort of the BMO Infrastructure group and Real Estate group
- Structured the project to ensure financeability
- Development of the project documents including the RFP and Project Agreement
- Prepared presentations / memos to IO and Waterfront Toronto as needed
- Met and negotiated with bidders on behalf of IO and Waterfront Toronto
- Advised the Province during bid evaluation
- Advised on appropriate scoring mechanism for bid evaluation to ensure all risks were appropriately considered

### Unique Challenges

- New asset class - combination of P3 project finance and real estate development
- Risk allocation between Province and private sector to achieve a financeable deal that is attractive to the private sector while protecting Province's objectives
- Mix of Provincial payments to develop the Village for athletes and Market Revenue risk post the Games a challenge to finance
- Significant financing needs required structure to accommodate various types of debt – \$1 billion project
- Very tight construction timeframe with a firm deadline due to 2015 Games

### Project Structure

- The Province will provide payments during the Games phase for the construction of the Village
- Project consortium is required to have a minimum level of contingent equity during Games phase which can be drawn by the Province in the event of a construction delay or default
- Condominium sale revenues are the first form of debt repayment following the Games in the event of a shortfall the Province will pay lenders shortfall amount
- Province provides a take out loan facility on shortfall after the Games are complete to insulate lenders from real estate market risk
- The take out loan facility can be exercised 2 years after the Games are complete and carries a high coupon

### Outcome

- High level of interest shown by the market during the RFQ stage
- Meetings were held with the three selected bidding consortiums to refine the Project Agreement and project structure
- By bid submission the Province received three fully committed bids for the Project
- The project reached financial close in December 2011





## Appendix B: BMO Infrastructure Banking



# BMO Capital Markets Infrastructure Banking

## Who We Are

BMO Financial Group (NYSE, TSX: BMO)  
(Parent of BMO Capital Markets)

Key Statistics on BMO Financial Group include:  
(as of most recent fiscal year end 10/31/13)

- Strong credit ratings Aa3/ A+/ AA- (Moody's/ S&P/ Fitch); \$23.6 billion in Tier 1 Capital (Tier 1 Ratio of 11.4%)
- 45,500 BMO employees globally; 6,400 in Illinois
- 8<sup>th</sup> largest North American bank with \$515 billion total assets

## Public Finance & Infrastructure

- Headquartered in Chicago with offices in New York and San Francisco
- Focused on serving state and local governments, healthcare, higher education, 501(c)3, power, and transportation clients

## BMO Global Investment Banking



## P3 Practice Leadership

- 20 years experience advising public sector clients on procurement processes for new infrastructure and new investment in existing assets; and advising private sector clients bidding on infrastructure projects
- Experienced in arranging bank, equity and bond financings
- Infrastructure procurement advice for opportunities in: Transportation, Energy & Power, Water & Wastewater, Air / Seaports, Stadium/Leisure, Education, Healthcare, General Government, Social Infrastructure

## Select BMO Infrastructure Finance & Advisory Experience

 <p><b>Ottawa Light Rail Project</b></p> <p><b>Advisor to Infrastructure Ontario and City of Ottawa</b></p> <p><i>February 2012</i></p>	 <p><b>\$1.5 billion</b> Ohio River Bridges</p> <p>Underbidder for the DBFOM of the East End Crossing P3 Project</p> <p><b>Financial Advisor and Committed Lead Underwriter</b></p> <p><i>Pending</i></p>
 <p><b>\$365 million</b></p> <p>Presidio Parkway P3 Golden Link Concessionaires</p> <p><b>Mandated Lead Arranger</b></p> <p><i>June 2012</i></p>	<p><b>407 East Development Group</b></p> <p><b>\$451 million</b> Short-term Notes Due 2015</p> <p><b>\$120 million</b> 33-year Amortizing Notes Due 2045</p> <p>Joint-Lead and Bookrunner</p> <p><i>May 2012</i></p>
 <p><b>&gt;C\$500 million</b></p> <p>Infrastructure Ontario</p> <p>Procurement of PanAm Games Athlete's Village</p> <p><b>Financial Advisor</b></p> <p><i>December 2011</i></p>	 <p><b>C\$400 million</b></p> <p>Greater Toronto Airports Authority</p> <p>Airport Revenue Medium Term Notes due 2041</p> <p><b>Sole Bookrunner</b></p> <p><i>November 2011</i></p>

# Important Notice

These materials are confidential and proprietary to, and may not be reproduced, disseminated or referred to, in whole or in part without the prior consent of BMO Capital Markets (“BMO”). These materials have been prepared exclusively for the BMO client or potential client to which such materials are delivered and may not be used for any purpose other than as authorized in writing by BMO. BMO assumes no responsibility for verification of the information in these materials, and no representation or warranty is made as to the accuracy or completeness of such information. BMO assumes no obligation to correct or update these materials. These materials do not contain all information that may be required to evaluate, and do not constitute a recommendation with respect to, any transaction or matter. Any recipient of these materials should conduct its own independent analysis of the matters referred to herein.

“BMO Capital Markets” is a trade name used by the BMO Investment Banking group, which includes the wholesale arm of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc. in Canada, BMO Capital Markets Corp in the U.S. and BMO Capital Markets Ltd in the U.K.

BMO does not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended to be used, and cannot be used or relied upon, for the purposes of avoiding any tax penalties and (ii) may have been written in connection with the “promotion or marketing” of the transaction or matter described herein. Accordingly, the recipient should seek advice based on its particular circumstances from an independent tax advisor.