

Presentation to the Municipal Finance Authority

How to make the public sector advantage disappear

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Bias against the public sector

- Is the Public Private Partnership (P3) process so biased that the comparison of costs cannot be trusted?
 - The Public Sector Comparator
 - Discount Rates
 - Risk Transfer



An example project

- \$10 million in value
- MFA borrowing at 4.5%
- Cost of private capital for a DBFO at 6.5%
- Semi annual payments
- No operating or maintenance for the purpose of this comparison
- MFA amortization schedule spread sheet



Why is the price of private sector capital higher?

- Governments in developed countries are a very good risk. They can raise taxes to pay their debts. Corporations can go out of business. They are a higher risk
- Part of the money companies put in is equity – they expect a rate of return from 9% to 15%
- Blended rate of the two is higher

\$10 million – 25 years

	Public Project	P3
	MFA	Blended borrowing and equity
	4.50%	6.50%
Total Cost - Principle and Interest	\$17,250,000	\$20,365,137
Savings	\$3,115,137	
% of total spending	18.06%	

Note: cost at 7.5% = \$22 million

How to make the public sector advantage disappear



Larry Blain
President
Partnerships BC

"Public sector comparators won't do you much good anyways, because I can make the public sector comparator as bad as we want to, in order to make the private sector look good."

Municipal Finance Authority meeting

March 26, 2003

The Public Sector Comparator

Public Sector Comparator Public Sector Comparator is a hypothetical risk-adjusted costing by the public sector as a supplier, to an output specification produced as part of a PFI procurement exercise. It:

- Is expressed in net present value terms;
- Is based on the recent actual public sector method of providing that defined output (including any reasonably foreseeable efficiencies the public sector could make) and;
- Takes full account of the risks which would be encountered by that style of procurement.

The future value of money

- The discount rate is a measure of the future value of money
- Money in the future is less valuable to us than money today
- For one thing, it gets reduced in value by inflation

Calculating net present value: The discount rate

- “By applying a rate of discount (interest rate) to future cash flows to bring them back to the present, the NPC (Net Present Cost) expresses future amounts in the dollars of a reference year (2005)”

Sea-to Sky Highway Value for Money Report, page 20

Some possible discount rates

- 2% predicted inflation rate
- 3.5% discount rate used in UK
- 4.65% current MFA 25 year borrowing rate
- 6% current bank prime lending rate
- 6% Canada Line discount rate – final report
- 7% discount rate used for decision on Canada Line
- 7.5% Partnerships BC discount rate on S2S
- 8.0% Partnerships BC rate on Bennett Bridge

Impact of discounting on NPC over 25 years

	3.5 percent	6 percent	8 percent
Year 1	\$1,000,000	\$1,000,000	\$1,000,000
Year 5	\$871,442	\$792,093	\$735,029
Year 10	\$733,730	\$591,898	\$500,248
Tear 20	\$538,361	\$330,513	\$231,712
Year 25	\$437,957	\$246,978	\$157,699
NPC	\$17,058,367	\$13,550,357	\$11,528,758

Box 4 - Discounted Cashflow Forecast

Year	Project Year	Cashflow	Discount Factor	Discounted Cashflow
(See Box 4A)				
		£M		£M
1999/2000	0	10.5	1.000	10.5
2000/01	1	36.8	0.9434	34.7
2001/02	2	66.4	0.8900	59.1
2002/03	3	61.9	0.8396	52.0
2003/04	4	89.7	0.7921	71.1
2004/05	5	80.5	0.7473	60.2
2005/06	6	80.6	0.7050	56.8
2006/07	7	84.0	0.6651	55.8
2007/08	8	87.5	0.6274	54.9
2008/09	9	91.2	0.5919	54.0
2009/10	10	-25.0	0.5584	-14.0
NPV =				495.1

Source: HM Treasury Taskforce: Private Finance: Technical Note Number 5 – How to Construct a Public Sector Comparator

Box 4A - Cashflow Summary

Year	Project Year	Capital Costs	Operating Costs	Other Costs	Total
		(Box 4B)	(Box 4D)	(Box 4F)	(Box 4)
		£M	£M	£M	£M
1999/2000	0	6.5	2.5	1.5	10.5
2000/01	1	28.4	9.6	-1.2	36.8
2001/02	2	50.0	19.7	-3.3	66.4
2002/03	3	19.2	45.8	-3.1	61.9
2003/04	4	12.5	70.2	7.0	89.7
2004/05	5	2.2	68.2	10.1	80.5
2005/06	6	2.3	71.1	7.3	80.6
2006/07	7	2.4	73.8	7.8	84.0
2007/08	8	2.6	76.8	8.2	87.5
2008/09	9	2.7	79.8	8.7	91.2
2009/10	10	2.8	83.0	-110.8	-25.0
Total Undiscounted Cashflow				=	664.1

Public Sector Comparator

Year	Capital	Operating	Indirect	Disposal	Total	Discount Factor	Discounted Cash Flow
1	100		4		104	1.0000	104.00
2		20	4		24	0.9434	22.64
3	10	20	4		34	0.8900	30.26
4		20	4		24	0.8396	20.15
5		20	4	-50	-26	0.7921	-20.59
Total	110	80	20	-50	160		156.46

In the above example, the net present value of the life-cycle costs of the project is \$156.46 Million. If no other considerations are used to compare the PSC to the P3 bids, value for money could be achieved if the lowest price private sector bid is less than \$156.46 Million in discounted net present value cash flow terms.

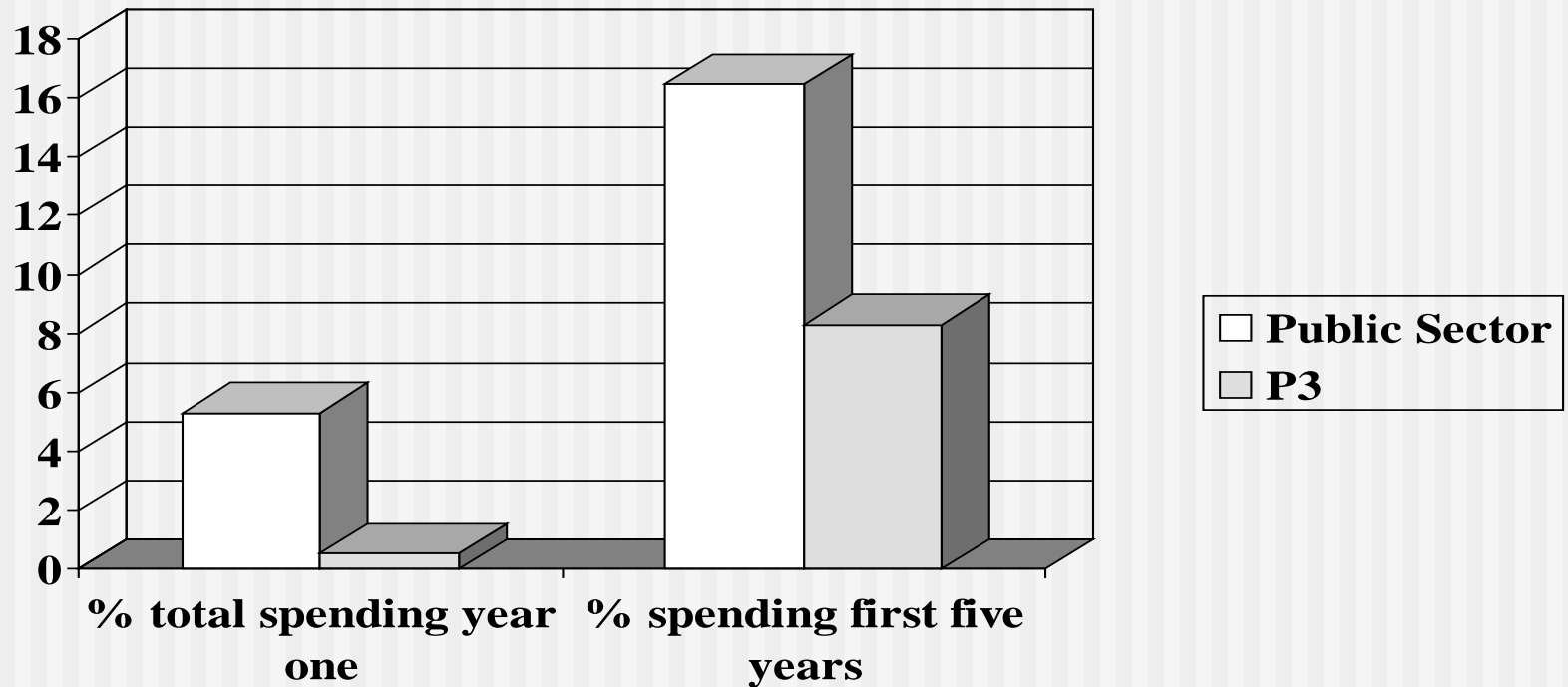
Why the timing counts (1)

- Discount rates make the value of money decline over time
- A dollar today is worth more than a dollar tomorrow
- With a big discount rate, a dollar today is worth a lot more

Why the timing counts (2)

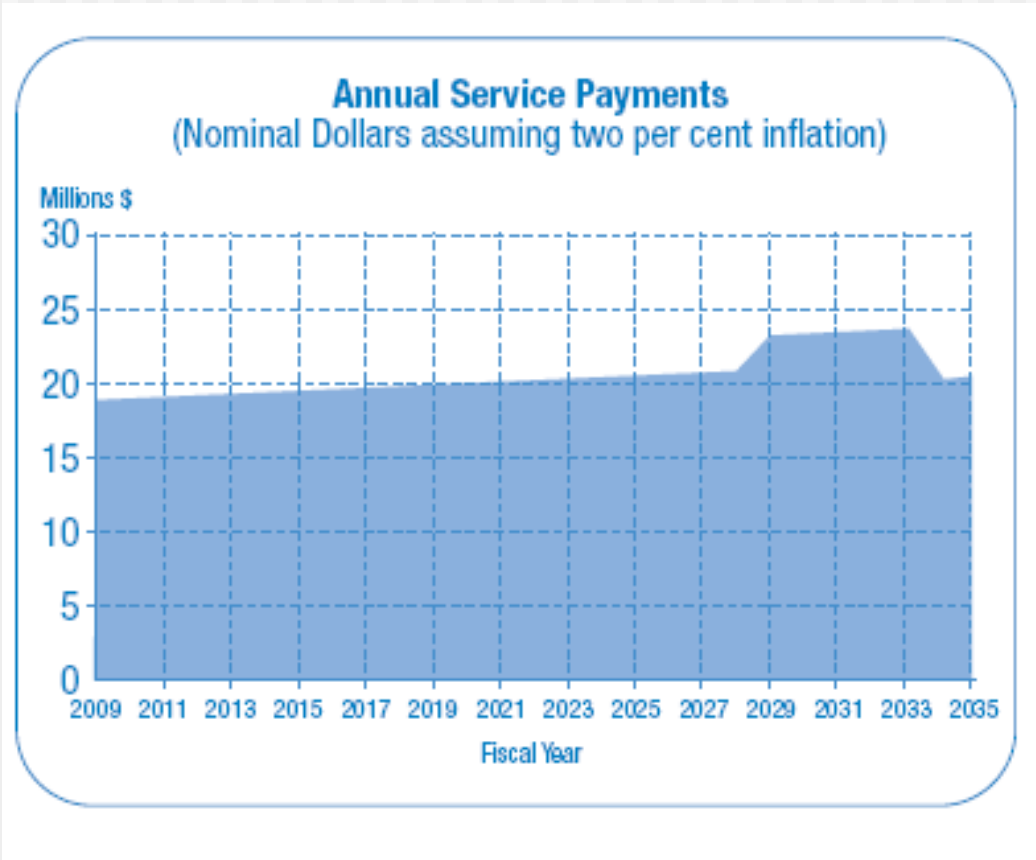
- People who create public sector comparators tend to “front-end load” the public sector costs and “back-end load” P3 costs
- This is what Partnerships BC did with the Sea-to-Sky Highway

Front end loading the public sector – S2S Highway



Note: A dollar in year one is worth 15cents in year 25

And back end loading the P3



Source: Bennett Bridge VFM Report, page 9

The impact of front end loading and a big discount rate

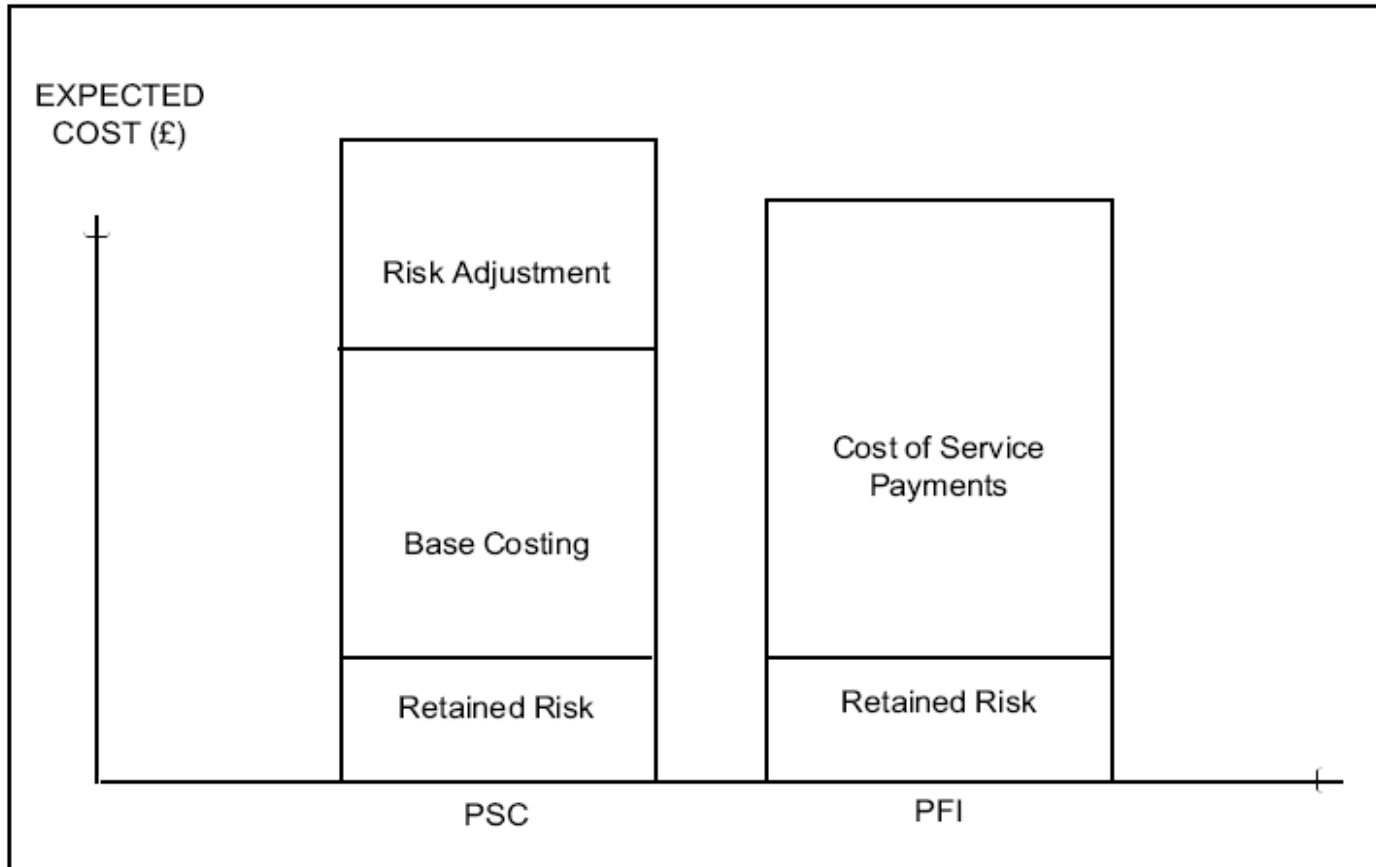
	Public Project	P3	Public Project Savings
Real cost in dollars	\$17,250,000.00	\$20,365,137.00	\$3,115,137.00
Real cost discounted at 7.5%	\$7,889,819.00	\$9,314,618.00	\$1,424,799.00
Front end loaded Public sector discounted at 7.5%	\$7,358,016.00	\$7,757,952.00	\$339,936.00

Pushing the private sector over the top

RISK

Risk Transfer

BOX 1 - VALUE FOR MONEY



Risk Transfer 2

	Project	PSC
CLCO Costs ³	120	98
Construction Costs ⁴		
Risk-free Estimate	1,382	1,263
Risk & Contingency	30	242
	1,412	1,505
Operating Costs ⁴		
Risk-free Estimate	577	559
Risk & Contingency	0	21
	577	580
Cost of Private Capital ⁵	130	0
Gross Cost	2,239	2,183
Incremental Ridership Revenue	(581)	(433)
Net Costs	1,658	1,750

Source: Canada Line VFM Report – page 20

What risk gets transferred?

- The public private partnership would be based on the principle that risks should be allocated to the party in the best position to manage them. For example, the contractor would assume risks associated with design, construction, facility operation and maintenance

Source: Bennett Bridge VFM report

How much risk would get transferred anyway?

- A Design/Build contract transfers virtually all of the construction risk transferred under a P3 without long term contracts and transferring control of the facility to the private sector
- The lion's share of risk is at the construction stage

Paying for risk transfer

“The private sector basically accepts more risk, reluctantly, in transactions because it gets more reward. It gets higher returns on its equity, higher returns on debt. That’s the quid pro quo for accepting more risk. Higher margins, higher returns.”

Nicholas Hann of Macquarie North America Ltd. Speaking at the November conference of the Canadian Council for Public Private Partnerships

How much do you pay for risk transfer?

“In the absence of specific information on these projects about the value of risk transferred to the private sector, we have assumed conservatively that the discounted value of risk transfer was equal to about 30% of construction cost based on evidence submitted to the Health Select Committee.

“Although one can vary the assumptions, this does suggest that the [health] trusts are paying a very high cost of risk transfer to get the hospitals built to time and budget”

Source: UK Association of Certified Chartered Accountants



How much do we pay in BC?

- We don't know

- "Proponents were required to provide a proposal that met the AAC requirements, rather than price specific risk" (Sea to Sky)
- "In conclusion, the quantum of risk transferred to the private proponent is not know by the public sector" (Canada Line)

What else don't we know?

“So how does one determine the portion of the total contract cost that relates to the construction of the asset in order to capitalize the amount? Again, there is no specific handbook guidance yet addressing P3s.”

Seeking Best Practices in Financial Reporting, Office of the Auditor General of BC, January 2007, page 50



Risk and the discount rate

How did we get to such a big discount rate

- “The cost of using capital is defined as the rate of return, investors who have alternative market investment opportunities, will require before they will invest in the project. The discount rate used represents the weighted average cost of capital (WACC) for S2S. The WACC best reflects the level of risk transfer for this particular project”

Risk and the public sector borrowing rate

- Partnerships BC went further in the Sea to Sky project and “assumed” that the public sector would borrow money at the same cost as the private sector cost of capital
- Larry Blain said this was fair because the change in the rate of borrowing was done to better estimate the risk the public sector could have picked up



Impact of “assuming” the public sector borrowing rate is bigger than it is

	Public Project	P3	Savings
Real cost in dollars	\$17,250,000.00	\$20,365,137.00	\$3,115,137.00
Real cost discounted at 7.5%	\$7,889,819.00	\$9,314,618.00	\$1,424,799.00
Front end loaded Public sector discounted at 7.5%	\$7,358,016.00	\$7,757,952.00	\$399,939.00
Front end loaded Public sector discounted at 7.5% AND assuming a 6.5% borrowing rate	\$8,686,783.00	\$7,757,952.00	-\$928,831.00

Applying the PBC method to make your own projects look good

- Assume a \$10 million project
- Assume a 25 year deal – 4.5% interest
- Ask the MFA to get you a deal so you pay nothing during the 25 years and then pay back a lump sum principle and interest in 25 years
- It's a risky business – discount cash values at 7.5%



- In 25 years you pay back \$30,000,000
- But discounted annually at 7.5%, in 25 years a dollar is worth 15.4 cents
- Your net present cost of this project is
\$4,630,000!



Bias in decision making: Partnerships BC's 3 jobs

1. create P3s and get them moving
2. advise the government on whether or not a particular P3 is a good idea
3. write their own value for money reports

Conflict of Interest? The World Bank says yes.

“Risks of a conflict of interest arise with crosssectoral PPP units that both provide input into the approval process for PPPs and play a role in identifying and preparing projects. Conflicts also can arise if a PPP unit promotes or assists in developing projects and then is asked to carry out ex post evaluations. The best solution may be to split the functions.”

Public-Private Partnership Units: What Are They, and What Do They Do? Public Policy for the Private Sector, World Bank, September 2006.

Myth 1: P3s get things done quickly and on time

“A PFI transaction is one of the most complex commercial and financial arrangements which a procurer is likely to face. It involves negotiations with a range of commercial practitioners and financial institutions, all of who are likely to have their own legal and financial advisers. Consequently, procurement timetables and transaction costs can be significantly in excess of those normally incurred with other procurement options.”

Source: HM Treasury. Value for Money Assessment Guide, August 2004.

Myth 2: with P3s the price is guaranteed

Project	Initial Estimate	Current Estimate
Abbotsford Hospital and Cancer Centre	\$211,000,000	\$355,000,000
Canada Line	\$1,550,000,000	\$2,000,000,000
Golden Ears Bridge	\$600,000,000	\$808,000,000
Sea-to-Sky Highway Project	\$600,000,000	\$789,000,000
William Bennett Bridge	\$100,000,000	\$170,000,000

Myth 3: Private money solves the infrastructure crisis

“Even though social infrastructure may be financed by the private sector, the government, through payments made through the contract’s life will ultimately fund it. These payment commitments are as real as those associated with servicing balance sheet debt... Private provision of public infrastructure is therefore not a “magic pudding” that can alleviate the resource constraints all governments necessarily face.”

New South Wales Treasury. *Private Provision of Public Infrastructure and Services.*

Is there a better way? Design/Build Projects

■ John Les on Chilliwack's GW Graham Middle School

"This is an excellent facility that will be here for years and years and will educate the future leaders of our community," Chilliwack-Sumas MLA John Les said, adding he is glad the school district decided against going the traditional route when building the school...This is the first time a Chilliwack school has been built using design/build, an innovative cost effective method in which the builder is responsible for both design and construction."

Chilliwack Times, November 17, 2006

Shirley Bond on Design/Build

In terms of P3 deals, Bond said, "there has been success with hiring single contractors to design and build schools in other parts of the province."

"The design/build process resulted in allowing them to make additional enhancements to the schools," she said. "We are going to look at what is the most effective way to build this school."

Prince George Free Press, 2 Feb. 2007

And John Les Again

"Les explained that the project will be built using the design build method, which he said is an enlightening way of doing business in the public sector. We know exactly what the cost is today and know it will be ready to deliver on Sept. 1."

Chilliwack Times, 19 January 2007



How to respond to Public Private Partnerships

- Be sceptical (about all claims regarding P3s, including this presentation)
- Don't let the province impose its vision
- Don't let Partnerships BC do the work

How to respond to Public Private Partnerships (2)

- Trust your community
- Trust your own staff