

NATIONAL
State of the Assets

A REPORT PREPARED BY JEFF ROORDA AND ASSOCIATES
FOR THE AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION

2014

NOVEMBER 2014

Local Roads Infrastructure Report 2014
Sealed and Unsealed Roads, Concrete and Timber Bridges



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Acknowledgements

The ALGA gratefully acknowledges the valued input from the 396 councils who participated and provided data for the report which was entirely optional.

This high level of response to the 2014 report is greatly appreciated by ALGA, and the data provides an excellent basis for an examination of local government road assets and associated funding issues.

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A REPORT PREPARED BY

Jeff Roorda and Associates

November 2014

Jeff Roorda and Associates (JRA) were engaged on the instructions of the Australian Local Government Association (ALGA) to prepare a National State of the Assets report for 2014.

The results of JRA's work, including the assumptions and qualifications made in preparing the report, are set out in this report dated November 2014 ("report"). The report should be read in its entirety including the applicable scope of work and any limitations. A reference to the report includes any part of the report. No further work has been undertaken by JRA since the date of the report to update it.

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EXECUTIVE SUMMARY

SCOPE

Transport infrastructure represents a vital component of Australian supply chain management for both the private and public sectors. The transportation of goods by road is a core component of economic activity and the development and shipping of domestic product from source to market.

Most major and other roads have a local dimension. In particular, this includes ensuring that “first and last mile” issues are addressed. This aspect highlights the need for integrated planning involving all levels of government.

Socially, roads infrastructure is a key service needed to build stronger communities. Good roads facilitate access for all communities to opportunities and services including employment, community networks, health, education, recreation and business.

The value of local government road infrastructure assets in Australia reported in 2011 is \$165 billion¹. At the same time, Australia’s total road network length was 911,418 km² with councils being responsible for approximately 670,000 km³.

The challenge for the sector is to ensure sound asset management principles are embedded in to all facets of local government decision making and there is a whole of government approach to infrastructure funding, particularly for local road infrastructure.

The 2014 National State of the Assets Report for local road infrastructure:

- Summarises the outcomes of the data provided by 396 local governments across Australia with \$104.8 billion in local roads under management;
- Assesses the current position of councils in relation to implementation of Asset Management and Long Term Financial Plans;
- Provides an assessment of the current stock of local road assets in terms of condition, function and capacity, with associated confidence levels; and
- Provides additional data perspectives based on rural and urban classifications across each State and Territory.

For the purpose of the report, local roads have been categorised into sealed and unsealed roads, timber and concrete bridges.

565 local government entities and one local government association (the Local Government Association of Northern Territory) were invited to participate and/or update their 2013 data for the 2014 report.

FINDINGS

Of the 344 councils sampled in 2013, 217 updated their data and a further 52 councils have provided their data for the first time. This brings the total sample size covered in this report to 396, which is 70 per cent of all councils. Of the 396 councils, 219 were urban and 177 were rural as determined by the Australian Classification of Local Government.

The 396 councils are managing a total of \$104.8 billion in infrastructure for the four local road asset categories included in this report – an increase of 6.6 per cent over the 2013 report outcome.

Local government sealed roads represent \$83.8 billion of this value. Unsealed roads represent \$12.2 billion, concrete bridges \$7.6 billion and timber bridges \$1.2 billion.

The total value of local road infrastructure for all Australian councils is estimated in excess of \$165 billion (NLRDS 2011).

The 2014 Report has found that of the \$83.8 billion of sealed roads under management, \$8.8 billion (11%) are in a poor to very poor state. The total sealed road value for all Australian councils is \$117 billion.

1 ALGA *National Local Roads Data System (NLRDS)*, 2011 <http://www.jr.net.au/nlrds>

2 BITRE, *Australian Infrastructure Yearbook*, Canberra, 2013, p.42

3 ALGA, op.cit.

Councils have \$12.2 billion of unsealed roads under management, with \$2.3 billion being regarded as in a poor to very poor state.

Councils indicate that of the \$7.6 billion of concrete bridges under management \$0.31 billion are in a poor to very poor state.

Councils indicate that of the \$1.2 billion of timber bridges are management \$ 0.27 billion are in a poor to very poor state.

The combined local roads infrastructure classes in a poor to very poor state is \$11.7 billion.

Rural and urban councils

Urban councils manage \$69.5 billion of the total sealed roads value of \$83.8 billion. Approximately 10% by value of urban sealed roads and 11% of rural sealed roads are considered to be in a poor to very poor condition.

\$6.7 billion of the \$12.2 billion in unsealed roads are managed by rural councils. 23% of the value of unsealed roads in urban areas are considered to be in poor to very poor condition compared to 15% of rural road values.

\$680m of the total value of \$1.2 billion in timber bridges are managed by urban councils. Of these, urban councils consider 23% to be in poor to very poor condition, which is consistent with rural council perspectives, where 21% are considered to be in poor to very poor condition.

Comparative data

In 2014, comparative data is made available for the first time, for direct comparison to each of the data elements of 2013. This allows an analysis of the movements in data:

- in total for all councils;
- by State or Territory;
- by rural /urban or otherwise agreed classification;
- for each of quality, functionality and capacity; and
- with associated confidence levels.

Individual councils will also be able to monitor trends over time in the data and the relationship between calculated infrastructure backlogs and the actual physical state of the infrastructure being managed as viewed from three different but related dimensions.

Confidence levels

A consolidated assessment shows all State and Territory councils sampled are expressing slightly higher levels of confidence in the data provided, with Tasmanian councils indicating slightly less degrees of confidence compared to 2013.

Most councils express low confidence with the function and capacity assessment whilst knowledge of quality/condition continues to rank much higher.

Integrated planning

Asset Management Plans for sealed roads are in place for 88% of sampled councils, an 8% increase on last year's result. Council's long term financial plans (LTFP) are in place for 73% of those councils.

While LTFP adoption rates are excellent, there is a need to ensure that financial projections derived from properly formulated asset management plans are included as part of the process.

A properly developed asset management plan provides a council with a number of important benefits and outcomes. These include:

- Gaining an understanding of the options, risks and consequences associated with the ongoing management of large-scale infrastructure;
- Having a basis for engagement with the community on funding levels, service levels, priorities and associated trade-offs; and
- Producing a series of long-term financial projections on the maintenance, operations and capital expenditures associated with the infrastructure base for incorporation in long-term financial planning processes.

RECOMMENDATIONS

Local government from across Australia is indicating the quality of some \$8.8 billion in sealed roads are in poor to very poor condition, together with a further \$2.3 billion in unsealed roads and \$575 million in concrete and timber bridges. That is, more than 10% is in a poor or very poor condition, an unacceptably high figure from the perspective of local government as a road manager.

For ALGA and local government associations, the data indicates the scale of infrastructure under management and the level of activity and funding needed to ensure that all local government transport infrastructure is at a reasonable standard.

The recommendations acknowledge the vital role that key stakeholders play in supporting local government efforts to become and remain financially sustainable. Consequently, the next phase to building a clear case showing how investment in local government infrastructure provides stronger communities, a stronger economy and demonstrates efficient expenditure of government funds is supported by the following recommendations.

1. A whole of Government approach to infrastructure management is required. Large cities and small communities all expect a coordinated approach from Government to managing supporting infrastructure essential to social cohesion and equity. The revenue raising capacity of many councils relative to their road asset management responsibilities necessarily dictates that all levels of government have a role in the trade-off between service levels, risk and cost.
2. A whole of Government infrastructure action plan that enables a coordinated approach to bridging the renewal gap. Funding programs like *Roads to Recovery*, were and are, not enough to reverse the general deterioration.
3. Consistent reporting of practice is evidence based for policy decisions. Councils have a duty of care responsibility as asset custodians to have in place core levels of asset and risk management practice. This provides ongoing reporting on the status of asset management maturity.
4. To build on the successful work already done for reporting on the State of the Assets for Local Roads Infrastructure, future reporting should focus on all key infrastructure groups such as buildings, parks, stormwater, water and wastewater assets. A pilot project is currently underway to test the viability of such a proposal.

This further builds on an already proven approach and will result in consistent and efficient reporting, advocacy and capacity building through mentoring for all local government infrastructure based service delivery.

IMPLEMENTATION

The Australian Local Government Association should:

- Consider the establishment of an agreed national timetable for the implementation of properly formulated and complete asset management plans integrated with long term financial plans.
- Continue to report on the state of the transport infrastructure and any emerging trends in terms of the deterioration or improvement in those assets.
- Together with each of the Local Government Associations, consider during 2014-15 the establishment of agreed national principles for the integration of workforce planning initiatives with asset management planning initiatives to improve capability in this important area.

State Local Government Agencies need to:

- Provide support to consistent monitoring and reporting of the current state of roads and bridges assets under management by local governments in each jurisdiction.

The Commonwealth Government should:

- Provide support to further accelerate implementation of asset management planning and reporting in all councils in conjunction with an emphasis on workforce planning and capacity building in councils.

How to use this report

The 2014 Report is in two parts including an Executive Summary which presents findings and recommendations.

Part 1 outlines the importance and role of asset management for councils, including the need to embed asset management decision making in all facets of strategic planning. Engaging community is emphasised and how consultation with community and agreement about affordable levels of service is crucial to delivering sustainable services into the future.

Part 2 includes information on the approach to the 2014 survey and the self-assessment methodology as well as detailed information and findings with regard to local roads infrastructure for which local government is responsible.

PART 1 Building Stronger Communities

1.1 INTRODUCTION

1.1.1 THE ROLE OF LOCAL GOVERNMENT

Careful planning and coordination of local government infrastructure is fundamental to the economic and social well-being of our communities. Local assets and public facilities and the services they provide make possible the wide range of lifestyle choices and high standards of living enjoyed in Australia. For what purpose and how councils provide and manage these assets has a direct impact for their communities.

The primary aim of managing assets for councils is to maintain an asset portfolio that allows a council to effectively meet current and future demand for services. These services include local road infrastructure, recreation and leisure facilities, libraries, waste and environmental management, public health, emergency services and home and community care.

Effective investment in local government infrastructure provides stronger communities, a more robust economy and efficient, affordable and inter-generationally equitable expenditure of public funds.

1.1.2 PURPOSE OF THIS REPORT

Similar to the 2013 report the 2014 National State of the Assets Report has a specific focus – reporting the performance of local roads infrastructure by presenting a consolidated position of actual trends – thereby providing valued decision support to the following key stakeholders:

- Councils;
- State and Territory Local Government Associations;
- ALGA;
- State and Territory Governments;
- Australian Government; and
- Other stakeholders e.g. Institution of Engineers, Austroads.

The 2014 National State of the Assets Report:

- Assesses the current position of councils in relation to implementation of Asset Management and Long Term Financial Plans;
- Provides an assessment of the current stock of local road assets in terms of condition, function and capacity, with associated confidence levels; and
- Provides additional data perspectives based on rural and urban classifications across each State and Territory.
- This Report demonstrates that regular State of the Assets reporting is achievable. It can identify significant financial sustainability challenges for local authorities and will assist all stakeholders in decision making for improved and affordable service delivery. There are many benefits and low costs in extending National State of the Assets reporting to cover all assets that are under the stewardship of all councils in Australia.

1.1.3 MEASURES AND DEFINITIONS

The three very simple indicators that answer the question *Is the local road infrastructure network getting better, worse or staying the same?* will continue to be used. This is a key question that Councils must already answer within their mandatory asset management plans.

The three indicators are:

1. Quality/Condition;
2. Function/fit for purpose; and
3. Capacity/Utilisation.

The indicators will be measured as a:

1. % of network by value in poor to very poor grading;
2. % of network by value in fair grading; and
3. % of network by value in good to very good grading.

A growing number of Australian councils have commenced or are planning to produce similar reporting in their corporate reports and the primary focus is to monitor the trends for assets with poor to very poor performance over time.

The above measures were collected as in 2013 for all participating councils to ensure a methodology whereby they:

- Are able to be made by professional judgment of experienced staff that know their road network within half a day;
- Are easily verifiable by Council or community;
- Able to be progressively linked to substantiation in asset management plans at any level up to complex multivariable measures;
- Are repeatable and auditable to produce material levels of accuracy; and
- Provide a materially consistent result independently of the level of complexity.

1.1.4 **BENEFITS**

- The straightforward 1 to 5 grading system, as per Tables 1.2 to 1.4 on pages 17-18 are used to monitor and report high level trends is easy to use and is consistent with the International Infrastructure Management Manual (IPWEA, 2011) and the [NAMS.PLUS](#) guidelines.
- Condition, function and capacity are already being reported in asset management plans being prepared by Councils.
- Local Government can report on trends and consequences associated with past and current funding levels.
- A National State of the Assets report builds on the agreed performance measures agreed at the ALGA national roads data workshop in Melbourne in 2003 and aligns with the AUSTRROADS National Performance Indicators for Network Operations.
- A National State of the Assets report can inform other stakeholders and publications such as the Engineers Australia annual Infrastructure Report Card.
- The risks and consequences associated with cost shifting can be understood.
- A National State of the Assets report builds on the National Framework for Asset Management requirement for all Councils to have asset management plans in place and allows consistent and effective communication to government of infrastructure service provision and risk trends.
- Existing mechanisms for collecting, collating and reporting data already exist through the AUSTRROADS National Local Roads Data System.
- This project is consistent with the ACELG National Sustainability Frameworks Evaluation Project.

1.2 **ASSET MANAGEMENT PLANNING**

The emphasis on asset management planning in local government has arisen as a result of the reliance that councils have on infrastructure to deliver services and support communities, particularly through the roads and bridges network but also through other assets, including recreation facilities, community buildings, water and sewerage networks and stormwater management systems. This emphasis, combined with the broad range of estimates and assumptions associated with valuing and depreciating infrastructure, means that asset management planning practices and financial projections for renewal, maintenance and operations expenditures are critical to ensuring the current and future financial sustainability and service delivery capability of councils.

The asset management planning process must balance the capital renewal program to the available funding. This requires an assessment of:

- Available funding in the financial forecasts;
- The priority capital expenditure areas;
- Service levels, and options for change; and
- Risks and consequences.

The asset management plan should not be finalised until the long-term financial projections are finalised, as additional funding for the capital renewal program may become available. The asset management plan will then document:

- Available funding in the financial forecasts;
- The proposed renewal program;
- Services and service levels; and
- Risks and consequences associated with the management of the assets and any funding shortfall.

This integrated approach to planning will allow the long term financial and asset management plans to be developed on the basis of common data and assumptions and support the development of appropriate financial management strategies.

Asset management planning is a means to an end. The asset management planning process recognises that local governments have significant infrastructure assets under management. The future expenditures associated with these assets must be understood and incorporated into a long-term financial plan. Only then will councils be able to fully understand whether the future expenditures can be managed within the known sources of funding, including own-source revenues, debt or grants and subsidies from the State and Commonwealth governments.

1.2.1 **LOCAL GOVERNMENT FINANCIAL SUSTAINABILITY**

To cope with the challenges of change, councils need above all to be in the strongest possible financial position. A recent report of the NSW Treasury Corporation on the *Financial Sustainability of the NSW Local Government Sector* defined sustainability in the following terms:

A local government will be financially sustainable over the long term when it is able to generate sufficient funds to provide the levels of service and infrastructure agreed with its community.

This definition takes into account the potential impact that changing circumstances and emerging challenges could have on a Council's operating position and service levels over the long term.

The 'National Financial Sustainability Study of Local Government' report on the financial sustainability of Australian councils, prepared for the Australian Local Government Association (ALGA) in 2006, concluded that around 35% of Australian local governments were not financially sustainable. The report estimated a national asset renewal backlog of \$14.5 billion. The additional funding required to clear this backlog and cover underspends on renewal was estimated at \$2.16 billion annually or \$3.1 million per local government. The focus of the ALGA report was on services provided from councils' infrastructure assets. Financial sustainability was the indicator used in assessing the ability of councils to deliver the services the community needs to maintain its existing quality of life.

Achieving financial sustainability requires properly developed long term financial plans supported by robust financial management strategies. The financial management strategies employed by councils to balance available funding with ongoing expenditures are one of the most important elements of asset management and the long term planning process.

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; and
- Include a sensitivity analysis highlighting key factors or assumptions most likely to impact on achievement of a plan's financial targets.

Financial sustainability evaluations of councils are based on the use of agreed ratios that seek to identify whether the infrastructure assets of the council are being maintained (renewals emphasis) whilst the council remains financially viable in the long term (operating surplus emphasis) and retains financial capacity to manage risks and unexpected events.

The expected outcome from sound asset management and long term financial planning is financially sustainable councils.

1.2.2 INVESTMENT IN LOCAL GOVERNMENT INFRASTRUCTURE

The 'Local Roads Funding Gap' Study⁴ in 2010 concluded that expenditure on local roads has been less than the life cycle cost for the past five years or more, but broader trends and future consequences are not being reported. Under investment in infrastructure has a social and economic consequence.

The Study identified two problem areas:

1. There was no evidence base for what proportion of councils' infrastructure was in poor condition (needing renewal) or provided poor levels of function (needing upgrade to meet safety and transport needs) or poor levels of capacity (needing expansion of the network to enable growth and better contribute to national transport objectives). The lack of evidence also meant there was no way to report whether the state of the assets to meet transport policy objectives was deteriorating; and
2. While roads and bridges represented a large proportion of expenditure, communities are dependent on a wide range of asset based services that could be deteriorating. Much of this infrastructure was funded by development or state and commonwealth government in past years of high growth. Buildings, pools, drains, parks, water and wastewater infrastructure is all are part of the trade-off between levels of taxation, risks and service levels.

The 'Local Roads Funding Gap' Study' also contained three recommendations that are applicable to all infrastructure:

1. Coordinate a whole of Government approach to infrastructure. Large cities and small communities all expect a coordinated approach from Government to manage infrastructure essential to social cohesion and equity. Vertical fiscal imbalance means all levels of government have a role in the trade-off between service levels, risk and cost;
2. Regularly and consistently report practice and the evidence base for policy decisions. Councils have a duty of care responsibility as asset custodians to have in place core levels of asset and risk management practice; and
3. Develop a whole of Government infrastructure action plan that enables a coordinated approach to bridging the renewal gap. **Infrastructure is a whole of Government Issue.** Funding programs like Roads to Recovery were and are, not enough to reverse the general deterioration of road assets.

1.3 LIVING WITHIN OUR MEANS – ENGAGING COMMUNITY

1.3.1 INTEGRATING PLANNING AND REPORTING

All states in Australia have a legislative framework of integrated strategic planning and reporting for local government, including a requirement for a local authority to engage their community in determining how best to resource its asset, risk and service management and performance objectives over the short, medium and long term.

⁴ ALGA, *Study of Local Roads Funding in Australia 1999-2000 to 2019-2020*, 2010

1.3.2 **SERVICE DELIVERY NEEDS AND SERVICE LEVELS**

Service delivery needs must form the basis of all asset management decisions. Assets are acquired for their service delivery potential and service delivery needs must form the basis of all asset management practices and decisions. Councils must establish these needs and service levels through consultation with local community stakeholders. This – together with other relevant considerations such as social, economic, and budgetary factors – assists a council in understanding what infrastructure needs are to be provided and at what level the asset needs to be maintained.

Councils must develop processes and mechanisms that define the levels of service expected, including:

- Establishing service delivery needs and defining service levels in consultation with the community;
- Establishing quality and cost standards for service to be delivered; and
- Regularly reviewing their services in consultation with the community to determine the financial impact of a reduction, maintenance of or increase in service.

Services and service level discussions by councils with the community need to be had in the context of broader considerations, including the global and national environment and strategic planning schemes at different levels of government.

1.3.3 **MANAGING RISK AND TRADE-OFFS**

There is an increasing political and community expectation that local authorities in Australia improve their financial sustainability and accountability in both asset and risk management while continuing to deliver value for money services. The key action that has resulted in change in asset and risk management policy and practice in Australia is the identification of risk and the range of options to manage risk depending on the resources available.

Managing risk is a fundamental component of asset management and financial sustainability. A risk management plan results in options for deliberate decisions to close or dispose of high risk infrastructure if other priorities result in risk management actions not being funded. The identification of risk and risk response enables the political level to engage the community about the trade-offs between levels of taxation, risk and achievable performance.

Managing risk underpins a Council's capacity and resilience in achieving all its strategic and service performance objectives. Risk funding competes with other priorities but public safety is not negotiable. Some of the options for lower funding levels include closing facilities if risks become too high. Councils must address the challenge of improving interaction between the technical experts, policy making and public debate regarding the trade-offs between risk funding and acceptable levels of service now and in the future.

1.4 **NATIONAL STATE OF THE ASSETS – ASSETS SURVEYED IN 2014**

1.4.1 **LOCAL ROADS INFRASTRUCTURE**

The National State of the Assets Local Roads Infrastructure Report 2014 builds on the work undertaken by Jeff Roorda and Associates (JRA) in 2010 that looked at the funding gap for local roads. The Australian Local Government Association (ALGA) subsequently commissioned JRA to undertake a pilot study as phase one of a National State of the Assets reporting process. The results of this work were published in the Report [National State of the Assets Pilot, October 2012](#).

ALGA commissioned JRA to update the National State of the Assets Report in 2014, following on from the successful [2103 Report](#), which reported on the state of local government road infrastructure and the degree of asset management and long term financial planning across the country.

PART 2 Local Roads Infrastructure Report

2.1 INTRODUCTION

2.1.1 METHODOLOGY AND SCOPE

The 2013 National State of the Assets report recommended the state of local roads infrastructure and any emerging trends in terms of deterioration or improvement be continued to be monitored in collaboration and with the support of the State and Territory Local Government Associations.

The methodology aligns with this objective and captures data on local roads infrastructure in terms of Inventory, Quality / Condition, Function and Capacity to meet demand based on asset management plans.

In all instances, councils were also asked to indicate the current level of confidence in the data being provided.

The data was collated, validated, analysed and presented in respect of:

- All Australian councils, categorised by State and using the ACLG classification index;
- Sealed roads, unsealed roads, concrete and timber bridges;
- Quality, Function and Capacity of the infrastructure in terms of very good to good, fair and poor to very poor;
- Confidence levels expressed as high, medium or low in respect of each of Quality, Function and Capacity;
- Gross current replacement cost for each infrastructure class and a proportional allocation of gross current replacement cost into good to very good, fair and poor to very poor;
- Status of asset management plan development;
- Status of long term financial plan development; and
- Extent to which financial projections from asset management plans are included in and integrated with the long term financial plan.

From this simple data set, ALGA and other stakeholders can recognise the improvement or deterioration in local government infrastructure under management and the confidence levels associated with the data provided.

In 2014, comparative data is made available for the first time, for direct comparison to each of the data elements of 2013. This allows an analysis of the movements in data:

- in total for all councils;
- by State or Territory;
- by rural /urban or otherwise agreed classification;
- for each of quality, functionality and capacity; and
- with associated confidence levels.

Individual councils will also be able to monitor trends over time in the data and the relationship between calculated infrastructure backlogs and the actual physical state of the infrastructure being managed as viewed from three different but related dimensions.

The State of the Assets reporting process uses a web based data collection tool. The timing of the capture of the data should complement each State and Territory's grants commission process as a result of the common emphasis on road-related data.

The data collected can be used to identify and value the deterioration of the infrastructure base of any individual council, group or type of council and the sector as a whole. This will enable whole of government consideration of the form and timing of a response.

The project approach includes:

- The conduct of the project methodology for all Australian councils using a web-based data collection tool specifically developed for the purpose;
- Individual council evaluations or reports arising from the data collected;
- Annual update of the National Local Roads Data Set; and
- Facilitated dialogue with each State and Territory Local Government Association.

2.1.2 DEFINITIONS

Measures

The report utilises three measures:

- Quality/Condition – the physical condition of the infrastructure that allows it to meet the intended service level;
- Function – the ability of the physical infrastructure to meet program delivery needs; and
- Capacity/utilisation – represents the ability of the physical infrastructure to meet service needs.

A road can be used as an example to illustrate the use of the three classifications.

The presence of potholes would be an indicator of the physical condition of the road.

The function aspect would be demonstrated by the ability of the road to meet service hierarchy requirements for design speed, width and alignment.

Traffic congestion would indicate if the capacity/utilisation of the road was able to meet the user's service needs.⁵

Further examples can be found in Appendix 7.2.

For the purposes of this report, three gradings were used, based on:

- Very good to good – grading 1 and 2;
- Fair – grading 3; and
- Poor to very poor – grading 4 and 5.

Additionally, councils were asked to identify the confidence level associated with the data being provided. The confidence levels were expressed as shown in Table 1.1:

Confidence levels

TABLE 1.1 Confidence level grades

Confidence Level	Description
Low	Data is based on expert judgement or low quality evidence. May be estimated or extrapolated. Accuracy $\pm 40\%$.
Medium	Data based on moderate quality evidence, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample. Up to 50% estimated with accuracy within $\pm 25\%$.
High	Data based on high quality evidence, such as sound and current records, procedures, investigations and analysis. Information is complete and estimated to be accurate $\pm 10\%$.

⁵ Based on Cloake & Sui, 2002, p 8.

Quality/condition data

The IPWEA's *NAMS.PLUS online guided pathway for asset management planning* recommends condition data be collected and held or be capable of conversion into a 1 – 5 scale as shown in Table 1.2.

TABLE 1.2 NAMS.PLUS3 National Standard Condition Grading Scores

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

Source: Based on IPWEA, 2011, IIMM, Table 2.5.2, Sec 2.5.4, p 2179.

Condition data may be used to assist in estimating the year of acquisition and evaluating remaining life.

Function data

Function is the ability of the physical infrastructure to meet program delivery needs. Table 1.3 shows the five function grading's and descriptions.

TABLE 1.3 NAMS.PLUS3 Function Grading Scores

Function Grading	Description of Condition
1	Very Good: meets program/service delivery needs in a fully efficient and effective manner.
2	Good: meets program/service delivery needs in an acceptable manner.
3	Fair: meets most program/service delivery needs and some inefficiencies and ineffectiveness present.
4	Poor: limited ability to meet program/service delivery needs.
5	Very Poor: is critically deficient, does not meet program/service delivery and is neither efficient nor effective.

Source: Based on Cloake & Sui, 2002, p 9.

Capacity/utilisation data

Capacity/utilisation represents the ability of the physical infrastructure to meet service delivery needs. The five capacity/utilisation gradings and descriptions are shown in Table 1.4.

TABLE 1.4 NAMS.PLUS3 Capacity/Utilisation Grading Scores

Capacity/Utilisation Grading	Description of Condition
1	Very Good: usage corresponds well with design capacity and no operational problems experienced.
2	Good: usage is within design capacity and occasional operational problems experienced.
3	Fair: usage is approaching design capacity and/or operational problems occur frequently.
4	Poor: usage exceeds or is well below design capacity and/or significant operational problems are evident.
5	Very Poor: exceeds design capacity or is little used and/or operational problems are serious and ongoing.

Source: Based on Cloake & Sui, 2002, p 9.

2.1.3 SAMPLE SIZE AND DATA

This section of the report provides an overview of the level of response and the associated value of the local roads infrastructure being managed by local government in Australia.

565 local government entities and one local government association (LGANT⁶) were invited to participate and/or update their 2013 data for the 2014 report.

Of the 344 councils sampled in 2013, 217 updated their data and an additional 52 councils provided new data for 2014 bringing the total sample size to 396, this is 70% of the total number local government entities available.

Consequently 2013 data was used in the 2014 analysis where revised data was not provided.

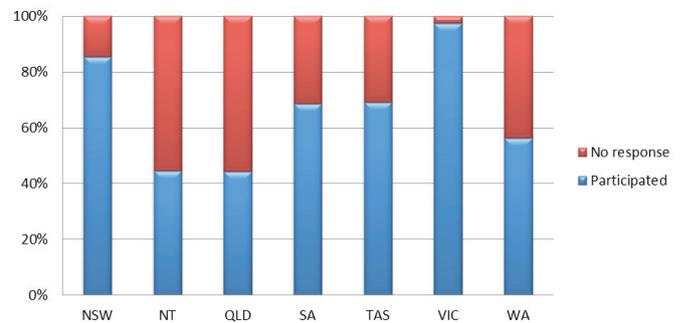
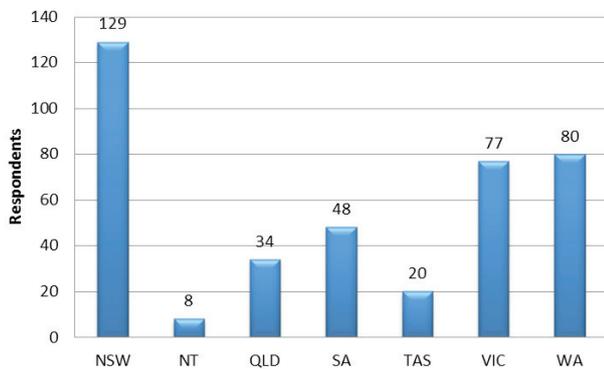
TABLE 1.5 Participation rates by State/Territory

State/Territory	Responded	Total	%
NSW	129	151	85%
NT	8	18	44%
QLD	34	77	44%
SA	48	70	69%
TAS	20	29	69%
VIC	77	79	97%
WA	80	142	56%
Grand Total	396	566	70%

Victoria and New South Wales had the highest participation rates followed by South Australia and Tasmania.

The sample includes 219 urban and 177 rural councils.

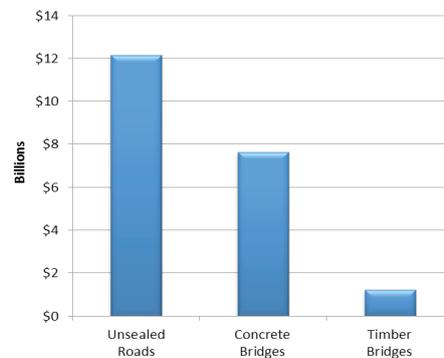
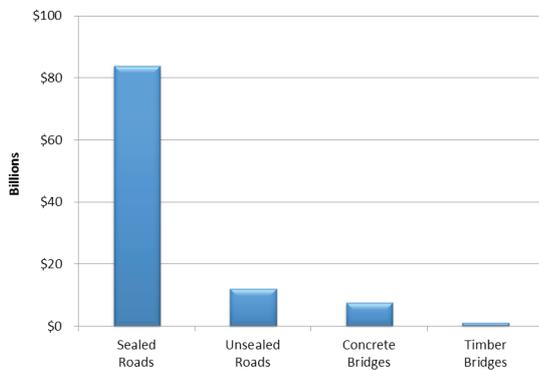
⁶ Local Government Association of Northern Territory is responsible for approximately 2,117 km of local roads across the Northern Territory and attracts financial assistance for ongoing maintenance.



Number of participating councils by State and Territory

Percentage of participating councils by State and Territory

Total asset values for each of the four asset classes used in the Report is provided below.



The 396 councils are managing a total of \$104.8 billion in infrastructure for the four local road asset classes included in this report, with local government sealed roads representing \$83.8 billion of this value. The estimated value for all Australian sealed roads controlled by councils is \$117 billion (NLRDS 2011).

Unsealed roads represent \$12.2 billion, Concrete bridges \$7.6 billion and Timber bridges \$1.2 billion of the sampled councils.

2.1.4 NATIONAL LOCAL ROADS DATA SYSTEM

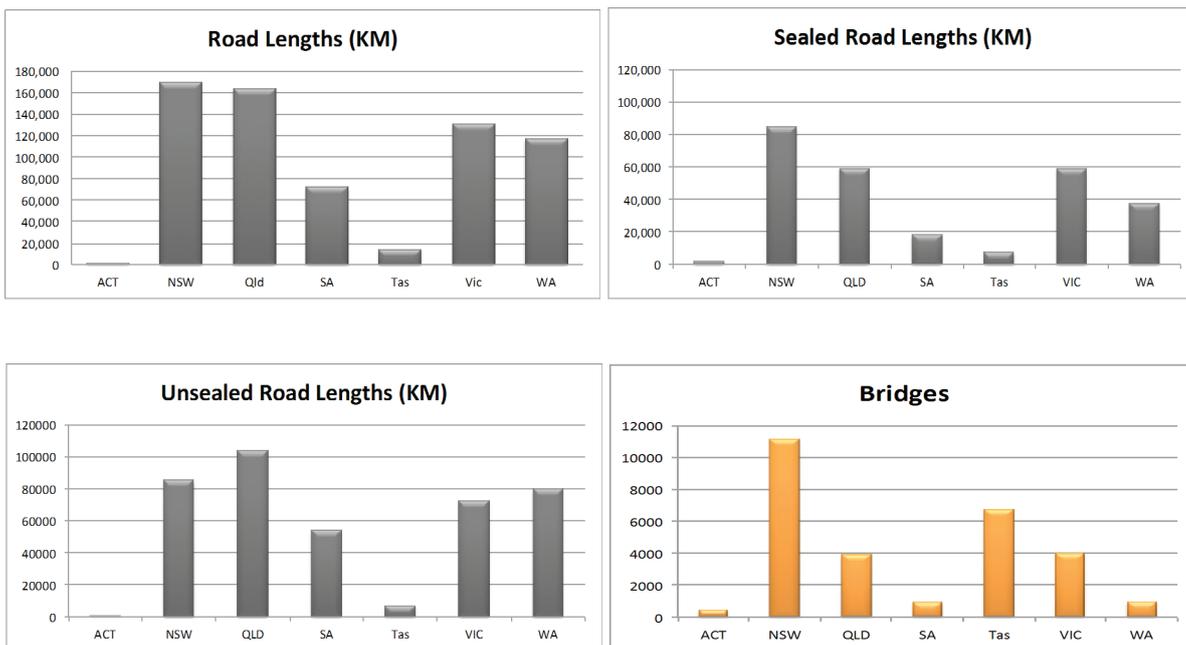
The total network length of all public roads in Australia in 2011 was 911,418 km, with 83% of this considered to be rural in nature (BITRE 2013, p.42). At the same time, councils reported approximately 670,000 km of roads (73%) under management according to the National Local Roads Data System (NLRDS)⁷.

The NLRDS captures road and bridge data from Australian local governments via the Grants Commission data return process. The NLRDS for 2011 indicates that:

- 667,290 km of roads under management;
- 266,614 km of sealed roads;
- 400,676 km of unsealed roads; and
- 27,939 bridges under management.

Total road length (km) under management has increased from 618,000 km in 2001 to 667,000 km in 2011, an increase of 8 per cent.

⁷ NLRDS is a national database of local government expenditure maintained by ALGA and state grants commissions.



The total value of local road infrastructure for all Australian councils is estimated in excess of \$165 billion (NLRDS 2011).

2.1.5 MANAGEMENT CONSIDERATIONS

An assessment of the state of an asset encompasses the collection of data and information through direct inspection, observation and investigation, indirect monitoring and reporting, and the analysis of the data and information to make a determination of the structural, operational, and performance status of the infrastructure assets. The collection of reliable data and information and the ability to make technically sound judgments as to the condition of the assets is therefore extremely important.

The assessment of the functionality of an asset is used to determine whether the asset is able to meet its purpose as intended. Each road has its function according to its role in the network. The most basic function of a road is transportation that can be further considered in terms of mobility and accessibility. Roads are designed according to planned performance requirements to provide consistent, safe and reliable road facilities for movement of traffic. These design elements also include the planned capacity of the roads and bridges.

The road network must have the capacity to deliver the level of service that has been determined after measuring the level of demand. An assessment of quality, functionality and capacity has a direct influence on the council's value of any backlog of capital investment.

Deterioration in the quality of a road or bridge may provide evidence of a needed renewal program. The renewal design must be made with reference to service standards agreed with Mayors and Councillors that also encapsulate whole of life costs and associated risks with known funding sources. A capital program to restore the quality of a road or bridge to expected standards represents a renewal of the asset.

A change in the functionality assessment of a road or bridge may provide evidence that the original town planning assumptions have altered and the road or bridge is now expected to meet a different purpose. Any planned capital expenditure arising from a functionality gap would be considered an upgrade or enhancement to the existing asset and not a renewal.

A review of the capacity of a road or bridge against the current level of demand may indicate that the utilisation of the asset may be more or less than originally planned. Any planned capital expenditure arising from a change in capacity would be considered an upgrade or enhancement to the existing asset and not a renewal.

Council decision making processes need to be able to identify the underlying factor (quality, functionality, capacity) associated with proposals in respect of road and bridge assets, and ensure that Mayors and Councillors are provided with the advice and options needed to allow trade-off discussions to occur.

2.2 NATIONAL STATE OF THE ASSETS – LOCAL ROADS INFRASTRUCTURE

2.2.1 CONTEXT

Socially, roads infrastructure is a key service needed to build stronger communities. Good roads facilitate access for all communities to opportunities and services including employment, community networks, health, education, recreation and business. Roads are the lifeblood for many rural and regional communities. Transport disadvantage (the result of unmet transport need from poor quality road infrastructure, inaccessible public transport services, relatively low rates of car ownership and unresolved road and pedestrian/cycle networks) like other forms of social disadvantage, limits the potential of residents and the surrounding communities. Residents' stories of the impact of the transport system and poor transport access on their lives provide powerful evidence of the link between transport disadvantage and social disadvantage. (Johnson & Herath 2004). A high quality, all-year, road network is the key enabler in the social development of communities by providing a connection to services in other centres as well as to recreational, cultural and social activities.

Economically, road infrastructure represents a vital component of Australian supply chain management for both the private and public sectors. The transportation of goods by road is a core component of business activity in this country. As such, a properly functioning and reliable road network is a core component of economic activity and the development and shipping of domestic product from source to market.

Most major and other roads have a local dimension. In particular, this includes ensuring that "first and last mile" issues are addressed. This aspect highlights the need for integrated planning involving all levels of government.

The total network length of all public roads in Australia in 2011 was 911,418 km, with 83% of this considered to be rural in nature (BITRE 2013, p.42). At the same time, councils reported approximately 670,000 km of roads (73% of the total network) under management according to the National Local Roads Data System (NLRDS).

2.2.2 PERFORMANCE OF LOCAL ROADS IN AUSTRALIA

The 396 councils that contributed to the report provided data on four asset types from three dimensions:

1	Sealed roads	2	Unsealed roads	3	Concrete bridges	4	Timber bridges
1	Quality (Physical condition) – the condition of the physical infrastructure that allows it to meet the intended service level						
2	Function (Function) – the ability of the physical infrastructure to meet program delivery needs						
3	Capacity (Capacity/utilisation) – represents the ability of the physical infrastructure to meet service needs						

In each instance, councils indicated the proportion of assets and physical state against three indicators of physical state:

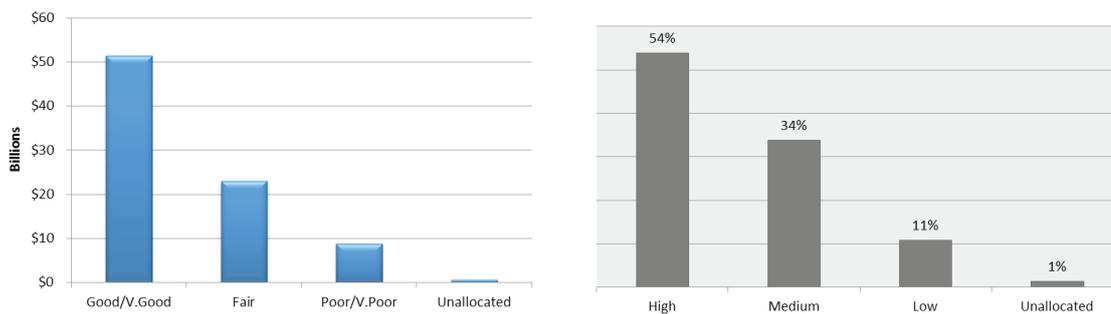
- Very good to good;
- Fair; and
- Poor to Very Poor.

In some cases, councils were not able to allocate values with any degree of confidence and these have been valued as "unallocated". Part 1 of the report identifies the definitions and scaling used by councils.

The following Section provides an overview of the state of roads infrastructure in 2014. Asset types have been coloured coded for ease of reading and interpreting the data as follows:

- **SEALED ROADS;**
- **UNSEALED ROADS;**
- **CONCRETE BRIDGES;** and
- **TIMBER BRIDGES.**

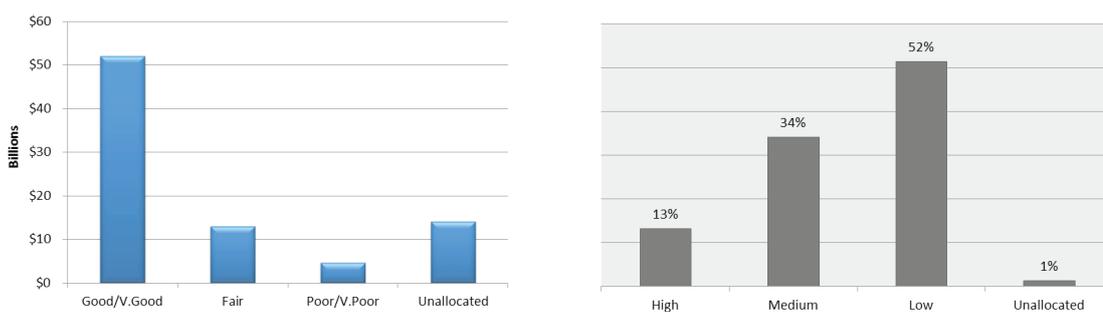
SEALED ROADS – Quality/Condition



Councils are indicating that in respect of the **quality of sealed roads**:

- 11% (\$8.8b) are in a poor to very poor condition, 27% (\$23.0b) in fair and 61% (\$51.4) in good to very good and 1% (\$0.6b) is unallocated;
- Councils have a high degree of confidence in this data at 54% which is 4% more than in 2013; and
- Councils were largely able to categorise all assets in this category.

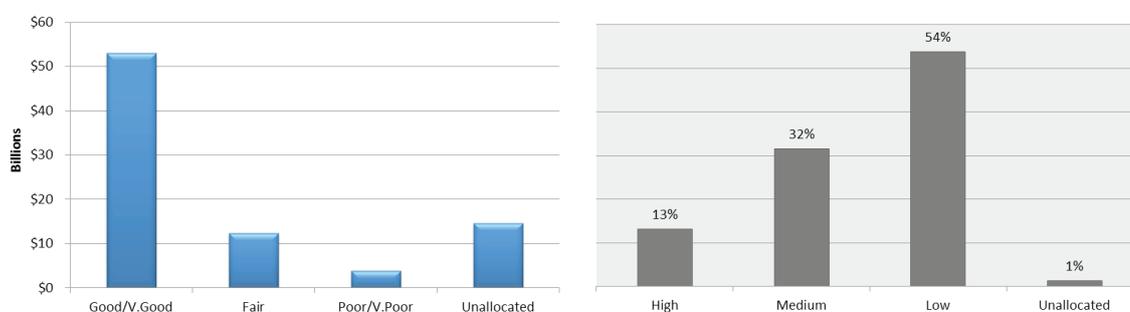
SEALED ROADS – Function



Councils are indicating that in respect of the **functionality of sealed roads**:

- 6% (\$4.7b) are in a poor to very poor condition, 15% (\$13.0b) in fair, 62% (\$52.0b) in good to very good and 17% (\$14.0b) is unallocated;
- Councils do not have confidence in this data;
- Councils were not able to categorise all assets in this category; and
- Performance remains unchanged from 2013.

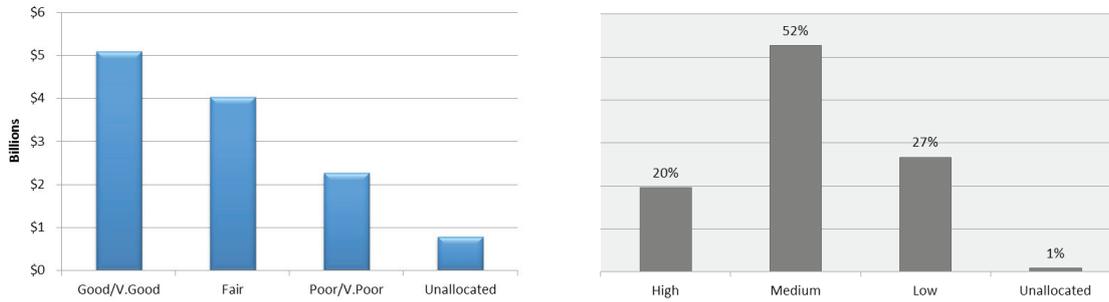
SEALED ROADS – Capacity



Councils are indicating that in respect of the **capacity/utilisation against expectations of sealed roads**:

- 5% (\$3.9b) are in a poor to very poor condition, 15% (\$12.2b) in fair, 63% (\$53.1b) in good to very good and 17% (\$14.6b) is unallocated;
- Councils do not have confidence in this data;
- Councils were not able to categorise all assets in this category; and
- Performance remains unchanged from 2013.

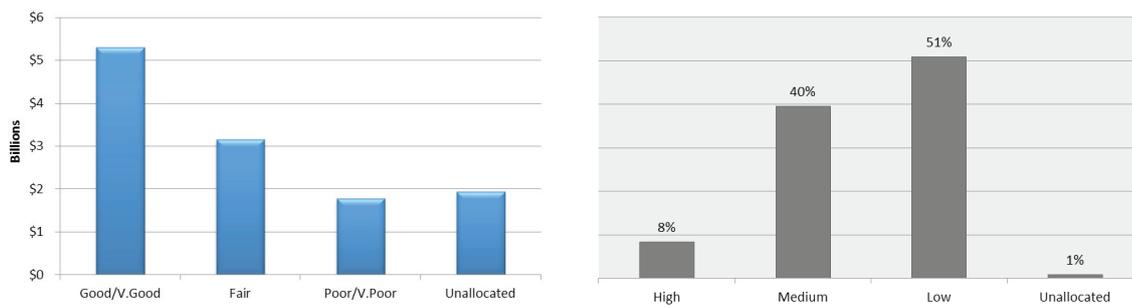
UNSEALED ROADS – Quality/Condition



Councils are indicating that in respect of the **quality of unsealed roads**:

- 19% (\$2.3b) are in a poor to very poor condition, 33% (\$4.0b) in fair, 42% (\$5.1b) in good to very good and 6% (\$0.8b) is unallocated;
- Councils have a reasonable degree of confidence in this data similar to 2013; and
- Councils were not able to categorise all assets in this category.

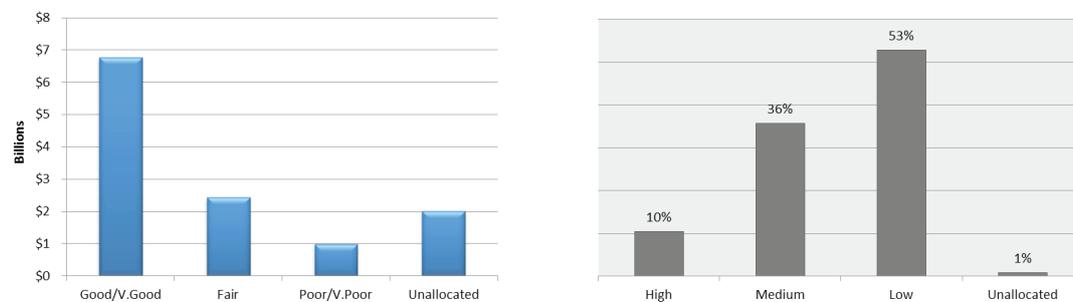
UNSEALED ROADS – Function



Councils are indicating that in respect of the **functionality of unsealed roads**:

- 15% (\$1.8b) are in a poor to very poor condition, 25% (\$3.1b) in fair, 44% (\$5.3b) in good to very good and 16% (\$2.0b) is unallocated;
- Councils have a low degree of confidence in this data;
- Councils were not able to categorise all assets in this category; and
- Performance remains unchanged from 2013.

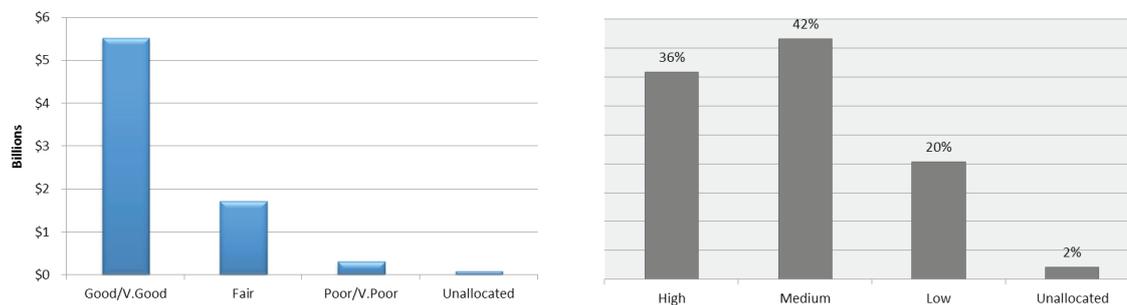
UNSEALED ROADS – Capacity



Councils are indicating that in respect of the **capacity/utilisation against expectations of unsealed roads**:

- 8% (\$0.98b) are in a poor to very poor condition, 20% (\$2.5b) in fair, 56% (\$6.7b) in good to very good and 16% (\$2.0b) is unallocated;
- Councils have a low degree of confidence in this data;
- Councils were not able to categorise all assets in this category; and
- Performance remains unchanged from 2013.

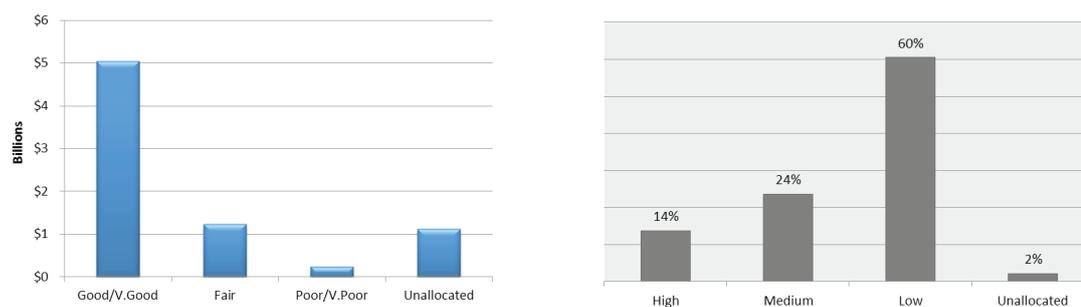
CONCRETE BRIDGES – Quality/Condition



Councils are indicating that in respect of the **quality of concrete bridges**:

- 4% (\$0.31b) are in a poor to very poor condition, 23% (\$1.72b) in fair, 72% (\$5.52b) in good to very good and 1% (\$0.1b) is unallocated;
- Councils have a high degree of confidence in this data increasing 10% in high confidence and 20% in medium confidence since 2013; and
- A very small proportion of assets could not be categorised.

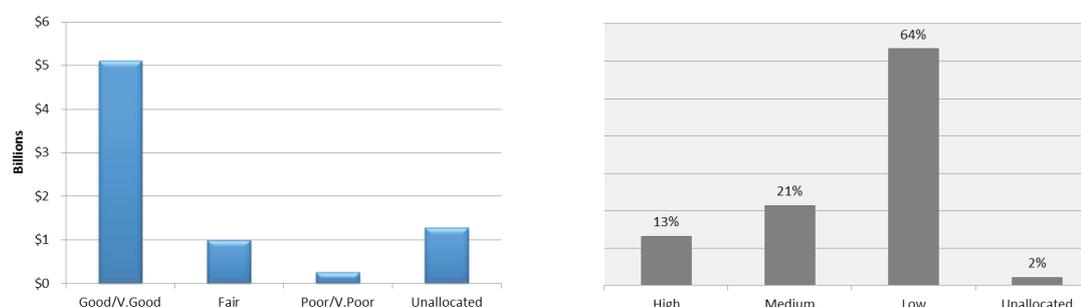
CONCRETE BRIDGES – Function



Councils are indicating that in respect of the **functionality of concrete bridges**:

- 3% (\$0.24b) are in a poor to very poor condition, 16% (\$1.24b) in fair, 66% (\$5.04b) in good to very good and 15% (\$1.12b) is unallocated;
- Councils have a very low degree of confidence in this data, a 10% and 4% increase is noted in medium and high confidence respectively compared to 2013; and
- Councils were not able to categorise all assets in this category.

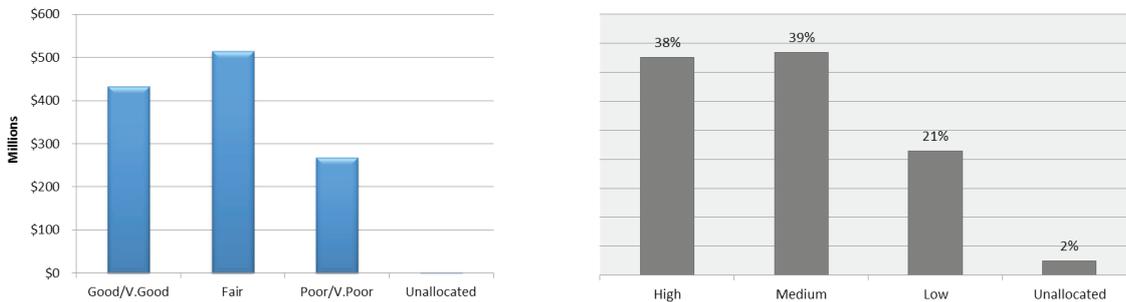
CONCRETE BRIDGES – Capacity



Councils are indicating that in respect of the **capacity/utilisation against expectations of concrete bridges**:

- 3% (\$0.26b) are in a poor to very poor condition, 13% (\$0.99b) in fair, 67% (\$5.11b) in good to very good and 17% (\$1.27b) is unallocated;
- Councils have a very low degree of confidence in this data, a 9% and 4% increase is noted in medium and high confidence respectively compared to 2013; and
- Councils were not able to categorise all assets in this category.

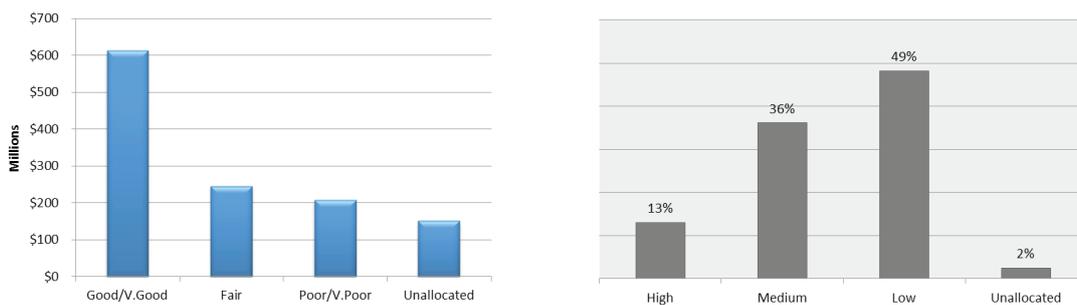
TIMBER BRIDGES – Quality/Condition



Councils are indicating that in respect of the **quality of timber bridges**:

- 22% (\$0.27b) are in a poor to very poor condition, 42% (\$0.51b) in fair, 35% (\$0.43b) in good to very good and 1% (\$2.7m) is unallocated;
- Councils have a high degree of confidence in this data. High confidence increasing by 12% and medium confidence by 20% since 2013; and
- Councils were largely able to categorise all assets in this category.

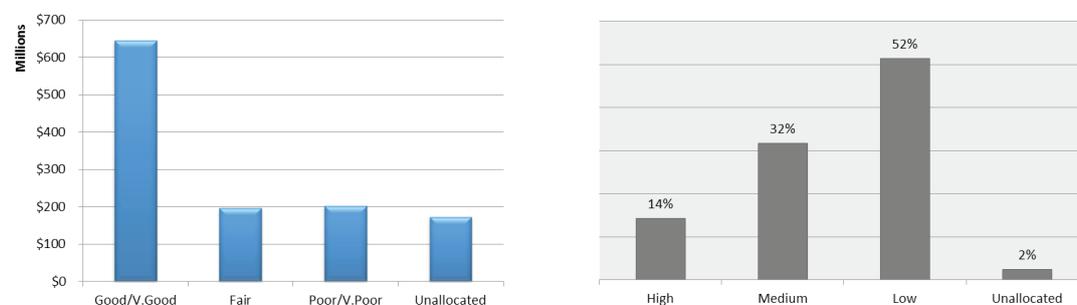
TIMBER BRIDGES – Function



Councils are indicating that in respect of the **functionality of timber bridges**:

- 17% (\$0.21b) are in a poor to very poor condition, 20% (\$0.25b) in fair, 51% (\$0.61b) in good to very good and 12% (\$0.15b) is unallocated;
- While councils have a very low degree of confidence in this data, a 14% increase is noted in medium and high confidence respectively compared to 2013; and
- Councils were not able to categorise all assets in this category.

TIMBER BRIDGES – Capacity



Councils are indicating that in respect of the **capacity /utilisation against expectations of timber bridges**:

- 17% (\$0.21b) are in a poor to very poor condition, 16% (\$0.20b) in fair, 53% (\$0.65b) in good to very good and 14% (\$0.17b) is unallocated;
- Councils have a very low degree of confidence in this data however a marginal increase in confidence levels is noted compared to 2013;
- Councils were not able to categorise all assets in this category.

2.2.3 CONSIDERATIONS

This section of the report provides a direct comparison of the physical state characteristics (i.e. measures) in dollar terms for each asset class with an assessment of confidence.

It demonstrates the differences that exist between considerations of quality, function and capacity.

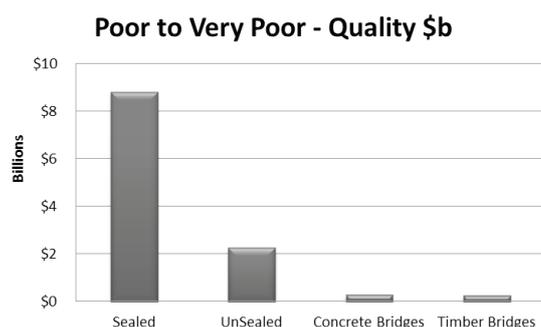
Quality/Condition

Quality has been expressed as the physical condition of the infrastructure that allows it to meet the intended service level using the following scales.

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

Source: Based on IPWEA, 2011, IIMM, Table 2.5.2, Sec 2.5.4, p 2179.

Below is the consolidated perspective on Quality associated with each asset class.



The 396 councils indicate that some \$8.8b in sealed roads is considered to be in poor to very poor condition, with \$2.3b in unsealed roads also considered poor to very poor. This represents 11% and 19% by value respectively.

\$0.31b out of a total replacement cost of \$7.6b for concrete bridges are considered to be in poor to very poor condition representing 4% of the value.

\$0.27b out of a total replacement cost of \$1.2b for timber bridges are generally considered to be in poor to very poor condition, which represents some 22% by value.

Councils have a reasonable degree of confidence in this measure and were able to categorise all data in terms of quality and being able to meet service expectations.

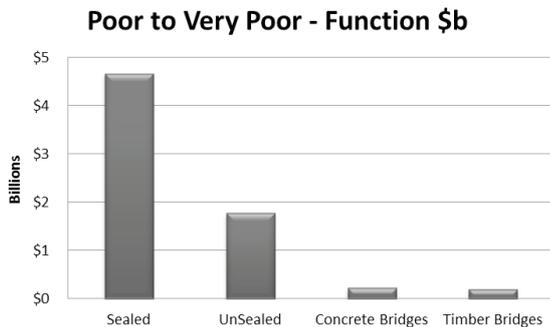
Function

Function has been expressed as the ability of the physical infrastructure to meet program delivery needs (i.e. fit for purpose) using the following scales.

Function Grading	Description of Condition
1	Very Good: meets program/service delivery needs in a fully efficient and effective manner.
2	Good: meets program/service delivery needs in an acceptable manner.
3	Fair: meets most program/service delivery needs and some inefficiencies and ineffectiveness present.
4	Poor: limited ability to meet program/service delivery needs.
5	Very Poor: is critically deficient, does not meet program/service delivery and is neither efficient nor effective.

Source: Based on Cloake & Sui, 2002, p 9.

Below is the consolidated perspective on Functionality associated with each asset class.



The 396 councils indicate that some \$4.7b in sealed roads are considered to be poor to very poor in respect of function, with some \$1.8b in unsealed roads also considered poor to very poor. This represents 6% and 15% by value respectively.

\$0.24b out of a total replacement cost of \$7.6b for concrete bridges are considered to be in poor to very poor condition representing 3% of the value.

\$0.21b out of a total replacement cost of \$1.2b for timber bridges are generally considered to provide poor to very poor functionality, which represents some 17% by value.

Councils have limited confidence in this measure and were not able to categorise all data.

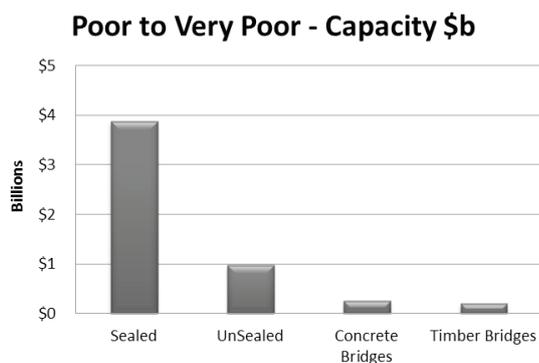
Capacity

Capacity/Utilisation has been expressed as the ability of the physical infrastructure to meet service delivery needs using the following scales.

Capacity/Utilisation Grading	Description of Condition
1	Very Good: usage corresponds well with design capacity and no operational problems experienced.
2	Good: usage is within design capacity and occasional operational problems experienced.
3	Fair: usage is approaching design capacity and/or operational problems occur frequently.
4	Poor: usage exceeds or is well below design capacity and/or significant operational problems are evident.
5	Very Poor: exceeds design capacity or is little used and/or operational problems are serious and ongoing.

Source: Based on Cloake & Sui, 2002, p 9.

Below is the consolidated perspective on Capacity /Utilisation associated with each asset class.



Some \$3.9b in sealed roads are considered to provide poor to very poor capacity representing 5% of the value. 8% or \$0.98b of unsealed roads are also considered poor to very poor.

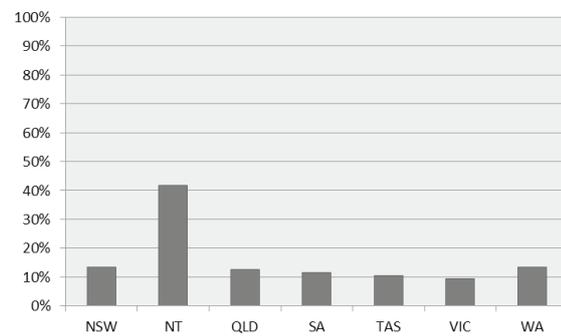
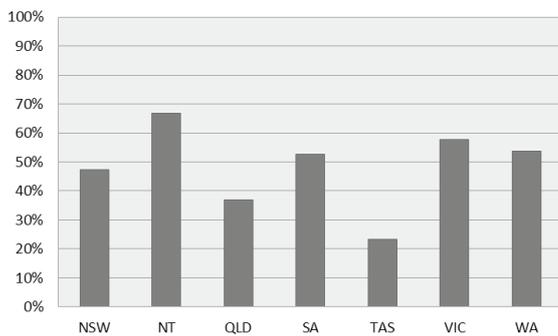
\$0.26b out of a total replacement cost of \$7.6b for concrete bridges are considered to be in poor to very poor condition representing 4% of the value.

17% by value of timber bridges are considered as not meeting capacity requirements.

Councils have limited confidence in this measure and were not able to categorise all data.

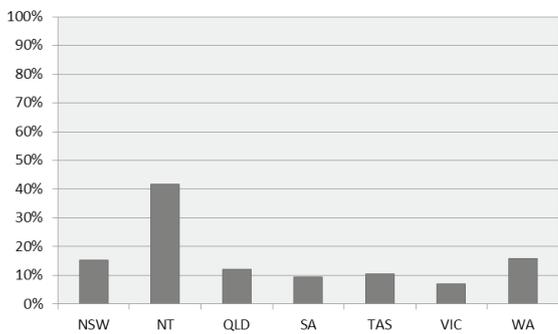
2.2.4 DATA CONFIDENCE

The representations below provide a perspective on the level of confidence indicated by each council in the data provided as a percentage of the current replacement cost of assets for each state and territory. Confidence levels associated with the various asset classes and categorisation has been provided in section 3.1 to this report.



High Data Confidence – Quality/Condition

High Data Confidence – Function



High Data Confidence – Capacity

All State and Territory councils sampled are expressing slightly higher levels of confidence in the data provided, with Tasmanian councils indicating slightly less degrees of confidence compared to 2013.

2.2.5 FINDINGS

Of the 344 councils sampled in 2013, 217 updated their data and a further 52 councils have provided their data for the first time. This brings the total sample size covered in this report to 396, which is 70 per cent of all councils. Of the 396 councils, 219 were urban and 177 were rural as determined by the Australian Classification of Local Government.

The 396 councils are managing a total of \$104.8 billion in infrastructure for the four local road asset categories included in this report – an increase of 6.6 per cent over the 2013 report outcome.

Local government **sealed roads** represent \$83.8 billion of this value. **Unsealed roads** represent \$12.2 billion, **concrete bridges** \$7.6 billion and **timber bridges** \$1.2 billion.

The total value of local road infrastructure for all Australian councils is estimated in excess of \$165 billion (NLRDS 2011).

The 2014 Report has found that of the \$83.8 billion of **sealed roads** under management, \$8.8 billion (11%) are in a poor to very poor state. The total sealed road value for all Australian councils is \$117 billion.

Councils have \$12.2 billion of **unsealed roads** under management, with \$2.3 billion being regarded as in a poor to very poor state.

Councils indicate that of the \$7.6 billion of **concrete bridges** under management \$0.3 billion are in a poor to very poor state.

Councils indicate that of the \$1.2 billion of **timber bridges** are management \$0.3 billion are in a poor to very poor state.

The combined local roads infrastructure classes in poor to very poor state is \$11.7 billion.

Key General findings

Most councils express low confidence with assessing the function aspect of road infrastructure (i.e. the ability of the infrastructure to meet service needs, e.g. design speed, width and alignment) as well the capacity aspect (i.e. the ability of the infrastructure to meet the service needs, e.g. traffic congestion). However, most councils' knowledge of the quality aspect of their road infrastructure (i.e. the physical condition of the infrastructure that allow it to meet the intended service level) continues to rank much higher.

Reporting on the quality aspect shows that:

- \$11.7 billion of roads assets is in a **poor** (i.e. significant renewal/rehabilitation is required) to very poor (i.e. physically unsound and/or beyond rehabilitation) state;
- \$29.2 billion is in a **fair** state (i.e. significant maintenance is required); and
- \$62.5 billion is in a **good** (i.e. minor maintenance is required plus planned maintenance) or **very good** (i.e. only planned maintenance is required) state.

This means that \$40.9 billion (60%) of total road assets surveyed (i.e. is \$104.8 billion) either require significant maintenance, significant renewal/rehabilitation or are physically unsound and/or beyond rehabilitation.

Respondent councils are identifying a range of assets in each class as being in a poor to very poor state currently.

Sealed roads – \$83.8 billion under management, with the following being regarded as in a poor to very poor state:

- By Quality – \$8.8 billion
- By Functionality – \$4.7 billion
- By Capacity – \$3.9 billion

Unsealed roads – \$12.2 billion under management, with the following being regarded as in a poor to very poor state:

- By Quality – \$2.3 billion
- By Functionality – \$1.8 billion
- By Capacity – \$1.0 billion

Concrete bridges – \$7.6 billion under management, with the following being regarded as in a poor to very poor state:

- By Quality – \$0.31 billion
- By Functionality – \$0.24 billion
- By Capacity – \$0.26 billion

Timber Bridges – \$1.2 billion under management, with the following being regarded as in a poor to very poor state:

- By Quality – \$0.27 billion
- By Functionality – \$0.21 billion
- By Capacity – \$0.20 billion

The combined local roads infrastructure classes in poor to very poor state:

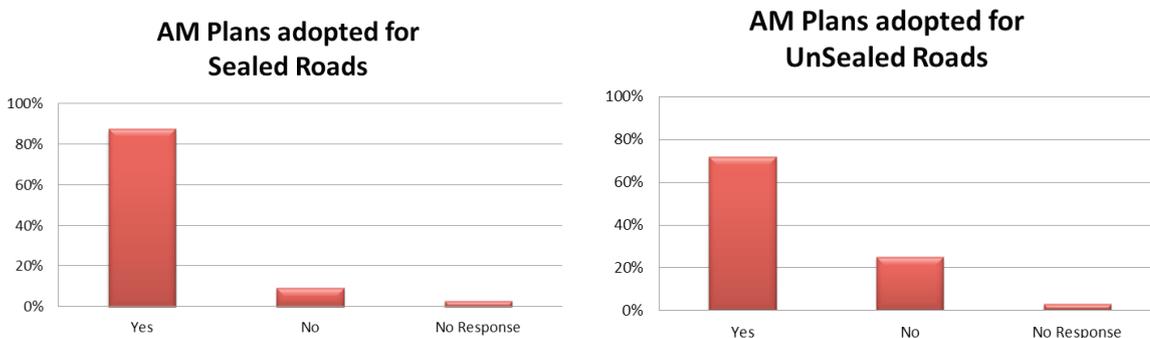
- By Quality – \$11.7 billion
- By Functionality – \$6.9 billion
- By Capacity – \$5.3 billion

2.3 ASSET MANAGEMENT – FINDINGS

While many local governments have been investing in asset management planning for more than a decade, for most councils the asset management planning process has only recently started to accelerate.

The current evidence is that councils are improving technical asset management practices. Key improvement areas include better engagement of the political/executive in understanding the trade-off decisions between new assets, and incorporating existing assets and revenue policy in to the long term financial plan.

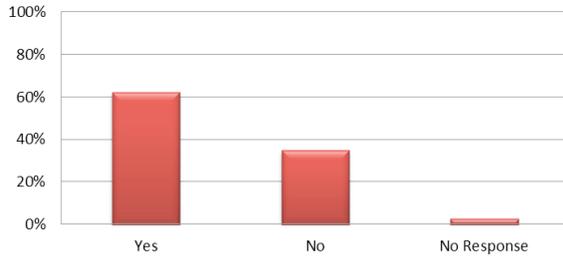
The 396 councils that contributed data to the report also indicated the status of progress in developing asset management plans (AM Plans) and long term financial plans (LTFP).



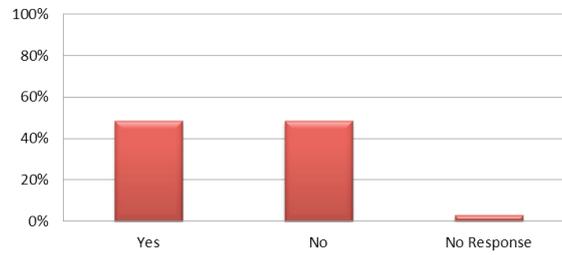
This is a very positive result, with AM Plans for sealed roads in place for 88% of sampled councils. This is an 8% increase on last year's result.

Asset management planning for unsealed roads at 72% (a 7% increase on last year) has not received the same degree of attention as sealed roads, but is still a positive result.

**AM Plans adopted for
Concrete Bridges**



**AM Plans adopted for
Timber Bridges**



AMP adoption for concrete bridges is at a satisfactory level of 62%, a 3% increase from 2013.

Councils are expressing significant doubt on the quality, function and capacity of timber bridges, and it is the asset class with the least coverage by asset management plans at 48%. This may be a reflection on the relative value of timber bridges compared to other transport assets of councils.

**AM Plans adopted for
Sealed Roads
by State & Northern Territory**



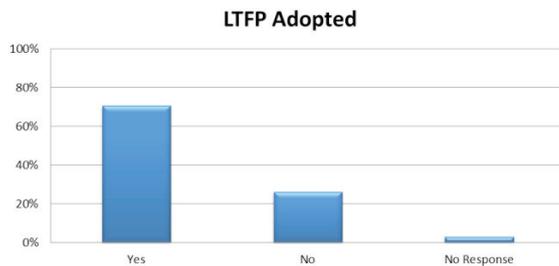
AM Plan adoption for sealed roads by individual States is high and relatively consistent. The Northern Territory is an exception, with a less significant rate of adoption being achieved than in other areas of Australia.

While 396 councils responded to the ALGA data collection process, it must be acknowledged that some 170 councils did not respond, which may be an indication of a lack of available asset management data.

The States and Territories need to continue to promote the values of continuing effective asset management planning and reporting.

2.4 LONG TERM FINANCIAL PLANNING – FINDINGS

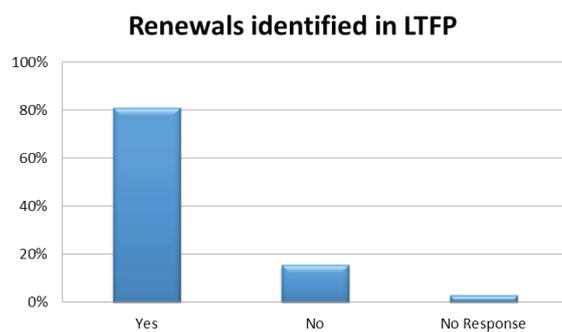
This section of the report considers the status of long term financial planning.



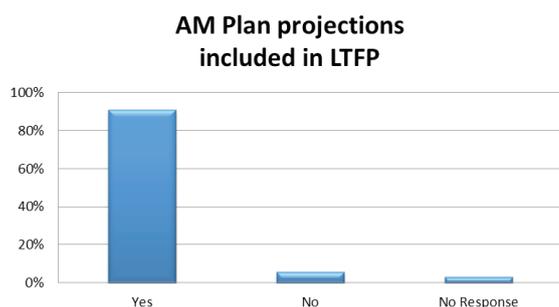
While asset management plans (AM Plans) for all local road asset classes are in place in 88% of the councils, long term financial plans (LTFP) are in place in 73% of those councils.

This is an encouraging result as it demonstrates councils are steadily progressing asset management planning.

Depreciation for all Australian councils, per the NLRDS, is approximately \$2.5b per annum for unsealed roads, for example. Depreciation expense is a key influence in two of the key indicators of financial sustainability, being the asset sustainability ratio and the operating surplus ratio. The asset management planning process influences, and is influenced by, the value of depreciation as determined by the asset register. It is important therefore that councils have confidence in the depreciation value when undertaking long term financial planning.



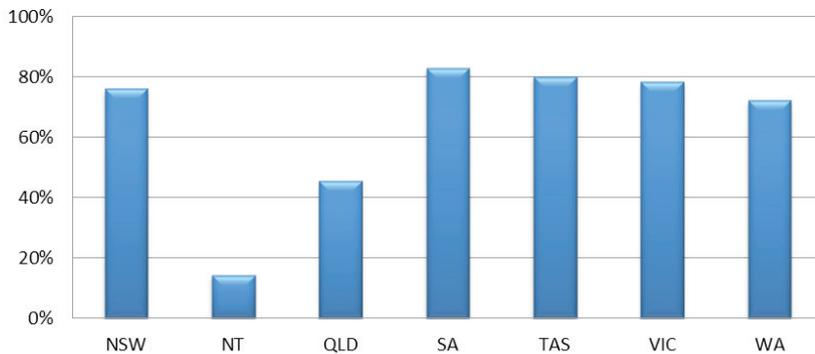
While councils are indicating a high rate of LTFP adoption, there is also an acknowledgement that renewals are considered in 81% of councils. This is a 7% increase from 2013.



Financial projections included in AM Plans are incorporated in the LTFP in 91% of instances. A notable 24% increase from 2013.

While LTFP adoption rates are excellent, there is a need to ensure that financial projections derived from properly formulated asset management plans are included as part of the process.

LTFP Adopted by State & Territory



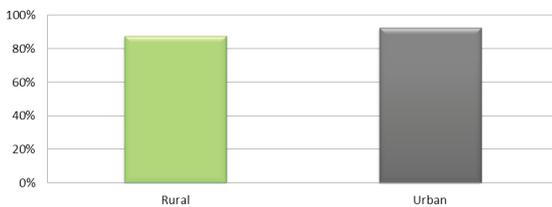
All States and Territories, with the exception of the Northern Territory are indicating a very good level of LTFP development and adoption.

2.5 RURAL AND URBAN COUNCIL ASSESSMENT

2.5.1 ASSET MANAGEMENT AND FINANCIAL PLANNING

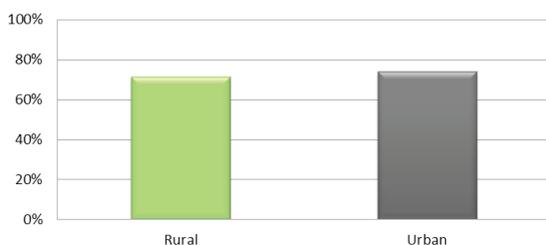
The following section provides additional data on the AM Plans and LTFP planning processes from the perspective of rural and urban councils.

**AM Plans in place
Rural & Urban Councils**



The data indicates that 88% of rural councils had asset management plans in place compared to 93% of the urban councils. This is a significant change from 2013.

**LTFP in place
Rural & Urban Councils**



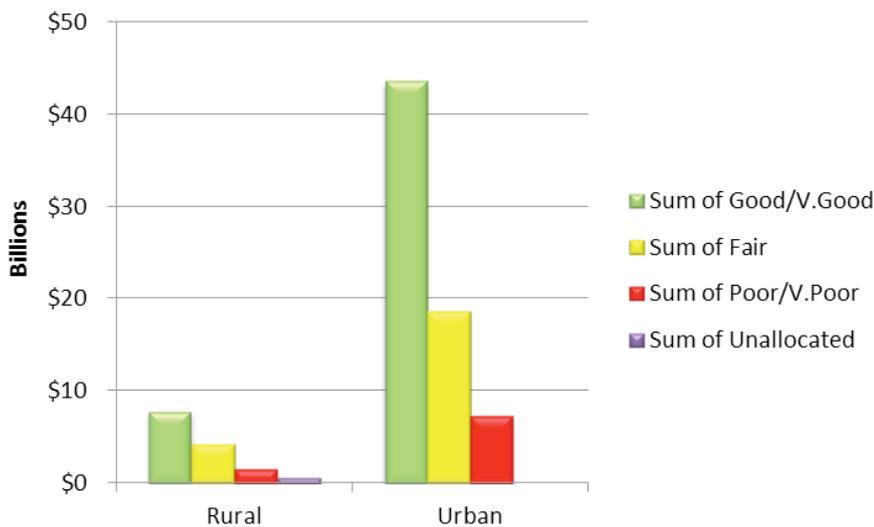
71% of the rural councils and 74% of the urban councils indicated that long-term financial plans were in place.

While this is an excellent result for all councils in the survey it also indicates that the long-term financial sustainability position of many Australian local governments is still not able to be satisfactorily determined. A much greater level of planning integration is needed for councils to have a more complete and accurate data set for long term planning and the development of financial management strategies.

2.5.2 LOCAL ROADS INFRASTRUCTURE

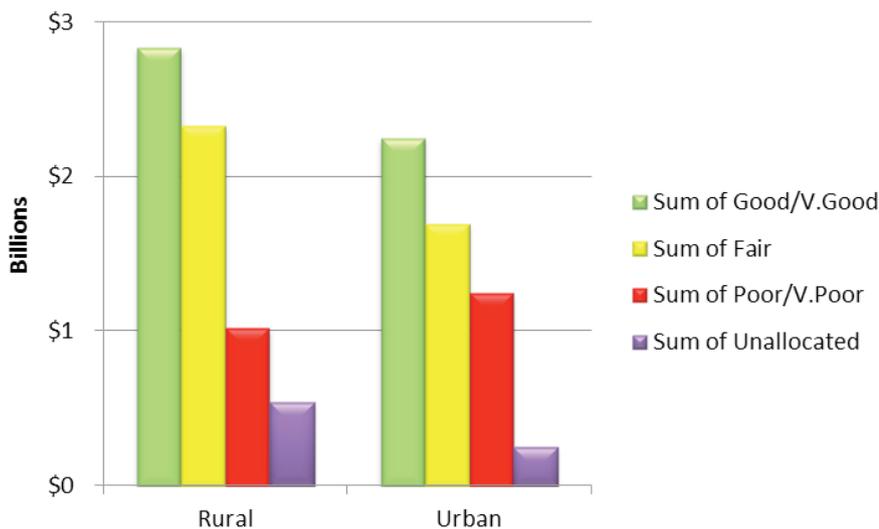
Councils have indicated the greatest level of confidence for data relates to the condition /quality of the local roads infrastructure. This section provides condition /quality perspectives for sealed, unsealed roads and concrete and timber bridges for rural and urban councils.

Sealed Roads – Condition/Quality



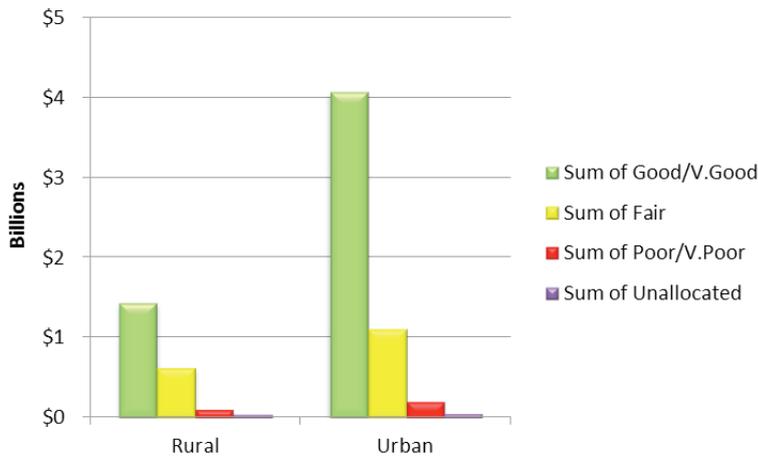
Urban councils manage \$69.5b of the total sealed roads value of \$83.8b. Approximately 10% by value of urban sealed roads and 11% of rural sealed roads are considered to be in a poor to very poor condition.

Unsealed Roads – Condition/Quality



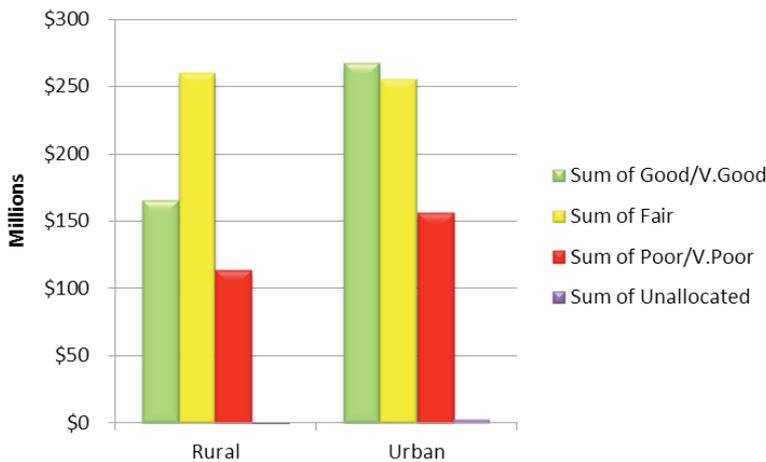
\$6.7b of the \$12.2b in unsealed roads is managed by rural councils. By contrast, 23% of the value of unsealed roads in urban areas is considered to be in poor to very poor condition compared to 15% of rural road values.

Concrete Bridges – Condition/Quality



\$5.4b of the total concrete bridge value of \$7.6b is managed by urban councils. Of these, 4% by value of urban concrete bridges are considered to be in poor to very poor condition, compared to 5% of rural concrete bridges.

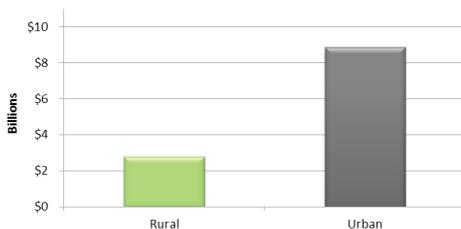
Timber Bridges – Condition/Quality



\$680m of the total value of \$1.2b in timber bridges is managed by urban councils. Of these, urban councils consider 23% to be in poor to very poor condition, which is consistent with rural council perspectives, where 21% are considered to be in poor to very poor condition.

Across the four local road asset classes \$11.7b is reported in poor to very poor condition. Urban councils consider some \$ 8.9b in local roads infrastructure to be in poor to very poor condition.

Poor to Very Poor Quality Rural & Urban Councils



Rural councils have indicated that some \$2.8b in value is considered to be in poor to very poor condition. Councils have reasonable confidence in the condition data.

2.6 REFERENCES

- ALGA, 2006, *National Financial Sustainability Study of Local Government*, Australian Local Government Association, Canberra
- ALGA, 2007, *National Local Roads Data System (NLRDS)*, Australian Local Government Association, Canberra, www.jr.net.au/nlrds.
- ALGA, 2010, *The Local Roads Funding Gap, Study of Local Roads Funding in Australia 1999-2000 to 2019-2020*, Canberra
- ALGA, 2012, *National State of the Assets Pilot 2012*, Australian Local Government Association, Canberra, http://alga.asn.au/site/misc/alga/downloads/transport/ALGA_StateOfTheAssets2012.pdf
- ALGA, 2013, *National State of the Assets 2013*, Australian Local Government Association, Canberra. <http://alga.asn.au/?ID=11787&Menu=50,471>
- Bureau of Infrastructure, Transport and Regional Economics (BITRE) 2013, *Australian Infrastructure Yearbook*, Canberra
- Cloake, T., Siu, K.L., 2002, *Standardized Classification System to Assess the State and Condition of Infrastructure in Edmonton*, Proc INFRA 2002, Montreal, Canada.
- IPWEA, 2009, *Australian Infrastructure Financial Management Guidelines*, Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.
- IPWEA, 2011, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM.
- Johnson, L. and Herath, S. (2004) *Big Roads, No Transport: A Report of the Goodna and Gales Community Mapping for Transport Improvements Study*, Research Monograph 5, Urban Policy Program, Griffith University
- New South Wales Treasury Corporation (TCorp) April 2013, *Financial Sustainability of the New South Wales Local Government Sector: Findings, Recommendations and Analysis*, NSW Government

2.7 APPENDICES

2.7.1 DATA COLLECTION – DATASHARE WEB PORTAL



**AUSTRALIAN LOCAL
GOVERNMENT ASSOCIATION**

NATIONAL STATE OF THE ASSETS - ROADS

State of the Assets - 2014 Data Collection Form for JRA

Status of asset management plan development - are asset management plans in place for:

Sealed Roads	Yes
Unsealed Roads	No
Timber Bridges	Yes
Concrete Bridges	Yes
All infrastructure assets of Council	Yes

Status of Asset Management Plan Development - has council adopted a Long Term Financial Plan? Yes

Are the financial projections from the asset management plans included in the long term financial plan? Yes

Does council separately identify and value infrastructure renewals as part of the long term planning process? Yes

Sealed Roads - (pavement and surface only)

Current Replacement Cost (as at 30 June 2014) \$ (\$'000's)

Comments

Quality	Function	Capacity/Utilisation
In Condition 1 & 2 <input type="text" value="100"/> %	In Function 1 & 2 <input type="text" value="0"/> %	In Capacity/Utilisation 1 & 2 <input type="text" value="0"/> %
In Condition 3 <input type="text" value="0"/> %	In Function 3 <input type="text" value="100"/> %	In Capacity/Utilisation 3 <input type="text" value="0"/> %
In Condition 4 & 5 <input type="text" value="0"/> %	In Function 4 & 5 <input type="text" value="0"/> %	In Capacity/Utilisation 4 & 5 <input type="text" value="100"/> %
Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>

click hyperlinks for more information

Unsealed Roads – (Formed and Gravel roads only)

Current Replacement Cost (as at 30 June 2014) \$ (\$'000's)

Comments

Quality	Function	Capacity/Utilisation
In Condition 1 & 2 <input type="text" value="0"/> %	In Function 1 & 2 <input type="text" value="0"/> %	In Capacity/Utilisation 1 & 2 <input type="text" value="0"/> %
In Condition 3 <input type="text" value="0"/> %	In Function 3 <input type="text" value="0"/> %	In Capacity/Utilisation 3 <input type="text" value="0"/> %
In Condition 4 & 5 <input type="text" value="0"/> %	In Function 4 & 5 <input type="text" value="0"/> %	In Capacity/Utilisation 4 & 5 <input type="text" value="0"/> %
Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>

click hyperlinks for more information

Concrete Bridges

Current Replacement Cost (as at 30 June 2014) \$ (\$'000's)

Comments

Quality	Function	Capacity/Utilisation
In Condition 1 & 2 <input type="text" value="0"/> %	In Function 1 & 2 <input type="text" value="0"/> %	In Capacity/Utilisation 1 & 2 <input type="text" value="0"/> %
In Condition 3 <input type="text" value="0"/> %	In Function 3 <input type="text" value="0"/> %	In Capacity/Utilisation 3 <input type="text" value="0"/> %
In Condition 4 & 5 <input type="text" value="0"/> %	In Function 4 & 5 <input type="text" value="0"/> %	In Capacity/Utilisation 4 & 5 <input type="text" value="0"/> %
Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>

click hyperlinks for more information

Timber Bridges

Current Replacement Cost (as at 30 June 2014) \$ (\$'000's)

Comments

Quality	Function	Capacity/Utilisation
In Condition 1 & 2 <input type="text" value="0"/> %	In Function 1 & 2 <input type="text" value="0"/> %	In Capacity/Utilisation 1 & 2 <input type="text" value="0"/> %
In Condition 3 <input type="text" value="0"/> %	In Function 3 <input type="text" value="0"/> %	In Capacity/Utilisation 3 <input type="text" value="0"/> %
In Condition 4 & 5 <input type="text" value="0"/> %	In Function 4 & 5 <input type="text" value="0"/> %	In Capacity/Utilisation 4 & 5 <input type="text" value="0"/> %
Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>	Confidence <input type="text" value="Low"/>

click hyperlinks for more information

[EXIT](#)

2.7.2 EXAMPLES OF QUALITY, FUNCTION AND CAPACITY/UTILISATION

The following table provides practical examples of the application of the assessment process to local government sealed and unsealed road assets. This table is drawn from a draft document developed with the support of the Australian Centre of Excellence for Local Government (ACELG) and the Institute of Public Works Engineering Australasia (IPWEA).

Quality	
Sealed Roads	Unsealed Roads
Service objective – Roads are smooth, with no potholes or ponding of water and accessible at all times.	Service objective – Roads are smooth, with no potholes, corrugations or ponding of water and accessible at all times.
Criteria – Road condition meets hierarchy requirements for condition measures.	Criteria – Road condition meets hierarchy requirements for condition measures.
Description of Poor and Very Poor Ratings	Description of Poor and Very Poor Ratings
Poor – Condition Rating 4, e.g. roads are potholed, have rough ride quality, major pavement failures and access is limited at times.	Poor – Condition Rating 4, e.g. roads are potholed, have rough ride quality, major pavement failures and access is limited at times.
Very Poor – Condition Rating 5, e.g. roads are almost un-trafficable, have extensive surface defects and pavement failures and access is severely constrained.	Very Poor – Condition Rating 5, e.g. roads are almost un-trafficable, have extensive surface defects and pavement failures and access is severely constrained.
Function	
Sealed Roads	Unsealed Roads
Service objective – Road network is appropriate to users' needs.	Service objective – Road network is appropriate to users' needs.
Criteria – Roads meets service hierarchy requirements for traffic volumes, design speed, width, alignment, access, etc.	Criteria – Roads meets service hierarchy requirements for traffic volumes, design speed, width, alignment, all weather access, etc.
Description of Poor and Very Poor Ratings	Description of Poor and Very Poor Ratings
Poor (4) – road network requires major upgrade to suit users' needs and/or road segments require major upgrades to meet appropriate hierarchy requirements for traffic volumes, design speed, width, alignment, access, etc.	Poor (4) – road network requires <i>major</i> upgrade to suit users' needs and/or road segments require major upgrades to meet appropriate service hierarchy requirements for traffic volumes, design speed, width, alignment, all-weather access, etc. Unsealed roads widths are 25% above or below hierarchy design standards.
Very Poor (5) – road network requires extensive upgrade and/or road segments require extensive upgrades to meet appropriate hierarchy requirements.	Very Poor (5) – road network requires extensive upgrade and/or road segments require extensive upgrades to meet appropriate service hierarchy requirements.
Capacity/Utilisation	
Sealed Roads	Unsealed Roads
Service objective – Sealed road capacity is appropriate to service hierarchy.	Service objective – Road capacity is appropriate to service hierarchy.
Criteria – Traffic congestion and delays are minimal. Road width is appropriate to service hierarchy.	Criteria – Road width and usage is appropriate to service hierarchy. No reduced speed limits.
Description of Poor and Very Poor Ratings	Description of Poor and Very Poor Ratings
Poor (4) – extensive traffic delays are experienced at peak times or usage is very minimal. Road is under or oversized for current use.	Poor (4) – Traffic volumes are 25% above or below service hierarchy design standards. Road is under or oversized for current use.
Very Poor (5) – extensive traffic delays are experienced throughout the day or usage is almost zero. Road is grossly under or oversized for current use.	Very Poor (5) – unsealed road traffic volumes are 50% above or below hierarchy design standards. Road is grossly under or oversized for current use.

2.7.3 CLASSIFICATION AND GROUPING OF COUNCILS

The Australian Classification of Local Governments (ACLG) classifies councils into 22 categories according to their socioeconomic characteristics and their capacity to deliver a range of services to the community.

The classification system involves three steps. Councils are first classified as either urban or rural. Urban councils are then divided into four categories – capital city, metropolitan developed, regional town/city or fringe. Rural councils are divided into three categories – significant growth, agricultural or remote. The final classification step for both urban and rural councils is based on population.

For example, a medium-sized council in a rural agricultural area would be classified as RAM – rural, agricultural, medium. If it were remote, however, it would be classified as RTM – rural, remote, medium. An urban metropolitan developed area with up to 30,000 population would be classified as UDS. The table below provides information on the structure of the classification system.

In this publication, we have put all councils into two groups or categories of Rural or Urban based on the ACLG rules. This makes it difficult to compare the performance of different councils in a meaningful way. As a result, there are often large differences between councils in the same group. This information should not be relied upon by councils to argue for individual policy changes.

The estimated resident population within council boundaries is the preliminary figure calculated by the ABS for 30 June 2013. This figure was used to determine the ACLG categories for the 2014 publication.

Step 1	Step 2	Step 3	Identifiers	Category
URBAN (U)				
Population more than 20 000	CAPITAL CITY (CC)	Not applicable		UCC
OR If population less than 20 000, EITHER Population density more than 30 persons per sq km OR 90 per cent or more of the local governing body population is urban	METROPOLITAN DEVELOPED (D) Part of an urban centre of more than 1 000 000 or population density more than 600/sq km	SMALL (S) MEDIUM (M) LARGE (L) VERY LARGE (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	UDS UDM UDL UDV
	REGIONAL TOWNS/CITY (R) Part of an urban centre with population less than 1 000 000 and predominantly urban in nature	SMALL (S) MEDIUM (M) LARGE (L) VERY LARGE (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	URS URM URL URV
	FRINGE (F) A developing LGA on the margin of a developed or regional urban centre	SMALL (S) MEDIUM (M) LARGE (L) VERY LARGE (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	UFS UFM UFL UFV
RURAL (R)				
A local governing body with population less than 20 000 AND Population density less than 30 persons per sq km AND Less than 90 per cent of local governing body population is urban	SIGNIFICANT GROWTH (SG) Average annual population growth more than 3 per cent, population more than 5 000 and not remote	Not applicable		RS G
	AGRICULTURAL (A)	SMALL (S) MEDIUM (M) LARGE (L) VERY LARGE (V)	up to 2 000 2 001–5 000 5 001–10 000 10 001–20 000	RAS RAM RAL RAV
	REMOTE (T)	EXTRA SMALL (X) SMALL (S) MEDIUM (M) LARGE (L)	up to 400 401–1 000 1 001–3 000 3 001–20 000	RTX RTS RTM RTL

2.7.4 CONTRIBUTING LOCAL GOVERNMENTS

The following 396 local governments contributed to the project.

Council	State	ACLG	Council	State	ACLG	Council	State	ACLG
Adelaide City Council	SA	UCC	Campbelltown City Council SA	SA	RAM	City of Swan	WA	UFL
Adelaide Hills Council	SA	UFM	Canada Bay Council	NSW	UDM	City of Tea Tree Gully	SA	UDL
Albury City Council	NSW	URM	Canterbury City Council	NSW	UDV	City of Unley	SA	UDM
Alexandrina Council	SA	URM	Carrathool Shire Council	NSW	RAM	City of Victor Harbor	SA	URS
Alice Springs Town Council	NT	URS	Casey City Council	VIC	UDV	City of Wanneroo	WA	UFV
Alpine Shire Council	VIC	RAV	Cassowary Coast Regional Council	QLD	URS	City of West Torrens	SA	UDM
Ararat Rural City Council	VIC	RAV	Central Coast Council	TAS	URS	City of Whyalla	SA	URS
Armidale Dumaresq Council	NSW	URS	Central Darling Shire Council	NSW	RTM	Clarence City Council	TAS	UFM
Ashfield Municipal Council	NSW	UDM	Central Goldfields Shire Council	VIC	RAV	Cobar Shire Council	NSW	RTL
Auburn City Council	NSW	UDM	Cessnock City Council	NSW	URM	Coffs Harbour City Council	NSW	URM
Ballarat City Council	VIC	URL	Charters Towers Regional Council	QLD	RAV	Colac Otway Shire Council	VIC	URS
Ballina Shire Council	NSW	URM	Circular Head Council	TAS	RAL	Conargo Shire Council	NSW	RAS
Balranald Shire Council	NSW	RAM	City of Albany	WA	URM	Cook Shire Council	QLD	RTL
Bankstown City Council	NSW	UDV	City of Armadale	WA	UFM	Coomalie Shire Council	NT	RAS
Banyule City Council	VIC	UDV	City of Bayswater	WA	UDM	Cooma-Monaro Shire Council	NSW	RAL
Barkly Shire Council	NT	RTL	City of Belmont	WA	UDM	Coonamble Shire Council	NSW	RAM
Bass Coast Shire Council	VIC	UFM	City of Bunbury	WA	URM	Cootamundra Shire Council	NSW	RAL
Bathurst Regional Council	NSW	URM	City of Bunbury	WA	URM	Corangamite Shire Council	VIC	RAV
Baw Baw Shire Council	VIC	URM	City of Burnside	SA	UDM	Corowa Shire Council	NSW	RAV
Bayside City Council	VIC	UDL	City of Canning	WA	UDL	Corporation of the Town of Walkerville	SA	UDS
Benalla Rural City Council	VIC	RAV	City of Charles Sturt	SA	UDL	Cowra Shire Council	NSW	RAV
Berrigan Shire Council	NSW	RAL	City of Cockburn	WA	UDL	Croydon Shire Council	QLD	RTX
Bland Shire Council	NSW	RAL	City of Fremantle	WA	UDS	Darebin City Council	VIC	UDV
Blayney Shire Council	NSW	RAL	City of Gosnells	WA	UDL	Deniliquin Council	NSW	URS
Blue Mountains City Council	NSW	UFL	City of Greater Geraldton	WA	URM	Devonport City Council	TAS	URS
Bombala Council	NSW	RAM	City of Holdfast Bay	SA	UDM	District Council of	SA	RAM
Boorowa Council	NSW	RAM	City of Joondalup	WA	UDV	Ceduna		
Boroondara City Council	VIC	UDV	City of Kwinana	WA	UFS	District Council of Cleve	SA	RAS
Borough of Queenscliffe	VIC	UFS	City of Mandurah	WA	URM	District Council of Copper Coast	SA	RAV
Bourke Shire Council	NSW	RAM	City of Marion	SA	UDL	District Council of Grant	SA	RAL
Brighton Council	TAS	URS	City of Melville	WA	UDL	District Council of Karoonda East Murray	SA	RAS
Brimbank City Council	VIC	UDV	City of Mitcham	SA	UDM	District Council of Kimba	SA	RAS
Buloke Shire Council	VIC	RAL	City of Nedlands	WA	UDS	District Council of Lower Eyre Peninsula	SA	RAM
Bundaberg Regional Council	QLD	URL	City of Norwood Payneham and St Peters	SA	UDM	District Council of Loxton Waikerie	SA	RAV
Burdekin Shire Council	QLD	RAV	City of Onkaparinga	SA	UFV	District Council of	SA	RAL
Burke Shire Council	QLD	RTS	City Of Palmerston	NT	UFS	Mallala		
Burnie City Council	TAS	URS	City of Perth	WA	UCC	District Council of Mount Remarkable	SA	RAM
Burwood Council	NSW	UDM	City of Playford	SA	UFL	District Council of Streaky Bay	SA	RAM
Byron Shire Council	NSW	URM	City of Port Adelaide Enfield	SA	UDL	District Council of Tumbly Bay	SA	RAM
Cabonne Shire Council	NSW	RAV	City of Prospect	SA	UDS	District Council of Yankalilla	SA	RAM
Cairns Regional Council	QLD	URV	City of Rockingham	WA	UFL	Dorset Council	TAS	RAL
Camden Council	NSW	UFM	City of Salisbury	SA	UDV	Dubbo City Council	NSW	URM
Campaspe Shire Council	VIC	URM	City of South Perth	WA	UDM			
Campbelltown City Council NSW	NSW	UFV	City of Stirling	WA	UDV			
			City of Subiaco	WA	UDS			

Council	State	ACLG
Dungog Shire Council	NSW	RAL
East Arnhem Shire Council	NT	RTL
East Gippsland Shire Council	VIC	URM
Etheridge Shire Council	QLD	RTS
Eurobodalla Shire Council	NSW	URM
Fairfield City Council	NSW	UDV
Forbes Shire Council	NSW	RAV
Frankston City Council	VIC	UDV
Fraser Coast Regional Council	QLD	URL
Gannawarra Shire Council	VIC	RAV
George Town Council	TAS	RAL
Gladstone Regional Council	QLD	URM
Glamorgan Spring Bay Council	TAS	RAM
Glen Eira City Council	VIC	UDV
Glen Innes Severn Council	NSW	RAL
Glenelg Shire Council	VIC	RAV
Glenorchy City Council	TAS	UFM
Gloucester Shire Council	NSW	RAM
Gold Coast City Council	QLD	URV
Golden Plains Shire Council	VIC	RAV
Goondiwindi Regional Council	QLD	RAV
Gosford City Council	NSW	UFV
Goulburn Mulwaree Council	NSW	URS
Greater Bendigo City Council	VIC	URL
Greater Dandenong City Council	VIC	UDV
Greater Geelong City Council	VIC	URV
Greater Shepparton City Council	VIC	URM
Greater Taree City Council	NSW	URM
Griffith City Council	NSW	URS
Gunnedah Shire Council	NSW	RAV
Gwydir Shire Council	NSW	RAL
Gympie Regional Council	QLD	URM
Harden Shire Council	NSW	RAM
Hawkesbury City Council	NSW	UFM
Hay Shire Council	NSW	RAM
Hinchinbrook Shire Council	QLD	RAV
Hindmarsh Shire Council	VIC	RAL
Hobart City Council	TAS	UCC
Hobsons Bay City Council	VIC	UDL
Holroyd City Council	NSW	UDL
Horsham Rural City Council	VIC	RAV
Hume City Council	VIC	UFV

Council	State	ACLG
Huon Valley Council	TAS	RAV
Hurstville City Council	NSW	UDL
Indigo Shire Council	VIC	RAV
Inverell Shire Council	NSW	RAV
Jerilderie Shire Council	NSW	RAS
Junee Shire Council	NSW	RAL
Kangaroo Island Council	SA	RAM
Katherine Town Council	NT	URS
Kempsey Shire Council	NSW	URS
Kiama Municipal Council	NSW	URS
King Island Council	TAS	RAS
Kingborough Council	TAS	UFM
Kingston City Council	VIC	UDV
Kingston District Council	SA	RAM
Knox City Council	VIC	UDV
Kogarah City Council	NSW	UDM
Ku-ring-gai Council	NSW	UDL
Kyogle Council	NSW	RAL
Lachlan Shire Council	NSW	RAL
Lake Macquarie City Council	NSW	URV
Latrobe City Council	VIC	URL
Latrobe Council	TAS	RAL
Launceston City Council	TAS	URM
Leeton Shire Council	NSW	RAV
Leichhardt Municipal Council	NSW	UDM
LGANT	NT	
Light Regional Council	SA	RSG
Lismore City Council	NSW	URM
Lithgow City Council	NSW	URS
Liverpool City Council	NSW	UFV
Liverpool Plains Shire Council	NSW	RAL
Lockhart Shire Council	NSW	RAM
Lockyer Valley Regional Council	QLD	URM
Loddon Shire Council	VIC	RAL
Logan City Council	QLD	UFV
Longreach Regional Council	QLD	RTL
Macedon Ranges Shire Council	VIC	URM
Mackay Regional Council	QLD	URL
Maitland City Council	NSW	URM
Manly Council	NSW	UDM
Manningham City Council	VIC	UDL
Mansfield Shire Council	VIC	RAL
Mareeba Shire Council	QLD	URS
Maribyrnong City Council	VIC	UDL
Maroondah City Council	VIC	UDL
Marrickville Council	NSW	UDL
Meander Valley Council	TAS	RAV
Melbourne City Council	VIC	UCC
Melton City Council	VIC	UFL

Council	State	ACLG
Mildura Rural City Council	VIC	URM
Mitchell Shire Council	VIC	URM
Moira Shire Council	VIC	URS
Monash City Council	VIC	UDV
Moonee Valley City Council	VIC	UDL
Moorabool Shire Council	VIC	URS
Moree Plains Shire Council	NSW	RAV
Moreland City Council	VIC	UDV
Moreton Bay Regional Council	QLD	UFV
Mornington Peninsula Shire Council	VIC	UFV
Mosman Municipal Council	NSW	UDS
Mount Alexander Shire Council	VIC	RAV
Moyne Shire Council	VIC	RAV
Murray Shire Council	NSW	RAL
Murrindindi Shire Council	VIC	RAV
Murrumbidgee Shire Council	NSW	RAM
Murweh Shire Council	QLD	RTL
Muswellbrook Shire Council	NSW	RAV
Nambucca Shire Council	NSW	RAV
Narrabri Shire Council	NSW	RAV
Narrandera Shire Council	NSW	RAL
Narromine Shire Council	NSW	RAL
Newcastle City Council	NSW	URV
Nillumbik Shire Council	VIC	UFM
Noosa Shire Council	QLD	URM
North Sydney Council	NSW	UDM
Northern Grampians Shire Council	VIC	RAV
Northern Midlands Council	TAS	RAV
Oberon Council	NSW	RAL
Orange City Council	NSW	URM
Palerang Council	NSW	RAV
Parkes Shire Council	NSW	RAV
Parramatta City Council	NSW	UDV
Penrith City Council	NSW	UFV
Pittwater Council	NSW	UDM
Port Augusta City Council	SA	URS
Port Macquarie-Hastings Council	NSW	URL
Port Phillip City Council	VIC	UDL
Port Pirie Regional Council	SA	RAV
Port Stephens Council	NSW	URM
Pyrenees Shire Council	VIC	RAL
Queanbeyan City Council	NSW	URM
Quilpie Shire Council	QLD	RTM
Randwick City Council	NSW	UDV
Redland City Council	QLD	UFV

Council	State	ACLG
Richmond Valley Council	NSW	URS
Rockdale City Council	NSW	UDL
Rockhampton Regional Council	QLD	URL
Ryde City Council	NSW	UDL
Scenic Rim Regional Council	QLD	URM
Shellharbour City Council	NSW	URM
Shire of Ashburton	WA	RTL
Shire of Augusta-Margaret River	WA	RAL
Shire of Beverley	WA	RAS
Shire of Boddington	WA	RAS
Shire of Bridgetown-Greenbushes	WA	RAM
Shire of Broome	WA	URS
Shire of Broomehill - Tambellup	WA	RAS
Shire of Bruce Rock	WA	RAS
Shire of Busselton	WA	URS
Shire of Cocos (Keeling) Islands	WA	
Shire of Collie	WA	RAL
Shire of Coolgardie	WA	URS
Shire of Corrigin	WA	RAS
Shire of Cranbrook	WA	RAS
Shire of Cuballing	WA	RAS
Shire of Cue	WA	RTX
Shire of Dalwallinu	WA	RAS
Shire of Dardanup	WA	RSG
Shire of Denmark	WA	RAL
Shire of Dowerin	WA	RAS
Shire of Esperance	WA	RAV
Shire of Exmouth	WA	RTM
Shire of Gingin	WA	RAM
Shire of Gnowangerup	WA	RAS
Shire of Goomalling	WA	RAS
Shire of Harvey	WA	RSG
Shire of Irwin	WA	RAM
Shire of Kellerberrin	WA	RAS
Shire of Kondinin	WA	RAS
Shire of Kulin	WA	RAS
Shire of Laverton	WA	RTS
Shire of Manjimup	WA	RAL
Shire of Mount Magnet	WA	RTM
Shire of Mt Marshall	WA	RAS
Shire of Murchison	WA	RTX
Shire of Murray	WA	RSG
Shire of Nannup	WA	RAS
Shire of Northam	WA	RAM
Shire of Peppermint Grove	WA	UDS
Shire of Plantagenet	WA	RAM
Shire of Ravensthorpe	WA	RAM
Shire of Roebourne	WA	URS

Council	State	ACLG
Shire of Sandstone	WA	RTX
Shire of Serpentine Jarrahdale	WA	RSG
Shire of Shark Bay	WA	RTS
Shire of Three Springs	WA	RAS
Shire of Toodyay	WA	RAM
Shire of Wagin	WA	RAS
Shire of Wyalkatchem	WA	RAS
Shire of Wyndham-East Kimberley	WA	RTL
Shoalhaven City Council	NSW	URL
Singleton Council	NSW	URS
Snowy River Shire Council	NSW	RAL
Somerset Regional Council	QLD	UFS
South Gippsland Shire Council	VIC	URS
Southern Grampians Shire Council	VIC	RAV
Southern Mallee District Council	SA	RAM
Stonnington City Council	VIC	UDL
Strathbogie Shire Council	VIC	RAL
Strathfield Municipal Council	NSW	UDM
Sunshine Coast Regional Council	QLD	URV
Surf Coast Shire Council	VIC	UFS
Sutherland Shire Council	NSW	UDV
Swan Hill Rural City Council	VIC	URS
Sydney City Council	NSW	UCC
Tablelands Regional Council	QLD	URS
Tamworth City Council	NSW	URM
Tasman Council	TAS	RAM
Tatiara District Council	SA	RAL
Temora Shire Council	NSW	RAL
Tenterfield Shire Council	NSW	RAL
The Barossa Council	SA	UFS
The Flinders Ranges Council	SA	RAS
The Hills Shire Council	NSW	UFV
The Rural City of Murray Bridge	SA	RAV
Toowoomba Regional Council	QLD	URV
Town of Bassendean	WA	UDS
Town of Claremont	WA	UDS
Town of Cottesloe	WA	UDS
Town of East Fremantle	WA	UDS
Town of Gawler	SA	UFS
Town of Port Hedland	WA	URS
Town of Victoria Park	WA	UDM
Town of Vincent	WA	UDM
Townsville City Council	QLD	URV
Towong Shire Council	VIC	RAL

Council	State	ACLG
Tumbarumba Shire Council	NSW	RAM
Tumut Shire Council	NSW	RAV
Tweed Shire Council	NSW	URL
Upper Hunter Shire Council	NSW	RAV
Upper Lachlan Shire Council	NSW	RAL
Uralla Shire Council	NSW	RAL
Wagait Shire Council	NT	UFS
Wagga Wagga City Council	NSW	URM
Wakefield Regional Council	SA	RAL
Wakool Shire Council	NSW	RAM
Walcha Council	NSW	RAM
Walgett Shire Council	NSW	RAL
Wangaratta Rural City Council	VIC	URS
Waratah - Wynyard Council	TAS	RAV
Warringah Council	NSW	UDV
Warrnambool City Council	VIC	URM
Waverley Council	NSW	UDM
Weddin Shire Council	NSW	RAM
Wellington Council	NSW	URM
Wellington Shire Council	VIC	URM
Wentworth Shire Council	NSW	RAL
West Wimmera Shire Council	VIC	RAM
Western Downs Regional Council	QLD	URM
Whitehorse City Council	VIC	UDV
Whitsunday Regional Council	QLD	URM
Whittlesea City Council	VIC	UFV
Willoughby City Council	NSW	UDM
Wingecarribee Shire Council	NSW	URM
Wodonga City Council	VIC	URM
Wollongong City Council	NSW	URV
Woollahra Municipal Council	NSW	UDM
Wudinna District Council	SA	RAS
Wyndham City Council	VIC	UFV
Wyong Shire Council	NSW	UFV
Yarra City Council	VIC	UDL
Yarra Ranges Shire Council	VIC	UFV
Yarriambiack Shire Council	VIC	RAL
Yass Valley Council	NSW	RAV
Yorke Peninsula Council	SA	RAV

2.8 GLOSSARY

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset Management Plan

Each council must prepare an Asset Management Strategy and Asset Management Plan/s to support the Community Strategic Plan and Delivery Program.

The Asset Management Strategy and Plan/s must be for a minimum timeframe of 10 years.

Asset Management Strategy

The Asset Management Strategy must include a council endorsed Asset Management Policy. The Asset Management Strategy must identify assets that are critical to the council's operations and outline risk management strategies for these assets. The Asset Management Strategy must include specific actions required to improve council's asset management capability and projected resource requirements and timeframes.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12). Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, e.g. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding specifically for capital expenditure.

Capital grants

Monies received that are directly associated with a specific capital expenditure.

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, e.g. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, e.g. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Long Term Financial Plan

- The long term financial plan (LTFP) provides a 10 year forward projection of financial resources and includes:
- Planning assumptions used to develop the Plan;
- Sensitivity analysis – highlights factors/assumptions most likely to affect the Plan;
- Financial modelling for different scenarios e.g. planned/optimistic/conservative; and
- Methods of monitoring financial performance.

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (e.g. 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality⁸

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or nondisclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, e.g. power, fuel, staff, plant equipment, on-costs and overheads.

Planned Maintenance

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that are still available for use in providing services (DRC/DA).

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

(a) the period over which an asset is expected to be available for use by an entity; or

(b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

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NATIONAL

State of the Assets

2014 NOVEMBER 2014

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FOR THE AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION

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