THE PUBLIC POLICY IMPACT OF INFRASTRUCTURE MANAGEMENT IN AUSTRALIA AND NEW ZEALAND

CO-PRESENTERS

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Abstract

Both New Zealand and Australia have made Infrastructure Asset Management Plans an essential component of infrastructure planning and funding. What have been the benefits, costs and risks of this approach? This paper will examine case studies in Australian and New Zealand practice.

The development of infrastructure asset management practices in Australia and New Zealand over the past 20 years has become an essential component of infrastructure planning and funding. This approach has had a range of impacts but have there been risks or adverse consequences to a mandatory approach to asset management planning and reporting?

The paper will examine case studies in Australian and New Zealand practice and the effects on public policy formation and communities in both countries.

1.0 Introduction

Local governments in Australia have been engaged in significant asset management planning activities for a number of years, and in some States these activities have been underway for more than a decade. Mayors and Councillors and other local government stakeholders have a right to expect that this concerted period of effort and cost will lead to improved outcomes for Councils and communities.

The indications are that Councils are moving very close to realizing the benefits from this sustained period of activity. Some significant policy questions remain to be answered. There is evidence that some Councils have chosen to expand asset based services beyond their revenue capacity. Is this poor asset management or an informed trade off choice in the hope that other levels of Government will underwrite their financial position? There are also currently low confidence estimates that around 30% of Australian Councils may be financially unsustainable. What is an appropriate whole of government policy response? Are some Councils including aspirational and unrealistic service levels in asset management plan service level targets. To date the response by the Federal and State Governments is to encourage Councils to borrow and/or raise land tax in order to achieve financial sustainability. A national project is currently underway to measure and report on service level trends across Australian local government and the report in the pilot will be presented at the National Local Roads and Transport Congress 14 - 16 November 2012, Hobart, Tasmania

The achievement of the first round of asset management plans in Councils is a significant milestone. This process needs to ensure however that the risks and community consequences of affordable service levels are identified and form part of the decision making processes of Mayors and Councillors.

In New Zealand local governments have had a mandatory requirement for asset management planning since 1996. All Councils have asset management plans in place that support long term financial planning documents.

The delivery of affordable service levels remains in debate at both a local and national government level in New Zealand.

2.0 Background of Asset Management Development, Australia

To assist in discussions on sustainability, JRA often refer to their definition of sustainability in the local government environment:

'A Council's long-term financial performance and position is sustainable where planned long-term service and infrastructure levels and standards are met without unplanned increases in rates or disruptive cuts to services.'

Over the past 20 years most Australian States and Territories have, at various times, focussed on financial sustainability of local governments.

Early Studies in Victoria (1998), South Australia (2001) and Tasmania (2001) raised the issue of Councils appearing financially unsustainable whilst at the same time having virtually no asset or risk management plans.

These various projects culminated in the PriceWaterhouseCoopers (PwC) report of 2006 that made a number of important observations on asset management practices across Australia.

These observations included several references to the direct relationship between asset management and financial sustainability in local government, including:

- Inconsistent asset valuation and depreciation practices
- Poor asset management practices
- Inconsistent application of accounting standards and accounting approaches
- Deficiencies in data quality and completeness
- Lack of understanding of levels of service and cost of service provision
- Little understanding of the whole of life costs for new assets

2.1 A Comparison of Early Adopters

The comparison between Victoria and South Australia is striking. Both Victoria and South Australia commissioned infrastructure studies by the same authors, Victoria in 1998 and South Australia in 1999/2000. The key results were similar with worsening infrastructure gaps and recommendations to re focus on strategic resource planning with asset management being a corporate responsibility rather than a technical activity.

The turning point for South Australia was the work prepared for the Local Government Infrastructure Management Group during 1999 and 2000 that resulted in the report released in April 2000 "A Wealth of Opportunities - A Report on the Potential from Infrastructure Asset Management in South Australian Local Government".

This report identified that in 2000, the resources needed to look after existing assets maintained by Councils were set to rise sharply and that a radical change in the way assets are managed must occur. The report was consistent with the 1998 Victorian infrastructure study by the same authors and stated that:

"This problem is beyond being a mere funding issue. More funding, by itself, will not solve the asset management problem and could well exacerbate it. This is now very much a problem of integrated resource planning, in which a more strategic understanding of assets and the part they play in the provision of Council services is essential. With better understanding and a positive attitude to asset management there is a 'wealth of opportunities' for Councils to improve their position, as indicated in this report. Yes, more funding for asset renewal and, particularly, for asset maintenance, will be required by most Councils. How much this can be managed within existing Council budgets and how

¹ A Wealth of Opportunities A Report on the Potential from Infrastructure Asset Management in South Australian Local Government Prepared for the Local Government Infrastructure Management Group April 2001 By Dr Penny Burns, AMQ International, Jeff Roorda, Jeff Roorda & Associates, David Hope, Skilmar Systems

much by raising extra revenues is a matter for each Council to determine. In doing so, they will need to consider what services are needed – and at what level – by their communities. From that point, decisions can be made about who should provide those services. Direct provision by Council is but one way of ensuring access to services. In the private sector, progressive companies are divesting themselves of assets; finding it more beneficial to focus on service instead and Councils may well find that they can do the same."

Substantial improvement in South Australia local government has occurred over time in two key areas:

- 1. Annual financial performance (operating result) At the time of the South Australian 'Wealth of Opportunities' report of a decade ago, the South Australian local government sector was incurring nominal deficits of about \$100 m p.a.
- 2. Asset renewal expenditure in absolute terms At the time of the Wealth of Opportunities report South Australian Councils were spending about \$55 m p.a. on asset renewal. The report suggested that within 10 years, South Australian Councils would need to spend three times as much on asset renewal.

Within ten years South Australian Councils were in fact spending 3½ times as much on asset renewal and at the same time had effectively eliminated operating deficits. The position has slightly further improved on that since.

There are a number of contributing factors:

- 1. The Wealth of Opportunities report and the fact that much was done to promote its messages.
- 2. The South Australian Financial Sustainability Inquiry (findings of which were also heavily promoted).
- 3. Legislative changes to facilitate findings/recommendations of 1) & 2) above to be progressed.
- 4. South Australian Local Government Association support program that has enabled people to be engaged in preparing various materials and training etc. to assist people.

The legislative changes not only included requirements to prepare Long Term Financial Plans (LFTPs) and Asset Management Plans but also required:

- Publishing mandated financial indicator data in budgets and LTFPs (projections) and end of year financial statements,
- Abolished all reference to cash accounting concepts (no rate determination statement or balanced (cash) budget etc.) and
- Specifically required Councils to consider and comment on their financial sustainability in setting strategic plans and annual business plans etc.

Current Position in South Australia

Chart 1 below provides aggregate data from 2000-01 until 2010-11 covering the sector's operating surplus / (deficit). This measures the difference between day-to-day operating revenue and expenses for a financial year and is considered to be the most critical measure of local government financial performance. The aggregate level of local government's annual operating deficit has reduced steadily since 2000—01. The 2008-09 result would have been break-even (i.e. operating revenue equal to expenses) but for the early receipt, in June 2009, of Commonwealth financial assistance grants. The very small operating surplus of \$2 million recorded in 2010-11 compares with an operating deficit of \$75 million in 2000 01. A total of 31 Councils recorded an operating surplus in 2010-11 compared with only 16 Councils in 2000-01.

Chart 1: Local Government Sector - Operating Surplus (Deficit)

40

20

-40

-60

-80

Chart 1: Local Government Sector - Operating Surplus/(Deficit)

Each Council is required to develop and adopt an infrastructure and asset management plan (I&) covering a period of at least 10 years. In addition each Council is required to adopt a long-term financial plan also covering a period of at least 10 years. There is a direct link between the development and implementation of these two plans. The two plans also need to be consistent. That is to say, the long-term financial plan must reflect the optimal level of proposed asset maintenance, renewal and replacement outlays necessary to achieve the Council's specified service levels, while minimising whole-of-life-cycle asset costs, as specified in the Council's I&. To achieve this it is often necessary to review proposed service levels upon which the infrastructure and Asset Management Plan is based and/or revenue raising proposals and forecasts specified in the long-term financial plan.²

Both Victoria and South Australia Implemented a Mentoring Programme

Work to change the focus to service planning started immediately with a "step by step" mentoring programme by the authors during 2000 to 2002. This programme provided a low cost programme of mentoring to Councils to write their asset management plans and make asset management a corporate responsibility. Most Councils completed asset management plans in the period 2000 to 2005, however some did not.

Mandatory Legislation in 2005 ensured that all Councils have Asset Management Plans – currently being reviewed to second generation to ensure all at core level. Most of these Asset Management Plans have been developed by Council staff using national templates and training. Councils choose service providers to assist as appropriate.

But the Results have been completely different

South Australia adopted and implemented the 2000 infrastructure study. In Victoria, the results have been less dramatic as reported in Appendix 2 of this report.

2.2 Reports, Debate and National Developments

In 2007, in light of the PwC findings, the Local Government and Planning Ministers Council (LGPMC) endorsed the concept of a nationally consistent approach to the assessment of sustainability. This resulted in the adoption by the States and Territories of three frameworks:

- Framework 1 Criteria for assessing financial sustainability of local Councils
- Framework 2 Asset planning and management

² Financial Sustainability Information Paper 6 Infrastructure and Asset Management, January 2012, Local Government Association of South Australia.

• Framework 3 – Financial planning and reporting

In May 2009 the LGPMC agreed to the enhancement of existing nationally consistent frameworks to assist Councils improve asset management planning and financial management and reporting. The LGPMC also committed to an acceleration of the implementation of the frameworks.

There are seven elements to the enhanced asset management framework:

- 1. Development of asset management policy.
- 2. Strategy and planning.
- 3. Governance and management arrangements.
- 4. Defining levels of service.
- 5. Data and systems.
- 6. Skills and processes.
- 7. Evaluation.

In terms of the levels of service element, States and Territory governments were to develop mechanisms that ensured that Councils defined the levels of service expected to be provided from the asset base, including ensuring that Councils:

- Establish service delivery needs and define service levels in consultation with the community
- Establish quality and cost standards for service to be delivered from assets
- Regularly review their services in consultation with the community to determine the financial impact of a reduction, maintenance of or increase in service

This particular element is clear in its emphasis on defining levels of service that are affordable to a community in consultation with that community.

The financial sustainability evaluation of a local government is undertaken with reference to a properly developed and complete long term financial plan. The financial plan should:

- Be based on the achievement of projected performance against carefully developed financial sustainability targets
- Fully accommodate in quantum and timing all expenditures as included in the asset management plans for the Council's infrastructure assets
- Include a sensitivity analysis highlighting key factors or assumptions most likely to impact on achievement of plans' financial targets

Expressed a different way, the decisions made by Councils must ensure that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.

Financial sustainability indicators are used to support the analysis of a Council's long term financial plan. In October 2011 Australian States and Territories agreed that the common financial sustainability indicators to be used in this analysis are:

- 1. Operating Surplus Ratio
- 2. Net Financial Liabilities Ratio.
- 3. Asset Sustainability Ratio.

Evaluations based on the use of these ratios seeks to identify whether the infrastructure assets of a Council are being maintained (renewals emphasis through the asset sustainability ratio) whilst the Council remains financially viable in the long term (operating surplus ratio) and retains financial capacity to manage risks and unexpected events (net financial liabilities ratio).

Consideration of performance in these three ratios should be an important part of all Council decision making and community processes in relation to assets.

2.3 IPWEA and NAMS.AU

One of the key differences between Victoria and South Australia is that South Australia implemented a collaborative project with IPWEA/ JRA to implement a web based toolkit and training programme to build capacity within local government.

This has now expanded to an international programme with NAMSPLUS2 being used by over 350 Councils in Australia and a growing group of asset custodians in USA and Canada.

The primary emphasis of this programme is to build internal capacity within infrastructure custodians rather than outsourcing asset management work to the private sector. This have proven to be a more effective long term solution than a mandatory approach, however the mandatory approach ensures all Councils have at least core level asset management plans in place.

2.4 Australian States Take Actions

Three States have taken a legislative approach to accelerating asset management planning:

- SA Mandatory Legislation (2005) All Councils have asset management plans currently being reviewed to second generation to ensure all at core level. Most of these plans have been developed by Council staff using national templates and training. Councils choose service providers to assist as appropriate
- NSW Mandatory Legislation (2009) All Councils have core level AMPs. The Department
 of Local Government reviews AMPs and some Council are in the second generation of
 updates. 42 small Councils that did not have core AMPs in 2011 were provided \$30,000
 assistance under LGRF and now all have core level AMPs integrated to Strategic Plan and
 Long Term Financial Plan in 12 months verified by audit. Over 80% done by Council staff
 using national templates and training developed in SA. Councils choose service providers.
- QLD Mandatory Legislation (2010) 60 out of 73 Councils have made substantial progress or have completed core asset management plans. The majority of those not yet achieving substantial progress are Indigenous communities. 43% done in-house using national templates as for other States. Councils choose service providers

3.0 Background of Asset Management Development, New Zealand

Asset Management in New Zealand gathered momentum following the recession in the late 1980's and early 1990's. This period saw very constrained capital expenditure, and minimum maintenance expenditure. Major reform of New Zealand Local Government occurred in 1989 with extensive amalgamations and the creation of Regional Councils. This reform was accompanied by major new laws and new accountability regimes.

3.1 Auditor General Sparks Action, 1996

New Zealand's Auditor-General became concerned at the lack of information in Council reporting regarding assets, and the possible financial implications of deferred renewals and maintenance. As a result of these concerns in 1996 the Local Government Amendment Act (No3) included a requirement for Councils to develop 10 year Long Term Financial Plans. By inference, the asset related information in the Long Term Financial Plans needed to be supported by Asset Management Plans. Concurrent with this NAMS produced manuals, training and guidance to support the development of Asset Management Plans. The take up and production of Asset Management Plans had begun.

3.2 Local Government Changes, 2002

The Local Government Act was extensively rewritten in 2002, with a range of new powers, consultation and reporting requirements. Schedule 10 of the Local Government Act 2002 required long term planning for groups of activities. This lead to Asset and Activity Management Plans being produced to support Council long term planning requirements. Subsequent amendments to the Local Government Act have changed requirements and emphasis, but the basic structure of 10 year planning supported by analysis of asset requirements has not changed. AMP's have updated since 2002 on a 3 yearly basis to support long term financial planning requirements.

3.3 Asset Management Requirements – Electricity and Government Departments

Following the 1998 Auckland Electricity Crisis the requirement for Asset Management Plans and planning also became mandatory for New Zealand Electrical Authorities. Subsequent to this New Zealand asset owning government departments have been required to produce Asset Management Plans as part of their capital planning requirements. This work is on-going.

3.4 NAMS and AM Development in New Zealand

The New Zealand National Asset Management Steering Group (NAMS) was set up by a range of stakeholders in the mid 1990's to assist in the development of asset management in New Zealand. During the following decade and a half NAMS has produced a range of manuals, conducted industry training, and been involved in policy guidance. NAMS is now part of Ingenium and continues to fulfil these roles.

3.5 National Infrastructure Unit

The National Infrastructure Unit was set up within the NZ Treasury in 2009 with a range of responsibilities including support of the National Infrastructure Advisory Board that was also set up in 2009. The key document produced by the NIU is the National Infrastructure Plan that has already seen 2 iterations. The NIU continues to examine infrastructure requirements at a national level and provides policy guidance to the New Zealand Government.

3.6 Current Developments

Infrastructure expenditure is facing increasing scrutiny in the current economic environment. Information from Asset Management Plans and the National Infrastructure Plan is allowing wideranging and healthy policy debate on the appropriate way forward for New Zealand's infrastructure.

4.0 Asset Management Plans and Asset Management Planning

In all Australian States, the key decision-making processes are anchored to old ways of making decisions, mostly tied to annual budget processes.

Moving all of the key decision-makers and decision-support into different roles takes time and a common and concerted program led by the State, supported by LGAs and consultants is needed.

Since initial long term financial planning requirements were introduced in 1996 New Zealand Councils have moved beyond annual budget processes to a more integrated 10 year planning process. The organisational culture change associated with this has taken time, and the implementation and integration of asset management planning has proceeded at different rates in different Councils.

4.1 Asset Management Plan Investment – Gain or Diversion

It has often been stated that the real gains in the development of Asset Management Plans are in the thinking that it forces you to do about what is required (levels of service and demand management) and how the assets are best managed (asset life cycle and risk management)

In examining these concepts it is clear that well developed Asset Management Plans are valuable documents for both the political and practitioner levels of organisations that are asset custodians.

Billions of dollars of national and local investment have been made into infrastructure assets, and these assets are part of the core of a well-functioning modern society.

The gains that have been made by considering the investment requirements of infrastructure assets (asset acquisition, operations, maintenance, rehabilitation, renewal and disposal) in a structured manner over an appropriate time period should not be under estimated.

Asset management planning will continue to develop to provide decision makers the information required to understand investments required, and to assess and make the trade-offs between infrastructure investments and other services required by our communities.

The application of asset management planning has, and does require sustained effort by organisations that are asset custodians. This effort can be seen as a diversion from the 'real work' of constructing, operating and maintaining assets. The reality is both are needed – constructing, operating, and maintaining assets that are the wrong assets, or in the wrong place, or at the wrong time is a costly miss-investment which our communities shouldn't be funding.

Asset Management Plans and planning enhance our understanding of the management and investment required. This has allowed informed discussion of options and alternatives – as such has been a major gain for infrastructure custodians.

4.2 Asset Management Planning and Deployment – do AMP's help or hinder

With Asset Management Plans now having been in place in Australia and New Zealand for a decade and a half it is possible to answer the question – 'do asset management plans help or hinder asset management planning and deployment?'

Asset Management Plans are of course just one component of a wider system and culture of asset management planning and deployment. One of the key concepts that has been developed in the past few years by JRA in association with IPWEA has been the measuring of organisational maturity with regard to asset management planning and deployment.

Asset Management Maturity assessments measure organisations across a range of criteria in broad categories – accountability and direction, information management, asset lifecycle management and service management.

The usefulness of asset management plans is directly related to organisational asset management maturity. The degree of maturity in information presentation and analysis, and in the organisational asset management culture has a direct effect on the usefulness of asset management plans.

As organisational asset management maturity progresses the usefulness of asset management plans increases, and the effectiveness of asset management planning and deployment improves.

In many Councils, asset management plans are seen to be technical rather than corporate strategic documents. Evidence of the deterioration in quality or alteration of the asset's functionality or capacity objectives is needed to support options and advice provided to Mayors and Councilors.

It is anticipated that as organisational asset management increases asset management plans will become more integrated with corporate strategic documents.

5.0 Examining the Mandatory Approach to Asset Management

New Zealand was an early adopter of the mandatory approach to asset management with the implied requirement in the 1996 legislation, which was made more specific in the 2002 changes to the Local Government Act.

In Australia the introduction of mandatory requirements has varied by State with South Australia introducing requirements in 2005, New South Wales in 2009, and Queensland in 2010.

The advantages, disadvantages and risks associated with the mandatory approach to asset management are briefly examined below.

5.1 What does the mandatory approach involve?

- Legislated requirements to produce asset management plans
- Information to be included in or analysed in asset management plans may be scheduled
- Updating and review cycles may be specified
- Audit requirements may be specified
- Integration with, and support of specified strategic planning and financial documents may be specified

5.2 Advantages of the mandatory approach

- Resources are allocated to asset management planning, deployment and the development and improvement of asset management plans
- Political and Senior Management effort is directed to achieving required mandatory outputs
- All Councils or authorities will reach the minimum specified level of asset management planning in a relatively short time period
- Consistent approach allows compilation of information and State or national comparative analysis
- Resources are mobilised at an industry wide level to assist infrastructure custodians with their requirements – the New Zealand NAMS manuals and training, and the IPWEA NAMSPLUS2 approaches are examples of this

5.3 Disadvantages of the mandatory approach

- Asset management becomes a compliance exercise boxes to be ticked
- If a compliance only approach is adopted the critical thinking required around the lifecycle management of assets is often not completed
- Asset management can just be used as budget bids by Engineers
- In the requirement for mandatory compliance community discussions around services required and ability or willingness to pay can be missed

5.4 Consequences of the mandatory approach

- All asset owning authorities that have a mandatory requirement for asset management planning will reach a core level of asset management
- The information available from asset management planning will inform community and political debates around infrastructure assets

5.5 Lessons learned

New Zealand has had a mandatory approach since 1996. This has driven the development of asset management planning in New Zealand.

As a result of the early mandatory approach there have been some missteps and, upon reflection, poor planning investment in New Zealand.

There have also been many gains in asset management planning in New Zealand, as all Councils have asset management plans at a core or better level supporting their long term financial plans. This has also enabled community debate around the cost of services – now and future projected, and debate around the level of services required by communities.

Australian States have implemented mandatory asset management requirements later than New Zealand. Observations of New Zealand practices, successes and lessons learnt have to some extent informed the development of mandatory requirements in Australia.

The main lessons learnt from the mandatory approach in Australia are:

- A mandatory approach is essential if all Councils are to be at a minimum core level of practice
- There needs to be clear guidance on what constitutes core level of practice. For example, asset management plans must provide at least one scenario that balances to the long term financial plan with clear communication of the service level and risk consequences of the balanced scenario
- Mandating asset management planning must include a continuing programme of guidance and training for the political level in the asset management governance and risk management responsibilities, particularly following elections
- There needs to be some form of compliance review to ensure asset management planning is maintained at core level
- A list of Councils should be published regularly showing which are and are not at core level

6.0 Asset Management Messages to Decision Makers

Asset management planning has had an impact on community, State and National decision makers.

Awareness is growing of the issues surrounding infrastructure provision and planning and their impact on local, state and national economies.

Debates are moving away from short term thinking to more medium term analysis of the impacts of investment decisions on communities.

The impact of asset management messages on Decision Makers is briefly outlined below.

6.1 What is the Asset Management Planning message?

- We need to plan on longer horizons that year to year or even 3 year election cycles
- There is a huge amount of community resource invested in infrastructure assets
- The cost of acquiring, operating, maintaining, managing and replacing infrastructure assets is high
- We need to carefully manage and plan our investment in infrastructure assets
- In some areas we have neglected investment in the past and there may be some catch up to do
- We are custodians and stewards of assets for current and future generations

6.2 What has been the Decision Maker response to the AM message

There has been a positive response when decision makers realise that asset management is a core corporate responsibility, rather than a technical activity. This requires asset management strategy to be responsive to the political agenda of a Council in a whole of government context.

Asset management plans need to clearly communicate scenarios for what the community can and cannot afford with service level and risk consequences of these scenarios.

6.3 Advantages of the Asset Management message

- It has allowed better informed community debate on what is required (service levels) and what communities are prepared to pay for
- It has assisted necessary national debates on the cost and affordability of infrastructure assets
- It has assisted improvement in management decision making with regard to infrastructure assets
- It has assisted with improved prioritisation of asset acquisition and renewal programmes

6.4 Risks and Disadvantages of the Asset Management message

- Some asset management planning exercises have become budget bid by Engineers this has been unhelpful
- The information contained in the asset management message can be used by populist politicians for grandstanding and fear-mongering
- The size of the problems outlined can invite knee-jerk political responses
- The size of the problems outlined can lead to decision paralysis too big, too hard
- Communities often still want someone else to pay for their problems this can lead to interesting political discussions and outcomes

7.0 What has been the Asset Management effect on Financial Investment in Infrastructure?

7.1 Australian Analysis

In Australia, the ACELG report of August 2012 "Strengthening Local Government Revenue" made several observations in respect of financial capacity and available funding sources for infrastructure. This includes:

- Local Governments are investing in new non-financial assets at a rate in excess of the recorded annual consumption of existing non-financial assets. In this context, new assets included renewals as well as new, upgrades and enhancements
- Depreciation expenses as a percentage of total expenses have been falling in many jurisdictions as asset related valuation and rate of consumption information has improved
- The level of outstanding borrowings of local governments, having regard to both the extent of their holdings of long-lived infrastructure assets and annual revenue is extraordinarily low

The Independent Inquiry into the Financial Sustainability of Local Government in South Australia (2005) made substantial comment about ways to improve financial governance in Councils. It followed from an earlier study reporting an asset management expenditure needs which concluded that South Australian local governments would need within 10 years to spend three times as much per annum (in real terms) on asset renewal as at that time.

For the past three years South Australian local governments have:

- Undertaken asset renewal expenditure at three times the levels of 10 years ago in real terms; and at the same time
- Improved annual financial performance from a collective \$100 million operating deficit to an operating breakeven result

The Productivity Commission completed its report in 2008 and noted that the ratio of the local government sector's taxation revenue appeared to have remained relatively constant over the period 1990/91 – 2005/06 as a percentage of household disposable income but had declined by about 10% as a proportion of the nation's Gross Domestic Product (GDP).

It concluded that local governments in many rural areas were already taxing their communities at a reasonable (but not excessive) level. Its research though led it to conclude that urban communities typically had the capacity to pay higher levels of local government taxes.

Access Economics reviewed the Productivity Commission's draft report on behalf of ALGA and the LGA of SA. It did not disagree with the overall general conclusions, however it considered that the Productivity Commission over-stated the financial capacity of the sector by not having sufficient regard to its asset renewal needs and the obligations associated with capital revenues.

The ACELG report notes that even if many local governments could and should better utilise their own source revenue capacities this cannot be the answer for all and in particular for many small rural ones. Many of these generate only a minor share of their total revenue from their own sources. In many instances substantial increases in taxes are not only not an option on capacity to pay grounds, they would make little overall impact. These local governments need more financial support if they are to provide a reasonable (but nevertheless modest) level of services on an on-going financially sustainable basis.

7.2 New Zealand Analysis

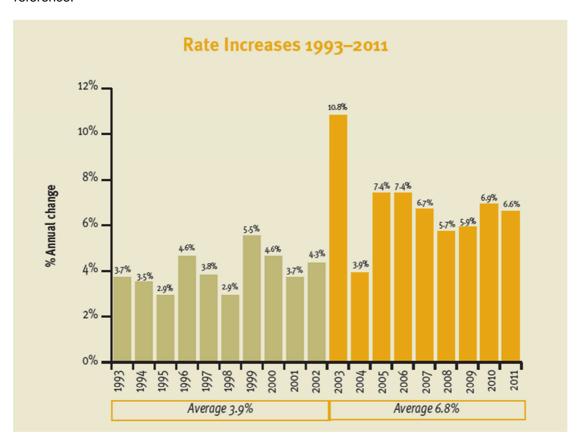
The asset management analysis completed during the period 1998-2002, coupled with depreciation funding requirements allowed Zealand Councils to gain a better understanding of medium term infrastructure investment requirements.

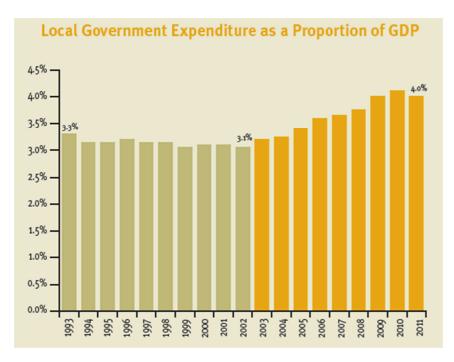
This period also saw New Zealand infrastructure start moving into a renewal phase.

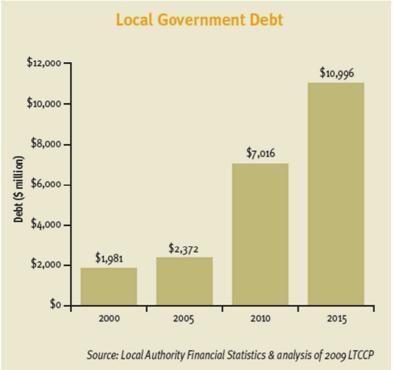
As a result of this asset management analysis during the period 2000-2010 and increased political understanding of infrastructure requirements, infrastructure investment increased in New Zealand. Infrastructure investment levels were raised in local government, state highways, government departments and the electricity sector.

By 2010 it is estimated that New Zealand was spending about 7% of GDP on infrastructure – reflecting the renewal phase, and the need to build new infrastructure for growth, particularly around Auckland. This level of investment compared with the OECD average of about 4% of GDP.

One of the results of this increased investment was increased property rates, which has led to an ongoing debate around the affordability of local government services and charges. The New Zealand Government published a discussion paper 'Better Local Government' in March 2012 which expressed concern about local government direction, focus, rates increases, expenditure as a percentage of GDP, and rising debt levels. The key figures from 'Better Local Government' are shown below for reference.







Following on from the 'Better Local Government' discussion paper the Local Government Act 2002 Amendment Bill 2012 has been introduced, and is expected to be passed into law in 2012.

This Bill seeks to narrow the focus of local government to core infrastructure and service delivery activities, and to focus local government on efficient and effective service delivery.

New Zealand infrastructure investment has increased as a result of asset management planning, and an infrastructure renewal phase. The wider political reaction has been – the cost is too high. As a result the Local Government Act is being amended, and it is expected that the next phase of asset management planning in New Zealand will involve further examination of service levels, demand and risk, and then a balancing of this against community willingness to pay. This will require further development and refining of asset management tools, analysis and benchmarking.

8.0 Integration of Strategic and Asset Management Planning Processes

8.1 Issues associated with the lack of fully integrated planning processes - Australia

In Australia, aspiration is currently driving demand and expenditure in many Councils that are reporting infrastructure sustainability problems. Expenditure decisions are not being planned strategically or taking into account service level / risk / funding trade-offs. Councils have the ability to change this over time and be financially sustainable by gaining community acceptance for affordable service levels.

There is currently not enough transparency as to whether the reported renewal gap is based on technical aspirations for improved service levels.

Councillors would benefit from a capacity building program on service levels, risk and community engagement. An independent review to assess the benefits and associated costs of the approaches used in South Australia and Queensland on integrated Asset Management that engages Councillors may add benefit to the Victorian local government efforts.

There is growing national evidence of the link between sustainability and Councils with core NAMAF (National Asset Management Maturity Assessment Framework) maturity levels. Councils are core level are tending to report lower or no renewal gaps as Councils and communities make decisions on what service levels they can afford and accept.

The areas needing greatest improvement being engaging elected Councillors in making informed trade off decisions between affordable service levels for existing infrastructure and the provision of new services.

Most Councils now have "first generation" asset management plans. Core Maturity across all practice areas would enable Councillors to communicate and make trade off decisions about the service levels and risk consequences of the renewal gap reported by the current first generation asset management plans.

Achieving a core level of maturity is a prerequisite to providing reliable data on asset management to support financial sustainability.

8.2 Issues associated with the lack of fully integrated planning processes – New Zealand

With New Zealand having been in a mandatory framework for longer than Australia more progress has been made in some areas relating to integrated planning.

Financial sustainability issues are being addressed with the Local Government Amendment Bill 2012, although local Council dialogue around the long term sustainability of service delivery are still required.

Longer term strategic planning has progressed, but there are still some disconnects between Regional resource planning, transportation planning and local authority asset management planning.

The major demographic shift that is now impacting New Zealand will be particularly felt in provincial and rural areas (outside the main cities) and will involve the rethinking of services, examination of the sustainability of services, and further analysis of the ability of communities to pay for services. The thinking relating to this shift has yet to be fully integrated into asset management planning.

At a national level the impacts of continued growth of Auckland and surrounding areas (north of Taupo) compared with projected relatively static but aging populations in the lower North Island and South Island has yet to be fully factored into medium term transportation and asset management planning.

Much good work has been done in achieving integrated strategic and asset management planning. There are a number of areas that require further integration, and much further work required to integrate on-going changes in community aspirations, national issues and how to best use community resources allocated to infrastructure.

8.3 Suggestions for Future Integration

In Australia, areas for further improvement can be categorised as:

- Most Councils generally have yet to adopt governance and decision-making models that include an emphasis on Informed trade off decisions on service levels, risk and revenues
- There is a need for better reporting of service levels the community can understand.
- Audit Committees have a role in supporting improved governance practices and managing organisational risks
- There remains a role for on-going capacity building / training in asset accounting practices and financial management practices in local government, including the provision of targeted capacity building to mayors and Councillors

In New Zealand, areas for further integration can be categorised as:

- Further analysis and integration of national, regional and local strategic planning documents
- Water allocation and water resource use following the conclusion of the Land and Water Forum
- Further analysis and integration of the issues relating to the demographic shift into strategic and infrastructure management planning
- Analysis and integration of the issues relating to Auckland / Waikato / Bay of Plenty Region growth on government expenditure priorities, and the impacts on the availability of funding for other regions
- The further development of governance and decision-making tools that inform trade-off decisions on service levels, risk and revenues (this is an issue for both Australia and New Zealand)
- On-going analysis and decisions around effective and efficient methods for the delivery of infrastructure services (driven by Local Government Act amendments)

9.0 Conclusion

The development of infrastructure asset management planning techniques and asset management plans in Australia and New Zealand over the past decade and a half has had wide ranging impacts on public policy in both countries.

The first and most notable public policy impact is the mandatory and legislated asset management requirements in South Australia, New South Wales, Queensland and New Zealand. This mandated approach indicates that politically the need for asset management planning in the management of public infrastructure has been accepted as required practice and enforced.

Organisations that have asset custodian roles and have used asset management planning techniques, and developed asset management plans now have much clearer understandings of their asset portfolios, investment requirements and phasing, risks associated with their service delivery, and the lifecycle costs associated with their assets.

The development of asset management planning is changing the public and political debate around public infrastructure from short term thinking, to a more medium term understanding of the issues and costs involved.

Communities are still grappling with the costs of acquiring, operating, managing, maintaining and renewing infrastructure, and what service levels are affordable.

It is expected that this community and political debate will continue for the foreseeable future, but that it will be increasingly informed by new tools and analysis to enable political and management decision makers to analyse the trade-offs between service levels, risks and expenditure.

The availability of State and National level asset management planning projections is informing high level public policy and political debates that involve the balancing of State and National resources and programmes.

Infrastructure management planning has is becoming embedded in our public policy development and analysis.

For infrastructure management planning there is still much technical work still to be completed in the analysis and integration of strategic planning, demographic and population changes, and changes in community expectations of service levels.

Moving infrastructure management planning from a technical management tool through to tools and communication that informs and enables political and community decision makers will be a challenge for the foreseeable future.

The key question for the future is how to plan for cumulative impact of ageing population demographics, ageing infrastructure, declining government revenues and high debt levels. This is not just an issue for Australia and New Zealand. It is interesting and important to note that USA has recently implemented a programme of mandating asset management plans through "Moving Ahead for Progress in the 21st Century" (MAP-21).

Whatever happens, asset custodians will need to become increasingly proficient at asset management and reporting risk and service level trends to decision makers.

10.0 References

The references in this paper are included in the footnotes of the paper

Brief Biography on the Presenter:Jeff Roorda, CEO, Jeff Roorda and Associates, Australia



Jeff is the CEO of Jeff Roorda and Associates, Australia. Jeff has an Honours Degree in Civil Engineering and is an asset management and public policy specialist.

Jeff has worked in asset and facilities management for over 30 years in Australia, New Zealand, USA, Malaysia and China with a strong background in asset management strategy, asset management policy across whole of government and knowledge management.

Jeff has worked for Local Government across Australia for CPA's. ALGA, IPWEA for the past 20 years in all Australian States and Territories.

Jeff has been involved in a wide range of State and Australian Commonwealth Government studies during this period around asset management and public policy development for local government.

For the past 10 years Jeff has been a Lecturer at Post Graduate Level in asset and risk management at a number of Australian Universities.

Jeff is one of Australasia's preeminent asset management specialists and having worked with over 200 organisations over the past 25 years. Jeff brings a wealth of experience to his presentations and work

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Ross Waugh, Director, Waugh Infrastructure Management

Ross is the founder of Waugh Infrastructure Management and is an asset management and systems integration specialist with 30 years experience in municipal infrastructure asset management and engineering. Ross has been consulting in infrastructure management for 14 years, in the areas of transportation, utilities, community facilities and property. Ross has contributed to a number of New Zealand national data capture, advisory and infrastructure standard setting projects, and is a section author of the International Infrastructure Management Manual 2011.

Ross is passionate about assisting people to practice infrastructure asset management holistically and comprehensively yet practically. His strategic analysis of client practices is balanced with a strong practical background that always ensures results not theory. Ross has experience of four cycles of integrating infrastructure asset management planning with long term financial planning within the New Zealand context.

Ross takes an active interest in on-going International infrastructure asset management trends. Ross has presented internationally on infrastructure asset management, most recently in June 2012 at the International Federation of Municipal Engineers Conference in Helsinki, Finland. Ross has also provided input into International Asset Management Practice Reviews.

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