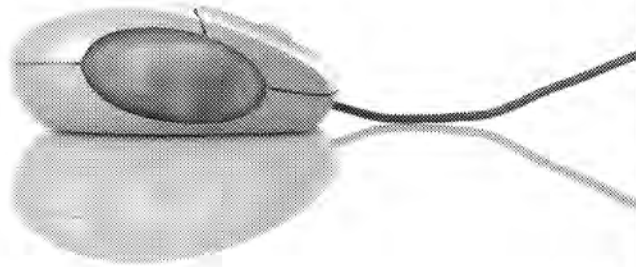


Deloitte



**Ottawa Light Rail Transit
Project**
Options for payment during
construction



August 2011

Purpose & Next Steps

- **Purpose**: The purpose of this meeting is to:
 - Present the City with a set of options for payment during construction;
 - Provide a preliminary evaluation of the various options; and
 - Obtain guidance from the City on which options should be carried forward for further study, including assessment of affordability.

- **Next Steps**: Following the meeting, we expect that the next steps will include:
 - More detailed costing/modeling of options carried forward
 - Submit cash flows to PWC for affordability check

Background

- Due to affordability and market capacity constraints, the entire capital cost of the OLRT Project cannot be financed by Project Co.

- The City and senior government funding partners must provide partial payment during the construction period.

- There are a variety of different methods for paying Project Co. during construction. Payment methods differ in terms of:
 - Risk transfer
 - Financial considerations
 - Implementation considerations

Criteria to evaluate payment options

Criteria to evaluate payment options

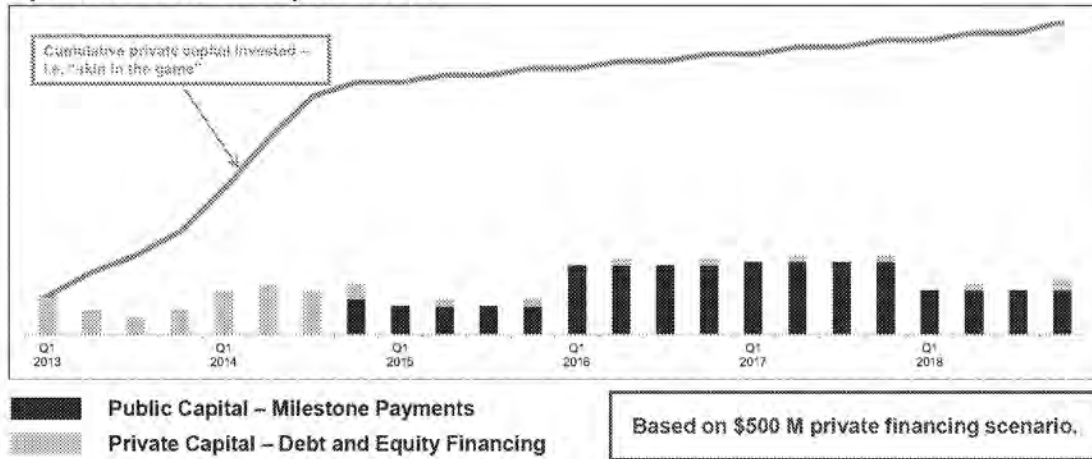
Risk Transfer	Degree to which each option secures construction risk transfer to Project Co., through deferral of payment until performance and private capital at risk.
Financial (Cost)	Degree to which each option may result in added financing costs or reduce financing costs.
Financial (Flexibility)	Degree to which each option may preclude certain forms of private financing (bank, bond) from being competitive
Implementation – City	Degree to which each option is administratively simple or complex for the City. Includes consideration of senior government funding issues.
Implementation – Project Co.	Degree to which each option may introduce complications to Project Co.'s ability to construct or finance the system.

Definitions/Terminology

“Milestone Payment” means a payment provided by the City to Project Co. during construction, contingent on achievement of a construction event or events. Example: a payment provided when the maintenance facility is certified as being substantially complete.

“Progress Payment” means a payment provided by the City to Project Co. during construction, based on construction progress as measured by costs incurred by Project Co.

Option #1 - Private Capital in First



Description

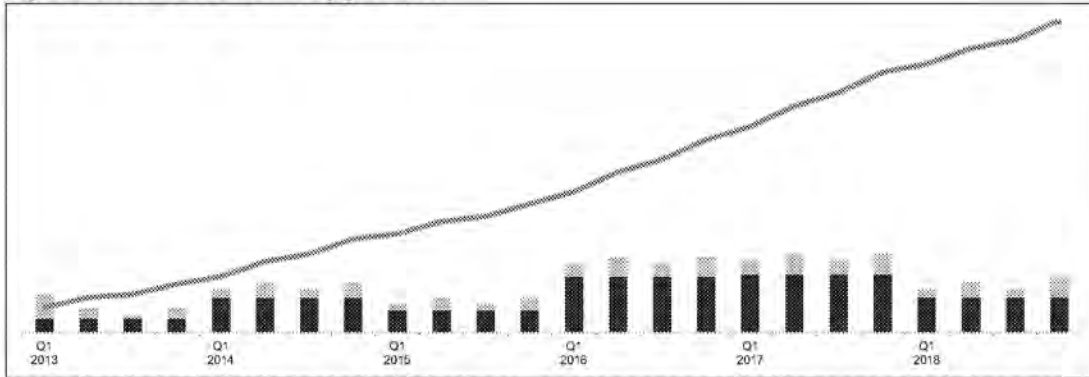
- Project Co. must fund a specified up-front portion or percentage of capital costs
- Example: No payment until work 30% complete
- Once required “work in the ground” has been certified, payments from owner will commence. Payments can be in the form of progress payments or milestone payments.
- Project Co. continues to fund certain financing-related costs (interest during construction, reserve accounts, etc.)
- This approach was used in Alberta – no payment until 30% of construction value was “in the ground”, after which progress payments were commenced.

Option #1 - Private Capital in First

Assessment

Criteria	Pros	Cons
Risk Transfer	<ul style="list-style-type: none"> Private sector is exposed first – private capital is at risk and performance is secured from day one. 	<ul style="list-style-type: none"> Progress payments are not linked to any event-driven milestone – monthly payments based on spend curve only Leaves no ability for contractual remedies against specific milestones or project security linked to specific milestones Note – these can be mitigated by using milestone payments.
Financial (Cost)	<ul style="list-style-type: none"> Defers City borrowing needs to pay project costs by 1-2 years 	<ul style="list-style-type: none"> Likely to be a higher cost approach. Under both bond and bank financing approaches, financing will be drawn up front and will accrue interest through the construction period.
Financial (Flexibility)	<ul style="list-style-type: none"> Does not favor bank or bond solution – either would likely be competitive, so maximizes sources of financing. 	
Implementation – City	<ul style="list-style-type: none"> Depending on trigger for public sector payments, can be relatively simple to implement. Example: Alberta projects provide no payment until work is certified as 30% complete, based on value of construction “in the ground” 	<ul style="list-style-type: none"> Potential delayed funding – province – larger amounts required, later in the construction period.
Implementation – Project Co.	<ul style="list-style-type: none"> Payment method does not dictate construction schedule or sequencing. 	

Option #2 - Pro Rata Approach



Public Capital – Milestone Payments
 Private Capital – Debt and Equity Financing

Based on \$500 M private financing scenario.

Description

- The City provides monthly progress payments during construction.
- Example – BC projects have used Cost to Date and Cost to Complete, as measured by certifier, to benchmark progress.
- Payments could also be based on a % of Project Co.'s costs (e.g. 82% of CAPEX), subject to a cap.
- Project Co. must finance the remaining portion of construction costs (e.g. 18%), and must also fund financing-related costs (fees, interest, etc.)

2. Pro Rata Approach

Assessment

Criteria	Pros	Cons
Risk Transfer	<ul style="list-style-type: none"> Private money is injected into the project from day one 	<ul style="list-style-type: none"> Payments flow before completion of any significant event based milestone Does not match AFP principles of deferring payment, which helps shape behavior
Financial (Cost)	<ul style="list-style-type: none"> Potential for lower cost (under bank solution), since funds are drawn evenly throughout the construction period, as opposed to large up-front draws. Result is less interest during construction. 	<ul style="list-style-type: none"> Under a bond solution, similar costs to other approaches (private in first, milestones)
Financial (Flexibility)		<ul style="list-style-type: none"> May favor a bank solution over a bond, and make a key source of finance in the Canadian market uncompetitive.
Implementation – City	<ul style="list-style-type: none"> Flexible – the “percentage of CAPEX” method means that if bid construction costs are lower than we expect, City will pay proportionally less in milestone payments. Contrast with “fixed amount” milestones, where lower construction prices just mean that Project Co. must obtain less financing. Provincial and federal money flows immediately (first month of payment) 	<ul style="list-style-type: none"> Detailed monthly certification/cost reconciliation process is required – administratively complex
Implementation – Project Co.	<ul style="list-style-type: none"> Payment method does not dictate construction schedule or sequencing. 	

Option #3 – Milestone Payments

- Public Capital – Milestone Payments
- Private Capital – Debt and Equity Financing

Based on \$500 M private financing scenario.

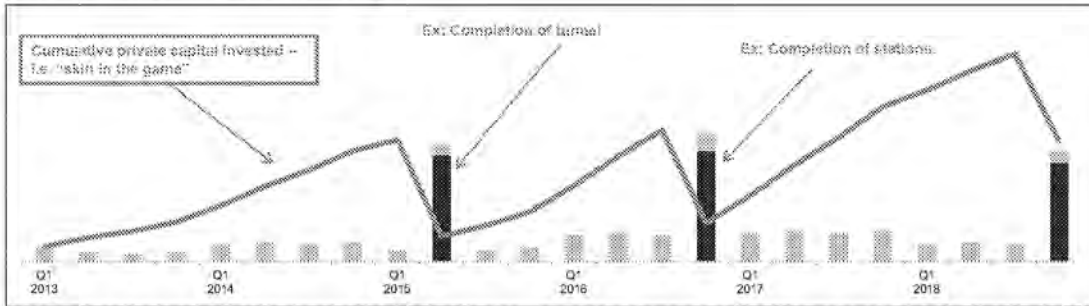
Description

- The City provides milestone payments upon specific construction events.

The milestones which trigger Milestone Payments may be defined by the City (“Prescribed”) or the City may allow Proponents to define these milestones within certain constraints (“Project Co. Defined”)

Option # 3a: Milestone Payments – Prescribed by City

indicative milestone payments – for illustration only.



Public Capital – Milestone Payments
 Private Capital – Debt and Equity Financing

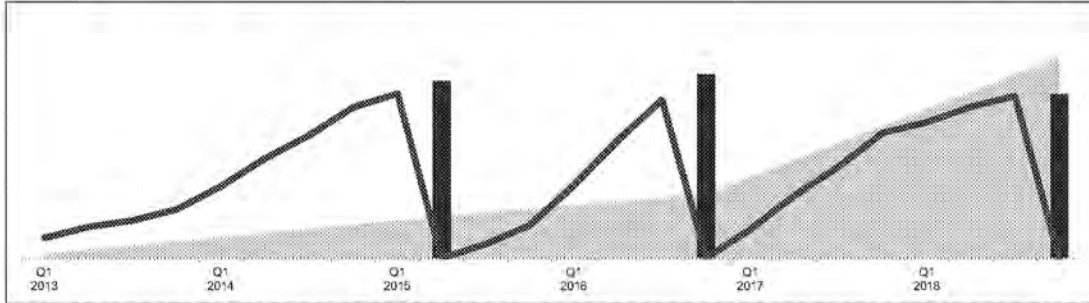
Based on \$500 M private financing scenario.

Description

- The City provides milestone payments upon specific construction milestones. Typically, a small number (2-4) of significant milestones – usually triggered by completion of a section or phase of a project.
- Under the “Prescribed by City” approach, the City pre-defines the construction milestones which trigger payment
- The City would also pre-define the amount of the payments
- Project Co. must finance the intervals between payments (short-term financing) and finance construction costs which are not covered by the payments (long-term financing)

Short Term Credit Facility bridges gaps between major milestone payments

indicative financing structure - not illustration only.



- Public Capital – Milestone Payments
- Private Capital – Long Term Debt and Equity Financing
- Private Capital – Short Term Credit Facility

Based on \$500 M private financing scenario.

Option #3a: Milestone Payments – Prescribed by City

Assessment

Criteria	Pros	Cons
Risk Transfer	<ul style="list-style-type: none"> • Links payment to significant project milestones, driving behavior to ensure that critical path elements are completed on time • Defers payment to later years – private capital invested from day one 	
Financial (Cost)		<ul style="list-style-type: none"> • Depending on timing of milestone payments, may require Project Co. to obtain an additional short term facility to bridge gaps between milestone payments.
Financial (Flexibility)		<ul style="list-style-type: none"> • May favor bank solution over bond.
Implementation – City	<ul style="list-style-type: none"> • Allows City to manage project around major milestones – may have contractual rights for each milestone, such as step-in. 	<ul style="list-style-type: none"> • Fixed milestone payments are inflexible, in the event that construction costs are lower than expected (i.e. government pays same amount, Project Co. needs to finance less) • Need to certify milestones – close involvement in construction • <u>City must define construction milestones up front and have some idea of when and in what sequence they will occur – can we do this?</u>

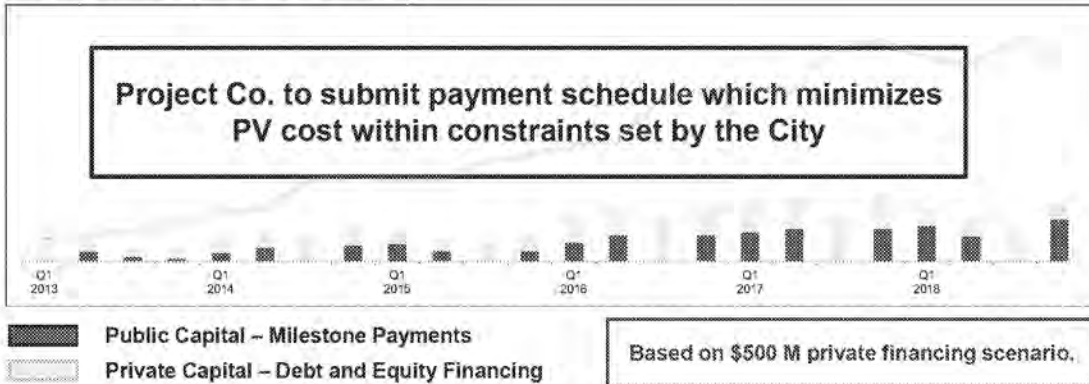
Option #3a: Milestone Payments – Prescribed by City

Assessment (Continued)

Criteria	Pros	Cons
Implementation – Project Co.		<ul style="list-style-type: none"> • May be difficult to define milestones that work for all bidders – construction schedule different for each bidder. <u>Bidders may emphasize that they do not want milestone payments to drive construction schedule.</u> • Need to be conscious of contingent equity issue when sizing payments.

Option #3b: Milestone Payments – Defined by Project Co.

Indicative milestone payments – for illustration only



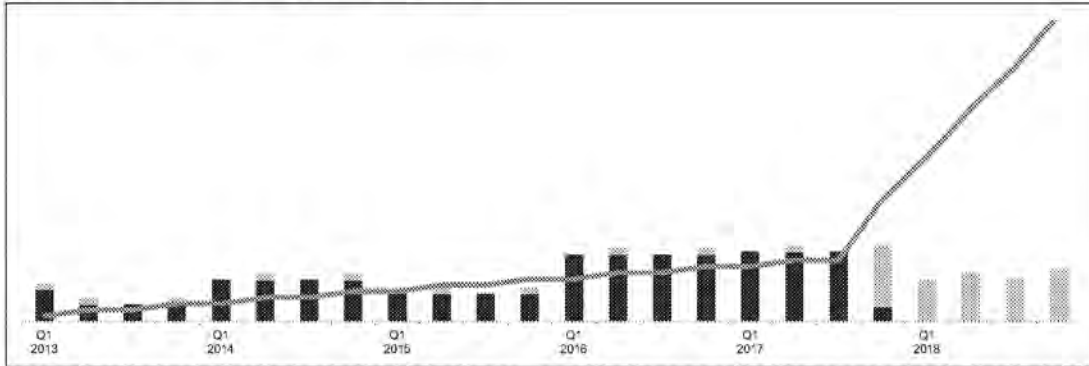
- Description**
- The City provides payments upon specific construction milestones
 - Project Co. defines the construction milestones, as part of its proposal.
 - City may place certain constraints – i.e. cannot draw milestones too early, cannot cluster milestones together, etc.
 - The amount of the payments would be defined by Project Co, subject to constraints provided by the City (availability of senior government funding, etc.)

Option #3b: Milestone Payments – Defined by Project Co.

Assessment

Criteria	Pros	Cons
Risk Transfer	<ul style="list-style-type: none"> • Constraints (i.e. private capital requirements by year, total payment ceiling by year, total % of spend constraint, etc.) still ensures “skin in the game”. 	<ul style="list-style-type: none"> • Bidders will be incented to ask for as many payments as early as possible, to lower financing costs. • Bidders may choose milestones that are not true/reasonable project milestones where risk transfer has been achieved (can mitigate by giving bidders a laundry list of eligible milestones)
Financial (Cost)	<ul style="list-style-type: none"> • Bidders should be incented to offer lowest-cost solution, within constraints. 	
Financial (Flexibility)	<ul style="list-style-type: none"> • Can offer milestone payment schedule tailored to bank or bond solution 	
Implementation – City		<ul style="list-style-type: none"> • City does not know what profile of payments it is getting until after RFP • Need to review, approve, and certify milestones
Implementation – Project Co.	<ul style="list-style-type: none"> • Allows bidding community flexibility to offer an optimal project payment structure that drives cost down, based on their unique approach to construction. • Payment regime will not drive construction – construction requirements will be foremost. 	

Option #4: Public Capital in First



Public Capital – Milestone Payments
 Private Capital – Debt and Equity Financing

Based on \$500 M private financing scenario.

- Description**
- Government payments provided as first source of financing
 - Project Co. must fund certain financing-related costs (fees, interest on drawn bond)
 - Once government payments are exhausted, Project Co. uses private financing to fund remainder of work
 - This option could include either progress or milestone payments

Option #4: Public Capital in First

Assessment

Criteria	Pros	Cons
Risk Transfer		<ul style="list-style-type: none"> Minimizes risk transfer, skin in the game early on
Financial (Cost)	<ul style="list-style-type: none"> May reduce financing cost, depending on what type of financing solution is used → Bank financing can be drawn later in construction period. 	
Financial (Flexibility)		<ul style="list-style-type: none"> Favors bank financing. If bond financing is used, may have to be drawn up front and may not be much cost savings.
Implementation – City	<ul style="list-style-type: none"> Federal and provincial funds flow from month one 	<ul style="list-style-type: none"> Requires city funding immediately
Implementation – Project Co.		

Cost of each option

* Initial estimate – based on assumptions and subject to refinement

** Present Value terms

		15 Year term		
		\$300 M Private Capital	\$500 M Private Capital	\$700 M Private Capital
Least Cost ↑ ↓ Highest Cost		Text here	Text here	Text here
		Text here	Text here	Text here
		Text here	Text here	Text here
		Text here	Text here	Text here

		30 Year term		
		\$300 M Private Capital	\$500 M Private Capital	\$700 M Private Capital
Least Cost ↑ ↓ Highest Cost		Text here	Text here	Text here
		Text here	Text here	Text here
		Text here	Text here	Text here
		Text here	Text here	Text here

Preliminary Assessment
Private in First (Option 1) and Milestone (Project Co. Defined) (Option 3b) appear to be best options

	Risk Transfer	Financial (Cost)	Financial (Flexibility)	Implementation (City)	Implementation (Project Co.)
1. Private in First *					
2. Pro Rata					
3a. Milestone (City Defined)					
3b. Milestone (Project Co. defined) *					
4. Public in First					

strong weak

Proposed Next Steps

1. Perform detailed modeling on the two short-listed options

- Refresh/update model assumptions (financing costs)
- Develop indicative “Project Co Defined” payment schedule
 - Will assume monthly payments – similar to pro rata from a financial perspective, but based on construction events and not simply construction spending

2. Provide scenarios based on short-listed payment options to PWC for affordability assessment

- Scenarios ranging from \$300 - \$700 M long-term private capital to test affordability