

Cost Efficiency under Negotiated Performance-Based Contracts and Benchmarking – Are there gains through Competitive Tendering in the absence of an Incumbent Public Monopolist?

The Australian Experience and Evidence

Professor David A. Hensher FASSA
Founding Director
Institute of Transport and Logistics Studies
The Business School
The University of Sydney
Australia

David.Hensher@sydney.edu.au
<http://sydney.edu.au/business/itls>

February 2013
SABOA Conference



THE UNIVERSITY OF
SYDNEY



- › Introduction – the Australian Situation Today
- › A Brief Overview of Negotiated Performance-Based Contracts (NPBCs) and Competitive Tendering (CT)
- › Approach to Establishing Benchmark (BM) Cost Efficiency
- › A Comparative Assessment of NPBC and CT in Australia
- › Conclusions and Insights

The Australian Setting for this Talk

- › Metropolitan **Sydney** has moved, unexpectedly, in late 2012 from NPBCs to CT (*).
- › CT contracts in **Adelaide** are showing serious signs of patronage decline and media criticism.
- › Bus services in the central areas of **Melbourne** are going through a consolidation of contracts into one CT, contract and away from the current NPBC.
- › **Perth** remains committed to CT.
- › **Brisbane** is staying at present with NPBCs.
- › * **However**, this does not apply to all private metropolitan operators. Operators who in their 2005 contracts committed to provide access to assets, including buses and depots, at the end of the contract term, as part of an argument to 'reduce the burden on taxpayers', were given the option to renegotiate the contracts, rather than them being competitively tendered like other Sydney metropolitan bus contracts. Only two of the 15 contract regions, operated by Veolia Transdev (VT), committed to this arrangement and on January 16, 2013 VT issued a press release announcing the renewal, through negotiation, of their two contracts for a further seven (7) years, with a number of service enhancements. This raises some interesting questions about the rationale and strength of a commitment to CT by the NSW Government.

- › We assess the extent to which a NPBC **with actionable benchmarking** can achieve as good as, or better, improvement in cost efficiency when incumbents are not public operators.
- › We use data that enables links between CT bid prices of successful bids to NPBC outcomes if benchmarking is actioned, by normalising the data to enable meaningful comparisons.
- › ***The evidence suggests that***
 - ***financial gains from CT do not exist or are very marginal (outside of the situation of an incumbent public operator).***
 - ***the effect of the procurement model is tending, at best, towards a neutral financial outcome.***
 - ***Stakeholders promoting the position that Government chooses to test the market for value for money through CT appear to be distorting the real claims of any noticeable benefit to society.***

- › Global experience shows that **serious** cost efficiency gains to the funder **will only occur** when a public monopoly is put out to tender
 - Evidence suggests cost efficiency improvement is a once off windfall gain, even if it is up to 30 percent .
- › Recent action in Sydney to put most private operators out to CT, while allowing public operators to be exempt, raises many questions about the virtue of such a strategy in general, and a selective one in particular.
- › Evidence suggests subsequent rounds of CT, relative to a starting point of an incumbent public operator, especially from round three onwards:
 - Show little if any cost efficiency gains to the funders, and
 - Place service quality at risk, and result in
 - Costs of disruption in tendering often exceeding the benefits.

- › Adelaide, as a city adopting CT, is now experiencing greater discrepancies in service delivery and public dissatisfaction following early success
 - A common experience for cities utilising CT
 - Round three has seen a dramatic increase in costs, well above their projected tender bids.
- › The story of Adelaide is documented in a paper at Thredbo12 by Wallis *et al.* (2010, 89-98) (with one of the co-authors being the Executive Director of the PTA at the time) in which they state:
- › “A key attribute of competitive tendering ...is to secure the provision of specified services at efficient cost levels. This has proved particularly effective where services were previously provided by an inefficient monopoly operator. **The arguments for the adoption of competitive tendering in preference to negotiation with the incumbent operator may be less clear-cut in other cases.**”

›

› Conclusions of the paper:

- “....[the]assessment against relevant SA Government objectives are that the NPBC strategy is clearly preferred against the group of ‘quality’ criteria, and also on balance preferred against the group of ‘supplier market and cost’ criteria. ”
 - and this position is supported by an assessment against international differentiating factors.
- › Identifies "a strong case for adopting an NPC-based strategy (with CT as the fallback), rather than CT as the primary strategy." (page 96)

What is happening in Sydney?

- › The outcome of the first tranche of four contract regions was announced on November 7, 2012.
 - Three (3) of the four contracts remain with incumbents (although with some variation in contract boundaries)
 - One (1) with a new operator entering the Sydney market (who currently operates under CT procurement management contracts in Adelaide and Perth).
- › Annual savings were announced as \$18m per annum, considerably higher than predicted by analysts and questionable.
 - reported savings is ~20c/km (given average of \$5.20/km), but **before** we identify the Benchmarked NPBC figure.

- › If NSW Government proceeded with NPBCs with an effective benchmarking process (already developed), then we could have expected
 - a cost efficient outcome (\$per km)
 - in the sense of delivering lower costs per km than currently,
 - providing all the right incentives to deliver continuous improvement through a trusting partnership (as is NPBC with Veolia Transdev (VT))
 - with arms length commercial obligations.

- › Sydney foregoes the opportunity to implement benchmarking reform under NPBC (except with VT) that could have demonstrated
 - how cost efficiency gains could have been achieved without placing service levels at risk (at least as a counterfactual)
 - without the relatively higher administrative costs of the tendering process.
- › Consequently, the announcement of an \$18m savings in the first tranche, even if not linked to a specific transfer of a service from public to a private operator, may be illusory when benchmarked against achievable outcomes under NPBCs.
- › **A 'level playing field' comparison needs to be undertaken, which is the basis of this presentation.**

- › Australian bus contracts have pioneered NPBCs, **founded on trusting partnerships:**
 - Contracts are re-negotiated with existing operators, subject to meeting certain conditions
 - They offer the opportunity to work closely with efficient incumbents to grow trust and build patronage where possible (mindful of the realities of the market for public transport services) (Wallis et al (2009)).
- › Melbourne and Sydney until late 2012 are examples of this approach.

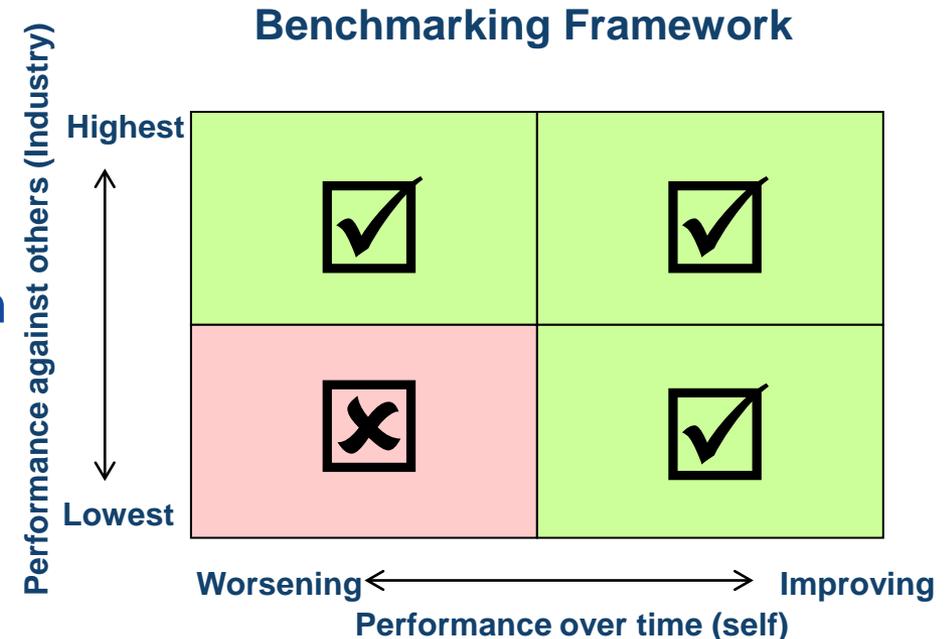
A Brief Overview of NPBCs and CT

- › NPBCs reduces uncertainty where a very efficient incumbent operator can still lose the right to provide services, provided provisions to guard against regulatory capture are in place.
- › NPBCs can achieve **transparency and accountability** if four conditions are in place (Hensher and Stanley 2008):
 - **Performance benchmarking subject to independent verification** to ensure efficient and effective performance.
 - **An open book approach to costs, independently audited**
 - Operators with high costs must justify their numbers or face a cut in remuneration.
 - Operators with low costs have the opportunity to argue for an increase.
 - The **appointment of a probity auditor** to oversee the negotiation process.
 - **Public disclosure of the contract.**

› Tendering gives rise to:

- real and observed risk of incumbents tending to not commit to longer term investment in the industry (both physical and human resources)
- a negative impact of building and maintaining a trusting partnership
- high transactions (including transitional) costs every time re-tendering is put in place.

- › Adoption of a “balance scorecard” approach
 - Efficiency and service quality must be considered together
 - Doing things right and doing the right things
- › Greater emphasis on data collection by the Ministry / third parties to ensure data reliability (e.g. on time running)
- › Options for setting benchmarks
 - Performance against others (industry)
 - Performance overtime (self)
 - Hard targets/thresholds
 - Directional trends (e.g. “stable or improving”)



KPIs and Compliance Benchmarks

Key Result Area	KPI	Frequency	Reporting	Industry Performance	Self performance
Cost Efficiency	1 Total Route & School Cost per service km	Annual (6 mthly for metro)	Operator (with Ministry audit)	Lower than industry median	Constant in real terms
Network effectiveness	2 Boardings per service Km	Monthly	Operator (with Ministry audit)	n/a	Stable or improving trend
Service reliability	3 Early and late trips from departure	Monthly	Operator (and Ministry via survey)	n/a	95% within 5 mins
	4 Early and late trips at mid-point^	Monthly	Operator (and Ministry via survey)	n/a	80% within 5 mins
Service quality	5 Complaints (net of compliments) per 100,000 boardings	Monthly	Operator and 131500	n/a	Stable or improving trend
	6 Customer satisfaction#	Annual	Ministry survey	n/a	At least 70% overall satisfaction

Key Result Area	KPI	Frequency	Reporting	Industry Performance	Self performance
Safety ¹	7 [Average number of HVIS fails (Minor, Major or Off the Road) per peak bus per annum]	Annual	RTA Heavy Vehicle Inspection Scheme (HVIS)	n/a	[tba]
Revenue protection and collection	8 No fraud detected during audit of sales and reconciliation processes	Ad hoc	Compliance auditing by Ministry	n/a	Nil fraud

- › For comparative measures of operator performance, we must distinguish those influences
 - under the control of the operator,
 - under the control of government (or the regulator),
 - determined by other (e.g., market) forces.
- › Separating out the sources of control is a grey area, and must depend on a 'reasonable amount of influence'.
- › Controlling or standardising for influences not under the control of each operator enables
 - A comparison of operator performance of operators in their operating environment ,and
 - A comparison of CT and NPBC applications in a single context.

- › **Normalising** the Cost Efficiency KPI for three adjustment factors **beyond the control of operators** which have a material cost impact:
 - **Average speed.** Slower average peak speed will typically increase driving time and operating costs (e.g., traffic congestion and/or an inefficient on-board fare payment system)
 - **Spread of operating hours.** A higher ratio of timetabled operating hours during periods when penalty rates of labour pay apply (e.g., weekends and early in the morning on weekdays (e.g., before 7 am)), will typically increase operating costs.
 - **Average bus utilisation.** A higher number of annual service kilometres per peak bus, because of higher timetabled route frequencies, will typically lower unit costs through diluting fixed costs.

Trusting partnerships and transparency

- › Big issue in NSW is change of bureaucrats who have no corporate memory of the value of a trusting partnership
 - NZ is moving to a trusting partnership and sharing pain and gain
- › Regulators argue for transparency without clarity in what it means. For example:
 - Failure to give truthful feedback on bid outcomes is not transparency
 - Recognising that transparency can be achieved well by BM NPBCs with proper reporting annually of performance.
- › Regulators must play their part in transparency and many do not bother.

›

› Data comprises

- 35 NPBCs with none currently benchmarked by the regulator
- 11 CT contracts.

› CT contracts are

- Management contracts
- Analysis has added additional cost items to make them comparable with NPBC (e.g., buses and depot support)

› All data relates to the 2011 financial year.

› All current **public** operators (who have not to date been subject to CT) are **excluded**.

Results

Procurement	Gross Cost (GC)	Net Cost (NC)	GC-NC
Mean NPBC	4.61	5.45	-0.84
Mean CT	4.55	5.11	-0.56
<i>Median NPBC</i>	<i>4.70</i>	<i>4.97</i>	<i>-0.73</i>
<i>Median CT</i>	<i>4.28</i>	<i>5.12</i>	<i>-0.63</i>
Mean –All private operators	4.60	5.39	-0.63
Median –All private operators	4.59	5.08	-0.63

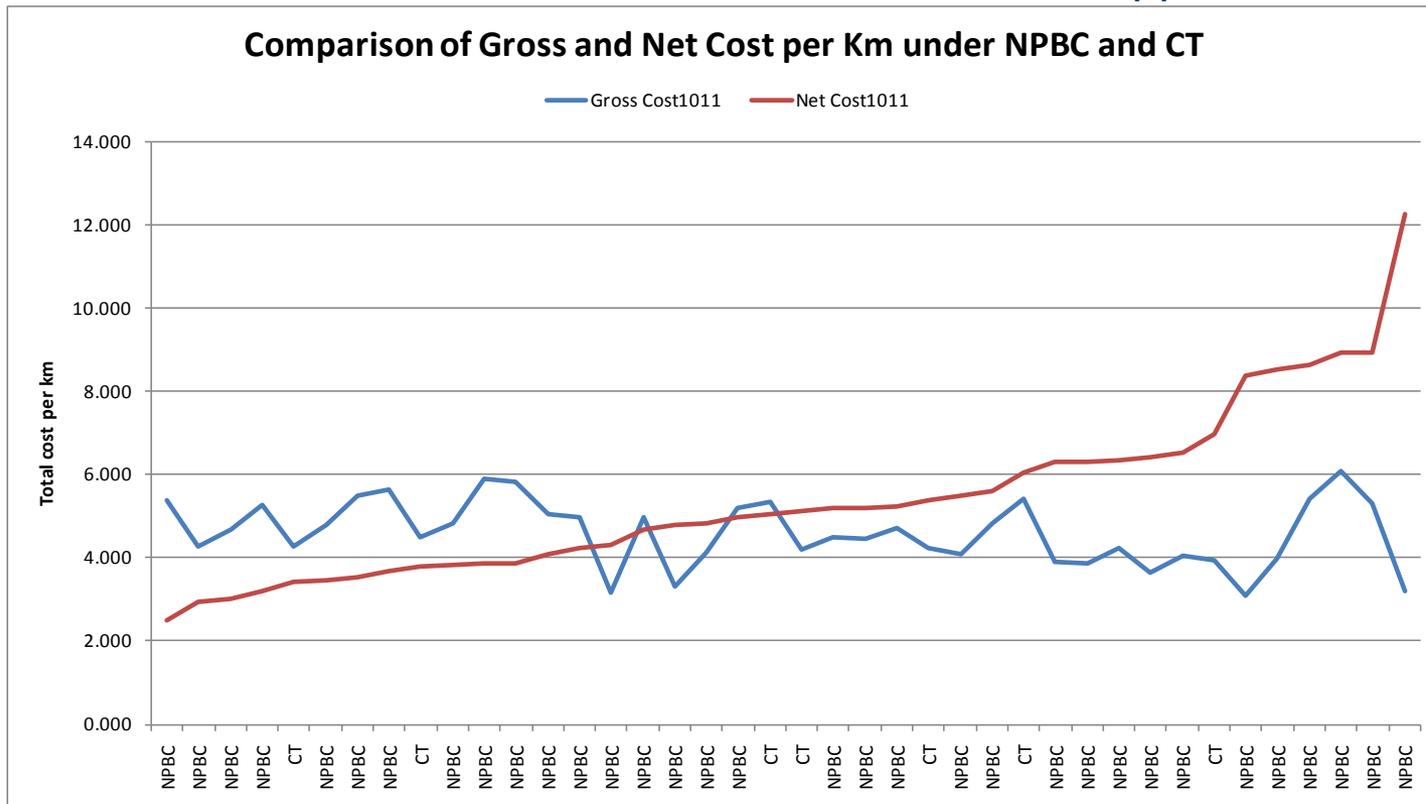
- › The average gross cost per km of the NPBC's without benchmarking is \$4.61/km, and the mean under CT is \$4.55/km.
- › The median values are \$4.70 for NPBC and \$4.28 for CT.
- › Is this the basis of preferring CT? Not a good comparison...
 - These figures don't take into account jurisdiction-specific effects
 - These figures don't take into account factors outside the control of the operator

Procurement	Gross Cost (GC)	Net Cost (NC)	GC-NC
Mean NPBC	4.61	5.45	-0.84
Mean CT	4.55	5.11	-0.56
<i>Median NPBC</i>	<i>4.70</i>	<i>4.97</i>	<i>-0.73</i>
<i>Median CT</i>	<i>4.28</i>	<i>5.12</i>	<i>-0.63</i>
Mean –All private operators	4.60	5.39	-0.63
Median –All private operators	4.59	5.08	-0.63

- › When we allow for these effects through normalisation:
 - the mean \$/km is higher under NPBC than under CT,
 - BUT the median, a much more reliable indicator if there exist deviations from a normal distribution for all contracts, **is considerably lower under NPBC (\$4.97/km) than under CT (\$5.12/km).**
- › This is the case for **not assuming** that CT will ensure greater cost efficiency than (pre-benchmarked) NPBCs.

- › The net cost per km distribution is significantly (and positively) skewed, so the mean is not an appropriate indicator of performance.
- › The median is better suited for skewed distributions - much more robust and sensible.
- › Cost efficiency must be in terms of net cost, hence the robust and sensible comparator for CT vs. NPBC is the median cost per km.
- › **The evidence shows that NPBC's, even before benchmarked targets are implemented through the negotiation process, offers a three percentage (3%) points gain in cost efficiency.**

- › The estimates of gross and net cost efficiency for each operator **in the full distribution** indicate that the outcome in favour of CT is far from definitive.
- › 4 operators under NPBC outperform the best CT outcome, and then there are another 10 NPBC contracts before 2 more CT contracts appear.



- › The mean and median estimates for NPBC this far are not adjusted for any sliding scale improvements (over a contracts life), that might be agreed **as targets introduced during the negotiation process.**
- › If an initial year contract price is in excess of the \$4.97/km median net price (already lower than the median CT price), then a sliding percentage scale could be applied to make operators achieve the median target level of cost efficiency say, over a 5 year period.
- › For example,
 - If an operator under a current contract in yr 2 of a 7 yr contract has a net cost efficiency of say \$5.20/km, (23c/km greater than the \$4.97/km)
 - then the requirement (to avoid CT) would be an improvement of 23 cents/km. over the remaining five years in order to return to the median level (before inflation).
- › **Note this is better than the 20c/km gain through CT.**

› Outcome:

- Net cost efficiency NPBC \$4.97/km
 - Against CT median price of \$5.12 (and even the mean price of \$5.11)
- › Converting back to a gross cost estimate, gives a mean of \$4.55/km for government budgetary purposes.
- › However, given that this adjustment will result in a revised overall benchmark indicator (being based on the median of the improved outcomes of all operators),
- the mean gross cost of \$4.55 might be expected to move, over a five year contract period, to an annual average closer to \$4.35/km. (excl. inflation).

- › Independent of the chosen procurement mode, some specific underlying conditions are assumed in the comparisons presented. In particular, we assume:
 - a mature market of competent private operators who are available to both tender if required, or to purchase through acquisition an incumbent if the opportunity arises.
 - that the regulator has the skills to ensure that all alternative procurement processes can be undertaken efficiently, and
 - that suitable monitoring of performance is in place as a credible threat to non-compliance with the terms of a contract.

- › Using data linking CT prices of successful bids to NPBC outcomes, the evidence suggests that *the gains from CT are illusory (outside of the situation of an incumbent public operator)*.
- › Although the evidence is drawn from Australia in the context of four of the major metropolitan areas, *we believe that it sends a strong message about the presumption that competitive tendering is the way forward*.
- › Many governments suggest that CT ensures transparency but *the practice of CT does not ensure such a claim is necessarily valid as details of tender review and assessment are rarely published, and claims of cost savings cannot be verified*.

- › The evidence suggests
 - that if an incumbent has built up a strong trusting partnership with the regulator (with arms length commercial and legal obligations), and
 - is subject to stringent benchmarked obligation,
 - then the ***outcome is likely to deliver (in the long run) better value for money to society.***

Questions and Discussion

Professor David Hensher
SABOA 2013



THE UNIVERSITY OF
SYDNEY

