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Using public-private partnerships (PPPs) to procure social infrastructure in Australia

Marcus Jefferies and W.D. McGeorge
School of Architecture and Built Environment, University of Newcastle, Callaghan, Australia

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Abstract

Purpose – Owing to increasing demands for new infrastructure and a reduction in public sector investment, Australian governments are increasingly turning to the private sector to form partnerships in the design, construction, ownership and operation of public sector projects. This paper aims to focus on the use of public-private partnerships (PPPs) to procure "social infrastructure projects", such as schools, hospitals and prisons. The research seeks to map the current extent of PPPs and to present some preliminary findings on the cost of bidding.

Design/methodology/approach – The research traces the origins of social infrastructure PPPs in Australia and gives an up-to-date account by mapping projects that are either completed to date or in the pipeline. The research also describes preliminary findings on additional costs likely to be incurred in bidding for social infrastructure PPPs. A semi-structured interview process involving senior managers from private sector PPP stakeholders was used in conjunction with a review of project documentation.

Findings – Social infrastructure projects are characterised as generally being smaller in scale than economic infrastructure projects (motorways, bridges, tunnels, etc.) and, by their very nature, also tend to be complex, particularly in terms of ongoing involvement with the community. Thus, private-sector bidders for social infrastructure PPP projects are often presented with a situation where the financial rewards are less and the operational demands are more complex than for hard economic PPP projects. The private sector would welcome increased risk transfer from the public sector and subsequently greater involvement in the operational stages of social infrastructure PPPs.

Originality/value – The outcome of the research project is of assistance to decision takers in both the public and private sectors by making explicit factors which are currently accepted as being implicit in PPP bidding and project evaluation. Ongoing research into PPPs is vital to ensure the development of sustainable procurements methods, the continued funding of a nation's infrastructure, successful operational viability, fair risk distribution and subsequent financial success and that greater rewards are provided for all stakeholders, particularly the community at large.

Keywords Public sector organizations, Private sector organizations, Partnership, Australia

Paper type General review

Introduction

The genesis for this research came from the private sector, where there would appear to be a widely held view that public-private partnerships (PPPs), particularly with respect to social infrastructure projects, are partnerships in name only. This line of argument is advanced by Curnow *et al.* (2005), who argue that there is a strong body of opinion to support the contention that current social infrastructure projects in Australia are not true partnerships and there is a clear need to reduce the "tokenism" of Australian PPPs. They argue that the public sector needs to make PPPs more

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attractive to the private sector and clarify the identification of risk in order to transfer more responsibility to the private sector. This issue is supported by recent industry criticism of PPPs concerning the "narrowness" of the scope of work that is offered to the private sector.

In terms of defining and clarifying PPPs, and based upon distinctions by Argy *et al.* (1999), the following useful differences between types of PPPs have been made for this research project:

- economic infrastructure (e.g. roads, tunnels, bridges): and
- social infrastructure (e.g. hospitals, schools, prisons).

This research is mainly directed at social PPPs. According to Jefferies and McGeorge (2008), a PPP consortium is defined as a temporary organisation with a complex network of stakeholders each with competing goals and objectives. Coupled with the additional complexities of social infrastructure projects, where clients and building users are so varied, this reinforces the fact that a PPP by its very nature and structure is among the most challenging and interdisciplinary approaches of all procurement methods.

In many instances, in the view of Curnow *et al.* (2005), PPP project costs relating to finance, building design, construction, maintenance and waste management amount to less than 15 per cent of the total life-cycle cost of the enterprise. As a result, the private sector may be deterred by the high transaction costs of social PPPs, which offer only a marginal increase in scope of business opportunity. This is in direct contrast to opportunities that are available in the much lower cost-to-bid ratio of more traditional procurement models or in economic PPP projects where the revenue stream from the likes of a freeway tollway has a substantial and clearly defined internal rate of return. There is evidence from our research to support the view that a number of private sector players are either withdrawing from social PPP projects completely or are being highly selective due to the unattractiveness of the projects on offer. There is a body of opinion amongst private sector bidders for social infrastructure PPP projects that they are being hit by what might be described as a "double whammy effect", where the financial rewards are less and the operational demands are more complex than for economic PPP projects.

Research method

A comprehensive review of related literature and industry reports was used to generate a list of major challenges facing the Australian construction PPP industry. Currently, there are only four main consortia in Australia that have both the capability and expertise to bid for social infrastructure PPPs. Three private-sector construction contractors are partners in this research project and they represent a substantial sector of Australian PPP contractors. They each then nominated two experts from senior management to participate in interviews. At present six interviews, each lasting for approximately one hour, have been conducted. A semi-structured interview process focused on key themes from current major PPP infrastructure projects that were identified during the review of the literature. Qualitative data were analysed using content analysis to group the findings. The research results are presented to the industry partners on an ongoing basis via workshops as part of the original project proposal and in accordance with the university human research ethics approval process. The research aim was to map the current extent of social infrastructure PPPs in Australia and identify some of the issues

resulting in high bidding costs. As part of the broader research project, workshops will also be used to collect additional data and to focus on specific case study projects. The research in this paper only reports on a small aspect of the overall project. An illustration of the research method is presented in Figure 1.

Interview participants

The interview participants are all senior managers involved in the bidding process for PPP projects. They represent contractors and other private sector stakeholders who are all members of the Construction Industry Institute of Australia (CIIA). The CIIA represents a number of major construction companies, major suppliers of goods and services to the construction industry, and a number of government clients. The CIIA is part of an international network of similar institutes in the USA, Europe and South East Asia. The goal of these institutes is to undertake research to create value, stimulate industry change and foster innovation. Three companies were selected from within CIIA, and two representatives from each company participated in the interview process. The results are presented from a private-sector point of view and they could also reflect some bias due to their involvement in these projects.

Company 1 is Australia's largest multi-discipline construction company. It is a leading construction, engineering and services provider with diverse operations throughout Australia, South East Asia, Indonesia, India and the United Arab Emirates. It has an annual turnover of A$4.5 billion, employs more than 14,000 people and lists PPPs as one of its key methods for the procurement of infrastructure.

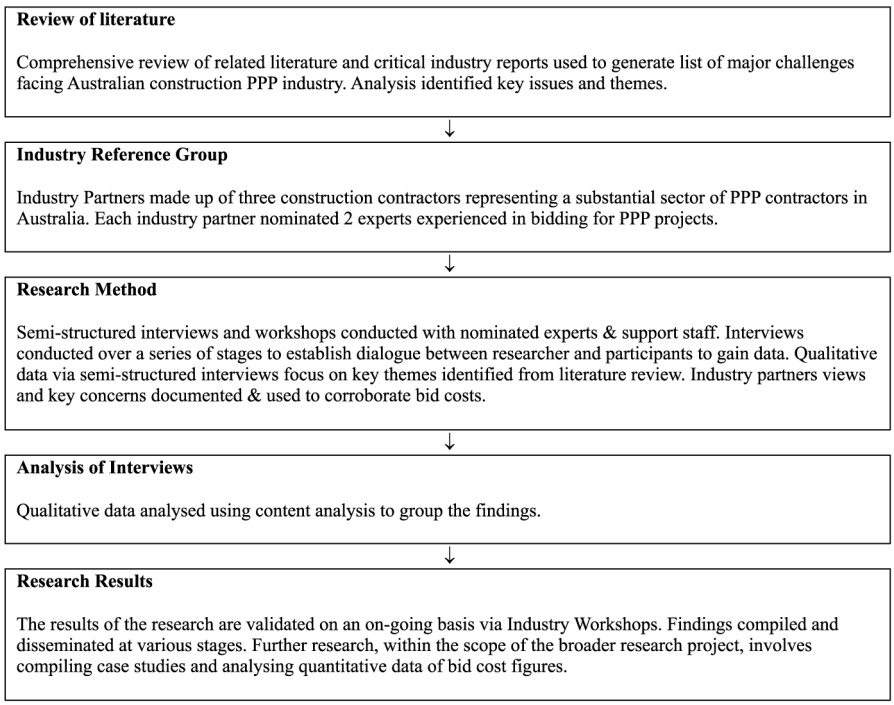

Figure 1.
Research method

Company 2 is one of Australia's most experienced and comprehensive providers of civil engineering and construction services. It has capabilities encompassing various procurement approaches, including BOOT and PPP, to deliver roads, tunnels, bridges, health facilities and education buildings. It has an annual turnover of A$4.1 billion and is member of a wider international group specifically renowned as one of the world's leading multi-service organisations with over 50,000 employees.

Company 3 is the Australian construction contracting division of a wider group that provides integrated solutions to clients' infrastructure and project requirements. It has an annual turnover of A$6 billion and is part of Australia's largest project development and contracting group. With around 30,000 employees the group's operations are spread all around the Asia-Pacific and Gulf regions and it is listed on the Australian Stock Exchange.

The origins of Australian PPPs

Jones (2003), Jefferies *et al.* (2002), Walker (2003), Jordan and Stilwell (2004), Duffield (2005), Malone (2005), Evans and Bowman (2005), Jefferies (2006) and McGeorge *et al.* (2006) trace Australian PPPs back to the 1980s and 1990s with projects such as the Gateway Motorway and Bridge, Brisbane (completed 1986), the Sydney Harbour Tunnel (completed 1992) and the Sydney Olympic infrastructure (completed 1999).

Australian PPPs have been classified into "first" and "second" generation by Duffield (2005) with the release of the Victorian Government policy document *Partnerships Victoria* being the watershed between the two generations. Quiggin (2005) also subscribes to the view that *Partnerships Victoria* (Victoria Department of Treasury and Finance, 2000) was significant in the development of Australian PPPs and that this document is representative of the approach adopted by other states. Duffield's (2005) view is that the first generation was primarily motivated by the public sector gaining access to private capital and the transfer of near full project risks, whereas in the second generation of PPPs state governments sought to retain direct control of "core services" and to involve the private sector in amongst other things, value-for-money outcomes.

Jones (2003) makes a fine distinction between publicly financed partnerships (PFPs) and partnerships involving private financing (PFIs). Jones groups operating franchises such as build-own-operate-transfer (BOOT) projects under PFIs, and project alliances with long-term service agreements and design, construct and maintain (DCM) projects under PFPs. Jones lists, in chronological order, a schedule of some 48 major Australian PPP projects from 1986 onwards. In this schedule all projects from 1986 to 1999 are PFIs, with PFPs emerging for the first time in 2000. Overall, using Jones's terminology, PFIs still dominate the PPP sector.

Duffield (2005) lists second-generation projects, some 36 PPP projects, with the project status (as at the 7 January 2005) ranging from the expression of interest (EOI) phase through to the operating phase. The research reported in this paper builds upon the work of Jones (2003), Duffield (2005) and Quiggin (2005) with an analysis of the historical development of PPPs in Australia by mapping projects up to and including all of 2006.

Emergence of social PPPs

A previously mentioned, part of this research involved mapping all Australian PPP projects undertaken from 1988 (see the Appendix). In the main, the data illustrates that

the application of the PPP approach to social infrastructure PPPs is a relatively recent trend. However many of the projects currently under consideration are for social PPP projects. Whether or not these projects progress to fruition will largely depend on the perceived risks and returns to both the public and private sectors. The number of proposed social PPP projects in Australia is on the increase and there are a number of private-sector players who are willing to bid in this environment, regardless of perceived risk and reward issues. This is shown in Table I, which has been developed and updated from McGeorge *et al.* (2006), and illustrates that the number of social PPP projects has increased markedly in 2005 and 2006.

Ideological issues with PPPs

There are fundamental ideological issues surrounding PPPs. Hodge and Greve (2005) suggest that there is a fundamental division between those scholars who view PPPs as a tool of governance and those who view PPPs as a "language game". The underlying rationale of PPPs as a tool of governance is that both the public sector and private sector have specific qualities, and if those qualities are combined, then the end result will be better for all (Vaillancourt Rosenau, 1999). The private sector often interprets this to mean that market pressures inevitably make the private sector more efficient than their public sector equivalent.

However, this view is strongly disputed by Crouch (2003), Sheil (2003) and others who subscribe to the view that PPPs are more to do with political motivation than efficiency. Leone (1999, p. vii) expresses a similar view in stating:

> The argument for privatisation is normally based on the conviction that profit motive and competition are necessary to provide the proper incentives for efficiency and quality. That view, however is a bit simplistic, ignoring, for example, the powerful discipline imposed by elections and the media on the operations of government.

	FED		ACT	NSW			NT		QLD			SA		TAS	VIC			WA		
Year	E	S	S	E	S	U	E	U	E	S	U	E	S	S	E	S	U	E	S	Total
1988				1					1											2
1992				3																3
1993					1										1					2
1995													1							1
1996				2	2											2				6
1997				2					1							2			1	6
1998										1						1			1	3
1999				3								1			1					5
2000				2												1		1		4
2001				1	1				1				1						1	5
2002				1		1									1	1	1			5
2003	1			2	2			1								2				8
2004					2	1								1			1		1	6
2005	1	2		6	3	1	1		6	2			1		5	3	1		1	33
20061			1	8	13	1			1	3	1		3	1	1	7	3		1	44
Total	2	2	1	31	24	4	1	1	10	6	1	1	6	2	9	19	6	1	6	133

Notes: E, economic infrastructure; S, social infrastructure; U, urban renewal and associated infrastructure

Table I.
Total break-up of PPP project types across the states

Many critics of PPP equate PPPs as being synonymous with privatisation. According to Leone (1999, p. vii):

> Political discourse is seldom notable for the precision of its language. Abstraction and impressionism rather than realism have been the rhetorical model for candidates of all persuasions since time beyond recall. Politicians routinely use words in symbolic fashion, seeking to create in the minds of the voters attractive approximations of reality and lyrical visions of the future. The specifics of political diction, to be sure, do change over time reflecting new issues and alterations in the culture and character of policy.

Linder (1999) describes PPPs as a "grammar of multiple meanings" in which the language of PPPs is a game designed to "cloud" other strategies and purposes. Many critics argue that PPPs are privatisation by stealth (Quiggin, 2004; Sheil, 2003). Sheil (2003), for example, cites Orwell's essay on *Politics and the English Language* in support of his proposition that political decay is connected with the decay of the language. The particular point at issue being the use, or from Sheil's point of view, the misuse of the word "partnership" in PPPs and whether in fact the term "public-private partnership" has any meaning. In Sheil's view the slack usage of the term by state governments is a deliberate attempt to obfuscate the real issues. It is interesting to note that despite perhaps coming from different ends of the political spectrum there is some degree of accord between private-sector developers and social commentators on the concept of "partnership" as to the genuine nature of the PPP partnership and whether this is a partnership in name only.

Still on the topic of the use of language, it is perhaps worth observing that whilst considerable acrimonious debate has surrounded PPPs, the likes of BOOT, BOT and BOO projects have largely slipped under the economic and social commentators' radar. Perhaps this is because most commentators are more interested in public policy than project procurement, or perhaps more importantly it is because PPPs are seen as encompassing not just developers, project managers and facilities managers but also banks and financiers. However, the notion that PPPs are wider in scope than BOOT projects is difficult to sustain if one takes for example the Eastern Distributor tollway in Sydney. This is generally described as a BOOT project or more specifically by the Roads and Traffic Authority (New South Wales Roads Traffic Authority, 1998) as being funded, designed and built by a private consortium (completed in 2000), and to be operated for a period of 48 years then reverting to the State government. This project would appear have all the characteristics of a PPP project with, however, no mention being made of the evocative PPP acronym. The Eastern Distributor is generally agreed to be a successful project. This may perhaps the ultimate test of a project's acceptability.

Notwithstanding the above quite fundamental objections to PPPs, the balance of opinion would appear to be that PPPs are here to stay and are deeply embedded as part and parcel of government procurement strategies. This view is reinforced in a recent editorial by Carey Lyon, National President of the Royal Australian Institute of Architects (2006, p. 1), where he expresses the view that:

> Enough projects have now been completed to assess whether PPPs are delivering both world class public infrastructure and successful design outcomes expected by the community of State Governments and it's imperative that the industry critically assess the ongoing success of PPPs in the delivery of major public infrastructure.

In our view, accepting that PPPs are part of the contemporary procurement landscape is not an unreasonable position. Defining what PPPs are is quite another matter.

Definitions of PPPs

As previously noted, most Australian commentators view BOOT, BOT and BOO projects as the precursors to PPPs. This highlights one of the problems with PPPs – determining an acceptable definition. Definitions tend to depend on a commentator's own particular perspective and range from the very general to the quite particular. For example, Evans and Bowman (2005) cite a definition of PPP by Stern and Harding (2002, p. 126) as "a loose term applied to any venture which embraces both public and private sectors". On the other hand they cite a much narrower definition of PPPs from Webb and Pulle(2002) as partnerships between the public and private sectors for the financing, design, construction, operation and maintenance, and/or the provision of assets or infrastructure and associated services that have traditionally been provided by the public sector. As can be seen, BOOT projects and their variants do fall within these definitions. So can we make a clear-cut definitional distinction between a BOOT project as opposed to a PPP project? The answer is probably "no", although subtle shifts in attitude and an increase in the number of stakeholders can be observed as public/private sector relationships mature. As previously discussed, the BOOT Eastern Distributor project in Sydney falls under the category of Duffield's first-generation PPP, where the motivation was public sector access to private capital and transfer of project risk. Duffield's second-generation concept is to some extent exemplified by Blood's (2005) contention that PPPs in Australia have gone through three phases of development, the first phase being the contractor-led consortium, followed by the investment-bank led consortium and now the third phase of the equity-investment led consortium that has a long-term commitment to project success.

In summary, many papers on PPPs begin with the comment that PPPs are notoriously difficult to define (Evans and Bowman, 2005; Hodge, 2005). The above observations perhaps explain why this is so. Certainly the precise terms BOOT, BOT and BOO do seem to be slipping from current usage in favour of the more generic and imprecise term PPP. This is perhaps due to the impact of *Partnerships Victoria* (Victoria Department of Treasury and Finance, 2000). Whatever the reason, the definitional problems add to the difficulties of undertaking research in the area.

Practical issues with social PPPs

As stated previously, the trigger for this research was the view expressed by private sector players that the current high cost of transaction fees incurred in bidding for hard social PPPs was acting as a deterrent to bidders and that in many cases the concept of partnership was token rather than genuine (Curnow *et al.*, 2005). Curnow argues for a broadening of the scope of work to make PPPs more attractive to the private sector, whereas Blood (2005) argues more for a transfer of responsibility to the private sector rather than the scope of work *per se* (although both arguments, if accepted, would perhaps have the same result). Blood's proposition is that the Government perception of PPPs is one of "private funding for public infrastructure" and should be a shift of responsibility, not funding, to subsequently motivate all parties to take responsibility for their actions and delivery, making projects more accountable and measurable. In support of his argument Blood makes the case that PPPs should not be used as a scapegoat for Government-led finance, inaccurate tender assessment models (such as the public sector comparator) or staff cuts and changes, but rather should be seen as an

opportunity not to reduce staffing but to make staffing more efficient through a better infrastructure for delivery. There are certainly a number of critics, including the trade unions, who would not subscribe to this point of view

These issues, while not necessarily unique to social PPPs, are perhaps more acute than for economic PPPs. If a comparison is made between a large teaching hospital as an example of a social PPP and a tollway as an example of an economic PPP then the contrast in terms of complexity of operation and interaction between the private sector operator and the users is quite marked. In the hospital situation staff costs will represent at least 90 per cent of the total annual operating costs whereas in a tollway staff costs are minimal with the largest item of expenditure being maintenance. Whilst both types of PPP do carry a number of risks (to both the public and private sector), the risk potential over the operating period would appear to be greater in social PPPs than for economic PPPs, although recent controversy surrounding the cross-city tunnel in Sydney (Farrelly, 2005; Mitchell, 2005; Salusinszky, 2006; Scott, 2006a, b; Wainwright and Baker, 2006; Wallace and Salusinszky, 2006) demonstrates that economic PPPs are not immune to political and sovereign risks. Problems also arise in predicting the operational lifecycle of social PPPs such as hospitals, where advances in technology mean that to some extent the future pattern of health care and its consequent demand on hospital buildings is largely unknown and unknowable.

Cost of bidding and bid price

As well as mapping the current extent of PPPs in Australia, our research addresses the following question: whether the cost-to-bid ratio (i.e. the cost of preparing a bid relative to the bid price) is higher for social PPPs than economic PPPs and, if so, does this act as a deterrent to potential bidders?

Hughes *et al.* (2002), describing a study on the cost of procurement in the construction industry, state that there is a desperate need for robust data in respect to tendering costs. Whilst it may appear to be a relatively straightforward matter to identify the costs of bidding for a specific project, in reality this is not the case. To quote from Hughes *et al.* (2002 p. 6):

> . . . complexity of the data collection places significant hurdles in the way of those who wish to undertake research in this area. This is probably why so few attempts have been made at assessing these costs. The quantification of the costs of tendering that have already been reported in the literature tend to focus on the cost of estimating and bidding, and take no account of the relationship between the distinct stages of a project. Moreover, they are based on impressionistic estimates, rather than analysis of data. However, the fact that they range from 1 per cent to 15 per cent indicates a strong feeling that there is a lot of expenditure in this area, and it is difficult to quantify. Also there is the further conclusion that the value added by this expenditure is not clear.

Hughes's comment on "impressionistic estimates" is particularly interesting in the context of PPP bidding.

Our own research is still at the data collection stage and the data has yet to be finalised and analysed. However, we are beginning to appreciate the aptness of the term "impressionistic estimating" used by Hughes *et al.* (2002, 2006). In addition to the difficulties associated in accurately allocating costs to a specific tender bid, there is the added dimension of the commercially sensitive nature of the data surrounding PPP bidding and also the extended nature of the commercial relationships of a PPP

consortium. Despite these challenges, initial cost data from the research project clearly indicates that PPP legal costs are excessively high and they act as a deterrent to some bidders. As legal costs are often regarded as non-value added there is perhaps the argument that the issue of legal costs tends to be exaggerated by the construction industry. This is perhaps exacerbated by the fact that social PPP projects tend to be for smaller contract sums and hence attract proportionately higher legal costs.

By way of illustrating the difficulties associated in obtaining robust data on private-sector bid costs, the New South Wales Treasury Post Implementation Review of The New Schools Privately Financed Project (New South Wales Office of Financial Management, 2005 p.40), a project for nine schools completed in 2004/2005, contains the following statement:

> *Anecdotal evidence* (our emphasis) suggests the private sector incurred bid costs of $2-3 million per bidder from Expression of Interest to Best and Final Offer stage.

Given that the client in this case was the New South Wales Government, their lack of accurate data on private sector bidding costs illustrates either reluctance on the part of the private sector to disclose this type of data or disinterest on part of the Government in obtaining this type of data, or perhaps both. The *Review* does, however, provide detailed information on the NSW Government costs incurred in the tendering process. These are shown in Table II.

As previously stated, we are currently at the data collection stage of our research and are not in a position to report on more detailed costs of private sector bidding on a similar basis to Table II. However, Figure 2 illustrates a breakdown of cost components based on the Schools PPP project with a total bid cost being in the range of $2-3 million dollars as quoted in NSW Treasury post implementation review.

Conclusions

PPPs act as an essential but relatively minor part (10 per cent) of the State Government's asset acquisition program. However, as they tend to be large, complex projects that can affect the broader community for a very long time, PPPs arouse a

Government[a]	Cost ($)
Financial advisor	860,000
TCorp	26,000
Probity auditor	96,000
Technical advice	300,000
Legal advice	1,000,000
FM advice	250,000
Contract summary preparation	29,000
Contract administration manual preparation	134,000
Total	2,695,0004[b]

Notes: [a]The New Schools Project was the first Social PFP project delivered under the NSW Government's *Working with Government: Guidelines for Privately Financed Projects* (New South Wales Treasury, 2001). It is claimed that such a high level of transaction costs should not be repeated in future projects. [b]Excludes estimated $800,000 in-house resources. Assumed to be an opportunity cost that would in any event have been incurred in the absence of this project
Source: New South Wales Office of Financial Management (2005)

Table II.
Government costs for schools PPP project

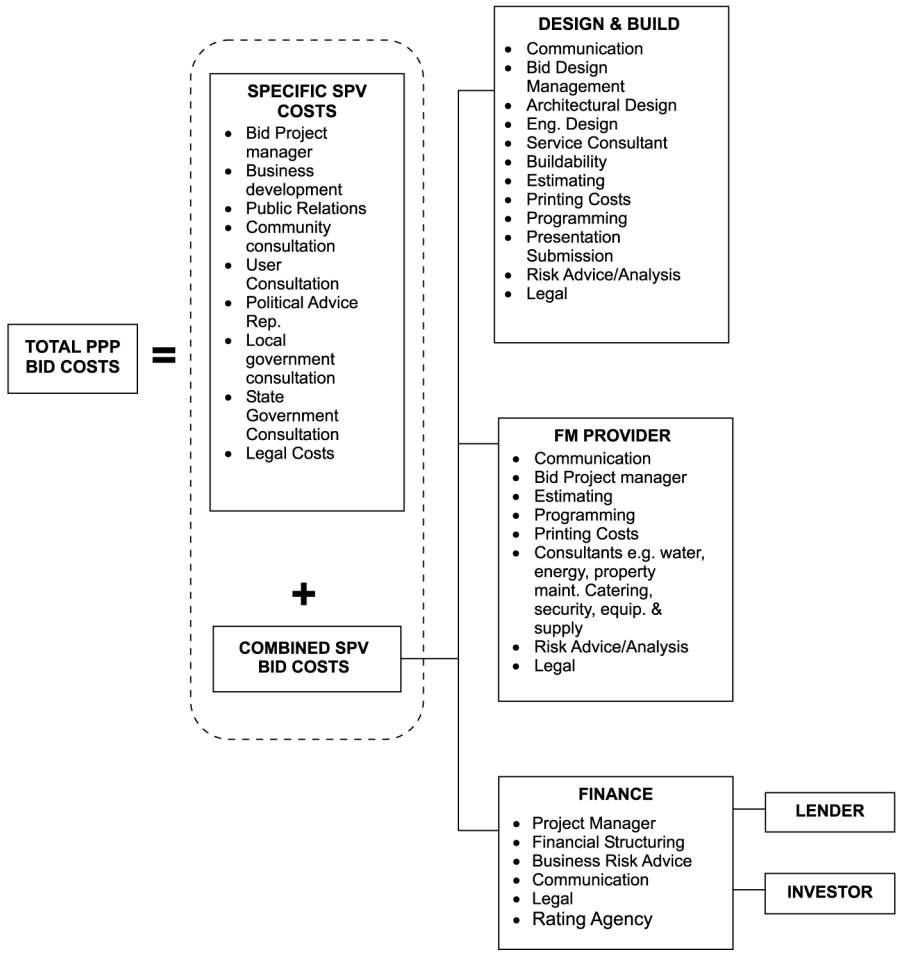

Figure 2.
Typical break-up of PPP bids

great deal of interest and passion (New South Wales Public Accounts Committee, 2006). Our contention is that social PPPs have at least if not a more intimate connection with people's lives than economic PPPs. Whilst social PPPs can, as claimed in the New South Wales Department of Education and Training's *New Schools Privately Financed* report (New South Wales Department of Education and Training, 2003) significantly reduce construction time and reduce net present costs, they are also viewed as high risk/low gain projects by some of the major stakeholders in the development and construction sector. Therefore, it is important that:

- Non-value-added transaction costs, such as legal fees, in the PPP bidding process are identified. PPP legal costs are excessively high and they act as a deterrent to some bidders. Legal costs tend to be exaggerated in the tender process, and in social PPP projects, which typically have smaller contract sums than economic PPPs, they are proportionately higher.

- Risk is properly identified and allocated to the parties best able to carry the risk. As PPPs are a shift of risk, not funding, they should motivate all parties to take responsibility for their actions and delivery, making projects more accountable and measurable.
- PPPs must become a true partnership with the scope of work, particularly at the operation stage, broadened. Much of the negativity and adversarial environment which surrounds PPPs is due to a lack of transparency both in terms of the costs of bidding and in terms of identification of risk, opportunity and success factors.
- Due to concerns that current tender assessment models, such as the public sector comparator (PSC), are being unduly used to reduce the size and scope of projects, then these evaluation methods must be thoroughly reviewed. Methodologies must also be developed to objectively evaluate project success.
- Ongoing research into PPPs continues due to the increasing demand for new infrastructure and the reduction of public sector investment. Part of the interim results from this research involves mapping the historical development of Australian PPPs and provides an up-to-date account of projects to date (see the Appendix).
- The findings of this research may well be indicative of wider validity so further comparative work, both in Australia and internationally, would be useful.

These are the basic objectives of our continuing research. The outcome of the research project should be of assistance to decision takers in both the public and private sectors by making explicit factors which are currently accepted as being implicit in PPP bidding and project evaluation. In our view ongoing research into PPPs is vital to ensure the development of sustainable procurements methods, the continued funding of a nation's infrastructure, successful operational viability, fair risk distribution and subsequent financial success and that greater rewards are provided for all stakeholders, particularly the community at large.

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Appendix. Total PPP-type projects in Australia since 1988

Year	State	Type	Project	Status
1988	NSW	E	Sydney Monorail	Completed
1988	QLD	E	Logan Motorway	Completed
1992	NSW	E	Sydney Harbour Tunnel	Completed
1992	NSW	E	M4 Tollway	Completed
1992	NSW	E	M5 Tollway	Completed
1993	NSW	S	Junee Correctional Centre	Contract awarded 1991. First correctional facility in Australia to be designed, constructed and managed by the private sector under a single contractual arrangement. Opened and completed in 1993 by Australasian Correctional Services Pty Ltd (Wackenhut Corrections Corporation, ADT Australia and Thiess Contractors Pty Limited)
1993	VIC	E	Yan Yean Water Treatment Plant	Completed 1994. First BOOT project in the Australian water industry. Cost $25 million. Joint venture partners Transfield and United Utilities Australia
1995	SA	S	Modbury Hospital	First privately managed public hospital in SA. Awarded to Healthscope Ltd
1996	NSW	E	Prospect Water Filtration Plant	Completed
1996	NSW	E	Redbank Power Station	Completed
1996	NSW	S	Port Macquarie Hospital	Completed
1996	NSW	S	Hawkesbury Hospital	Planning for new hospital commenced 1989. While detailed planning was undertaken and work began on site, capital funds were not allocated to the program past this early stage ($6 million expended). NSW Department of Health identified the new hospital for "privatisation" in 1992. In 1993 EOIs for the development process were called from not-for-profit organisations. Five expressions of interest were received, short-listed to two. The contract was awarded to Catholic Health Care Services. Fletcher Construction Limited commenced work on site in February 1995 and the site was "handed over" to Catholic Healthcare at the beginning of June 1996
1996	VIC	S	Women's Correctional Facility, Deer Park	In 1994 a private sector consortium was selected as the preferred tenderer to build, own and operate the new facility. Arrangements for the establishment of the correctional centre were finalised in June 1995 Excor Investments Pty Ltd, Corrections Corporation of Australia Pty Ltd in association with John Holland Construction & Engineering Pty Ltd with financier Société Generale Australia Limited
	VIC	S	Metropolitan Women's Correctional Centre	

Table AI.

(*continued*)

Year	State	Type	Project	Status
1997	NSW	E	M2 Hills Motorway	Completed
1997	NSW	E	Pyrmont Light Rail	Completed. Contract awarded to Pyrmont Light Rail Company Pty Limited (PLRC) and Sydney Light Rail Company Limited (SLRC)
1997	QLD	E	Noosa Shire Council Sewerage Treatment	Completed in 2000 by Veolia Water. Fifteen-year DBO contract
1997	VIC	S	Fullham Rural Men's Prison	The project brief was issued in 1994 for the design, construction and operation. Four tenders were received. In May 1995, the preferred tenderer was selected, Australasian Correctional Investment Ltd (Australasian Correctional Management Pty Ltd, Thiess Contractors Pty Ltd with financier AMP investments Australia Ltd. Completed 1997
1997	VIC	S	Port Phillip Prison Metropolitan Men's Prison	In 1995 the project brief issued for the design, construction and operation. Tender submissions were received from three bidders. In 1996, the Government advised the bidders that their submissions did not meet all the criteria of the project brief and that they should resubmit their bid. Successful bidder in 1996 was Australian Correctional Facilities Pty Ltd (Fletcher Construction Australia and Group 4 Correction Services Pty Ltd, financier Dresdner Australia Ltd). The total cost to the consortium was $60 million, funded from $55 million debt financing and $5 million equity contributions. Completed 1997
1997	WA	S	Peel Health Campuses	Contract with Health Solutions (WA) Pty Ltd for the management of services at Peel Health Campus. Part of the site on which the hospital stands is leased to CAMS who contracted Leighton's Building Company to extend the original hospital building
1998	QLD	S	Robina Hospital	Completed
1998	VIC	S	Latrobe/ Mildura Hospital	Completed
1998	WA	S	Joondalup Health Campuses	In 1998 the Joondalup Health Campus was completed. Health Care of Australia (HCoA) provided hospital services to public patients at the Joondalup Health Campus
1999	NSW	E	Stadium Australia, Olympic Stadium	Completed
1999	NSW	E	Superdome, Olympic Park	Completed
1999	NSW	E	Picton Regional Sewerage Scheme	Completed
1999	SA	E	Riverland Water	In 1996 Riverland Water was awarded a 27-year contract. The consortium includes United Utilities Australia AMP Investments, and Bechtel Enterprises. Completed 1999

(*continued*)

Table AI.

Year	State	Type	Project	Status
1999	VIC	E	Melbourne City Link toll way	In 1992 the call was made for ROI for a build-own-operate proposal for "Southern and Western" bypass. Five consortia replied. In 1995 the consortium of Transfield Holdings and Obayashi of Japan was selected as the preferred bidder. Opened 1999, fully completed 2000
2000	NSW	E	Eastern Distributor Toll Road	Completed
2000	NSW	E	Sydney Airport Link	Completed
2000	VIC	S	Victorian County Court	Project announced in 2000. Awarded to The Liberty Group Pty Ltd, consisting of ABN Amro, N.M. Rothschild & Sons (Aust.) Ltd (financiers), Multiplex Construction Ltd (construction), and Honeywell Limited (facility services). Equity interest has since been sold and the Liberty Group is a wholly owned subsidiary of Challenger Financial Services Group, an Australian property and funds management company. Completed May 2002
2000	WA	E	Graham Farmer Freeway	Awarded to Baulderstone & Clough in 1996. Completed 2000
2001	NSW	E	Cronulla Wastewater Treatment Project	Completed
2001	NSW	S	First batch New Schools	Contract awarded in 2002 to Axiom Education Pty Ltd (Hansen Yunken Pty Ltd, St Hilliers Contracting Pty Ltd, ABN Amro (Aust.) Ltd, Spotless Services Australia Ltd). Completed 2005
2001	QLD	E	Brisbane Air Train City Link	Completed
2001	SA	S	State Aquatic Centre	SA Minister for Sport & Recreation committed the State Government to develop an aquatic centre via a PPP in late 2001 and undertook to provide direct state funding where private investment was not available. Call for EOI from the private sector for the PPP procurement was made in 2004
2001	WA	S	Acacia Prison Project	Completed 2001
2002	NSW	E	M5 Toll way upgrade	Completed
2002	NSW	U	Kogorah Town Centre revitalisation	$55 million contract with the developer Hightrade Pty Ltd. Completed 2003
2002	VIC	E	Southern Cross [Spencer St] Station Re-development	Awarded to Civic Nexus consortium, comprising the following partners: ABN Amro, Leighton Contractors, Daryl Jackson Architecture, Nicholas Grimshaw & Partners, Honeywell Limited, and Delaware North Australia. Anticipated completion 2006
2002	VIC	S	Casey Community Hospital (previously know as Berwick Hospital)	Awarded to Progress Health consortium, consisting of ABN Amro, Multiplex Constructions, architects Silver Thomas Hanley Daryl Jackson and facilities manager Multiplex Asset Management. Completed 2004

Table AI. (*continued*)

Year	State	Type	Project	Status
2002	VIC	U	Film and Television Studio	Awarded 2002 to private developer Melbourne Central City Studios. Studios commissioned February 2004. Stage 1 completed. Stage 2 construction commenced in 2005
2003	FED	E	Alice Springs-Darwin Railway	Completed
2003	NSW	E	Lane Cove Tunnel Project	Awarded to the Lane Cove Tunnel Consortium (sponsored by Thiess Pty Limited, Transfield Holdings Pty Limited and ABN Amro) in October 2003. Under construction
2003	NSW	E	Eastern Creek Alternative Waste Technology Facility	Awarded to Global Renewables Eastern Creek Pty Limited (a subsidiary of Global Renewables Limited). Opened 2004
2003	NSW	S	Parramatta Police Headquarters	Completed
2003	NSW	S	Royal Newcastle Maternity Hospital	Awarded to Novacare consortium (Abigroup, Compass Group, Honeywell, and Westpac) and contract signed on November 2005
2003	NT	U	Darwin City Waterfront (Stage 1: The Darwin Convention Centre, community leisure and recreational facilities, commercial developments)	In September 2004 the Darwin Cove Consortium was announced as preferred developer. In May 2005 the contract was awarded. Stage 1 anticipated completion date April 2008
2003	VIC	S	Royal Women's Hospital Re-development Project	Project announced 2003, contract awarded to Royal Women's Health Partnership comprising Bilfinger Berger BOT (sponsor and equity), Baulderstone Hornibrook (builder), United KG (facility maintenance manager), ANZ and Macquarie Bank (financiers). Completion June 2008
2003	VIC	S	Partnerships Victoria Correctional Facilities – Remand Centre Raven Hall & Programs Centre Lara	Victorian Correctional Infrastructure Partnership Pty Ltd, consisting of: Bilfinger Berger BOT GmbH (equity); Baulderstone Hornibrook (as the design and construction company); & United KG in conjunction with Baulderstone Services (as facility maintenance managers). The Bank of Scotland is the debt provider. Signed on 23 December 2003, the contract is for a period of 25 years. Facilities expected to be operational in early 2006
2004	NSW	S	Newcastle Polyclinic	Project awarded to Austcorp and contract signed September 2005
2004	NSW	S	Newcastle Community Health Centre	Awarded to Austcorp and contract signed September 2005
2004	NSW	U	Parramatta Civic Place development	In 2005/06 contract was being finalised with Grocon Developments Pty Ltd. Construction is expected to begin late 2007. Anticipated completion by 2014

(*continued*)

Table AI.

Year	State	Type	Project	Status
2004	TAS	S	Risdon Prison Redevelopment	Listed as a potential PPP project. No longer in the PPP pipeline
2004	VIC	U	Melbourne Convention Centre	Winning Multiplex/Plenary Consortium announced February 2006. Anticipated completion 2008
2004	WA	S	Perth Convention and Exhibition Centre	Completed 2004 by Multiplex Consortium
2005	FED	E	National Water Initiative	Pipeline
2005	FED	S	Phase 1 and 2 of Accommodation Project for Single Defense Force Personnel (EOI)	Pipeline
2005	FED	S	Mulwala Munitions Factory Development (outcome expected 2006)	Pipeline
2005	NSW	E	Cross City Tunnel	Awarded to Cross City Motorway consortium (sponsored by Bilfinger Berger, Baulderstone Hornibrook amd Deutsche Bank) in February 2002. Construction completed December 2005
2005	NSW	E	Western Sydney Orbital	Awarded to West Link Motorway consortium (sponsored by Macquarie Infrastructure Group, Transurban, Abigroup and Leighton Contractors) in October 2002. Under construction
2005	NSW	E	Parramatta Transport Interchange	
2005	NSW	E	Chatswood Transport Interchange	Awarded to CRI Australia Pty Limited (CRI Australia Pty Limited, Barclay Mowlem, CBA, and SBP Developments Pty Ltd), and contract signed June 2005
2005	NSW	E	RailCorp Rolling Stock	To consortia short-listed. RailCorp will issue a request for the final committed proposals to the short-listed proponents in May 2006 for response in August 2006
2005	NSW	E	Newcastle Port Multi-purpose Container Terminal	EOI close – February 2003. Two short-listed consortia, NovoLink and Bouygues-Newcastle Stevedores, were invited to submit detailed proposals and provide responses August 2005. Call for detailed proposals and subsequent evaluation explored a model for private sector investment in building a large-scale multi-purpose terminal on the site. Evaluation determined that there was no suitable privately financed proposal for the site; however, there was strong endorsement for the strategic importance of the site and for the development of both general cargo and container trade

Table AI.

(*continued*)

Year	State	Type	Project	Status
2005	NSW	S	Second Batch New Schools	Project was awarded to Axiom Education NSW No. 2 Pty Ltd (ABN Amro, Babcock & Brown, St Hilliers, Hansen Yuncken, Spotless Services) and the contract was signed on 20 December 2005
2005	NSW	S	Bonnyrigg Public Housing Estate	EOI sought in 2005. Two consortia were short-listed in 2006. The following two proponents have been short-listed: Bonnyrigg Partnerships (Becton Group Holdings, Westpac Banking Corporation, Spotless, Property & Facilities Pty Ltd, & St George Community Housing Co-op Ltd); & Sydney West Housing Partnerships (Urban Pacific Limited, Macquarie Bank, Transfield Services, & Hume Community Housing Association). Responses to the Request for Detailed were received on 14 March 2006
2005	NSW	S	Minto Public Housing Estate	Pipeline
2005	NSW	U	Liverpool "2020" development	Pipeline
2005	NT	E	AustralAsia Railway (Alice Springs to Darwin)	
2005	QLD	E	Townsville Ocean Terminal	Preferred developer announced – September 2005. Contract finalisation – December 2005
2005	QLD	E	Townsville Industrial Recycling Opportunities Project	N.M. Rothschilds & Sons announced as preferred tenderer in June 2005
2005	QLD	E	Gold Coast Cruise Terminal	In September 2005 the Government announced the first stage in the anticipated Gold Coast Cruise Ship Terminal. EOI closed January 2006
2005	QLD	E	Brisbane City North-South Bypass Tunnel	On Thursday 27 April 2006 Council announced RiverCity Motorway as the preferred tenderer to build, own and operate NSBT. The RiverCity Motorway consortium includes Leighton Contractors, Baulderstone Hornibrook with Bilfinger Berger Concessions and ABN Amro. Construction of the NSBT is scheduled to begin later this year, with the tunnel due to open in the second half of 2010
2005	QLD	E	Brisbane City Councils Airport Road Project	Pipeline
2005	QLD	E	Gateway Bridge Duplication and Motorway Upgrade	The Expression of Interest stage attracted five consortia and a call for tenders will be issued in September 2005. A contract is expected to be award in the third quarter of 2006 and construction to commence in late 2006. The new Gateway Bridge is scheduled to open by late 2010
2005	QLD	S	Southbank TAFE	Thirty-year concession to build and operate awarded in April 2005 to Axiom Education, Queensland. Under construction

(*continued*)

Table AI.

Year	State	Type	Project	Status
2005	QLD	S	Mackay Convention Centre and Hotel	EOI called 2005. Contract awarded. Abacus Property Group, Abigroup Contractors, Honeycombes Property Group, and Pradella Developments Pty Ltd short-listed. In November 2005 Pradella was announced as the preferred consortium. In June 2006 a revised plan was required after Pradella indicated to proceed. Not viable. Site changed and council will build centre
2005	SA	S	Regional Police Station and Court Facilities	Regional Police Stations and Courts (SAPOL/CAA) – Project Financial close was on the 15 June 2005
2005	VIC	E	Mitcham-Frankston Freeway project	
2005	VIC	E	Ballarat/Creswick Reclaimed Water Project	Pipeline
2005	VIC	E	Echuca/Ochester Wastewater Treatment Plant	Pipeline
2005	VIC	E	Enviro Altona	This project is no longer progressing as a Partnerships Victoria contract due to the insolvency of the private contractor. The project was structured as a design, build, operate contract with Simon Engineering
2005	VIC	E	Barwon Water – Bio-solids Management Project	EOI closed 5 June 2005. A shortlist of private sector tenderers has been announced. The Request for Tender document was released to three parties in October 2005. Anticipated completion November 2007
2005	VIC	S	Box Hill Hospital Car Park	Pipeline
2005	VIC	S	Royal Children's Hospital	Shortlist of preferred consortia end July 2006
2005	VIC	S	Royal Melbourne Showground Redevelopment	A contract with PPP Solutions was executed on 22 June 2005 and is for a period of 25 years. The new showground is completed in time for the staging of the 2006 Royal Melbourne Show
2005	VIC	U	Melbourne Wholesale Fruit, Vegetable, Flower and Fish Markets Redevelopment	Pipeline – site announced in 2005
2005	WA	S	Perth CBD Courts	Awarded to Western Liberty Group, 25-year contract
2006	NSW	E	Eurobodalla Shire council: School relocation/retail centre car park	Pipeline
2006	NSW	E	Sydney Port Corporation Intermodal logistic Facilities	Pipeline

Table AI.

(*continued*)

Year	State	Type	Project	Status
2006	NSW	E	Railcorp Southwest Rail Link	Pipeline
2006	NSW	E	Railcorp Northwest Rail Link	Pipeline
2006	NSW	E	RailCorp Harbour Link	Pipeline
2006	NSW	E	Upgrade of Pacific Highway	Pipeline
2006	NSW	E	M4 extension	Pipeline
2006	NSW	E	Sydney Water Corp – various recycling initiatives	Pipeline
2006	NSW	S	Development of a specialist medical centre at Singleton Hospital	The partnership structure is being reviewed
2006	NSW	S	TAFE Colleges & New Schools	Pipeline
2006	NSW	S	Royal North Shore Hospital, Redevelopment Stage 2	Pipeline
2006	NSW	S	Orange-Bloomfield Hospital Redevelopment	A copy of the EOI document is available on the NSW Government Tenders website
2006	NSW	S	Auburn Health Services Redevelopment	Pipeline
2006	NSW	S	Northern Beaches Hospital	Pipeline
2006	NSW	S	Long Bay Forensic Hospital	Financial close on deal for $130m likely to occur soon with PPP Solutions. Project awarded to PPP Solutions consortium (Multiplex, Honeywell, Compass Group, and Babcock & Brown) and the contract was signed on 23 January 2006
2006	NSW	S	New court facilities	Pipeline
2006	NSW	S	New correctional facilities	Pipeline
2006	NSW	S	Police station maintenance	Pipeline
2006	NSW	S	Living Communities, around four urban renewal projects	Pipeline
2006	NSW	S	Accommodation projects for the Department of Ageing, Disability and Home Care	Pipeline

(*continued*)

Table AI.

Year	State	Type	Project	Status
2006	NSW	U	Hawkesbury Council Commercial Sites Windsor	Pipeline
2006	NSW		Development of a private residential aged care facility on the Sutherland Hospital campus	Contract documentation has been finalised with the preferred proponent (Amity Group). Contract award and execution is expected by mid-July 2006
2006	QLD	E	Brisbane City Council's Link Road and Bridge	Pipeline
2006	QLD	S	Royal National Association's Showground's Redevelopment	Pipeline
2006	QLD	S	Pharmacy Australia Centre of Excellence	Final negotiations with consortium featuring Baulderstone Hornibrook
2006	QLD	S	Greater Springfield Campus	Pipeline
2006	QLD	U	Boggo Road Mixed Use Precinct	State Government endorsed a draft Master Plan to redevelop the former Boggo Road Goal site into a major research, business and residential precinct. The Department of State Development, Trade and Innovation are working with various agencies to establish a core of eco-science research activities on the site as part of the redevelopment. A number of options, including partnerships with the private sector for the redevelopment of the whole site, are being investigated
2006	SA	S	Adelaide's Women Prison	Pipeline – Business Case completed
2006	SA	S	Adelaide's Men's Prison	Pipeline – Business Case completed
2006	SA	S	Adelaide Supreme Court	Pipeline – Business Case completed
2006	TAS	S	Future Public Housing under consideration	Pipeline
2006	VIC	E	Cardinia Shire Council: "Connecting Cardinia" road program	Pipeline. In mid-2004, Cardinia Shire Council launched a $17 million project to construct 50 km of the Shire's 13 most critical local arterial roads
2006	VIC	S	Victoria's Women Prison	Pipeline
2006	VIC	S	Hawthorn Campus buildings	Pipeline
2006	VIC	S	Monash University College of Pharmacy Redevelopment	Pipeline

Table AI. (*continued*)

Year	State	Type	Project	Status
2006	VIC	S	Swinburne University of Technology Hawthorn Campus buildings	Pipeline
2006	VIC	S	Partnerships Victoria Correctional Facilities (East link)	Pipeline
2006	VIC	S	Affordable housing	Pipeline
2006	VIC	S	Supreme Court Redevelopment	Pipeline
2006	VIC	U	Greensborough Town Centre Redevelopment	Pipeline
2006	VIC	U	Port Phillip "Triangle Site" Redevelopment	Pipeline
2006	VIC	U	Cardinia Shire Civic Centre construction	Pipeline
2006	WA	S	Considering PPP for Health and Aged Care facilities	Pipeline
2006[a]	ACT	S	ANU Student Accommodation Complex	Pipeline

Notes: E, hard economic infrastructure; S, hard social infrastructure; U, urban renewal and associated infrastructure. [a]A number of projects listed in the table for the year 2006 are under consideration and may or may not proceed as a PPP

Table AI.

Corresponding author
Marcus Jefferies can be contacted at: marcus.jefferies@ newcastle.edu.au