

# **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**

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# Introduction

The resources needed to look after existing assets maintained by councils are set to rise sharply.

Councils look after some eight billion dollars of public assets that depreciate on average by 2% each year (\$160 million). Councils currently spend \$55 million on renewal of these assets leaving a shortfall of \$ 105 million. Council spending on renewal is currently 7% of revenue. To overcome this shortfall this figure would need to be increased to 19 %.

Clearly a radical change in the way assets are managed must occur.

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 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.

Data gathered during the survey has also contributed to an analysis of the level of grant funding needed to sustain regional networks and is opening up the discussion of what should be the responsibility of local communities to maintain and what should be supported by the wider community.

The current situation is serious – but not hopeless. With imagination, the adoption of sound management practices, and co-operation with others (councils, governments, private sector) as outlined in this report, the challenge can be met.

The voluntary co-operation of ALL councils within the State in the collection of data, the survey and the site visits, is testimony to the commitment of local governments to solve their own problems.

We commend the report for serious consideration by all councils.

The South Australian Local Government Infrastructure Study Steering Committee

Rodney Donne,	City of Burnside	(Chair)
Jeff Tate,	City of Onkaparinga	
Frank Brennan,	DC Wattle Range	
Stuart Mathews,	Local Government Association	
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Geoff Hatwell,	Institute of Public Works Engineers Australia	
Jane Gascoigne,	SA LG Grants Commission	
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# Executive Overview

Councils are custodians of about \$8 billion of public assets. The average annual cost of supporting these assets is approximately \$160 million since they wear out or become obsolete at approximately 2% per annum. This is approximately three times the amount that councils are currently spending on asset renewal.

The asset information presented in this report has been provided by councils. While the accuracy of some of this data is in doubt, even if individual councils were to adjust their data reporting by as much as plus or minus 20% this would not alter the main messages contained in this report.

When the data is revised, asset renewal requirements are much more likely to rise than to fall because approx. \$500 million of assets are recorded in the financial records yet not included in the current study for lack of age profile data. It would be wise, therefore, to consider the present figures, large though they are, as a lower bound on future requirements.

## **How has this imbalance come about?**

Renewal has a 'delay function'; councils are now facing the renewal of infrastructure that was first established (often in better economic circumstances, and often with the help of state and federal funding) some 30, 40 or more years ago.

Renewal is lumpy; unlike depreciation which averages the renewal costs, actual payments for renewal are periodic, and for any given asset group renewal can be far less, or much more, than depreciation. Only sound long term renewal forecasting will let councils know where they stand in prepare for the renewal challenge.

Renewal is not associated with increased funding. Instead, it has to compete with many other demands on council, and recently these demands – for social and environmental reasons as well as for increased services – have themselves been increasing. Revenue increases have not kept pace with these extra demands; a limited revenue base and community sensitivity to tax (property rates) increases have been the main reasons.

Renewal is exacerbated where maintenance is under-funded.

## **A pre-disposition to increasing assets**

Older notions that equate 'development' with 'progress' are increasingly coming under attack as communities recognise that development and social and environmental benefits are not necessarily compatible. But perceptions that the community 'expects' asset growth have tended to drive councils' spending patterns, with the result that, even while renewal of the basic asset stock falls short of what is needed, expenditure on new assets exceeds expenditure on renewal by some 50%. (Average annual spending on new assets is \$79, cf \$55m on renewal.)

## **Focus on Service Provision**

Councils have tended to focus on the provision of services, rather than facilitating community access to services. This has led to more asset ownership than, with hindsight, may be seen as either desirable or economically sustainable. Re-assessing what services – and, especially what level of service – their communities require, and seeking alternatives to council service provision, can seriously reduce the renewal funding problems councils are facing. Solutions include private provision, co-operating with neighbouring councils and the private sector in the provision of joint services, and administrative assistance to community bodies, such as sporting or social groups, where services can be provided more cost effectively.

## **Equity**

Australians have long had a strong commitment to equity. The notion of a 'fair-go' for all, no matter where they live, is the reason for the 'equalisation' grants provided by the Grants Commission to supplement the revenue opportunities of councils. They are to ensure a certain minimum 'quality of life'. Cost data provided in this study will assist Grants Commissions in their understanding of overall needs as well as differentials. This applies to services provided to local communities.

## **Regional Benefits**

But not all assets that councils own and maintain provide services purely for their local community. Many of them also provide regional, state or national benefits. Questions are now being raised about who should assist with the funding for these wider benefits. This particularly applies to the rural road network and roads of economic significance. These are issues that were raised at the Moree Rural Roads Congress in 2000 and further developed at the Mildura Rural Roads Congress in 2001. Recognition of wider service may present councils with opportunities for funding assistance – but it will also require of them greater accountability and responsibility for asset management. The issue of regional benefits is not confined to roads and there is greater scope for co-operation between levels of government to promote goals of industrial and agricultural development and tourism.

## **Asset Management Planning**

Whether the issue be the funding of asset renewal, deciding which asset (if any) should be acquired, reducing the drain on council revenues from under-performing or unnecessary assets, or improving maintenance, the major tools that councils have available to them is their Asset Management Strategy (council's directions for the future) and their Asset Management Plan (options for meeting those future directions). Basic to these tools are up-front decisions about the desired level of services and who is to provide them. Asset information systems that record asset values and maintenance schedules are no substitute for well-developed strategies at the senior management level and sound, accountable and transparent asset management planning.

### **What needs to be done now?**

An Asset Management Implementation Committee with broad representation needs to be established to receive the report and consider implementation of its recommendations and to take custody of, and maintain, the database.

Asset Management Strategies and Plans need to be developed by all councils and, as guidance, a pilot study could be established with a large and a small council in which the difficulties overcome and progress made was reported on a regular basis to all councils. Other councils should also be encouraged to report their own development to establish a store of case studies for the sector to draw upon.

Similarly those regions that have already developed a level of co-operation could be asked to document their procedures for use on the study website.

To encourage better documentation, it is suggested that the Local Government Association might create Annual Awards for the Best Asset Management Strategy and Asset Management Plan.

Skill training in asset management generally and in the construction of asset management strategies and asset management plans in particular will be needed.

Detailed recommendations are provided in Part Four: The Way Forward. There is also a checklist to help councils in establishing their own asset management procedures.

### **A Focus on Opportunities**

This report is based on the survey findings, site visits and discussions with individual councils. It is designed to highlight and explain the asset management issues that affect all councils and to illustrate the opportunities that councils can gain. It is not an 'asset management manual'. The focus has been deliberately placed on decision-making from elected members to senior management and other staff.

#### **Website**

**<http://sainfrastructure.com>**

Councils are encouraged to use the database on the study website and to explore the further resources that they will find there. The database is 'live'; it is continually being updated.

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# Glossary

**Accounting Lives** - the period over which the cost of an asset is allocated for the purpose of calculating depreciation. *See also* "Economic Lives"

**Asset** - A store of future service potential controlled by the entity as a result of a past transaction or other past events (Australian Accounting Standard 27 para. 12). Infrastructure is a subset of asset, *see* "infrastructure".

**Asset System** - A complex asset such as a facility or a network which consists of a number of essential but separable components which may be separately replaced to maintain the function of the system. The smallest aggregate of components that provides a distinct service outcome. Infrastructure assets are asset systems.

**Capital Expansion** - Investment in new assets designed to extend the same standard and type of service currently provided to ratepayers to a greater number of ratepayers, e.g. extending a drainage or a road network, or the provision of standard facilities in a new suburb. Extension is a function of population growth.

**Capital Renewal** - - Extending the functionality of an infrastructure asset by piecemeal replacement of individual components as they age or become obsolete. Ensuring that ratepayers continue to receive the benefits of existing infrastructure assets. Capital investment in renewal extends the period of service potential but does not change the total capital replacement value, thus it does not increase the size of the infrastructure asset portfolio. (*see* "component"; "infrastructure asset").

**Capital Upgrade.** Investment in new assets designed to improve the type of service provided to existing ratepayers. For example, widening the pavement and sealed area of an existing road, replacing drainage pipes with higher capacity pipes to provide a better service, building a grandstand at a sporting facility, or the provision of any new service to existing ratepayers

**Component** - An essential part of an asset which may be separately removed and replaced to extend the life of the asset. (e.g. road seal as a component of a road asset; or a roof as a component of a building asset)

**Condition Based Depreciation** - A method of estimating the depreciation or run down in service potential of an infrastructure asset (its change in condition) by the amount it costs to restore that service potential. This is calculated as an annuity over a forward renewal cash flow, hence it is also referred to as the "renewal annuity" method.

**Current Replacement Cost (CRC)** - The cost, in today's dollars, of replacing the assets concerned. *See also* "Written down current replacement cost"

**Current Replacement Value (CRV)** - *see* "Current Replacement Cost"

**Depreciation** - Loss of service potential through wear and tear and/or general obsolescence. Estimated in the balance sheets by application of a formula involving the Current Replacement Cost and the assumed Accounting Lives. But *see also* "Condition Based Depreciation"

**Design Life** - Period during which an asset can be expected to remain of acceptable physical quality and perform its intended function without repair.

**Economic Life** - The period from the acquisition of an asset to the time when the asset, while it may be still physically capable of providing a service, ceases to be the lowest cost alternative to satisfy a particular need. The economic life, at a maximum, is equal to the physical life; however obsolescence will often ensure that the economic life is less than the physical life. *See also* "design life"

**Effort** - *see* "Management Effort"

**Expansion** - *see* "Capital Expansion"

**Growth Assets**- Investment in assets that increases the size of the asset portfolio. Growth includes "extension" related to population growth (see "extension" ) and "upgrade", an increase in service levels (see "upgrade"). *cf* "reinvestment".

**Infrastructure Assets** - Assets that are not replaced as a whole, but rather renewed piecemeal by the replacement of individual components whilst maintaining the function of the asset as a whole. Infrastructure assets have indefinite lives. Economic lives are assigned to components of an infrastructure asset. (see "economic lives"; "component")

**Infrastructure Spending Gap** - The difference between the "default" renewal expenditure projections and the current level of renewal expenditures.

**Maintenance** - General definitions such as those in Standards Australia "Glossary of Building Terms" include all actions necessary to retain the intended function of the asset (including restoration).

This study has defined maintenance in an activity sense as "Expenditure on an asset which maintains the asset in use but does not increase its service potential or life, e.g. repairing a pothole in a road, repairing the decking on a timber bridge, repairing a single pipe in a drainage network, repairing the fencing in a park, repair work to prevent early failure of an asset or a portion of an infrastructure network".

In practice, this is close to the accounting treatment of maintenance as "all of those actions to preserve the use of the asset that are deemed to be expendable within the accounting period". This, however, varies between councils.

**Management Effort** - Although measured in terms of the gap between current and future levels of capital spending (mostly that required for renewal), management effort represents all of the management avenues for closing the gap, ie reducing costs through greater efficiency, rationalisation, demand management, etc, making future provisions, and innovative funding.

**Reinvestment** - Capital investment in renewal of infrastructure assets or replacement of non-infrastructure assets. Re-investment does not increase the size of the asset portfolio. (see "replacement"; "renewal" ) *Cf* "Growth Assets"

**Renewal** see "Capital Renewal"

**Replacement** - the complete removal of an asset or a component of an asset and the use of another in its place. (see "component")

**Service Delivery** - the purpose for which an asset is held, measured in terms of service outputs or outcomes, eg road access, travel time, hours of library access, etc.

**Strategic Asset Management Plan** - A plan showing future changes to the asset portfolio (renewal, acquisition, disposal) to ensure that the asset portfolio stays aligned with the Corporate Strategy. It is supported by a full analysis of options, justified in terms of outputs/outcomes.

**Sustainment** - the cost of maintaining the function of an infrastructure asset portfolio by day to day maintenance and periodic replacement of components ("renewal"). (see "infrastructure asset", "maintenance", "replacement", "components")

**Upgrade Assets** - see "Capital Upgrade"

**Written Down Current Replacement Cost** - The Current Replacement Cost less Accumulated Depreciation calculated on the basis of accounting lives.