Review of Partnerships BC's

Methodology for Quantitative Procurement Options: Discussion Draft - August 2009

Prepared For

The Canadian Union of Public Employees

By

Marvin Shaffer Ph.d

November 2009

Review of Partnerships BC's Methodology for Quantitative Procurement Options Analysis: Discussion Draft - August 2009

Introduction

In August 2009 Partnerships BC published on its web site a *Draft Discussion Paper: Methodology for Quantitative Procurement Options Analysis.*

The purpose of the document was to provide an overview of the methodology Partnerships BC undertakes on behalf of its clients in its analysis of public private partnerships versus more traditional financing and procurement of major capital projects.

Partnerships BC solicited feedback on the document saying that a final paper would be published in January 2010.

I was approached by the Canadian Union of Public Employees to analyze the appropriateness of the methodology as a tool for making public policy choices between traditional procurement of projects and the use of public private partnerships. My analysis follows.

Marvin Shaffer, Ph.D.

Key Findings

- Partnerships BC's methodology for comparing traditional procurement with the use of public private partnerships (P3s) ignores the lower cost of public financing.
- Partnerships BC's methodology does not give appropriate consideration to the long term lease obligations in P3 projects. It overly discounts (underweights) future costs.
- In very simple terms PBC's analysis is shortsighted, doing a disservice to future taxpayers who must pay the extra costs of the P3 for the full length of the contract.
- PBC's methodology fails to consider the extra costs of a P3. It also fails to consider whether the risk transfer and efficiency benefits couldn't be achieved in other, less costly ways.

In sum, PBC's methodology ignores the extra costs of P3 as opposed to traditional government financing of new project – it looks at the benefits but not the cost of P3s. It fails to give proper weight to the long term cost impacts – impacts borne by taxpayers over the full life of the P3 contract. And it fails to consider the least cost ways of achieving the risk transfer and efficiency benefits P3s are assumed to provide.

Its methodology is fundamentally flawed, providing no justification for selecting P3s over more traditionally procured publicly-financed projects.

Discussion

In its discussion draft, Partnerships BC (PBC) sets out the evaluation procedures and assumptions it makes to compare the costs and benefits of public-private partnerships (P3s) versus more traditionally procured, publicly-financed projects.

The type of P3 that PBC focuses on is where a private consortium designs, builds, operates and finances a new project. PBC compares this procurement model to what it calls the Public Sector Comparator (PSC) in which government would develop and finance the project itself with design-build contracts for construction and separate contracts or arrangements for the on-going operation and maintenance of the new facility.

The advantage of a P3, according to PBC, is in the efficiencies and transfer of risks it can provide. PBC describes how it estimates these benefits, and how it then determines whether a P3 would be more cost-effective for taxpayers than a more traditionally procured, publicly-financed PSC, taking the estimated risk and efficiency benefits and other factors (for example, differences in tax implications) into account.

However, PBC's evaluation procedures do not in fact indicate whether a P3 would be more cost effective or otherwise advantageous. *Its evaluation methodology is fundamentally flawed.*

1. Lower costs of public financing are ignored: - The choice between a P3 and a more traditionally procured, publicly-financed PSC requires careful consideration of the basic trade-off these alternatives entail. On the one hand a P3 may enable government to transfer more risk and achieve greater efficiency than it could with a traditionally procured project. On the other hand the cost of capital the private P3 consortium must recover (and therefore government must ultimately pay for) is greater than the cost of capital government would incur if it were to finance a new project with public debt.

To determine which model is better the evaluation methodology must consider whether the risk transfer and efficiency advantages of the P3 are likely to outweigh the higher cost of capital embedded in the P3 bid price and payment arrangements.

The problem is that PBC's evaluation procedures do not recognize any difference in the cost of capital between privately-financed P3s and publicly financed projects. The cost comparison should be between the lease and other payments for the P3, adjusted for risk transfer and other factors, versus the debt service and other costs government would incur if it were to finance the project in a PSC. However, PBC's methodology does not estimate the debt service charges under the more traditionally procured, publicly-financed alternative. It incorrectly assumes in this case that all capital costs would be paid upfront, with no debt financing. The effect of this assumption in PBC's methodology (combined with its discount rate assumption discussed below) is equivalent to assuming that whatever financing takes place under the traditionally procured PSC is not at the government borrowing rate, but rather at the higher cost of capital the private consortium incurs. PBC's methodology effectively ignores any difference in the cost of capital between the two procurement models. In other words, PBC's evaluation model analyzes the potential benefits of a P3, but does not even attempt to estimate the costs. It is an extraordinary failing in a methodology aimed at objectively assessing the relative merits of the alternative procurement models.

 Future costs are not properly weighted: - Under a P3, project costs are paid through lease and other charges that typically increase through the contract period. In some cases the payment schedule intentionally shifts taxpayer repayment obligations from earlier to later years in the contract period.

In assessing the overall burden (total present value cost) that these arrangements impose on taxpayers, a key factor is the weight given to future relative to current obligations. In economic terms a key factor is the discount rate.

In its methodology, PBC uses a relatively high discount rate to calculate the total present value cost. To say the same thing it gives relatively little weight to future obligations. PBC typically uses a discount rate of 7.5% based on the rate of return the private sector wants to earn from these types of projects. That discounts tax obligations in ten years time by over 50%; tax obligations in 30 year time are discounted by almost 90%.

PBC's discount rate assumption may be appropriate for investors, who are focused on more immediate payback on their investments. And it may be appropriate for the evaluation of whether the project itself should proceed, when the returns possible from other projects must be considered. But it isn't appropriate for assessing the overall cost to taxpayers of alternative payment arrangements for projects the government has decided to undertake.

The issue is what trade-off are taxpayers willing to make between current and future tax obligations. There is considerable evidence that many taxpayers don't even accept the trade-off implied by the government borrowing rate. That suggests that at most, future tax obligations should be discounted at the government borrowing rate, a rate that is much smaller, giving greater weight to future costs, than PBC's private sector rate.

In very simple terms PBC's analysis is shortsighted, doing a disservice to future taxpayers who must pay the extra costs of the P3 for the full length of the contract.

3. Alternative methods of risk transfer not considered: - PBC's methodology fails to consider the extra costs of a P3. It also fails to consider whether the risk transfer and efficiency benefits couldn't be achieved in other, less costly ways.

Appropriately structured design-build competitions may achieve the efficiency benefits PBC states P3s may provide. Arguably there may be potential for greater efficiencies in the bidding process because of the larger number of firms that are able to participate. The requirement for financing in a P3 can limit the number of bidders involved.

Bonding and warranty arrangements can be used to ensure cost and performance guarantees are met in more traditionally procured processes – that risks the builders can manage are effectively transferred. The model PBC has recently turned to, whereby the winning bidder must provide some equity, but the balance of the capital cost is financed by government can also ensure long term performance guarantees are met. PBC recognizes this is a lower cost arrangement than their preferred P3, particularly with the recent turmoil in the private capital markets, but alternatives like this aren't even considered in its standard methodology.

The point is that PBC's methodology makes no effort to determine the optimal procurement arrangement, one that minimizes cost to the taxpayer, while still achieving appropriate, cost-effective risk transfer and private sector participation in the project.

In sum, PBC's methodology ignores the extra costs of P3 as opposed to traditional government financing of new project – it looks at the benefits but not the cost of P3s. It fails to give proper weight to the long term cost impacts – impacts borne by taxpayers over the full life of the P3 contract. And it fails to consider the least cost ways of achieving the risk transfer and efficiency benefits P3s are assumed to provide.

Its methodology, as stated earlier, is fundamentally flawed, providing no justification for selecting P3s over more traditionally procured publicly-financed projects.

Professional Qualifications

Marvin Shaffer is a consulting economist specializing in energy, transportation and natural resource economics. He has undertaken consulting assignments for a wide range of clients in the public and private sectors. Among his major accomplishments are negotiating on behalf of the province of British Columbia the arrangements for the return of the downstream power benefits under the Columbia River Treaty, and negotiating on behalf of Metro Vancouver the terms governing the creation of TransLink.

Marvin is also an adjunct professor in the Masters Public Policy Program at SFU, where he teaches a course on multiple account benefit-cost analysis. He has previously taught in the economics departments at UBC and the Universities of Tasmania and Queensland in Australia. He received his BA Honors in Economics at McGill University and his Ph.D. at UBC.