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Ottawa LRT

Analysis of Alternative Financing Options

Draft 2
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Purpose of this Report

- As the City continues to assess all possible options that could mitigate its retained risk profile while meeting its Affordability objectives, it has sought to obtain feedback from market participants to ensure that it has considered all options.
  - Deloitte was directed to conduct a market sounding to:
    1. Seek insight from project sponsors and vehicle suppliers on structures that could enhance vehicle maintenance performance over the maintenance term including:
       - Capital Lease: Withholding a portion of payments during construction for the Vehicles, which would then be re-paid during maintenance term (e.g. “F” or Capital ASP) and linked to Vehicle performance.
       - Lease with Residual: City to lease Vehicles during maintenance term with a conventional lease structure (including a residual amount due at end of term).
    2. Obtain feedback from participants on other approaches that could enable the City to meet its Affordability objectives.

- This report provides the results of this market survey.

Summary of Results

- **Vehicle Capital Lease:**
  - Separation of Vehicle Bundle and Civil Bundle has not been done before and will introduce integration issues that the City will need to manage.
  - Offers no value to City in terms of risk transfer
- **Conventional Vehicle Lease:**
  - Lease structure used in European market is not be applicable and a "Pure" Financing Structure does not add any value to the City as suppliers financing costs would not be lower than the City's.
  - Offers no value to City in terms of risk transfer.
- **Other Approaches:**
  - Spend Target and Two Envelope Procurement was identified by participants as an alternative approach to meet Affordability issues:
    - Have been used/applied by other jurisdictions and are known to market.
    - Pros of simplified message to the Public and enabling bidders to define risk transfer that is Affordable to the City, out-weigh the Cons of a more complicated procurement (which can be managed / mitigated).

Summary of Market Survey Topics

- Contacted two major vehicles suppliers and two equity participants with credible and recent experience in global transit PPP:
  - Siemens;
  - Bombardier;
  - Macquarie (Denver Fastracks Eagle Transit PPP, closed in 2010); and
  - Plenary (Australia Gold Coast Transit PPP, closed in 2011).

- Summary of survey questions:
  - Objectives:
    - Examine cost effective means to enhance security over maintenance term (e.g. as compared to LC ~ 50% to 100% of annual maintenance fee in DBM).
  - Summary of survey topics:
    1. Seek input on alternative Vehicle Procurement and Financing:

       1 a. What would be the structure of a Vehicle Capital Lease?

       1 b. What would be the structure of Conventional Vehicle Lease?
    2. Obtain input on other options that the City should consider to maximize value while meeting Affordability objectives.

Results

1. Vehicle Procurement and Financing

1 a. Vehicle Capital Lease:

Overview
- Portion of costs for Vehicle "Bundle" (vehicles + signals + catenary + communication system) during construction would be withheld and re-paid during maintenance term, and linked to performance (would act like the capital portion of an Availability Annual Service Payment).

Results
- Vehicle suppliers could provide - but responsibilities during maintenance term would need to be contractually separated from Civil "Bundle" (guideway / structures + tunnel + stations + track + maintenance facility).
  - Introduces integration risk to the City as transit performance is dependant on both the Civil Bundle and Vehicle Bundle (City would need to define and manage integration issues).
    - Would result in a risk premium to account for contractual separation and loss of control of both Civil and Vehicle Bundles.
    - Never been done likely due to integration issues introduced by delineating and separating Vehicle Bundle from Civil Bundle.
    - This delineating and separating is typically done by "equity" in a DBFO/M structure using precedent interparty agreements developed and refined over many projects, under a single umbrella Project Agreement for which "equity" would have full control.

Applicability
- Not done before.
- Could be done.

Conclusions
- Offers limited value to City in terms of risk transfer.

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Results cont'd

1. Vehicle Procurement and Financing cont'd

1 b. Conventional Vehicle Lease:

Overview	• Structured like a automobile lease – transit authority can lease vehicles for 5 to10 yr term and "return" vehicles to supplier at end of term (could include maintenance). • Supplier retains residual value risk.
Results	• Requires a liquid and robust transit vehicle market where vehicle technology is "standard" and can be used by different transit authorities so that supplier's can mitigate residual value risk by reselling vehicles into secondary ("used") vehicle market. – Only exists in Europe where vehicles are highly standardized and where strong secondary market exists. – Does not exist in North America because opposite is true (vehicles are not standardized and secondary market does not exist). • "Pure" Financing Structure - suppliers could lease vehicles to City. However, this structure would not include maintenance risk transfer and would simply be a form of financing over the term. If term is shorter that expected useful life, City would be required to hold residual value risk, or suppliers would need to adjust lease rate to account for residual value risk.
Applicability	• Lease structure used in European market would not be applicable. • "Pure" Financing Structure does not add any value to the City as suppliers financing costs would not be lower than the City's.
Conclusion	• Offers no value to City in terms of risk transfer.

Results cont'd

2. Feedback on Other Approaches

Spend Target and Two Envelope Procurement:

Overview	• Obtain input on procurement or contractual options that the City should consider to maximize value while meeting Affordability objectives.
Results	• Recent completion of Denver Fastracks Eagle PPP applied a unique approach to address Affordability: – Bidders were provided with a nominal "Spend Target" that had to be met (e.g. annual cost ceiling) which addressed payments: ▪ To be made during construction period which considered different sources of capital funding; and ▪ Sources of funding available during the maintenance term to manage cost increases to the local tax base. • Sea to Sky Highway in B.C. used a hybrid procurement due to concerns over possible costs of PPP – a "Two Envelope" system was used whereby bidders were required to submit a DBFM bid and a DB bid (Note: City would seek DBM rather than DB). ▪ DB bid "envelope" would only be opened if the DBFM bids did not meet Affordability targets. ▪ May be used in combination with a "risk ladder" where bidders can specify an adjusted risk profile to meet any Affordability cap (i.e. if they cannot get there under City's preferred risk profile) – this becomes an evaluation factor.
Applicability	• The combination of the Spend Target and Two Envelope system is something bidders have seen and understand. Not withstanding evaluation issues, it is favourable as it provides bidders maximum flexibility in financing and risk allocation to meet Affordability target.
Conclusion	• Could offer value to City to allow market to optimize risk transfer and Affordability, and should be considered further.

Assessment of Spend Target and Two Envelope Procurement

Pros and Cons

- Possible structure of RFP:
  - City would provide a Spend Target that must be met by bids.
  - Two Envelope bid process would request:
    - DBFM offer as "base case"; and
    - DBM("f") as "fall-back" which would only be opened if compliant DBFM bids were not received.

Pros	Cons
• Offers bidders maximum flexibility to allocate risk, seek innovations, and "squeeze costs" to meet the City's cost objectives (e.g. the Spend Target). • Simplifies messaging to public as follows: ▪ Project budget has been set based on Dec'09 costs - annual Spend Target will be provided to bidders to ensure compliance (project will be on budget); ▪ Procurement approach will allow bidders to address pricing of inflation, financial and performance risks; and ▪ Removes need for City to prescribe risk transfer model (level of "f" and/or "F") and allows bidders to apply best practices from past projects to optimize risk transfer model. • City gets a DBM that meets budget with / without "f" or "F".	• Complicates Project Agreement development as architecture of agreement will need to account for a DBM("f") and DBFM structure: – Output specifications would not vary; – Payment mechanism would be calibrated differently (e.g. cost of deductions) due to Capital Payment component in DBFM; and – Differing role of Lender's rights will affect supervening / relief events and security package. • Requires City to provide a "risk transfer" ladder which would enable bidders to fine-tune pricing of risk. • Complicates evaluation process.

Assessment of Spend Target and Two Envelope Procurement

Can the Cons be Mitigated?

Cons	Mitigation
• Complicates Project Agreement development as architecture of agreement will need to account for a DBM("f") and DBFM structure: – Output specifications would not vary; – Payment mechanism would be calibrated differently (e.g. cost of deductions) due to Capital component in DBFM; and – Differing role of Lender's rights will affect supervening / relief events and security package.	• Use precedent DBM (Ottawa N/S) and other Canadian PPPs (Ontario, Alberta and BC) to develop DBM("f) and DBFM forms .
• Requires City to provide a "risk transfer" ladder which would enable bidders to fine-tune pricing of risk.	• City can define a risk allocation ladder which enables bidders to define how much risk the City needs to retain. • "Ladder" approach is familiar to Canadian markets as a similar concept (scope ladder) is used on Partnerships BC projects, and was also used in Communications Security Establishment project ($1 B plus project) • Risk ladder would address: – Elements of the Civil Bundle and Vehicle Bundle; and – Define risk transfer thresholds that are "non-negotiable" .

Assessment of Spend Target and Two Envelope Procurement

Can the Cons be Mitigated? cont'd

Cons	Mitigation
• Complicates evaluation process.	• Apply a 'staged' technical submission process that is common to DBM ("f) and DBFM (similar to Ontario , BC and Alberta approaches) – City's "signs-off" on compliance (with Output Specifications) at Final Stage. • Financial Proposal at Final Stage checked to ensure Financial Compliance (with Spend Target). • Only proposals that meet Final Stage requirements are scored to rank and select preferred bid: – Scoring can be financial and technical (e.g. 50:50). – Technical could include "value added traits" that difference technical submission. – Financial would be NPV of costs to City.

Conclusions:

- Cons can be managed / mitigated.
- Spend Target and Two Envelope type procurement have been used/applied by other jurisdictions and are known to market.
- Pros of simplified message to the Public and enabling bidders to define risk transfer that is Affordable, out-way Cons.

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