

# Private Financing of Local Government Infrastructure: An Australian Snapshot

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## Introduction

SGS Economics & Planning (SGS) was recently commissioned by the Department of Transport & Regional Services (DoTaRS) to investigate the extent to which local governments across Australia used private sector financing for the provision of infrastructure. The consultancy aimed to highlight barriers to private sector financing and solutions to these barriers, keeping in mind the appropriateness of private sector involvement in infrastructure provision.

SGS approached the research by:

- broadly defining local government infrastructure;
- distinguishing between infrastructure 'funding' and 'financing';
- summarising some of the challenges ahead for local government in terms of infrastructure provision;
- profiling the mechanisms through which the private sector can become involved in local infrastructure; and
- surveying local government's use of these mechanisms across Australia.

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## Overview of Key Issues

### *Local Government Infrastructure*

Local government infrastructure is a fundamental building block for communities across Australia. Australian Councils are responsible for the essential 'hard' infrastructure networks such as local roads, drainage, recreation facilities; parks, gardens and open space; and, in some cases, water and sewerage infrastructure and/or neighbourhood-based public transport systems. Councils also deliver 'soft' infrastructure services such as cultural, civic and library facilities amongst other things (University of Canberra 2001).

The cost of establishing and maintaining local government infrastructure networks and services is substantial, and is set to increase markedly in the next 20 to 30 years. A recent study of Victorian Councils suggests that the required spending to maintain existing infrastructure assets will increase from the current level of approximately \$1.4 billion p.a. to \$2.6 billion p.a. in 2032, and this spending does not include the extension of infrastructure to new communities (VOLG 1998).

VOLG (1998) and CGC (2001) attribute the increased significance and urgency of infrastructure replacement expenditures to:

- past infrastructure investments coming to the end of their useful lives (in a relatively concentrated time period);
- cost shifting from State and Commonwealth Governments; and
- increasing infrastructure expectations from the

Australian community and higher tiers of government.

Such pressures have caused local governments to seek alternative *financing* and management mechanisms for their infrastructure responsibilities, recognising that efficient delivery will be crucial in closing future infrastructure *funding* gaps. Much of the focus of this search has recently targeted the involvement of the private sector in local government infrastructure delivery.

### *The Private Sector and Local Government Infrastructure*

Private sector involvement in local infrastructure is not a new phenomenon. For the past few decades the private sector has become increasingly active in local infrastructure delivery. In fact, the traditional model of Council ownership and operation is virtually a thing of the past.

Private sector financing has come under various auspices including service/management/ lease contracts, joint ventures, build operate and invest arrangements (e.g. BOO or BOOT schemes) or full privatisation of the infrastructure networks/services in question. Each of these arrangements can be distinguished by the nature of the risks assumed by the private sector.

Of course, where the private sector assumes risk, it must be commensurately compensated. Herein lies the reason why opening up infrastructure assets to the private sector does not solve Councils' *funding* worries. Although the private sector might bring forward the ability to *finance* large capital works, as they remove upfront capital costs from the Council's immediate resourcing requirements, the servicing of the private sector's associated borrowings still remain with the local community.

At this point it is important to distinguish between *funding* and *financing*. These terms are often used interchangeably, but in this paper they have very different meanings. *Funding* refers to how an infrastructure item is paid for using taxes, users charges or a combination of both. *Financing*, alternatively, is about how the capital required for the delivery of infrastructure is assembled.

### *There's No Magic: The Community Still Funds Infrastructure Provision*

That's right! The community still pays for (i.e. funds) local government infrastructure regardless of the

owner or delivery agent. In the traditional model of full Council ownership and operation local infrastructure is *funded* by municipal rates, user charges and, to a limited extent, from Commonwealth and State Government Grants (CGG 2001). When the private sector becomes involved nothing really changes.

Although the infrastructure might move from a broad community cost burden, *funded* by municipal rates, to a regime where users bear the majority of costs, when the infrastructure network/service is not commercially viable operating subsidies are required to ensure that the private sector's operations are commercially viable. And operating subsidies are paid for via municipal rates and other forms of Council's general revenue.

### *So Why Use the Private Sector for Infrastructure Provision?*

The private sector potentially offers improved efficiency in infrastructure service delivery when exposed to competition. Considerable evidence indicates that the private sector is frequently better equipped to:

- assess market needs;
- raise necessary resources (i.e. *financing*);
- identify and manage risks;
- provide contemporary management skills and optimise performance; and
- improve the efficiency and quality of services (DFAT 1998).

Note the qualification 'when exposed to competition'. Megginson *et al* (1994), in a study of financial and operating performance of 61 fully or partly privatised infrastructure agencies across 18 countries and 32 industries between 1961 and 1990, found that increased efficiency consistently occurred with infrastructure that was exposed to competitive pressures. However, if the privatised agencies continued to operate in monopoly markets the benefits are far from clear.

Similar studies in the United Kingdom (Treasury Taskforce 2000) anecdotally suggest that private sector involvement in competitive local government infrastructure markets lead to savings (after accounting for their higher borrowing costs).

While the longevity of private sector operational savings is not undisputed, a savings potential certainly exists.

### What about when Competition is Impossible?

Many local government infrastructure services exist in non-competitive environments.<sup>1</sup> Whilst a full discussion of the underlying reasons for this is not recounted here, it is important to understand that components of local government infrastructure should not be delivered to an ‘unregulated’ private operator due to the natural monopoly, public good and merit good traits of local infrastructure.

This poses some real challenges for facilitating private sector involvement in an array of local government infrastructure markets. In essence, the challenges centre on:

- offering the right infrastructure components to the private sector;

- transferring the appropriate risks to the private sector for the right price;
- pricing community service obligations if and when necessary; and
- achieving all of this in a transparent, binding, and often long-term, contractual arrangement.

Any management and operating efficiencies gained through the use of private sector will depend on how well the private sector manages the risks transferred to it and on the public sector’s success in managing the contractual arrangements throughout their duration, a significant portion of which are for 25 to 30 years.

### Mechanisms for Using Private Finance

The private sector has been involved in local government infrastructure for at least two decades. This involvement has been at both direct and indirect levels. Figure 1 (below) illustrates how these mechanisms fit within the context of infrastructure delivery.

#### Indirect Infrastructure Financing

Indirect private sector involvement in infrastructure financing assumes commercial viability. More importantly, it relies on the minimal risk of default

<sup>1</sup> There are numerous underlying reasons for this including:

- The natural monopoly characteristics of network based infrastructure (e.g. roads, water, drainage, etc), which infer that the costs of delivery are minimised when one supplier (i.e. local government) services demand because of inherent economies of scale;
- The inability of the supplier of infrastructure services to capture the value of their service’s benefits due to infrastructure public good and merit good characteristics and due to the existence of externalities or spillover effects; and
- The underlying impact infrastructure has on community well-being and economic performance (Terry et al, 1988).

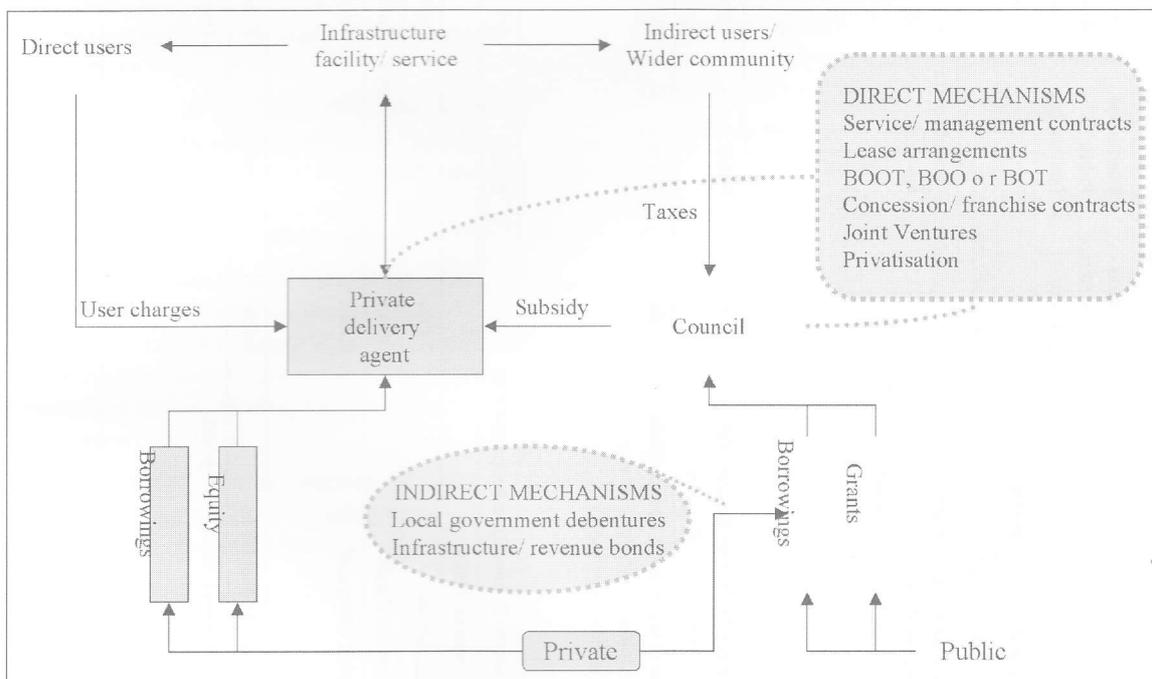


Figure 1: Private Financing Mechanisms in Context

Table 1: Characteristics of Private Sector Involvement in Infrastructure Delivery

Characteristic	Complete Public Sector Delivery	Traditional Public Contracting	Service/Management Contracts	Lease Contracts	BOO, BOOT or BOT Schemes	Concession or Franchisee Agreements	Joint Ventures	Full Privatisation
<b>Infrastructure Ownership</b>	Public	Public	Public	Public	Public	Public	Joint	Private
<b>Contract Duration</b>	Not applicable	Once off	5 to 10 years	Up to 30 years	20 to 30 years	20 to 30 years	Permanent	Permanent
<b>Basis for Private Sector Compensation</b> (All are performance based)	Not applicable	Agreed contract fee	Agreed contract fee	Unit cost plus margin (linked to estimated demand at contract inception)	Public sector guarantees to purchase a minimum level of output (based on unit cost of delivery)	Similar to lease of BOOT contracts	Market driven (with regulation)	Market driven (with regulation)
<b>Revenue Collection Responsibility</b> (inc. invoicing & collection)	Public	Public	Public	Public (some private)	Public	Private	Joint	Private
<b>Capital Investment Responsibility</b> (inc. initial, upgrade & service expansion investment)	Public	Public	Public	Public (Private operator funds capital maintenance expenditure)	Private operator (Public sector funds service expansion expenditure)	Private	Public and Private	Private
<b>Recurrent Expenditure Responsibility</b>	Public	Public	Private	Private	Private	Private	Public and Private	Private
<b>Commercial Risks</b>								
<b>Construction</b>	Public	Private	Private	Private	Private	Private	Private	Private
<b>Operation (Cost)</b>	Public	Not applicable	Public	Private	Private	Private	Public and Private	Private
<b>Market (Revenue)</b>	Public	Public	Public	Private	Shared (guaranteed minimum custom)	Private	Public and Private	Private
<b>Non-commercial Risks</b>	Public	Public	Public	Public	Public	Public	Joint	Private
<b>Sectors where Most Appropriate</b>			Low willingness to pay	Where limited capacity expansion required	Where new facilities are required (e.g. toll roads)	Networked based infrastructure (e.g. water)	Where private capital is required immediately	Where competitive structures can be unbundled

on private funds due to the effective 'guarantee' on local government borrowings. Indirect private sector financing usually takes the form of local government/revenue/infrastructure bonds or debentures. They are issued in capital markets, usually via a State underwritten borrowing authority (e.g. Queensland Treasury Corporation, Treasury Corporation of Victoria, etc.) and operate as typical debt instruments.

### *Direct Infrastructure Financing*

The private sector can and has also become more directly involved in the provision of local government infrastructure. Such involvement revolves around the rights and obligations in the contractual arrangements between private operators and Councils and can take the form of service/management contracts, lease contracts, build operate and invest arrangements (e.g. BOOT, BOO or BOT schemes), concession or franchise agreements, joint ventures or full privatisation.

Each type of direct private sector financing assumes some element of risk and, as with all efficient investment of resources, the 'risks' must be adequately counter-balanced by 'returns'. In terms of local government infrastructure investment, these risks can be categorised as being either:

- commercial risks: cost overruns in construction (construction risks), operation (operational risk) or uncertainties surrounding the demand for infrastructure services (market risk), amongst others; or
- non-commercial risks (specifically policy risks), which cover any adverse conditions that are imposed on infrastructure operation because of changes in the regulatory, legal or economic policy framework (Lindfield 1998).

Apart from the allocation of risks between the private sector and Councils, the various forms of involvement can be distinguished by the ownership of the infrastructure assets, capital and recurrent investment responsibilities, basis for remuneration and contract duration.

Table 1 (opposite) contrasts each of the direct private financing mechanisms using these differentiating characteristics.

## Local Government Use of Direct Private Sector Financing Mechanisms

### *Survey Design & Administration*

As part of the consultancy, a survey was administered to 700 councils across Australia in early 2002. The survey basically presented Table 1 and then asked Council officers:

- If any of the direct private financing mechanisms were used?
- What types of infrastructure were they used to finance?
- How did Council's arrangements differ to the characteristics profiled in Table 1?

Other questions explored:

- How the private sector involvement met initial expectations?
- The major difficulties in involving the private sector?
- How these difficulties were overcome?

### *Survey Response*

The survey was completed and returned by a total of 132 councils. This represents a response rate of approximately 21 per cent. The response from metropolitan councils represented 25 per cent of all metropolitan councils. Eighteen per cent of all regional (i.e. non-metropolitan councils) responded (Table 2).

Table 2: Survey Response

State	No. of LGAs	No. of Respondents	Percentage
NSW	172	31	18.0
NT	7	6	85.7
QLD	125	21	16.8
SA	68	14	20.6
TAS	29	9	31.0
VIC	79	25	31.6
WA	142	26	18.3
TOTAL	622	132	21.2

## Extent of Private Sector Financing

Private sector financing of local government infrastructure was present in 66 per cent (or two thirds) of the councils surveyed. This figure falls to 40 per cent if service/management contracts are removed from the analysis, recognising that the recent outsourcing behaviour of Australian local governments have been manifest in a multitude of design contracts, construction contracts, design

and construct contracts, infrastructure maintenance contracts and various others that transfer minimal risks to the private sector.

In fact, the breakdown in Figure 2 suggests that apart from lease contracts, which were used by just over 30 per cent of respondent councils, the use of risk sharing approaches to local government infrastructure provision is very limited.

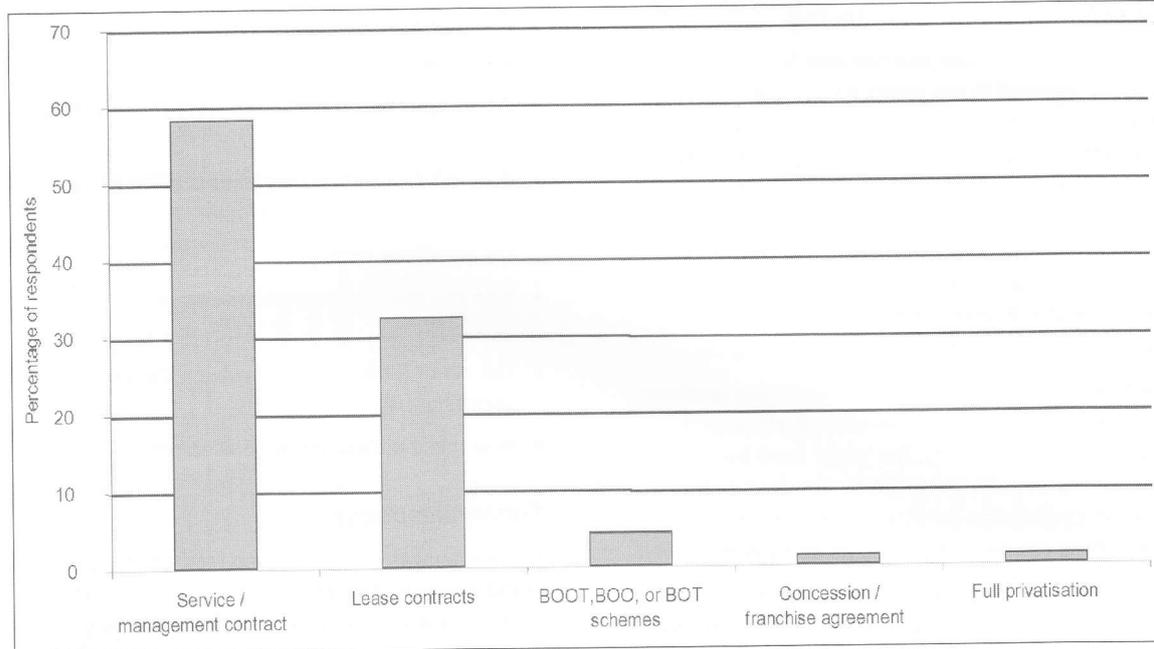


Figure 2: Private Sector Involvement in Local Government Infrastructure

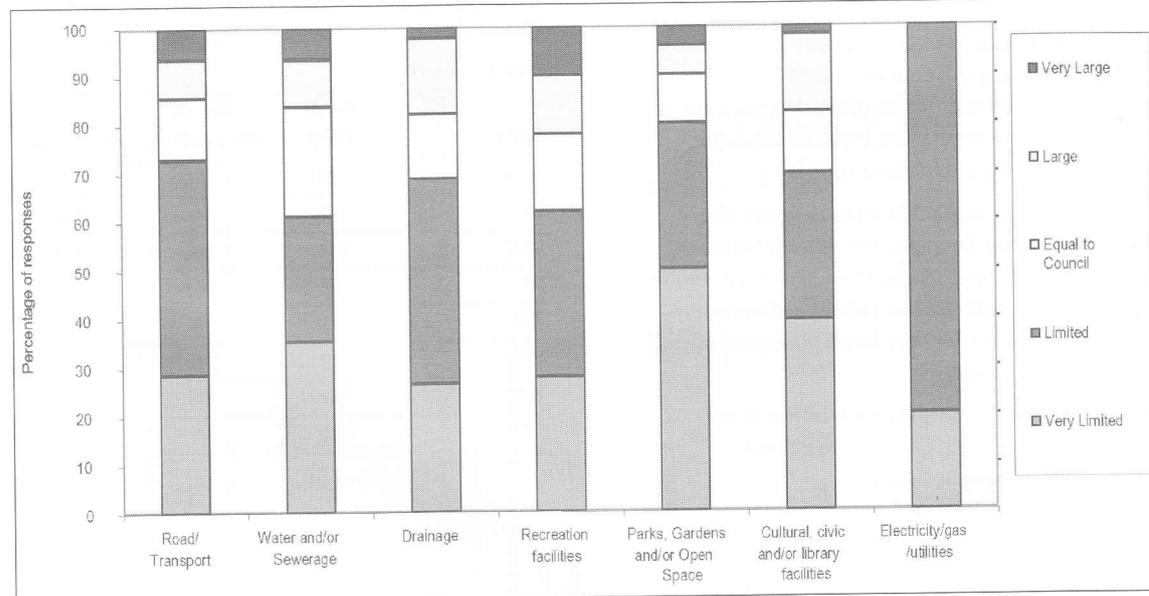


Figure 3: Significance of Private Sector Contribution to Infrastructure Network (Service/Management Contracts)

	Road/ Transport	Water and/or Sewerage	Drainage	Recreation facilities	Parks, Gardens and/or Open Space	Cultural, civic and/or library facilities	Electricity/ gas/ utilities	Total
Service/Management	61	28	44	57	43	41	5	279
Lease	0	1	0	37	7	14	0	59
BOOT, BOO, BOT	2	2	1	2	0	0	0	7
Concession/Franchise	0	0	0	2	0	1	0	3
Full Privatisation	0	0	0	2	0	0	0	2
Total	63	31	45	100	50	56	5	350

Table 3: Respondent Private Sector Financing Arrangements - Transactional Type and Infrastructure Category (Number of Responses)

It was also found that regional local governments (67 per cent) were just as likely as metropolitan local governments (62 per cent) to use private sector financing. This applied to private sector financing overall as well as to the less intense transactional types, i.e. service/management contracts and leases.

There were too few respondents that utilised the more intensive styles of private sector infrastructure financing, i.e. BOOTs, BOOs or BOTs, concession/franchise agreements and full privatisation, to make any sensible comparisons of local government traits.

## Infrastructure Financed

When categorised via infrastructure type, private involvement was more prevalent in infrastructure components that can be separately identified and managed, such as a recreation centres. This reflects the ease of outsourcing management responsibilities for discrete infrastructure items.

In fact, recreation facilities are the only infrastructure components that are readily distinguishable as being prime candidates for private sector financing (excludes service/management contracts). Some stand-alone cultural, civic and library facilities also appear to be private financing candidates, albeit to a lesser extent. The usual transactional form for these types of infrastructure is a lease contract (Table 3).

## Significance of Private Sector Financing

Councils were asked to indicate the extent to which the private sector contributes to the council's overall network of each particular infrastructure item/

service. Due to sample size restrictions, only service/management contracts could be analysed with a reasonable level of accuracy (Figure 3). That is, due to the low use of other forms of private sector financing, comparative statistics are not meaningful.

It was found that in most cases service/management contracts were quite limited, with at least 60 per cent of respondents stating that the overall contribution to the infrastructure network through this means was 'limited' or 'very limited'. This was the case across all types of local government infrastructure.

## Transactional Characteristics

In the vast majority of cases, the transactional characteristics used by Australian local governments were as outlined in Table 1.

## Perceived Success of Private Financing

Private sector financing was generally perceived as successful by respondents, if not very successful.

In the few cases where private sector financing was not viewed as successful (i.e. below expectations), poor legal advice, contract drafting and contract management on Council's part were considered as the source of most problems.

Notably, problems such as these and the perception of under-performance by the private sector were more likely to occur with infrastructure items/services that were large in scale and difficult to define (e.g. performance assessment of park and garden maintenance).

## Difficulties Faced and Overcoming Them

The major difficulties faced by local government in involving the private sector in infrastructure provision arise in two separate categories - the definition of contracts and the lack of private sector competition.

### *Contract/Service Definition*

Many councils experienced problems with the private sector that they believe could have been avoided if the original contracts were more thorough. Moreover, several councils reported that they lacked the proper skills (or legal advice) to draw up contracts necessary for their needs.

Contract problems usually arose when attempting to accurately define the service/s to be provided or preparing a 'performance-based' specification. These problems tended to diminish as councils became more experienced in approaching these problems.

Some local governments found that reorganising the organisational structure to resemble core infrastructure responsibilities enabled a better integration of the private sector. The ability to make accurate budget forecasts (for performance monitoring) was considered a key benefit of this organisational shift.

### *Lack of Private Sector Interest*

Qualitative comments on the returned surveys indicate that a large proportion of Australian councils find it difficult to attract private sector financing for infrastructure. This is particularly evident in rural and remote areas, where private contractors often experience difficulties due to the extra costs associated with freight and staff travel and accommodation. This results in inflated costs for service provision and often a lack of sufficient market participants to form a competitive market.

It appears as though the actual dollar size of the infrastructure contracts are, in many cases, insufficient to gain credibility with the private sector given the significant transaction costs associated with competitive tendering.

Few councils can solve these problems on their own. Such problems may be tackled by more collaborative approaches with surrounding local government areas (i.e. bundling up of infrastructure

opportunities) and with the private sector operators (i.e. working up and capturing the investment opportunities).

## Post Survey Discussions

SGS and DoTaRS invited a number of local government representatives, private investors and academics to further discuss the barriers to private sector financing after the survey was complete.

At this forum concerns over the capacity for local government officers to conceptualise and assess private sector infrastructure projects were raised again. More specifically, these constraints included:

- An irrational 'fear of debt' on behalf of local governments nationwide;
- An inordinately slow progression of investment opportunities from project conceptualisation through to project specification, expressions of interest and eventual contract letting stages. The forum attributed this primarily to inexperience within councils and a distrust of the private sector; and
- Insufficient 'technical skills' within local government for appropriate infrastructure project identification, evaluation, negotiation and monitoring. Skills were considered lacking at Councillor and officer levels.

In defence of local government, the forum also identified that the private sector was not well prepared for engaging with local government.

## Summary and Conclusions

The consultancy highlighted that only a very limited number of true 'risk sharing' relationships exist between local government and private investors in the provision of local government infrastructure. Most of the contractual relationships in use are of a more arms' length type, i.e. traditional service/management contracts and lease arrangements.

While there are a number of barriers to private sector investment in local infrastructure such as transaction size and geographic remoteness, one of the key barriers is the inability of local government to engage with the private sector to this end.

This inability to engage the private sector certainly deserves further attention at a policy level.

## Endnotes

<sup>1</sup>There are numerous underlying reasons for this including:

- The natural monopoly characteristics of network based infrastructure (e.g. roads, water, drainage, etc), which infer that the costs of delivery are minimised when one supplier (i.e. local government) services demand because of inherent economies of scale;
- The inability of the supplier of infrastructure services to capture the value of their service's benefits due to infrastructure public good and merit good characteristics and due to the existence of externalities or spillover effects; and
- The underlying impact infrastructure has on community well-being and economic performance (Terry et al, 1988).

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