

## **LOCAL INFRASTRUCTURE INVESTMENT, MAINTENANCE AND RENEWAL: A COMPARATIVE ANALYSIS OF CONTEMPORARY AUSTRALIAN AND NEW ZEALAND LOCAL GOVERNMENT**

**Brian Dollery**<sup>1</sup>

Centre for Local Government, University of New England, NSW 2351

**Stuart Mounter**

School of Business, Economics & Public Policy, University of New England, NSW 2351

**ABSTRACT:** The preservation and expansion of local infrastructure presents significant funding and management challenges for local government systems across the developed world. A useful way of approaching the local infrastructure question is to undertake comparative analysis of different local government jurisdictions with similar institutional characteristics. This paper accordingly considers the local infrastructure problem in contemporary Australian and New Zealand local government, which share many common institutional features, in the light of the recent deliberations of two national inquiries into local government finance in the two countries. It is argued that while both the intergovernmental grants system and the quantum of these grants differ significantly between the two nations, local government infrastructure in both countries requires urgent attention from policy makers and similar policy solutions can be identified.

### **1. INTRODUCTION**

Local government across the developed world has experienced mounting fiscal stress over recent years. While the causes of this financial pressure differ between different local government jurisdictions, they are often a consequence of vertical fiscal imbalance between the different tiers of government, a limited local tax base and externally imposed restrictions on local revenue-raising activities (see, for instance, Dollery, Garcea and LeSage, 2008). Even greater similarities exist in the consequences of fiscal distress, with the burden of scarce financial resources falling primarily on local government infrastructure rather than on service provision (see, for example, Shah, 2006a; 2006b). The net result has typically been insufficient funding in local infrastructure investment, maintenance and renewal as well as the development of local infrastructure backlogs of varying degrees of severity.

In the Australian local government context, the problem of financial sustainability and its impact on local infrastructure has been considered in several recent public inquiries into the various state local government systems. For example, the South Australian Financial Sustainability Review Board (FSRB) (2005) defined the concept of financial sustainability and then assessed South Australian councils against this measure. It found an infrastructure

---

<sup>1</sup> We gratefully acknowledge the helpful advice offered by three anonymous referees.

backlog existed in excess of \$300 million. Similarly, the Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI) (2006) also attempted to determine financial sustainability in NSW local government. It estimated the infrastructure backlog at around \$6.3 billion in that state. In an analogous vein, the Western Australian Local Government Association (WALGA) (2006) Inquiry found a local infrastructure backlog of about \$1.75 billion. Finally, the Local Government Association of Tasmania (LGAT) (2007) estimated the infrastructure backlog at \$29 million.

At the national level, a commissioned report by PriceWaterhouseCoopers (PWC) (2006) considered the problem of financial sustainability across all Australian local government systems. It developed three different estimates of the local infrastructure backlog, depending on the method of calculation, but all of these estimates pointed to a massive problem.

While all these efforts at determining the magnitude of the local infrastructure backlog have been bedevilled by data problems in the form of both a lack of adequate and complete information, as well as data incompatibility between local councils, it is nonetheless clear that a substantial and growing problem exists in local infrastructure provision that requires urgent attention from national and state local government policy makers. The seriousness of this problem was acknowledged by the Australian Federal Government in its November 2008 announcement of \$300 million for local infrastructure renewal (Australian Council of Local Government (ACLG) 2008).

A similar problem has manifested itself in New Zealand local government infrastructure. A comprehensive national investigation conducted by the Local Government Rates Inquiry (LGRI) (2007) into the financial health of local councils in New Zealand was completed in late 2007. The Final Report (LGRI) (2007) drew on earlier work by the Local Authority Funding Project (LAFI) (2005) and the Local Authority Funding Project Team (LGFI) (2006). These three documents identified a substantial local infrastructure backlog, spread unevenly between different types of local infrastructure and different local councils.

On the basis of these various reports, it is obvious that the respective local government systems in Australia and New Zealand are afflicted by serious local infrastructure problems that require policy remediation. Moreover, the wealth of information gathered through these inquiries provides scholars of local government with much useful material. Given the fact that the institutional structure of local government in the two countries is similar, they both provide roughly the same relatively narrow range of services, and they rely on approximately the same general sources of revenue, students of comparative local government are thus well placed to analyse the nature of the shared local infrastructure problem, consider commonalities in its origins and explore the feasibility of generic policy solutions.

While the similarities between the Australian state local government systems and their New Zealand counterpart are marked, a caveat is necessary since these commonalities should not be overdrawn. After all, Australia has a federal system, with three levels of government, whereas New Zealand is a unitary

system, with two-tiers. This difference is especially manifest in terms of intergovernmental grants; not only are the institutional mechanisms quite different between the two countries, but the magnitude of grants is also much greater in Australian local government. For example, in the Australian federation, the Commonwealth Government provides considerable financial assistance to local government through financial assistance grants, specific purpose grants and direct program funding. In addition, each state and territory local government jurisdiction has its own Local Government Grants Commission which directs Commonwealth funding to local government, as well as state monies (Dollery, Crase and Johnson, 2006). The fact that significant differences exist in intergovernmental transfers to local government has ramifications for local infrastructure finance. However, the roles and functions of local government in Australia and New Zealand are nonetheless closely matched, and this clearly facilitates fruitful comparative analysis.

This paper seeks to take advantage of these fortuitous circumstances to conduct a comparative analysis of the local infrastructure problems in Australian and New Zealand local government at the national level. Drawing largely on the PWC (2006) report and its New Zealand equivalent in the form of the LGRI (2007), we attempt to compare and contrast the extent of the local infrastructure problem in the two countries and assess whether any common policy solutions are available.

The paper itself is divided into four main parts. Section 2 considers the findings of the PWC (2006) and its putative policy solutions to the local infrastructure backlog in Australian local government. Section 3 conducts an analogous exercise with LGRI (2007) for New Zealand. Section 4 attempts to place the Australian and New Zealand infrastructure conundrum in a common framework. The paper ends with some concluding remarks on policy remediation in section 5.

## **2. AUSTRALIAN LOCAL INFRASTRUCTURE**

### **2.1 Magnitude of the Problem**

The local government sector in Australia comprises over 550 individual bodies which are responsible for the provision and maintenance of a range of local services and local infrastructure demanded by its constituents (Hearfield and Dollery, 2008). However, the financial health of many local government authorities has been deteriorating and the continued existence of a number of councils is under threat. Indeed, the report prepared by PWC (2006), commissioned by the Australian Local Government Association (ALGA), suggested that the viability of as many as 30 percent of all local municipalities may be at risk. Put simply, many local government bodies are caught in a vice-like cost squeeze. Endemic symptoms of this problem appear in the form of significant increases in local government operating expenditure and limited, stagnant or even declining revenue growth. While the precise causes of these ills are jurisdictionally specific, a synoptic review of identifiable generic factors must include dwindling population bases, particularly in rural and remote regions

of Australia, escalating operating costs, cost-shifting from higher tiers of government in the Australian federation, as well as a long-run shift in emphasis from 'services to property' to 'services to people' (Dollery, Wallis and Allan, 2006), often involving the delivery of additional local community services, such as aged-care facilities, public safety programs, as well as alcohol and drug problem mitigation. The implications of diminishing fiscal wellbeing in all Australian local government state and territory jurisdictions have been spelt out in detail in a number of state-based reports cataloguing substantial and growing local infrastructure maintenance and renewal backlogs (see, for example, FSRB 2005b; LGI 2006; WALGA 2006; LGAT 2007).

At the national level, PWC (2006) employed two separate approaches in its efforts to develop accurate national estimates of (a) the proportion of Australian local councils suffering from financial duress, and (b) the extent and magnitude of the local infrastructure backlog. In the first approach, financial data were collected from a weighted national sample of 100 local governments encompassing the seven Commonwealth Department of Transport and Regional Services (DOTARS) council classification categories. The data were compared with Key Performance Indicators (KPIs), constructed as proxy measures, to gauge financial sustainability. The main conclusion from the PWC (2006) study into financial sustainability was that a significant proportion of councils required considerable internal reform, as well as additional external financial assistance, to remain viable.

The second approach deployed by PWC (2006) derived a national estimate of the magnitude of the local infrastructure backlog based on trend extrapolation from three state-based studies (New South Wales, South Australia and Western Australia) which had already been undertaken by the consulting firm Access Economics, as well as from analysis undertaken by the Municipal Association of Victoria (MAV) in its state jurisdiction. Taken together, these four states accounted for approximately '63 percent of total national councils, 76 percent of the national population and 72 percent of the nation's local roads' (PWC, 2006, p.9).

In order to accommodate disparities in the estimates developed in these state-based reports, PWC (2006) calculated three measures of the national local government infrastructure backlog, representing a mean estimate, an upper bound estimate and a lower bound estimate. These estimates were then scaled up and extrapolated to include the Queensland, Tasmania and Northern Territory local government systems to obtain the three aggregate national estimates. A synoptic view of these estimates is reproduced in Table 1.

It is evident from the PWC (2006) national estimates reproduced in Table 1 that there is a potential national infrastructure backlog of between \$12.0 billion and \$15.3 billion across all seven Australian local government jurisdictions. In addition, the information in Table 1 indicates that an annual shortfall in expenditure on existing local infrastructure renewal occurs in the range \$0.9 billion to \$1.2 billion. Based on these projections, funding in the vicinity of \$1.8 billion to \$2.3 billion per annum would be required to address the deficit in maintenance spending on existing infrastructure and eliminate the current local

infrastructure backlog. As we can see from Table 2, this is equivalent to an additional \$2.6 million to \$3.3 million per council per annum<sup>2</sup> or approximately an \$87 to \$109 per capita impost on local council constituents per annum.

**Table 1.** Estimates of the Australian Local Infrastructure Backlog

	Backlog in infrastructure renewals (\$m)	Underspend on existing infrastructure renewals pa (\$m)	Estimated funding gap pa (\$m)	Estimated funding gap per council pa (\$m)
Total NSW/WA/SA/Vic	\$9,156	\$711	\$1,362	\$3.1
Low case national estimate	\$12,012	\$922	\$1,826	\$2.6
Mid case national estimate	\$14,533	\$1,129	\$2,163	\$3.1
High case national estimate	\$15,305	\$1,190	\$2,281	\$3.3

**Source:** PWC 2006, p.11.

**Notes:** Low case: average of WA, VIC and SA result per local government; Mid case: average of WA, VIC, SA and NSW result per local government; and High case: average of NSW, VIC and WA result per local government

**Table 2.** Australian Local Infrastructure Backlog Per Capita

	Backlog in infrastructure renewals (\$)	Underspend on existing infrastructure renewals pa (\$)	Estimated funding gap pa (\$)
Low case national estimate	\$571	\$44	\$87
Mid case national estimate	\$692	\$54	\$103
High case national estimate	\$728	\$57	\$109

**Notes:** Calculated on the Australian resident population of 21.015 million as at June 2007 (ABS 2008).

## 2.2 Proposed Policy Solutions

Several policy recommendations have been proposed to tackle the Australian

<sup>2</sup> Based on Access Economics methodology, the per annum funding gap is the 'necessary spending required and is the difference between the annual depreciation cost and actual expenditure' (PWC 2006, p.10).

local infrastructure problem. For example, the FSRB (2005) suggested improved governance and management practices, especially in asset administration, are pivotal to any long-term solution of this problem. In other words, the onus of alleviating fiscal stress should lie predominantly on each local jurisdiction. Other policy responses developed in the various state-based inquiries have included increased intergovernmental grants from state and federal governments to local councils, the imposition of higher rates and charges by local councils, increased local government borrowing, as well as the transfer of responsibility for the provision of some services between the different tiers of government (FSRB 2006; LGI 2006; WALGA 2006; LGAT 2007). In addition, Beresford-Wylie, Watts and Thurairaja (2006) have argued that Public Private Partnerships (PPP) should be given a much greater role in local infrastructure provision, while Byrnes, Dollery, Crase and Simmons (2008) have proposed the use of council asset-backed securities to fund the backlog in local infrastructure maintenance and renewal.

The recommendations put forward by PWC (2006) advocated a dual approach to the problem comprising a combination of internal council reform and increased intergovernmental fiscal transfers to local authorities from higher tiers of government. The proposed 'in-house' reforms should focus on efficiency improvements with the aim of reducing operational costs, identifying opportunities for 'own-source' revenue expansion by councils, the prioritisation of service provision and the implementation of programs targeted at improving local asset management and local financial skills (PWC 2006, pp.120-33).

In addition to these internal reform processes, the PWC (2006) report contended that local municipalities required increased funding support from state and federal governments in order to adequately address the massive local infrastructure backlog. A central pillar in this policy recommendation was a proposal to establish a new Local Community Infrastructure Renewals Fund (LCIRF) funded by the federal government. Independent of the PWC (2006) report, Dollery, Byrnes and Crase (2007a) also proposed the creation of a local infrastructure fund as method of ameliorating the national local government infrastructure backlog. To a limited extent, these proposals have been acted on by the Commonwealth Government. For instance, in November 2008 the federal government committed to the provision of \$300 million to local government through its new Regional and Local Community Infrastructure Program. These funds were delivered in two tranches by June 2009. The first instalment allocates \$250 million among all councils and shires across Australia with a minimum allocation of \$100,000 to each local authority. The second tranche invited bids for a share of \$50 million designated for investment in larger-scale projects (ACLG, 2008).<sup>3</sup>

Other remedies advanced by PWC (2006) included the introduction of a new

---

<sup>3</sup> These funds augment the earlier Commonwealth Government Roads to Recovery Program (R2R), which transferred billions of dollars directly to local government, thereby bypassing state and territory governments. Had it not been for the R2R Program, the Australian local infrastructure backlog would have been much worse (see, for example, Lopez, Dollery and Byrnes, 2008).

formula in the calculation of Financial Assistance Grants (FAGS) to increase local government funding, an expansion of funds and an extension in the life of the Roads to Recovery (R2R) program, and state and territory government incentives to assist local councils in improving asset management and financial practices (PWC, 2006, pp.135-48). In response to these recommendations, the Federal Government has already approved \$2.2 billion in FAGS and R2R funding, together with \$8 million for the establishment of a Centre for Excellence for Australian local government (ACLG 2008).

The main conclusions drawn by the PWC (2006) inquiry were that, across the seven DOTARS defined council classification categories, larger metropolitan councils were better able to strengthen their own financial circumstances through efficiency gains from 'internal' reforms than other types of local government. The council classification categories least able to effectively implement the 'internal' reforms prescribed in the PWC (2006) report, and hence most likely to be dependent on additional intergovernmental funding for infrastructure renewals, were the 'Rural Remote' and 'Rural Agricultural' categories of local councils.

### **3. NEW ZEALAND LOCAL INFRASTRUCTURE**

#### **3.1 Magnitude of the Problem**

Two distinct types of local government authorities exist in New Zealand; territorial authorities (constituting city or district councils) and regional councils. Approximately 52 percent of the New Zealand population lives in the ten largest territorial authorities, with one-third of the total population residing in the Auckland region alone (LGRI 2007).

The past several years has seen the publication of a number reports into local government funding in New Zealand, including LAFI (2005), LGFI (2006) and most recently LGRI (2007). In terms of their bearing on local government infrastructure, both the LAFI (2005) and the LGFI (2006) reports suggested that deferred infrastructure maintenance and renewals represent a matter of concern for some local government authorities in New Zealand. For example, LAFI (2005, p.51) concluded that 'a number of councils are under-investing in their infrastructure' and that 'due to their socio-economic circumstances the rating base of some councils lacks the capacity to fund the necessary infrastructure and services required to attract investment and meet future community needs'. Furthermore, information from a number of case studies indicated there was 'a backlog of deferred maintenance and renewals in some local authorities' that were 'a legacy of previous governance decisions, and a consequence of lack of robust asset management planning' (LGFI 2006, p.19). In a broader comparative Australasian context, LGRI (2007) observed that while local government in New Zealand did not suffer to the same extent from the financial ills besetting many Australian local authorities, it nonetheless was experiencing various fiscal problems, most notably in funding limitations and the rate of expenditure growth.

The LGRI (2007) report noted that according to long-term council

community plans (LTCCPs), which all local authorities in New Zealand must produce, capital expenditure is forecast to increase substantially over the ten-year period 2006/07 to 2015/16, with aggregate spending on infrastructure totalling around \$31 billion. The largest component of this projected infrastructure expenditure resides in 'transport', followed by expenditure on the 'three waters' (i.e. drinking water, wastewater and stormwater) (LGRI, 2007, p. 54). However, determining what proportion of this expenditure is indicative of past underinvestment has proved very difficult to estimate, although there is sufficient evidence of capital expenditure deferrals in the land transport sector from 1990 to 2003 (LGRI 2007, p.104).<sup>4</sup>

LGRI (2007) stressed that the challenge for New Zealand local government resides in the generation of adequate funds to meet projected expenditures. Property taxes in the form of rates comprise the main source of local government funding, at some 56 percent of operating revenue in the fiscal year 2005/06. LGRI (2007) observed that LTCCP predictions are for rates to increase to 60 percent of operating revenue by 2015/16. LGRI (2007) argued that these projected rate increases are not sustainable over the longer term, noting that, for a significant proportion of the community, this planned rates rise will represent a growing burden over the next ten years. In other words, local councils must have alternative funding mechanisms to reduce their heavy reliance on rates revenues.

### 3.2 Proposed Policy Solutions

The LGRI (2007) recommendations to improve the financial stability of local government in New Zealand are not dissimilar to the recommendations proposed by PWC (2006) to address the infrastructure backlog problems confronting all Australian local government jurisdictions. The numerous LGRI (2007) reform propositions can be grouped into four broad categories; modifying existing funding configurations; identifying alternative funding sources; improvements in planning and financial decision making; and additional funding from, and improvements in, communicative links with central government.

In more specific terms, LGRI (2007) recommended that local councils should consider greater use of debt to finance long-life assets rather than using funds drawn from current revenue streams. This would seem to offer greater intergenerational equity prospects since the costs of such assets could be distributed over future and current generations of local council ratepayers. In its report, LGRI (2007) identified various viable sources of funding, including the supplementation of current revenues through the introduction of volumetric user charges to support water and waste-water provision costs, the establishment of local environmental taxes, and increasing existing local authority petroleum taxes (LAPT).

One area of concern highlighted in the LGRI (2007) report lay in the purportedly unsatisfactory financial decision making processes employed in some local authorities. In particular, a lack of prudence in spending,

---

<sup>4</sup> A backlog develops as the level of the service provided by the infrastructure deteriorates with deferrals of capital expenditure.



accountability and transparency were all viewed to be problematic in the report. LGR (2007) suggested that solutions to most of these problems rested on better 'in-house' management practices, such as re-evaluating forecasted capital expenditures in the light of community needs, as well as setting medium-term financial targets.

The LGRI (2007) report also acknowledged that New Zealand's central government should play a more pivotal role in helping to maintain rates at affordable levels. Various specific measures were proposed in the report, in addition to increased funding from the national government, included a new source of revenue in the form of a centrally financed Infrastructure Equalisation Fund to assist with the costs involved with the construction and maintenance of 'three waters' infrastructure, improvements in the transparency and equity of the current rating system, enhanced liaison and coordination between the different tiers of government in New Zealand as well as a review of the funding of major urban arterial routes, especially in the Auckland metropolitan region.

In sum, the LGRI (2007) recommendations had two general strands. On the one hand, regional or 'network' expenditures should be funded by a combination of debt, central government funding and user charges, whereas on the other hand, community and social infrastructure should be financed by a combination of property rates and debt.

#### **4. COMMONALITIES AND DIFFERENCES**

As we have seen, local authorities in both Australia and New Zealand fulfil essentially the same functions in the range of services they supply. The more traditional 'services to property' provided by local councils includes network infrastructure, such as local roads, water, sewerage and waste disposal. In addition, over the past three decades, local authorities in both countries have increasingly emphasised 'services to people' in service delivery, like community infrastructure, cultural and recreational amenities, etc. From a revenue perspective, in both countries a substantial proportion of local council income is derived from property rates, but the reliance on this form of 'own-source' income differs significantly between the Australian and New Zealand local government systems. Table 3 provides roughly comparable estimates of rate revenue as a proportion of total revenue; it is evident that, in general, New Zealand local councils have a much higher dependence on rates as a primary source of income than their Australian counterparts. By contrast, Australian local government revenue is supplemented to a much greater extent by user charges and fiscal transfers from higher tiers of government.

**Table 3.** Australia & New Zealand: Funding Sources for Local Government (%)

	Rates	Sales of goods & services	Grants	Other revenue/Regulatory income & petrol tax (NZ)	Interest & related income/Total investment income (NZ)
Australia	40	29	17	11	3
New Zealand	56.1	19.7	12.7	5.8	5.7

**Sources:** Productivity Commission (2007), p. 21; and LGRI, 2007, p.42.

In recent years, local councils in the two countries have been confronted by a growing number of community demands not only for improvements in existing service delivery, but also an expansion in the range of ‘non-core’ services provided by local councils. These demands have placed additional financial burden on local governments, which have been reinforced by other mutual drivers of fiscal pressure. This includes ‘cost-shifting’ in its myriad of forms (see, for example, Dollery, Johnson and Byrnes, 2008). For instance, the devolution of some services from higher tiers of government to local authorities through either deliberate legislative mandate, often without adequate financial compensation, or by the withdrawal of services traditional by higher levels of government, leaving local councils, especially in rural and remote areas, as ‘supplier of last resort’, has added immensely to the fiscal load on the shoulders of local government. In addition, regulatory constraints are frequently imposed on the ability of local councils to increase property rates as well as other fees and charges for services, perhaps most notoriously in the form of ‘rate-capping’ in New South Wales local government, which limit ‘own-source’ revenue raising. On the other hand, local councils have almost no influence over the expenditure side of their operations, with escalating labour and material costs often exceeding revenue growth. The net consequence of these and other financial pressures inevitably translates into fewer available funds for infrastructure requirements (Dollery, Byrnes and Crase, 2007b; 2008).

In Australia, the backlog of local government renewals work appears to have developed mostly in areas of community infrastructure, such as community centres, swimming pools, libraries, etc. By contrast, deferments of renewals in local network infrastructure expenditure, such as local roads, sewerage and water services, are not as prevalent because a significant proportion of the funding is derived from user charges or alternatively grants from higher tiers of government (PWC 2006, p.6), most notably R2R funding of local roads.<sup>5</sup>

Although less explicit in terms of its magnitude and source, the infrastructure problem in New Zealand would seem to be more evident in network assets, particularly in local roads (LGRI 2007, p.104). In order to provide a guide to proposed capital outlays in New Zealand local government, of the \$31 billion in

<sup>5</sup> However, it should be noted that, even with R2R funding, the renewal of local roads presents ongoing difficulties for many rural Australian councils (PWC, 2006).

total forecast capital expenditures, as outlined in the LTCCPs, for the 10 year period from 2006/07 to 2015/16, land transport accounts for around 44 percent, the 'three waters' for 29 percent, with around 18 percent earmarked for community infrastructure.<sup>6</sup>

In many respects, the same underlying reasons for prospective increases local infrastructure expenditure requirements are common to Australia and New Zealand local government. For example, in both countries, many rural and local roads are coming towards the end of their economic existence and thus require urgent investment. Indeed, this fact underpinned the introduction of the R2R scheme in Australia (PWC 2007, p.57) and it was identified in the Local Authority Funding Project (2005, p.92) as one of the key factors driving growing local government infrastructure expenditure in New Zealand. In addition, local government in both countries has seen the imposition of higher standards in the provision of some services in areas, especially health facilities and environmental regulation, which has forced local councils to invest in new local infrastructure. Finally, demographic change and population growth in some regions has led to an increasing demand for local network and local community infrastructure.

At the level of the individual local authority, both the reasons for increased local infrastructure expenditure as well as the magnitude of the infrastructure backlogs differ markedly between local councils. Nonetheless, a number of general factors common to Australia and New Zealand seem to have contributed to the financial constraints operating on local government and the consequent development of local infrastructure backlogs. These factors are summarised in Table 4.

Perhaps the most critical issue confronting the ongoing financial sustainability of local councils in Australia and New Zealand is revenue growth. 'Own-source' income is greatly constrained in both countries by various limitations on the use of rates to generate additional income. For instance, in Australia restrictions range from outright rate-pegging in NSW, various property tax exemptions and rebates across all state and territory jurisdictions, to 'moral suasion' by state governments, as well as electoral pressure to keep rate increases to a minimum (PWC 2006, p.84). Some of these restrictions, like rate exemptions for various categories of land, are also common to New Zealand. However, 'own-source' local government incomes in New Zealand appear to have reached its limits, largely because of the current heavy reliance on rates in New Zealand local government. Given that rates revenue already accounts for more than half of New Zealand's local government income, further increases pose serious affordability concerns for some poorer sections of the community (LGRI 2007, p.3).

A related factor affecting council revenue is population growth trends. For example, councils experiencing financial difficulties typically have declining (or at least small) population bases which translate into dwindling (or at least static)

---

<sup>6</sup> This compares with just \$15.7 billion in capital expenditure over the past 10 years (LGRI 2007, p.92).

council revenue. In Australia, around 60 percent of councils classified as rural and remote councils fall into this category (PWC 2006, p.5). In New Zealand, from 1996 to 2006, twenty-eight of the 73 territorial councils, mostly smaller entities, experienced population decreases and thus limited (or even zero) increases in their ratings bases. As at 2006, the 25 smallest territorial authorities are home to just 7 percent of New Zealand's total population (LGRI 2007, p.35).

**Table 4.** Common Financial Factors Affecting Local Councils

Australia	New Zealand
<ul style="list-style-type: none"> <li>• Minimal (negative) revenue growth</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal (negative) revenue growth</li> </ul>
<ul style="list-style-type: none"> <li>• Rating constraints</li> <li>• Electoral pressure to minimise the absolute level and any increases</li> </ul>	<ul style="list-style-type: none"> <li>• Unpopularity of rates</li> <li>• Electoral pressure to minimise the absolute level and any increases</li> </ul>
<ul style="list-style-type: none"> <li>• Declining population base (almost 60 percent of councils are rural/remote)</li> </ul>	<ul style="list-style-type: none"> <li>• Population decline (and/or lower population densities)</li> </ul>
<ul style="list-style-type: none"> <li>• Award wage increases</li> <li>• Cost escalations in the maintenance and construction sectors</li> <li>• Operating deficits</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of new or replacement infrastructure driven by cost escalation</li> <li>• Increased costs from the consultative and procedural requirements of the LGA 2002</li> <li>• Lower holdings of other revenue-producing assets</li> </ul>
<ul style="list-style-type: none"> <li>• Increasing provision of non-core services</li> <li>• Cost shifting from other levels of government</li> </ul>	<ul style="list-style-type: none"> <li>• Higher community expectations of the quality of services and facilities, and lower tolerance of service failures</li> <li>• New regulatory roles such as gambling, building and dog legislation</li> <li>• Higher environmental and health standards</li> <li>• Increased responsibility to meet community needs and preferences</li> </ul>
<ul style="list-style-type: none"> <li>• Skills shortages</li> <li>• Lack of asset and financial management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Skills shortages</li> </ul>

**Source:** PWC (2006) and LGRI (2007).

As we have seen, there are thus a number of factors placing additional demands on local government resources. In Table 4, these factors are broadly grouped into two types that impose additional costs on local government. The first category subsumes the main sources of increasing expenditure costs by including factors such as higher remuneration paid to workers as a consequence of skill shortages, increases in award wages, significant cost increases in some areas of council activity, such as maintenance and construction. The second category represents costs that are exogenous in origin and enforced on councils, thereby placing additional demands on council resources. Examples include increasing provision of 'non-traditional' services, greater community

expectations, higher compliance standards and the introduction of new regulatory roles for local councils.

## **5. CONCLUSION**

As an exercise in comparative local government analysis, this paper has attempted to demonstrate that the Australian and New Zealand local government systems exhibit a common and growing local infrastructure backlog problem, albeit of a much greater magnitude in Australian local government. Similarly, we have argued that many of the factors which have contributed to this problem are evident in both countries, although not in identical proportions. Given the many characteristics shared by Australian and New Zealand local government, these commonalities are hardly surprising. However, they do suggest that common policy remediation options for the alleviation of local infrastructure problem may also exist.

As we have seen, a host of factors largely beyond the control of individual councils are responsible not only for the development of a local infrastructure backlog, but also the more general fragile state of financial sustainability in local government. For example, in both countries a substantial segment of the stock of local infrastructure has aged to the limits of its economic life and thus requires renewal. Moreover, continually rising standards of service provision, typically imposed by higher tiers of government, have rendered much local infrastructure obsolete long before its planned date, effectively further shortening the economic life of local infrastructure. Similarly, greater emphasis on 'services to people', often an artefact of coercive state or national government policy making mandating local councils to provide designated services, or alternatively the withdrawal of services previously offered by state and national government agencies in particular local government areas, has also generated pressure for new local infrastructure.

In an analogous vein, to a significant degree inadequate local government revenue growth is due to factors that lie outside of the control of local councils in both countries. For example, while local authorities in Australia and New Zealand do have a range of specific fees and user charges which they can utilise, these are frequently regulated by higher levels of government. Furthermore, additional sources of income from pricing services are proscribed by law. In terms of general revenue derived from taxation, in both countries local councils are forced to rely exclusively on rates, which are subject to numerous exemptions and rebates by state and national governments. In other words, severe constraints have been placed on the revenue-raising abilities of local government in both countries.

Many of the other elements which determine the demand for local services fall beyond the power of local government to influence. For instance, demographic changes lie largely outside of the control of local authorities, but have decisive effects on the nature and extent of service provision and thus of local infrastructure requirements. Similarly, environmental changes are exogenous to local authorities, but nonetheless can require expensive infrastructure investment. These and other 'non-discretionary' factors underpin a

significant proportion of the local infrastructure backlog.

Given that many of the forces driving the supply of local infrastructure, as well as the demand for local infrastructure, cannot be affected by local council policy making, as well as the constraints on the ability of local councils to raise revenue to pay for local infrastructure, the question arises as to the best policy options to tackle the local infrastructure backlog in the local government systems under review. As we have seen, numerous suggestions have been offered for both Australian local government and New Zealand local government. Successful resolution of this question in policy terms hinges on local government obtaining access to adequate finance to fund local infrastructure.

In essence, there are only three generic methods of securing this finance. In the first place, local councils could substantially increase their 'own-source' income from property taxes as well as rates and charges. However, as we have seen, New Zealand local government appears to have reached the limits of revenue-raising from rates, and the magnitude of the Australian infrastructure backlog is so large that local 'own-source' income will never be sufficient. In both nations, what would thus be required are legislative changes by higher tiers of government which would provide local councils with new taxation powers to raise revenue, such as local sales taxes or even environmental taxes. Given the marked historical reluctance of state and national governments in Australasia to grant these powers to local councils, this method of increasing income is not politically feasible. Secondly, local councils could use debt instruments to borrow the requisite funding, a method suggested in several Australian state inquiries, the LGRI (2007) report, and by Byrnes, Dollery, Crase and Simmons (2008). Although debt finance does have several attractive features, not least intergenerational equity in long-term local infrastructure provision, for the majority of local authorities, it does not seem feasible since (a) is unlikely that it would provide sufficient funds for many councils with massive infrastructure backlogs and (b) financial sustainability problems afflicting many local councils would preclude them from access to debt markets under present market conditions.

The third generic method of raising income resides in intergovernmental transfers within the public sector. Given the high degree of vertical fiscal imbalance in both Australia and New Zealand, with central governments collecting the vast bulk of tax revenue, three possible avenues of intergovernmental revenue transfer exist: (a) tax-sharing with local government in, say, general sales tax revenue; (b) granting additional powers of taxation to local government, such as local sales taxes; and (c) some system of intergovernmental grants. Apart from the relatively minor revenue accruing to New Zealand local government from LAPT, we have argued that central governments in Australia and New Zealand have always been extremely reluctant to consider options (a) and (b). We are thus left with the sole policy option of a system of intergovernmental grants.

Against this background, it is thus hardly surprising that PWC (2006) and LGRI (2007) both arrived at similar conclusions, with the former recommending a Local Community Infrastructure Renewals Fund and the latter proposing an

Infrastructure Equalisation Fund. A system of intergovernmental grants appears to be the optimal approach in both countries since it can generate the magnitude of funds required, an especially important ingredient in Australian local government, with its massive local infrastructure backlog, it represents an economically efficient method of raising finance, and it meets equity considerations because of the 'non-discretionary' nature of the financial forces impinging on local government.

## REFERENCES

- Australian Bureau of Statistics (ABS) (2008) *Population Projections, Australia, 2006 to 2101*, Cat. No. 3222.0, Australian Bureau of Statistics: Canberra.
- Australian Council of Local Government (2008) 'Prime Minister Kevin Rudd - Address at the Australian Council of Local Government meeting'. Available at [http://www.aclg.gov.au/media\\_centre/audio/pm\\_transcript.aspx](http://www.aclg.gov.au/media_centre/audio/pm_transcript.aspx). Consulted 23 February 2009.
- Beresford-Wylie, A., Watts, G. and Thurairaja, V. (2006) Financing local government infrastructure: The Australian experience, *Sustaining Regions*, 5(2), pp.5-15.
- Byrnes, J.D, Dollery, B.E., Crase, L. and Simmons, P. (2008) Resolving the infrastructure crisis in local government: A bond market issue approach based on local council income, *Australasian Journal of Regional Studies*, 14(2), pp. 115-131.
- Dollery, B.E., Byrnes, J.D. and Crase, L (2007a) The Infrastructure crisis in Australian local government: A proposed federal asset fund solution', *Australasian Journal of Regional Studies*, 13(1), pp. 3-19.
- Dollery, B.E., Byrnes, J.D. and Crase, L. (2007b) Too tough a nut: Determining financial sustainability in Australian local government, *Australasian Journal of Regional Studies*, 13(2), pp. 110-133.
- Dollery, B.E., Byrnes, J.D and Crase, L. (2008) The mirage of municipal self-sufficiency: A taxonomic approach to local government sustainability in Australia, *Public Policy*, 3(1), pp. 51-66.
- Dollery, B. E., Crase, L. and Johnson, A. (2006), *Australian Local Government Economics*, UNSW Press: Sydney
- Dollery, B.E., Garcea, J. and LeSage, E, Jr. (2008) *Local Government Reform. A Comparative analysis of Advanced Anglo-American Countries*, Edward Elgar: Cheltenham.
- Dollery, B.E. Johnson, A. and Byrnes, J.D (2008) Cost shifting in Australian local government: An analysis of the spatial impact of pensioner rate concession rebates in New South Wales, *Australian Geographer*, 39(4), pp. 467-478.
- Dollery, B. E., Wallis, J. L. and Allan, P. (2006) The debate that had to happen but never did: The changing role of Australian local government, *Australian Journal of Political Science*, November, 41(4), pp. 553-567.
- Financial Sustainability Review Board (FSRB) (2005) *Rising to the Challenge*, South Australian Local Government Association: Adelaide.

- Hearfield, C. and Dollery, B.E. (2009) Representative democracy in Australian local government, *Commonwealth Journal of Local Governance*, 2, pp. 61-75.
- Independent Inquiry into Local Government Inquiry (LGI) ('Allan Inquiry') (2006) *Are Councils Sustainable? Final Report: Findings and Recommendations*, NSW Local Government and Shires Association: Sydney.
- Local Government Association of Tasmania (2007) *A Review of the Financial Sustainability of Local Government in Tasmania*, Local Government Association of Tasmania: Hobart.
- Local Authority Funding Project (LAFI) (2005) *Local Authority Funding Issues: Report of the Joint Central Government/Local Authority Funding Project Team*, Department of Internal Affairs: Wellington.
- Local Authority Funding Project (LGFI) (2006) *Local Government Funding Issues: An Update Second Report of the Local Authority Funding Project Team*, Department of Internal Affairs: Wellington.
- Local Government Rates Inquiry Panel (LGRI) (2007) *Funding Local Government: Report of the Local Government Rates Inquiry*: Wellington.
- Lopez, M., Dollery, B.E. and Byrnes, J.D (2008) Financial sustainability in local government: An analysis of the *Roads to Recovery* program in New South Wales local government, *Public Policy*, 3(2), pp. 141-158.
- PriceWaterhouseCoopers (PWC) (2006) *National Financial Sustainability Study of Local Government*, PriceWaterhouseCoopers: Sydney.
- Productivity Commission (Australian Government) (2007) *Assessing Local Government Revenue Raising Capacity*, Research Report 04/2008: Canberra.
- Shah, A. (ed.) (2006a) *Local Governance in Industrial Countries*, World Bank: Washington.
- Shah, A. (ed.) (2006b) *Local Governance in Developing Countries*, World Bank: Washington.
- Western Australian Local Government Association (WALGA) (2006), *Systemic Sustainability Study: In Your Hands - Shaping the Future of Local Government in Western Australia, Interim Report*, Western Australian Local Government Association: Perth.