

# NATIONAL *State of the Assets*

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

2013

NOVEMBER 2013



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A REPORT PREPARED BY

### Jeff Roorda and Associates

November 2013

Jeff Roorda and Associates (JRA) was engaged on the instructions of the Australian Local Government Association ("ALGA") to prepare a National State of the Assets report for 2013.

The results of JRA's work, including the assumptions and qualifications made in preparing the report, are set out in this report dated October 2013 ("report"). You should read the report in its entirety including the applicable scope of the 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.

The report has been prepared for the ALGA's use only.

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ALGA gratefully acknowledges the Australian Centre of Excellence for Local Government's (ACELG) funding contribution to assist with undertaking the important work summarised in the report.

# 1 Executive Summary

## 1.1 INTRODUCTION

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 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.

The OECD reported in 2006 that Australia had 810,000 KMs of network road lengths, with 24% of this considered to be rural roads. At that time, councils reported approximately 623,000 KMs of roads under management, and are currently reporting some 670,000 KMs of roads under management.

This report represents the outcome from the ALGA examination of the current status of local government transport assets. For the purposes of this work, road assets have been categorised as including sealed roads, unsealed roads and bridges (concrete and timber).

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

The development of asset management plans in councils is a significant milestone. The process needs to ensure, however, that the risks and community consequences of affordable service levels are identified and form part of the decision-making processes of councils.

In many councils, asset management plans are seen to be technical rather than corporate strategic documents. This ignores the fact that evidence of the deterioration in quality or alteration of the asset's functionality or capacity objectives is needed to support options and advice provided to Mayors and Councillors.

ALGA will consider options for regular reporting on the national state of transport assets being managed by councils across Australia. The 2012 report represented a pilot of the methodology for data collection, analysis and reporting. This 2013 report represents the outcome from data provided by 344 councils with \$ 98.3 BN in transport assets under management.

Provision of data for the report by councils was optional. The high level of response to the 2013 report is greatly appreciated by ALGA, and the data provides an excellent basis for an examination of local government transport assets and associated funding issues.

## 1.2 THE REPORT

This National State of the Assets report builds on the 2010 report and seeks to understand the current state of infrastructure for all Australian councils.

The current state of the road assets further underpins the work undertaken by the ALGA in 2010 to identify mechanisms to improve the situation at the time. Asset management planning processes by councils have a key role in supporting Mayors and Councillors in the trade-off of priorities as an important aspect of their stewardship role.

The report has a specific focus on roads and bridges but the challenge for the sector is to have asset management seen as a corporate strategic activity and not just be focused on road and bridges. It is not possible to implement asset management planning effectively unless the process covers all assets, and corporate priorities and standards are set.

The National State of the Assets report 2013:

- Summarises the outcomes of the data provided by 344 local governments from across Australia;
- Assesses the current position of councils in relation to implementation of Asset Management Plans (AMPs) and Long Term Financial Plans (LTFPs);
- Provides an assessment of the current stock of transport assets in terms of condition, function and quality, with associated confidence levels; and
- Provides additional data perspectives based on rural and urban classifications and individual State or Territory data.

This 2013 report is the first time ALGA has sought data from all Australian local governments. A simple web-based tool was developed with individual access provided to each council.

## 1.3 FINDINGS

### ***The State of the Assets***

344 councils from across Australia contributed data to the 2013 report. These included 183 urban and 161 rural councils. The 344 councils are managing a total of \$98.3 billion in infrastructure for the four transport asset classes included in this report, with local government sealed roads representing \$77.1 billion of this value.

The data collected from 344 local governments also indicated the existence of asset management practices that provide high levels of confidence on the quality of the road and bridges infrastructure. Councils are generally aware of the condition of the physical infrastructure and whether that condition allows the asset to meet the intended service level.

Councils are indicating that the vast majority of sealed roads are in good condition, are functionally fit for purpose and meet capacity expectations. Nevertheless, the current state of sealed roads still presents the greatest challenge to councils, with over \$8.3 billion in value (10.7%) being regarded as poor or very poor in respect of Quality. Total sealed road values for all Australian councils approximates \$122 BN.

Councils are indicating that the vast majority of unsealed roads are in good condition, are functionally fit for purpose and meet capacity expectations.

Councils are indicating that the majority of bridges are in good condition, however there is a large proportion of timber bridges in poor or very poor condition.

New South Wales, Victoria and Western Australian councils consistently express a higher level of confidence in the data, while Queensland councils indicate a slightly lesser level, albeit that most councils expressed a lack of confidence associated with the functionality and capacity (as defined in section 3) of managed road infrastructure.

### ***Urban and Rural Councils***

Urban councils manage \$60 BN of the total sealed roads value of \$77.1 BN. Approximately 10% by value of urban sealed roads and 12% of rural sealed roads are considered to be in a poor or very poor condition.

\$6.9 BN of the \$10.2 BN in unsealed roads are managed by rural councils. 20% of the value of unsealed roads in urban areas is considered to be in poor or very poor condition compared to 18% of rural road values.

### ***Integrated Approaches to Planning***

The National State of the Assets Report 2013 has demonstrated that while councils are largely embracing long-term financial management planning, adoption of asset management planning has only just begun to accelerate.

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 practice. 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. This is discussed further in section 8.2.

Councils generally lack confidence in categorising the asset classes in terms of a matrix of evaluations comprising quality, functionality and capacity, with high degrees of confidence only being evident in respect of Condition/Quality considerations.

While 344 councils responded to the ALGA data collection process, it must also be acknowledged that some 200 councils did not respond, which may be an indication of a lack of available asset management data.

While asset management plans for all transport asset classes are in place in 57% of the councils, long term financial plans are in place in 86% of those councils.

Financial projections included in asset management plans are incorporated in the long-term financial plans in 67% of instances. This is an excellent result, which is somewhat devalued through the lack of progress in asset management planning.

Depreciation for all Australian councils, per the National Local Roads Data System (NLRDS), is approximately \$2.5 BN 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. This is discussed further in section 8.3.

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,
- 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.

Each of these perspectives contributes to the level of understanding of the factors associated with managing infrastructure in local government and also contribute to the development of financial management strategies for long term sustainability.

## ***A Revised Approach***

Infrastructure management and asset management planning should be regarded as core competencies for councils in Australia. There is an opportunity for key stakeholders to leverage the investments being made in workforce planning and asset management planning for greater benefit.

There is a need to more tightly associate asset management planning activity as part of workforce planning and capacity building. The scale of infrastructure being managed by council staff necessitates a recognition of certain minimum standards of skills and competencies and improvements in recruitment and retention.

Long-term capacity building in the area of asset management in conjunction with the broader emphasis on workforce planning is needed. Embedding asset management planning within a longer term focus on workforce planning, retention and staff development would provide immediate and sustained benefits to the sector.

In common with the acknowledged themes of sustainability, there is a need to emphasise:

1. A balanced funding approach to infrastructure renewal, with consequential impacts on service levels defined and articulated to the community,
2. The value and ongoing renewal associated with a skilled and experienced workforce in the areas of long term asset management planning, long term financial planning and community engagement,
3. The ongoing financial viability of the local government sector.

This is discussed further in section 8.6.

## 1.4 RECOMMENDATIONS

Local governments from across Australia are indicating that the transport network being managed is largely fit for purpose (e.g. traffic volumes) and in good condition. As noted in Section 6.15, Councils are also indicating however that some \$ 8.3 billion in sealed roads are in poor or very poor condition, together with a further \$1.9 billion in unsealed roads and \$1.4 billion in concrete and timber bridges.

The recommendations acknowledge the vital role that key stakeholders play in supporting local government efforts to become and remain financially sustainable.

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 Australian Local Government Association should:*

- Consider the establishment of an agreed national timetable for the achievement of properly formulated and complete asset management plans and 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 2013-14 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 for 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.

## 2 Approach

ALGA commissioned Jeff Roorda and Associates (JRA) to develop a National State of the Assets Report 2013 to build on the work undertaken by JRA in 2010 and 2012 that looked at the gap in funding for local roads. This report provides a clearer picture about the state of local road assets in terms of quality, functionality and capacity. The focus for the review is sealed local roads, unsealed local roads, concrete bridges and timber bridges.

555 Australian local governments were invited to participate.

A simple web-based survey tool was developed and provided to the participating councils on 6 June 2013 with all responses due by 19 July 2013, with extensions of up to four weeks granted. The assistance of the councils in this project is greatly appreciated.

The asset management plan has two levels of reporting: community service level (good and very good/fair/poor and very poor) and technical. For the purposes of this work, the state of the local road assets has been reported at the community service level.

Councils also noted the confidence level attaching to the data being provided. This is a very useful perspective on the data being provided and the extent to which councils collect or assess the data.

Financial data was captured in respect of the current replacement cost as currently known by each participating council for each of the four asset classes.

Councils also contributed data in respect of the current status of development of asset management plans and long term financial plans.

All data has been subject to a reasonableness review but has not been subject to audit. Where clarification was required, councils were approached directly and alterations made by the councils concerned. Non-material errors in allocations were corrected by the authors.

Data has been collated, analysed and presented in respect of:

- 344 councils, categorised by State and in terms of urban or rural classification
- Sealed roads, unsealed roads, concrete bridges and timber bridges
- Quality of the infrastructure in terms of good or very good /fair/poor or very poor
- Confidence levels expressed as high, medium or low
- Gross current replacement cost for each infrastructure class
- Asset management plan development
- Long term financial plan development.

Councils have been classified as either rural or urban using the Australian Classification of Local Governments (ACLG) unless adjusted by the respective Local Government Association.

The analysis and interpretations and views expressed are those of the authors.

## 3 Definitions

The report utilises three measures:

1. Physical condition – the condition of the physical infrastructure that allows it to meet the intended service level.
2. Function – the ability of the physical infrastructure to meet program delivery needs
3. 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 the demands of the user in that the path from Point A to Point B would be the most direct and efficient route. Traffic congestion would indicate if the capacity/utilisation of the road was able to meet the user's service needs.<sup>1</sup>

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

- Very good and good – grading 1 and 2
- Fair – grading 3
- Poor and 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:

- High confidence – council has supporting data or information to support the assessment.
- Medium confidence – council has some supporting data or information and the assessment is largely based on professional judgement.
- Low confidence – council has little or no supporting data or information and the assessment is based on professional judgement only.

### **Condition data**

IPWEA's *NAMS.PLUS2 Asset Management* recommends condition data be collected and held or be capable of conversion into a 1 – 5 scale as shown in Table 3.1.

TABLE 3.1 NAMS.PLUS2 National Standard Condition Grading Scores

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

Source: Based on IPWEA, 2011, IIMM, Table 2.5.2, Sec 2.5.4, p 2/79.

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

1 Based on Cloake & Sui, 2002, p 8.

## Function data

Function is the ability of the physical infrastructure to meet program delivery needs. Table 3.2 shows the five function gradings and descriptions.

TABLE 3.2 NAMS.PLUS2 Function Grading Scores

Function Grading	Description of Function of the Asset
1	<b>Very Good:</b> meets program/service delivery needs in a fully efficient and effective manner
2	<b>Good:</b> meets program/service delivery needs in acceptable manner
3	<b>Fair:</b> meets most program/service delivery needs and some inefficiencies and ineffectiveness present
4	<b>Poor:</b> limited ability to meet program/service delivery needs
5	<b>Very Poor:</b> 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 3.3.

TABLE 3.3 NAMS.PLUS2 Capacity/Utilisation Grading Scores

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

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

## 4 The National Self-Assessment Methodology – The State of the Assets

The methodology used in the development of this report in 2012 was shown to be suitable for application to all Australian local governments in 2013, with some minor amendments being required. The methodology is proposed for use in subsequent years with the objective of capturing data on transport infrastructure in terms of Inventory, Quality/Condition, Function/Safety and Capacity to Meet Demand based on asset management plans.

In all instances, councils are also asked to indicate the current level of confidence in the data being provided. This has been shown to be an important aspect of the data reporting process.

The data collated, analysed and presented is in respect of:

- All Australian councils, categorised by State and rural/urban classifications.
- Sealed roads, unsealed roads, concrete bridges and timber bridges.
- Quality of the infrastructure in terms of very good or good/fair/poor or very poor.
- Confidence levels expressed as high, medium or low in respect of each of Quality, Function and Capacity.
- Current replacement cost for each infrastructure class and a proportional allocation of gross current replacement cost into good or very good/fair/poor or very poor.
- Status of asset management plan development.
- Status of long term financial plan development.
- 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, the 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 future years, comparative data will be available for direct comparison to each of the data elements of 2013. This would then allow an analysis of the movements in data over time.

Individual councils will also be able to monitor trends over time in the data provided.

ALGA will consider options for the State of the Assets reporting process to be conducted regularly using the established web based data collection tool.

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 data collected is vested in ALGA.

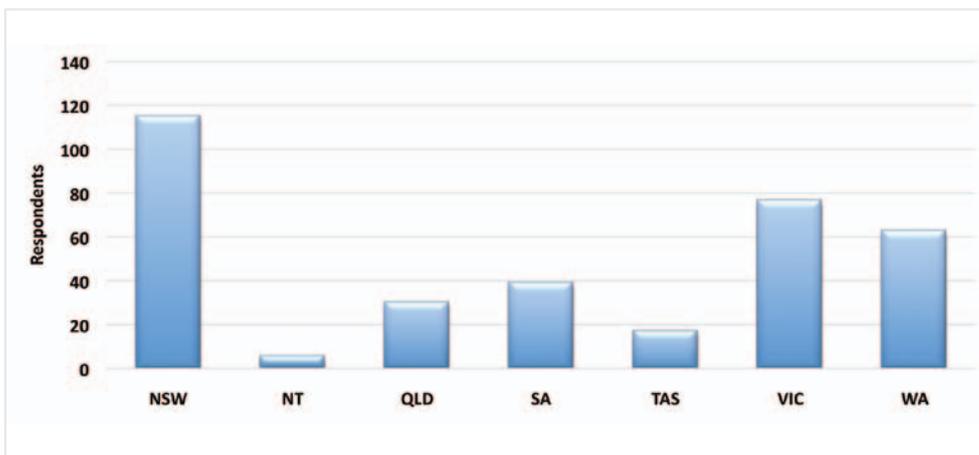
## 5 Background Data

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

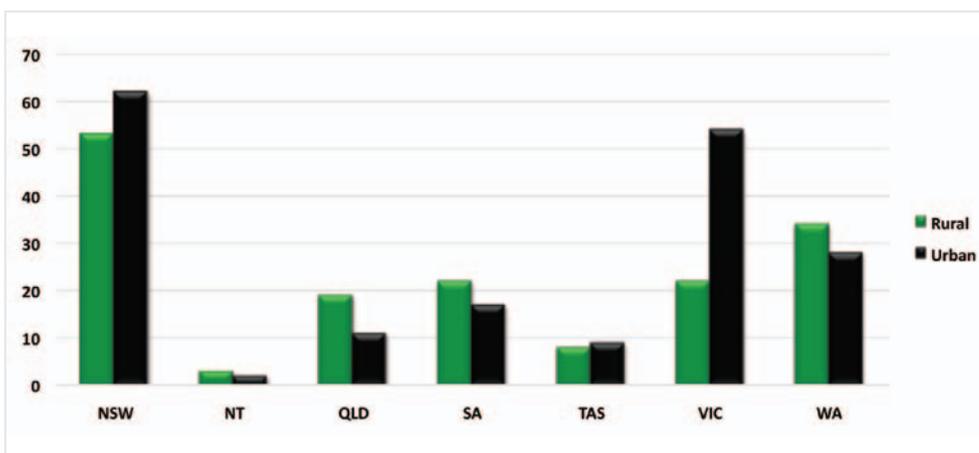
### 5.1 RESPONDENT DATA

344 councils from across Australia contributed data to the 2013 report. These included both 183 urban and 161 rural councils.

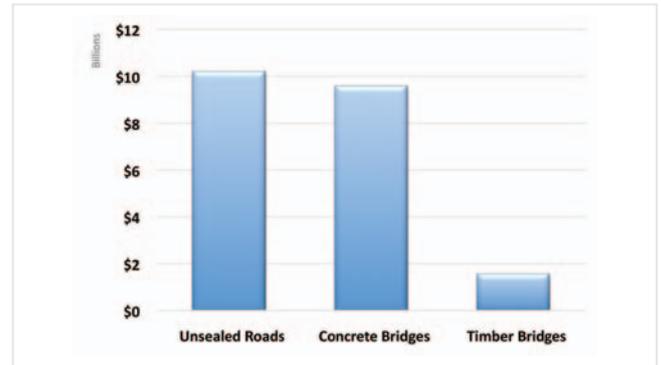
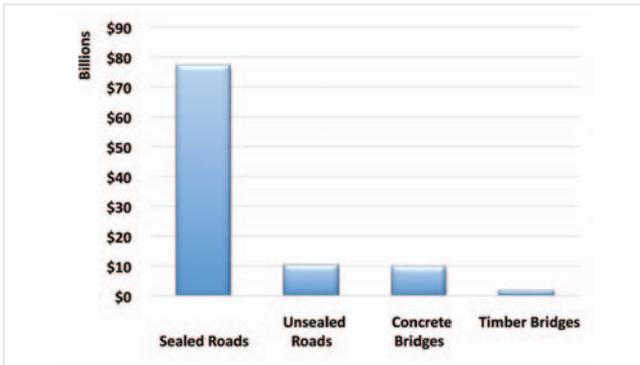
Respondent councils by State and Territory:



Respondent councils by type for each State and Territory:



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



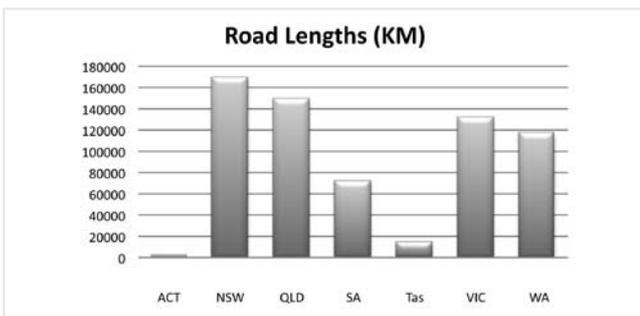
The 344 councils are managing a total of \$98.3 billion in infrastructure for the four transport asset classes included in this report, with local government sealed roads representing \$77.1 billion of this value.

## 5.2 AUSTRALIAN CONTEXT

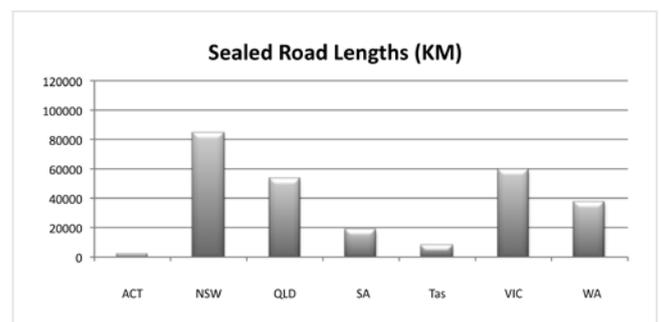
The National Local Roads Data System (NLRDS) also captures road and bridge data from Australian local governments. The NLRDS for 2011 indicates that:

- 667,290 KM of roads under management
  - 266, 614 KMs of sealed roads
  - 400,676 KMs of unsealed roads.
- 27,939 bridges under management
- Total road KMs under management has increased from 618,000 KMs in 2001 to 667,000 KMs in 2011, an increase of 8 per cent.

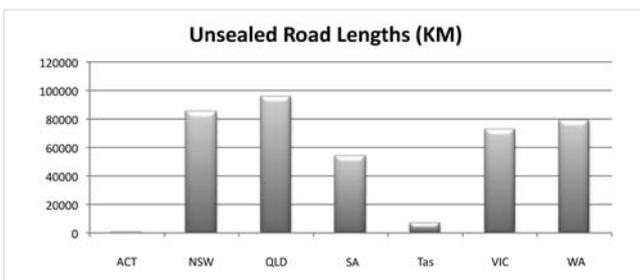
Roads under management, by State



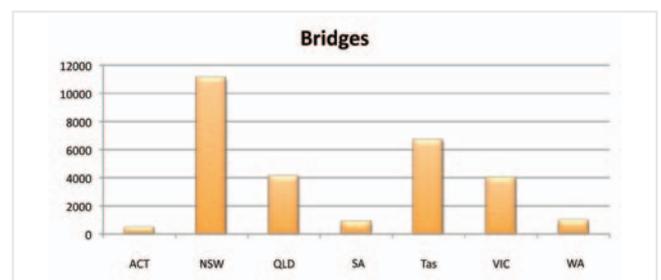
Distribution of Sealed Roads (lengths), by State



Distribution of Unsealed Roads (lengths), by State



Number of Bridges under management, by State



## 6 The State of Transport Infrastructure in Councils

### 6.1 ROAD AND BRIDGES

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.

A 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.

## 6.2 DATA

The 344 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						

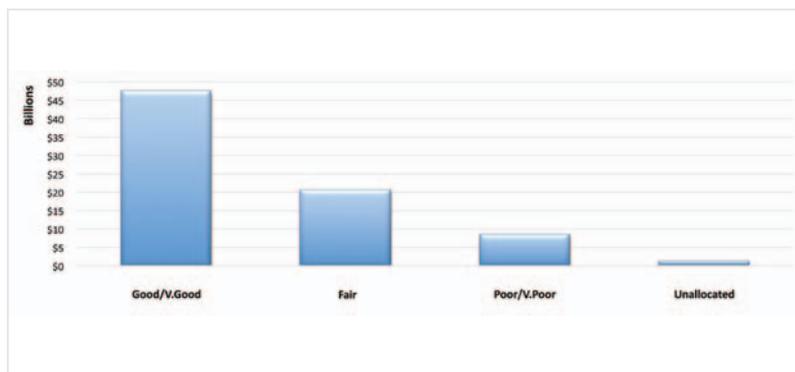
In each instance, councils indicated the proportion of assets and physical state against three indicators of physical state:

- Very good or good
- Fair
- Poor or Very Poor.

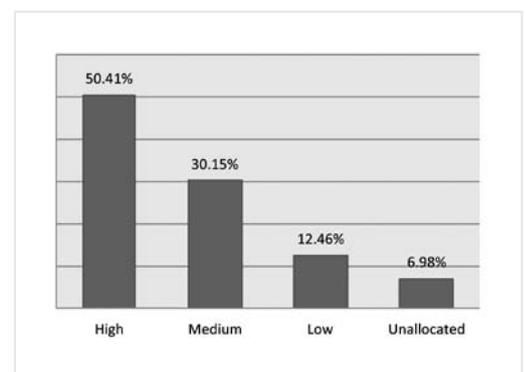
In some cases, councils were not able to allocate values with any degree of confidence and these have been valued as “unallocated”. Section 3 of the report identifies the definitions and scaling used by councils.

The remainder of this section of the report provides a short overview of the state of the physical infrastructure and the associated confidence levels in the data provided.

## 6.3 SEALED ROADS - QUALITY



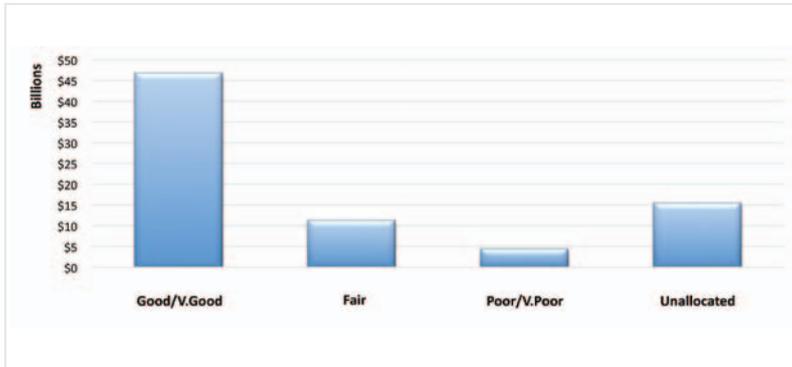
Data Confidence:



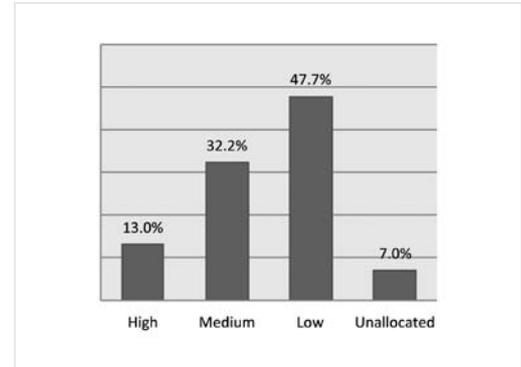
Councils are indicating that in respect of the quality of sealed roads:

- The vast majority of sealed roads are in good or very good condition and able to meet service expectations with a small proportion being in a poor or very poor condition;
- Councils have a very high degree of confidence in this data;
- Councils were largely able to categorise all assets in this category.

## 6.4 SEALED ROADS - FUNCTION



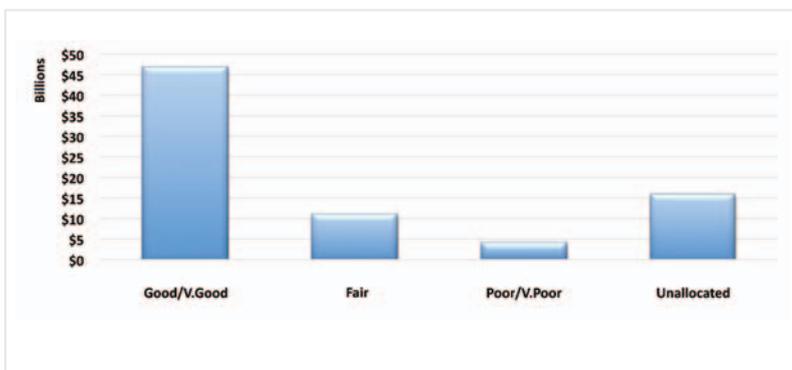
Data Confidence:



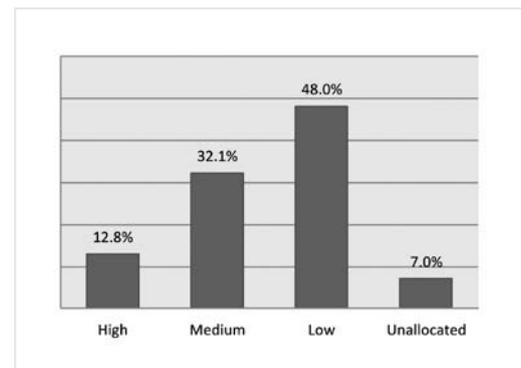
Councils are indicating that in respect of the functionality/fit for purpose of sealed roads:

- The vast majority of sealed roads are fit for purpose with a small proportion not providing the expected functionality;
- Councils do not have confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.5 SEALED ROADS - CAPACITY



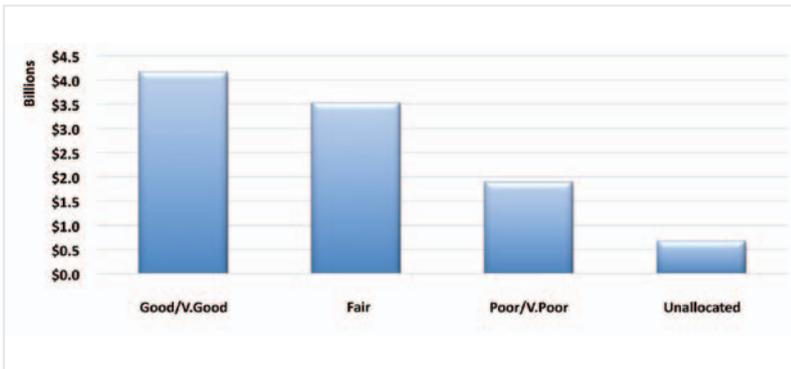
Data Confidence:



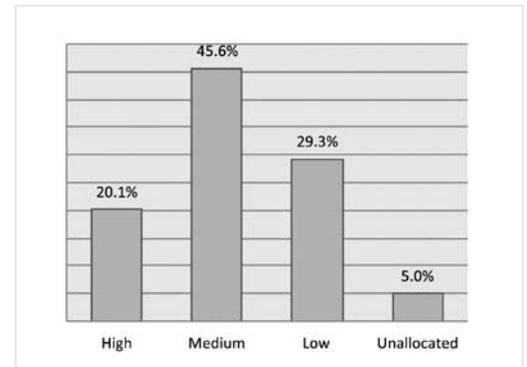
Councils are indicating that in respect of the capacity/utilisation against expectations of sealed roads:

- The vast majority of sealed roads are meeting capacity expectations with a small proportion not operating at the expected capacity;
- Councils do not have confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.6 UNSEALED ROADS - QUALITY



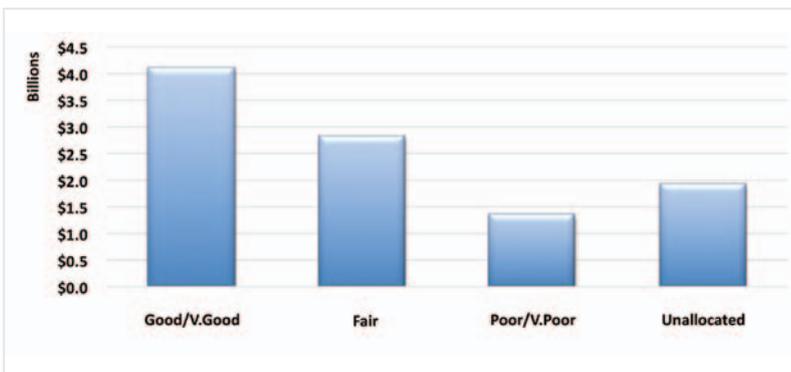
Data Confidence:



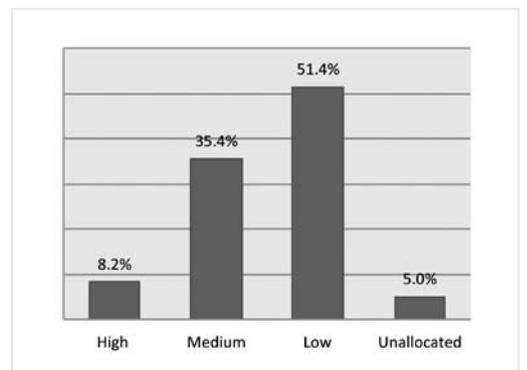
Councils are indicating that in respect of the quality of unsealed roads:

- The majority of the unsealed roads are in fair, good or very good condition and able to meet service expectations with a medium proportion being in a poor or very poor condition;
- Councils have a reasonable degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.7 UNSEALED ROADS - FUNCTION



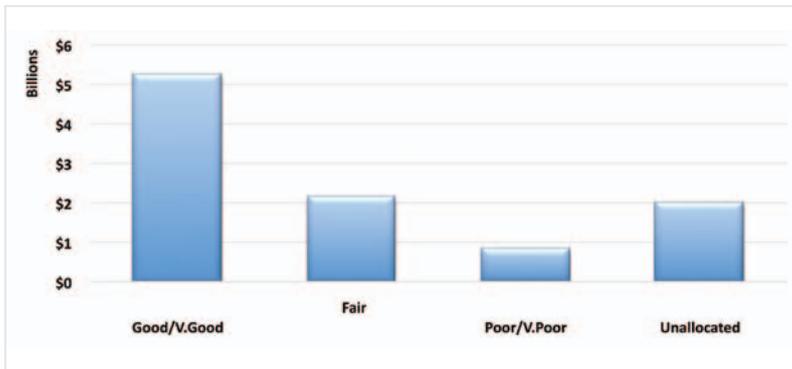
Data Confidence:



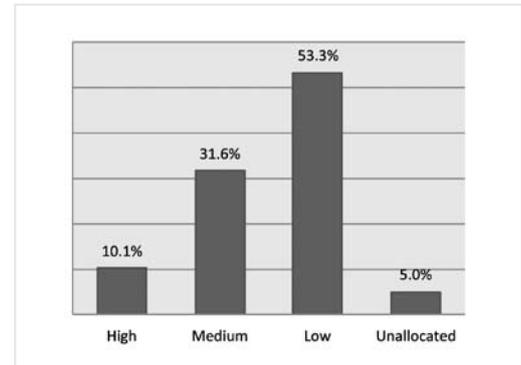
Councils are indicating that in respect of the functionality/fit for purpose of unsealed roads:

- Most of the unsealed roads are fit for purpose with a small proportion not providing the expected functionality;
- Councils have a low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.8 UNSEALED ROADS - CAPACITY



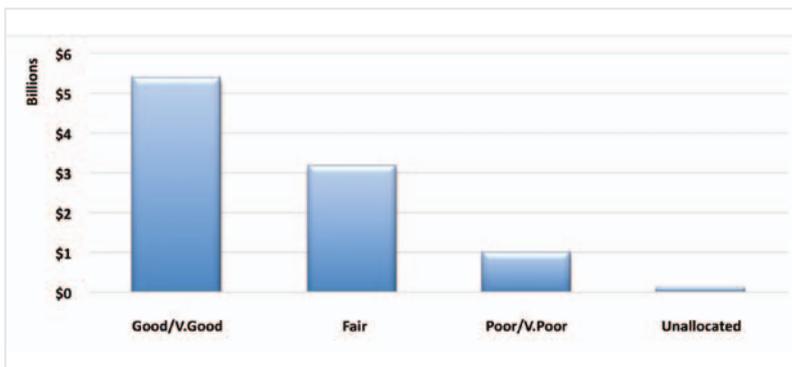
Data Confidence:



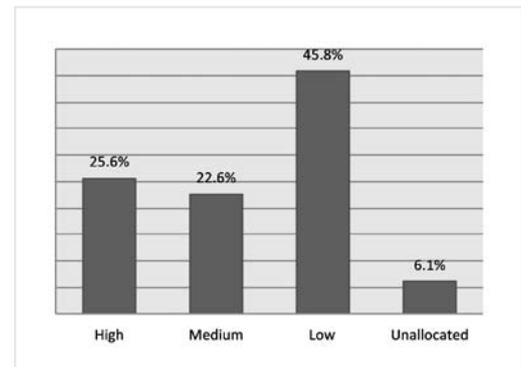
Councils are indicating that in respect of the capacity/utilisation against expectations of unsealed roads:

- The vast majority of the unsealed roads are meeting capacity expectations with a small proportion not operating at the expected capacity;
- Councils have a low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.9 CONCRETE BRIDGES - QUALITY



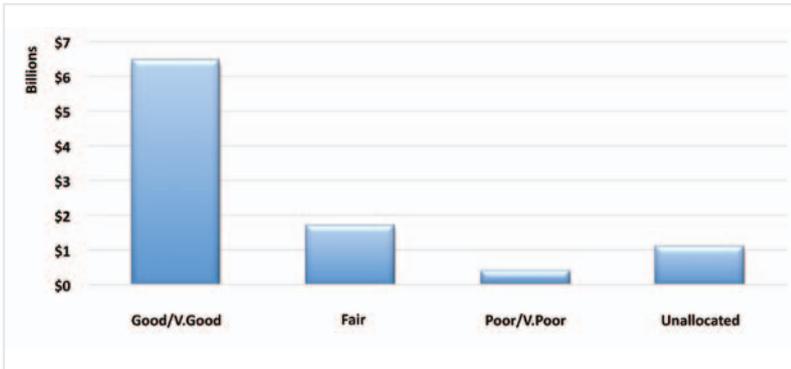
Data Confidence:



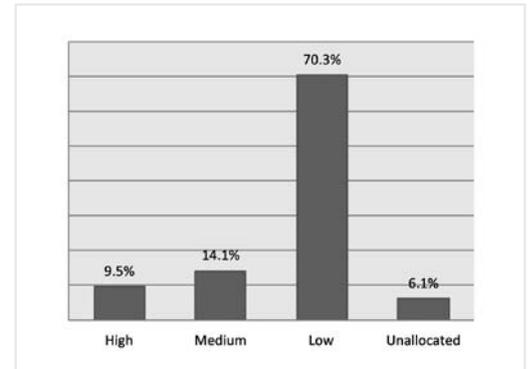
Councils are indicating that in respect of the quality of concrete bridges:

- The large proportion of the concrete bridges are in good or very good condition and able to meet service expectations with a small proportion being in a poor or very poor condition;
- Councils have a reasonable degree of confidence in this data;
- A small proportion of assets could not be categorised.

## 6.10 CONCRETE BRIDGES - FUNCTION



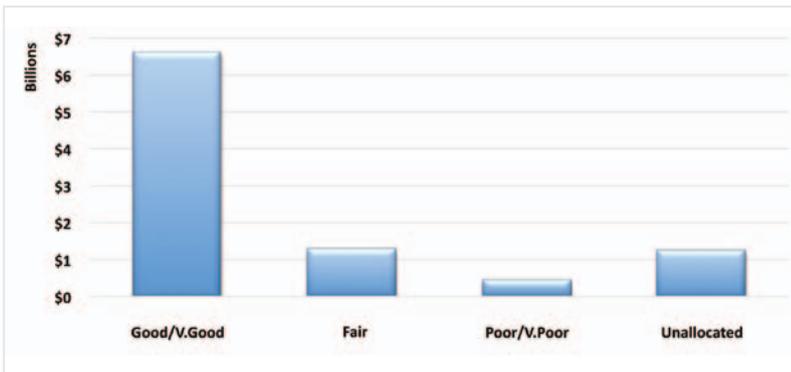
Data Confidence:



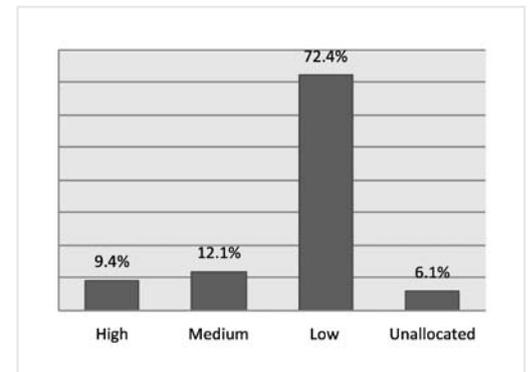
Councils are indicating that in respect of the functionality/fit for purpose of concrete bridges:

- The vast majority of the concrete bridges are fit for purpose with a small proportion not providing the expected functionality;
- Councils have a very low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.11 CONCRETE BRIDGES - CAPACITY



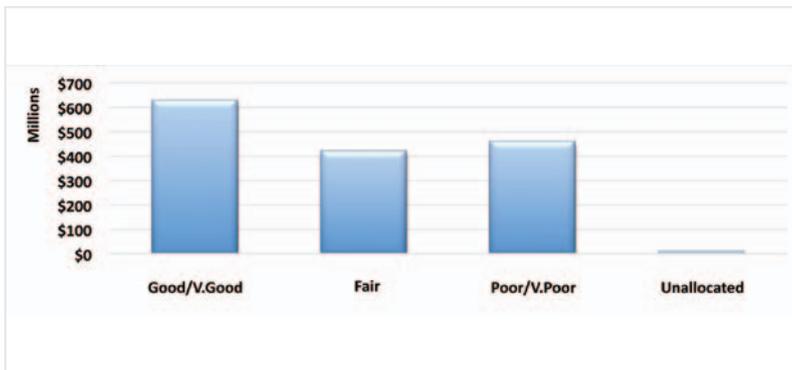
Data Confidence:



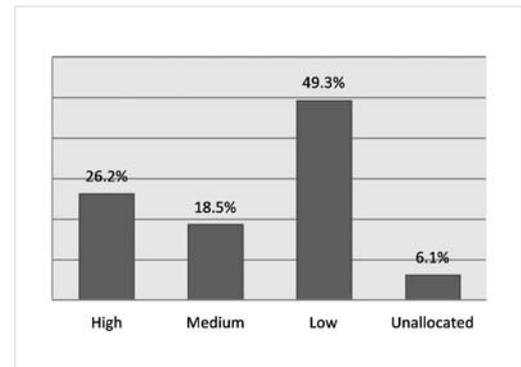
Councils are indicating that in respect of the capacity/utilisation against expectations of concrete bridges:

- The vast majority of the concrete bridges are meeting capacity expectations with a small proportion not operating at the expected capacity;
- Councils have a very low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.12 TIMBER BRIDGES - QUALITY



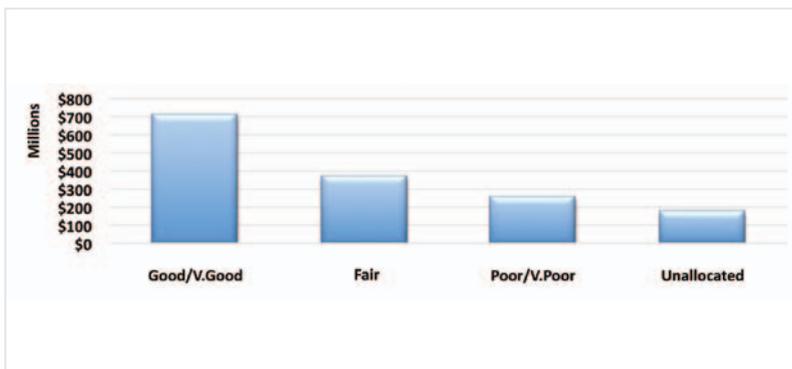
Data Confidence:



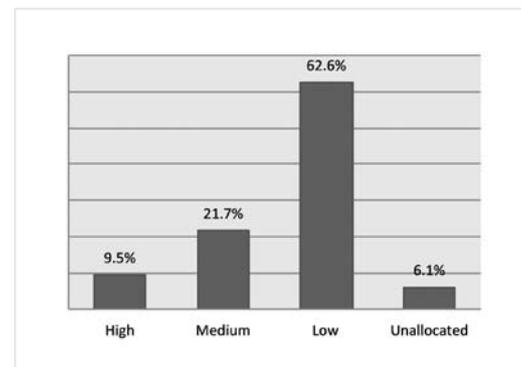
Councils are indicating that in respect of the quality of timber bridges:

- While the majority of timber bridges are in fair, good or very good condition and able to meet service expectations, a large proportion are considered to be in a poor or very poor condition;
- Councils have a reasonable degree of confidence in this data;
- Councils were largely able to categorise all assets in this category.

## 6.13 TIMBER BRIDGES - FUNCTION



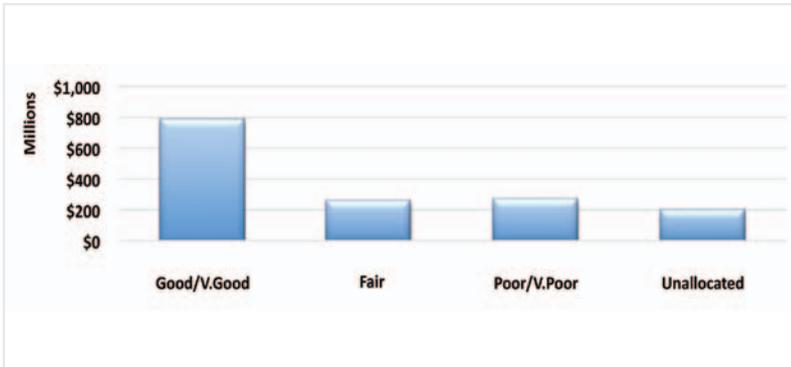
Data Confidence:



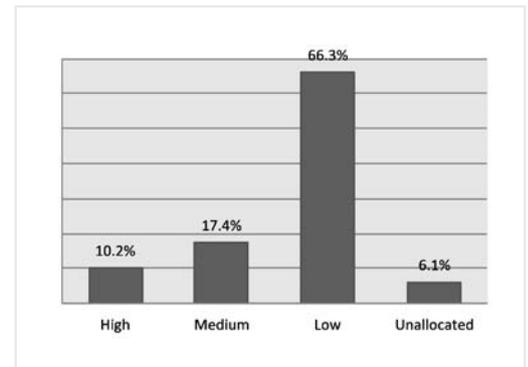
Councils are indicating that in respect of the functionality/fit for purpose of timber bridges:

- The majority of the timber bridges are fit for purpose with a reasonable proportion not providing the expected functionality;
- Councils have a very low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.14 TIMBER BRIDGES - CAPACITY



Data Confidence:



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

- The vast majority of the timber bridges are meeting capacity expectations with a reasonable proportion not operating at the expected capacity;
- Councils have a very low degree of confidence in this data;
- Councils were not able to categorise all assets in this category.

## 6.15 OVERALL

Sealed roads represent \$77.1 BN in value for the respondent councils and \$122 BN in value for all councils in Australia. Councils are indicating that the vast majority of sealed roads are in good condition, are functionally fit for purpose and meet capacity expectations. While respondent councils have a high level of confidence in the condition data, there is less confidence in the functionality and capacity data provided.

Unsealed roads represent \$10.2 BN in value for the respondent councils and \$22 BN in value for all councils in Australia. Councils are indicating that the vast majority of unsealed roads are in good condition, are functionally fit for purpose and meet capacity expectations. While respondent councils have a reasonable level of confidence in the condition data, there is low confidence in the functionality and capacity data provided.

Concrete bridges represent \$9.6 BN in value for the respondent councils while timber bridges represent \$1.5 BN in value. Councils are indicating that the majority of concrete and timber bridges are in good condition, however there is a large proportion of timber bridges in poor or very poor condition. Councils have a low degree of confidence in the functionality and capacity data provided.

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

- Sealed roads - \$77.1 billion under management, with the following being regarded as in a poor/very poor state:
  - By Quality - \$8.3 billion
  - By Functionality - \$4.3 billion
  - By Capacity - \$3.9 billion
- Unsealed roads - \$10.2 billion under management, with the following being regarded as in a poor /very poor state:
  - By Quality - \$1.9 billion
  - By Functionality - \$1.3 billion
  - By Capacity - \$0.8 billion
- Concrete bridges - \$9.6 billion under management, with the following being regarded as in a poor/very poor state:
  - By Quality - \$0.98 billion
  - By Functionality - \$0.37 billion
  - By Capacity - \$0.44 billion
- Timber Bridges - \$1.5 billion under management, with the following being regarded as in a poor/very poor state:
  - By Quality - \$0.46 billion
  - By Functionality - \$0.26 billion
  - By Capacity - \$0.26 billion.

## 7 Considerations of Road Infrastructure

This section of the report provides a direct comparison of the physical state characteristics for each asset class. It demonstrates the significant differences in confidence that exists between considerations of quality, function and capacity.

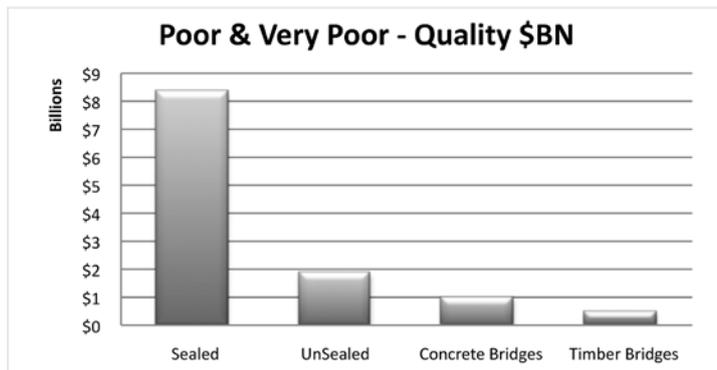
### 7.1 QUALITY

Quality has been expressed using the following scales.

Condition Grading	Description of Condition of the Asset
1	<b>Very Good:</b> only planned maintenance required
2	<b>Good:</b> minor maintenance required plus planned maintenance
3	<b>Fair:</b> significant maintenance required
4	<b>Poor:</b> significant renewal/rehabilitation required
5	<b>Very Poor:</b> 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 344 councils included in the data indicate that some \$8.3 BN in sealed roads are considered to be in poor or very poor condition, with \$1.9 BN in unsealed roads also considered poor or very poor.

\$0.46 BN out of a total replacement cost of \$1.5 BN for timber bridges are generally considered to be in poor or very poor condition, which represents some 30% 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.

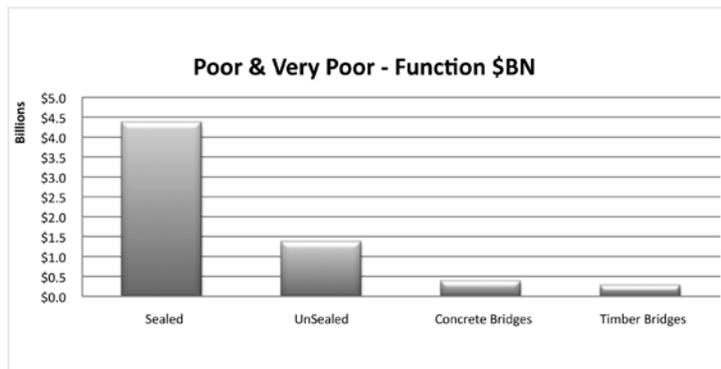
### 7.2 FUNCTION

Function has been expressed using the following scales.

Function Grading	Description of Function of the Asset
1	<b>Very Good:</b> meets program/service delivery needs in a fully efficient and effective manner
2	<b>Good:</b> meets program/service delivery needs in acceptable manner
3	<b>Fair:</b> meets most program/service delivery needs and some inefficiencies and ineffectiveness present
4	<b>Poor:</b> limited ability to meet program/service delivery needs
5	<b>Very Poor:</b> 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/Fit for Purpose associated with each asset class.



The 344 councils included in the data indicate that some \$4.3 BN in sealed roads are considered to be poor or very poor in respect of function, with some \$1.3 BN in unsealed roads also considered poor or very poor. \$0.26 BN out of a total replacement cost of \$1.5 BN for timber bridges are generally considered to provide poor or very poor functionality, which represents some 17% by value.

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

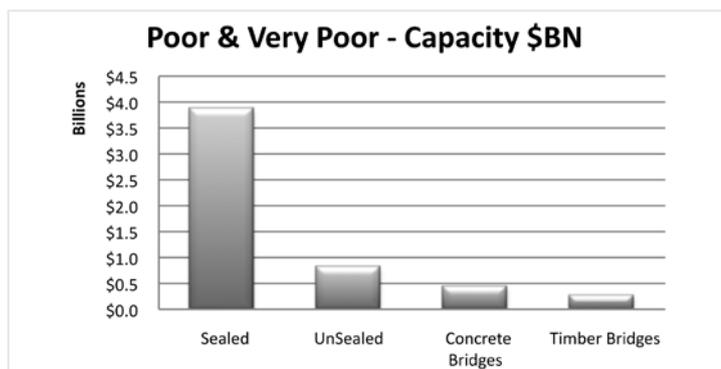
### 7.3 CAPACITY

Capacity/Utilisation has been expressed using the following scales.

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



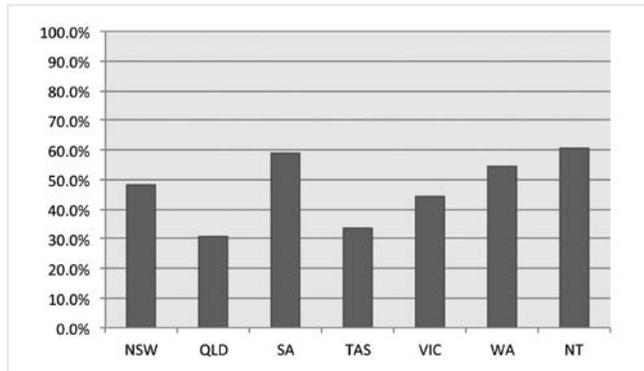
Some \$3.7 BN in sealed roads are considered to provide poor or very poor capacity.

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

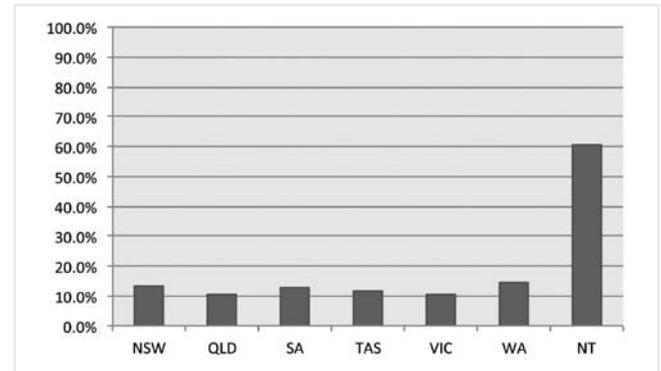
## 7.4 CONFIDENCE IN DATA

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 the specific State or Territory. Confidence levels associated with the various asset classes and categorisation has been provided in section 6 to this report.

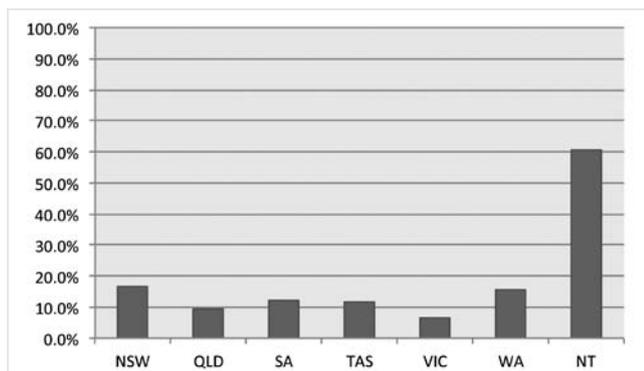
High Data Confidence - Quality, Condition:



High Data Confidence - Function:



High Data Confidence - Capacity:



New South Wales, Victorian and Western Australian councils are consistently expressing higher levels of confidence in the data provided, with Queensland councils indicating slightly less degrees of confidence.

## 7.5 OVERALL

Councils generally lack confidence in categorising the asset classes in terms of a matrix of physical state evaluations comprising quality, functionality and capacity with high degrees of confidence only being evident in respect of Condition/Quality considerations.

Councils consider that the transport related infrastructure is meeting capacity and utilisation expectations, but there is little confidence attached however to the data overall.

Councils also consider that the transport infrastructure is largely fit for purpose, with the exception being timber bridges where a large proportion is not considered to meet functional requirements.

All asset classes are considered to be currently demonstrating good levels of physical condition, with the exception again being timber bridges where a large proportion is considered to be in a poor or very poor condition.

## 8 Integrated Approaches to Planning

### 8.1 FINANCIAL SUSTAINABILITY AND FINANCIAL STRATEGIES

The emphasis on asset management planning in local government arises as a result of the reliance that councils have on infrastructure to deliver services and support communities, particularly through the road and bridges network but also through 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 understanding and managing the financial position of any council.

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

Currently, there are many councils that develop multiple financial scenarios and then choose the most advantageous and probable scenario for adoption. Generally, the scenarios do not clearly indicate the strategies to be employed to achieve the underlying movements in revenue, borrowings, renewal planning, workforce planning etc. The lack of properly formulated financial strategies means that many councils lack the direction to actually achieve the expected financial outcomes indicated by the financial plan.

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 plans' financial targets.

Evaluations based on the use of agreed ratios 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.

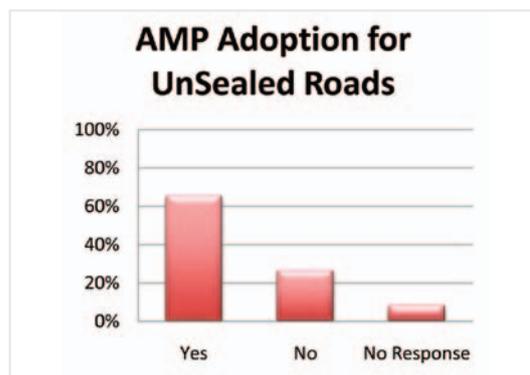
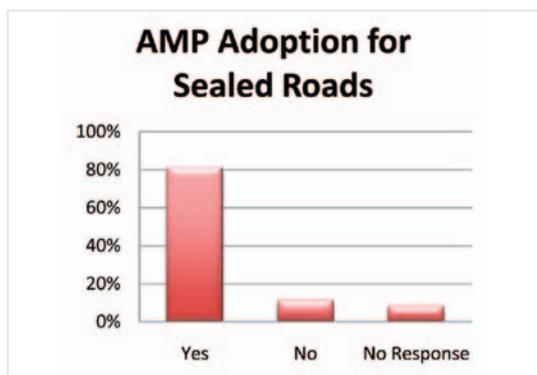
The expected outcome from the asset management planning and long term financial planning is financially sustainable councils.

## 8.2 ASSET MANAGEMENT STATUS

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.

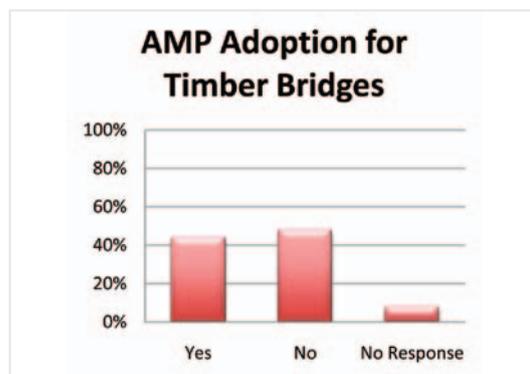
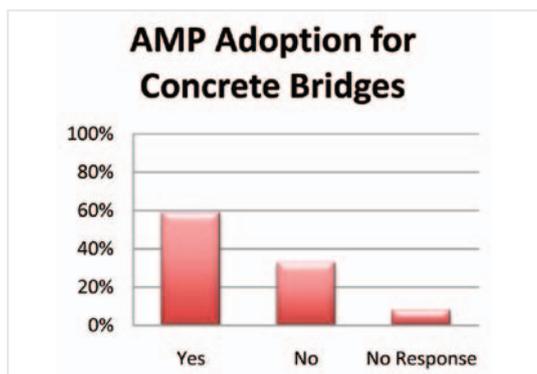
The current evidence is that councils are improving technical asset management practice. Key improvement areas include better engagement of the political/executive in understanding the trade off decisions between new assets, and incorporating existing assets and revenue policy in to the long term financial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

The 344 councils that contributed data to the report also indicated the status of progress in developing asset management plans (AMP) and long term financial plans (LTFP).



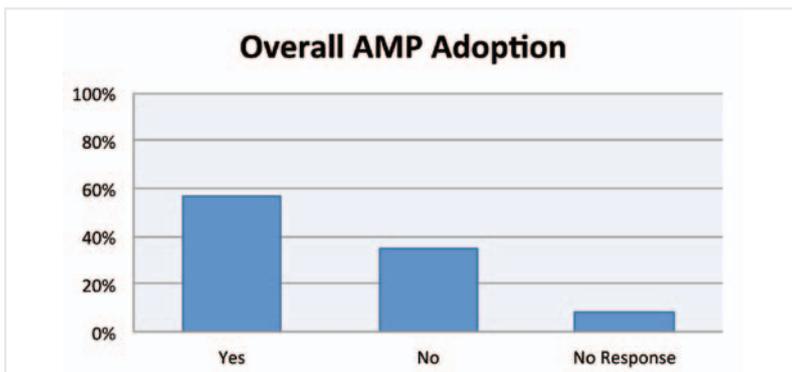
This is a very positive result, with AMPs in place for 80% of councils.

Asset management planning for unsealed roads has not received the same degree of attention as sealed roads, but is still a positive result.



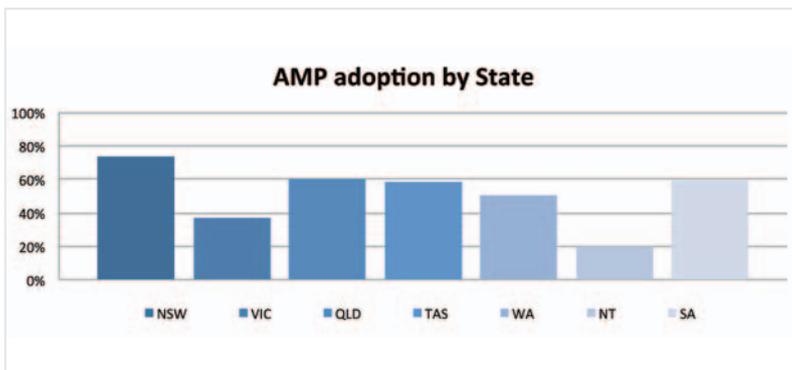
AMP adoption for concrete bridges is at a good level.

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. This may be a reflection on the relative value of timber bridges compared to other transport assets of councils.



Overall, AMP adoption is at a reasonable level.

While 344 councils responded to the ALGA data collection process, it must also be acknowledged that some 200 councils did not respond, which may be a strong indication of a lack of available asset management data.

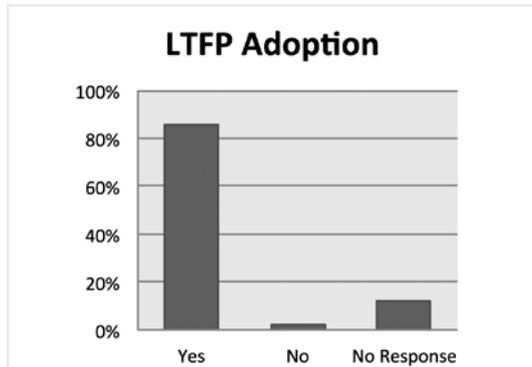


AMP adoption by individual States and Territories is relatively consistent at this time. The Northern Territory is an exception, with a less significant rate of adoption being achieved than in other areas of Australia.

The States and Territories need to continue to promote asset management planning.

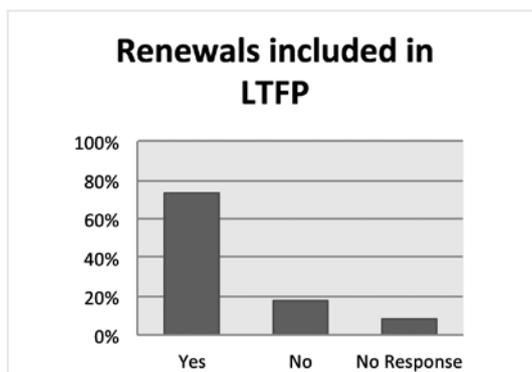
### 8.3 LTFP STATUS

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

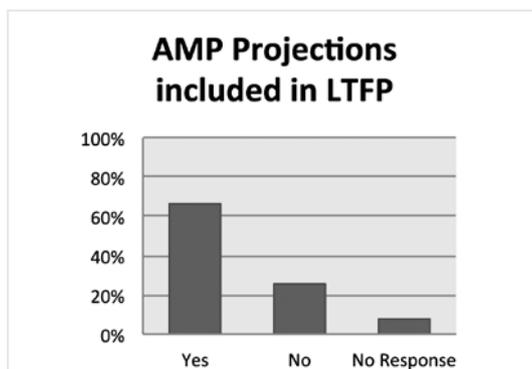


While asset management plans for all transport asset classes are in place in 57% of the councils, long term financial plans are in place in 86% of those councils.

This is an excellent result, which is somewhat devalued through the lack of progress in asset management planning. Depreciation for all Australian councils, per the NLRDS, is approximately \$2.5 BN 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 only considered in 74% of councils.



Financial projections included in asset management plans are incorporated in the long-term financial plans in 67% of instances.

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.

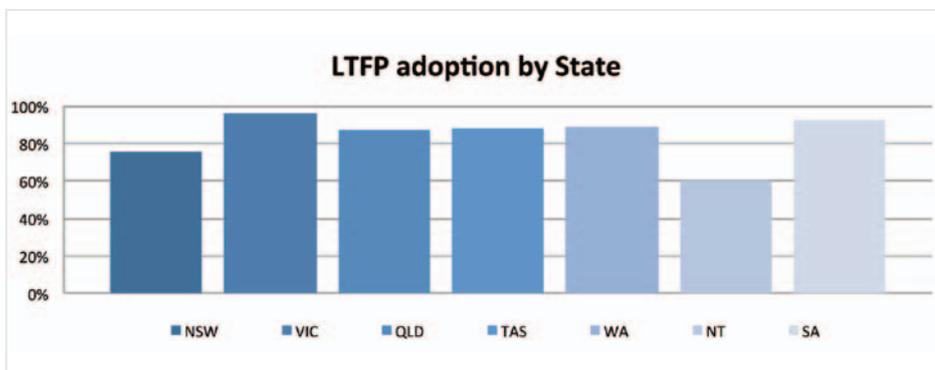
The asset management planning process must balance the renewal capital program to available funding. This requires an assessment of:

- Available funding in the financial forecasts
- The priority capital expenditure areas
- Service levels, and options for change
- 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
- Risks and consequences associated with the management of the assets and any funding shortfall.

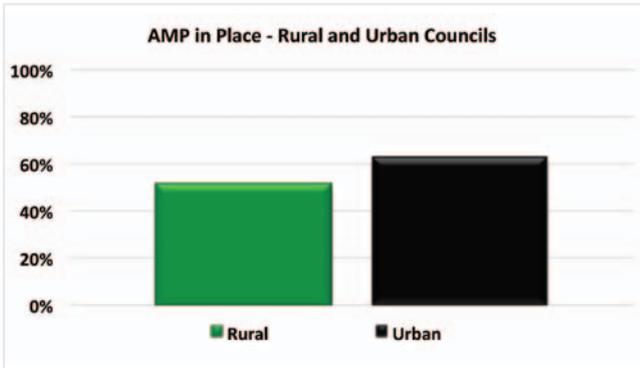
This integrated approach to planning will allow the LTFP and asset management plans to be developed on the basis of common data and assumptions and support the development of appropriate financial management strategies.



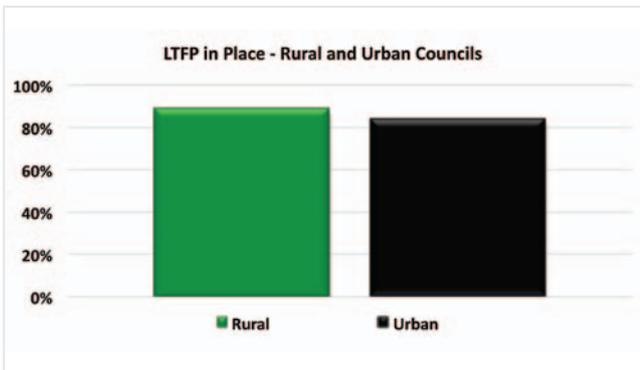
All States and Territories are indicating a very good level of LTFP development and adoption.

## 8.4 RURAL AND URBAN COUNCILS - PLANNING

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



The data indicates that 51% of rural councils had asset management plans in place compared to 62% of the urban councils.



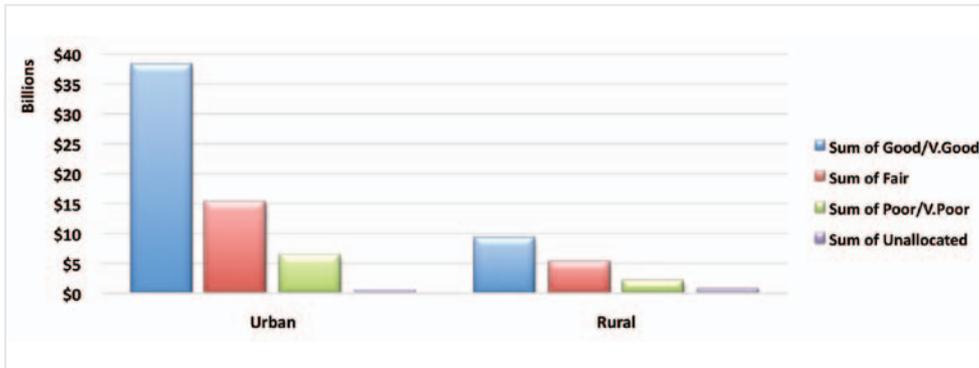
Conversely, 88% of the rural councils and 84% of the urban councils indicated that long-term financial plans were in place.

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 councils 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.

## 8.5 RURAL AND URBAN COUNCILS – INFRASTRUCTURE

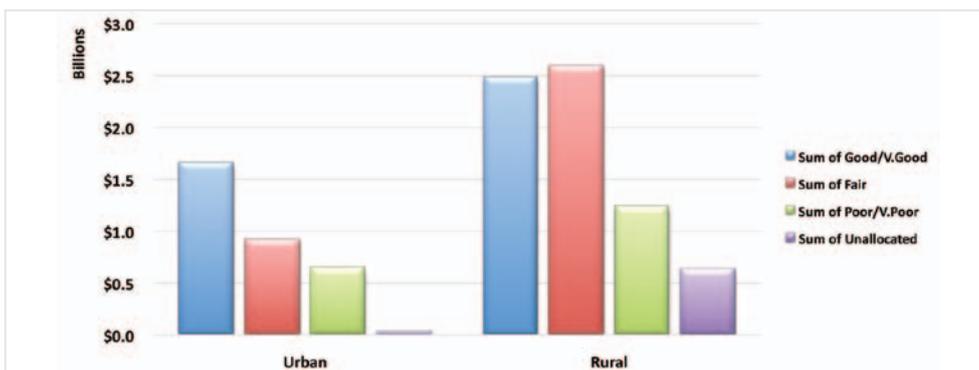
Councils have indicated the greatest level of confidence for data relating to the condition /quality of the transport infrastructure. This section provides condition /quality perspectives for rural and urban councils.

### Sealed Roads – Condition /Quality



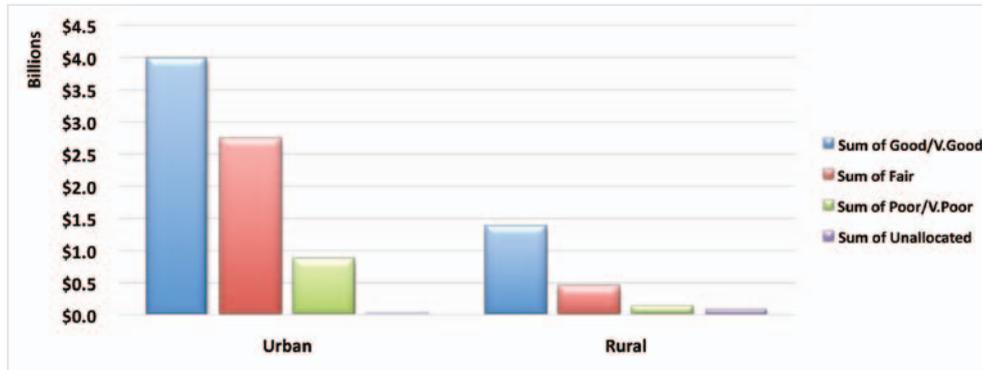
Urban councils manage \$60 BN of the total sealed roads value of \$77.1 BN. Approximately 10% by value of urban sealed roads and 12% of rural sealed roads are considered to be in a poor or very poor condition.

### Unsealed Roads – Condition /Quality



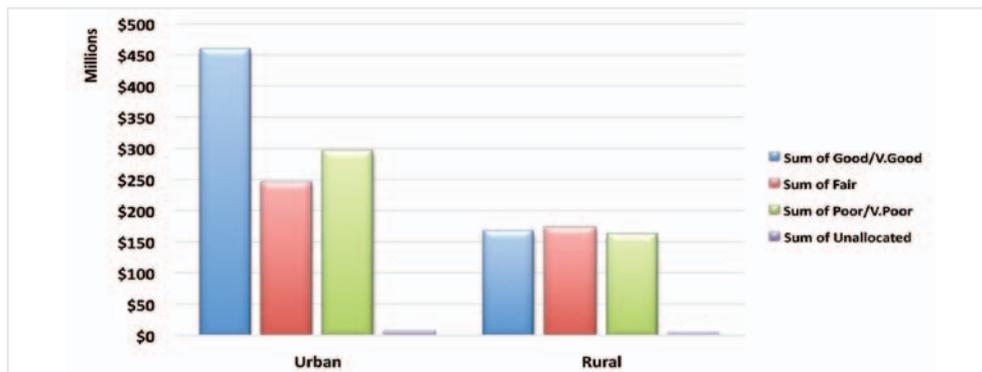
\$6.9 BN of the \$10.2 BN in unsealed roads are managed by rural councils. By contrast, 20% of the value of unsealed roads in urban areas is considered to be in poor or very poor condition compared to 18% of rural road values.

**Concrete Bridges – Condition /Quality**



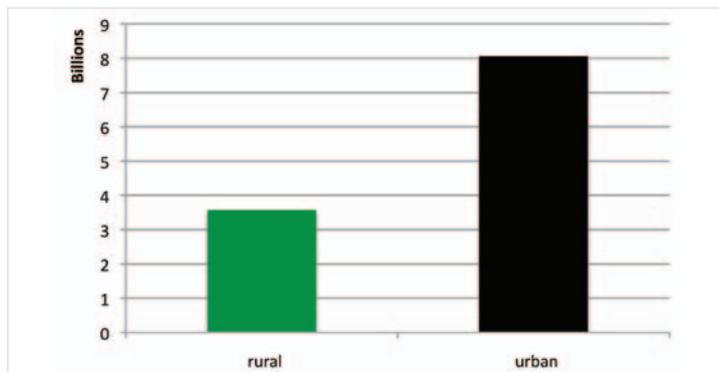
\$7.6 BN of the total concrete bridge value of \$9.6 BN is managed by urban councils. Of these, 11% by value of urban concrete bridges are considered to be in poor or very poor condition, compared to 6% of rural concrete bridges.

**Timber Bridges – Condition /Quality**



\$1.0 BN of the total value of timber bridges of \$1.5 BN is managed by urban councils. Of these, urban councils consider 29% to be in poor or very poor condition, consistent with rural council perspectives, where 32% are considered to be in poor or very poor condition.

Across the four transport asset classes, urban councils consider some \$ 8.1 BN in infrastructure to be in poor or very poor condition.



Rural councils have indicated that some \$3.6 BN in value is considered to be in poor or very poor condition. Councils have reasonable confidence in the condition data.

## 8.6 A REVISED FRAMEWORK

Asset management is a means to an end, with the asset management planning process recognising that local governments have significant infrastructure assets under management, and the future expenditures associated with these assets needs to 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.

In the medium term, councils will also need to incorporate other elements into the long term planning process e.g. workforce planning and service planning, and process/system improvement.

In the future, service and service level discussions by councils with the community need to be supported by tightly integrated approaches to planning that also recognise broader considerations such as planning schemes and planning for future infrastructure provision.

Councils are expected to develop mechanisms that define the levels of service expected, including:

- Establishing service delivery needs and define 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.

In recent years, the International Integrated Reporting Committee (IIRC) has undertaken broad consultation and development work to improve the type and quality of reporting by organisations on matters directly associated with long-term sustainability.

Integrated reporting as defined by the International Integrated Reporting Committee aims to incorporate everything from strategy to risk management, from financial reporting to the inclusion of consideration of a range of Capitals and the inter-relationships and dependencies.

IIRC released a Consultation Draft of the International IR Framework in April 2013.

Reporting on an organization's current state and future prospects requires a comprehensive understanding of the strategies being adopted, the risks the organization is facing, the opportunities it is pursuing, details of its operations, its impact on the environment and the wider society, and more<sup>2</sup>.

Integrated Reporting recognises that sustainability for organisations is based on long term strategies and integrated approaches to planning across six Capitals which are:

1. financial capital;
2. manufacturing capital;
3. human capital;
4. social and relationship capital;
5. intellectual capital; and
6. natural capital.

In the Integrated Reporting context, manufacturing capital is infrastructure capital.

In Australian local government at this time there is a common emphasis on three of the six capitals referred to above – financial capital and infrastructure capital, and the now emerging human capital through the workforce planning initiatives of ACELG, LGMA and the Local Government Associations. Currently, it is the maintenance of capitals associated with infrastructure and finance that dominate financial sustainability evaluations and definitions. It was not intended however that the emphasis on those two capitals alone would represent the entirety of the sustainability discussion in local government in the long term.

The National State of the Assets Report 2013 has demonstrated that while councils are largely embracing long term financial planning, asset management planning has yet to gain the foothold that would have been expected. The longer term implications associated with a lack of a balanced funding approach to investment in renewals has yet to gain broad understanding and traction, even though the outcome is intuitively understood within the sector.

It may be time for a new framework to emerge, drawing on the inputs, processes and outcomes from the emphasis on human resource capital to engage the asset management planning process. As an example, since 2005, the LGAQ has been promoting broad based initiatives in Queensland to promote asset management under its "From the Back Room to the Board Room" program. Yet as the level of turnover in local government at all levels continues, gains in understanding, experience and process are quickly lost. Long term capacity building in the area of asset management in conjunction with the broader emphasis on human resource management and workforce planning is needed. Embedding asset management planning within a longer term focus on workforce planning, retention and staff development would provide immediate and sustained benefits to the sector.

In common with the acknowledged themes of sustainability, the new framework needs to emphasise:

1. A balanced funding approach to infrastructure renewal, with consequential impacts on service levels defined and articulated to the community,
2. The value and ongoing renewal associated with a skilled and experienced workforce in the areas of long term asset management planning, long term financial planning and community engagement,
3. The ongoing financial viability of the local government sector.

Infrastructure management and asset management planning should be considered to be core competencies for councils in Australia. There is an opportunity for key stakeholders to leverage the investments being made in workforce planning and asset management planning for greater benefit.

The number of people engaged in asset management planning, together with the associated skills and competencies, should be ascertained and valued, and considered as the current benchmark. A preferred workforce model of competencies and resource commitment should then be established, and processes established to measure individual council progress in closing the resource commitment and competency gap.

It is recommended that ALGA together with each of the Local Government Associations consider during 2013-14 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.

## 9 References

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## 10 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
- 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.

### **Materiality<sup>3</sup>**

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.

## 11 Contributing Local Governments

The following 344 local governments contributed data to the project.

Council	State	Council	State	Council	State
Adelaide City Council	SA	City of Cockburn	WA	District Council of Yorke Peninsula	SA
Adelaide Hills Council	SA	City of Fremantle	WA	Dorset Council	TAS
Albury City Council	NSW	City of Gosnells	WA	Dubbo City Council	NSW
Alexandrina Council	SA	City of Greater Geraldton	WA	East Arnhem Shire Council	NT
Alice Springs Town Council	NT	City of Holdfast Bay	SA	East Gippsland Shire Council	VIC
Alpine Shire Council	VIC	City of Joondalup	WA	Etheridge Shire Council	QLD
Ararat Rural City Council	VIC	City of Kwinana	WA	Eurobodalla Shire Council	NSW
Armidale Dumaresq Council	NSW	City of Mandurah	WA	Fairfield City Council	NSW
Ashfield Municipal Council	NSW	City of Marion	SA	Forbes Shire Council	NSW
Auburn City Council	NSW	City of Melville	WA	Frankston City Council	VIC
Ballarat City Council	VIC	City of Mitcham	SA	Gannawarra Shire Council	VIC
Balranald Shire Council	NSW	City of Nedlands	WA	George Town Council	TAS
Bankstown City Council	NSW	City of Norwood Payneham and St Peters	SA	Gladstone Regional Council	QLD
Banyule City Council	VIC	City of Onkaparinga	SA	Glen Eira City Council	VIC
Bass Coast Shire Council	VIC	City of Perth	WA	Glen Innes Severn Council	NSW
Bathurst Regional Council	NSW	City of Playford	SA	Glenelg Shire Council	VIC
Baw Baw Shire Council	VIC	City of Port Adelaide Enfield	SA	Glenorchy City Council	TAS
Bayside City Council	VIC	City of Prospect	SA	Gloucester Shire Council	NSW
Benalla Rural City Council	VIC	City of Rockingham	WA	Gold Coast City Council	QLD
Berrigan Shire Council	NSW	City of Salisbury	SA	Golden Plains Shire Council	VIC
Bland Shire Council	NSW	City of South Perth	WA	Goondiwindi Regional Council	QLD
Blayney Shire Council	NSW	City of Stirling	WA	Gosford City Council	NSW
Blue Mountains City Council	NSW	City of Subiaco	WA	Goulburn Mulwaree Council	NSW
Boorowa Council	NSW	City of Swan	WA	Greater Bendigo City Council	VIC
Boroondara City Council	VIC	City of Tea Tree Gully	SA	Greater Dandenong City Council	VIC
Borough of Queenscliffe	VIC	City of Unley	SA	Greater Geelong City Council	VIC
Bourke Shire Council	NSW	City of Wanneroo	WA	Greater Shepparton City Council	VIC
Brighton Council	TAS	City of West Torrens	SA	Greater Taree City Council	NSW
Brimbank City Council	VIC	Clarence City Council	TAS	Griffith City Council	NSW
Buloke Shire Council	VIC	Cobar Shire Council	NSW	Gunnedah Shire Council	NSW
Bundaberg Regional Council	QLD	Coffs Harbour City Council	NSW	Gwydir Shire Council	NSW
Burdekin Shire Council	QLD	Colac Otway Shire Council	VIC	Gympie Regional Council	QLD
Burke Shire Council	QLD	Conargo Shire Council	NSW	Harden Shire Council	NSW
Burnie City Council	TAS	Cook Shire Council	QLD	Hawkesbury City Council	NSW
Burwood Council	NSW	Coomalie Shire Council	NT	Hay Shire Council	NSW
Byron Shire Council	NSW	Cooma Monaro Shire Council	NSW	Hinchinbrook Shire Council	QLD
Cabonne Shire Council	NSW	Coonamble Shire Council	NSW	Hindmarsh Shire Council	VIC
Cairns Regional Council	QLD	Cootamundra Shire Council	NSW	Hobart City Council	TAS
Camden Council	NSW	Corangamite Shire Council	VIC	Hobsons Bay City Council	VIC
Campaspe Shire Council	VIC	Corowa Shire Council	NSW	Holroyd City Council	NSW
Campbelltown City Council	NSW	Corporation of the Town of Walkerville	SA	Horsham Rural City Council	VIC
Campbelltown City Council	SA	Cowra Shire Council	NSW	Hume City Council	VIC
Canada Bay Council	NSW	Croydon Shire Council	QLD	Huon Valley Council	TAS
Canterbury City Council	NSW	Darebin City Council	VIC	Hurstville City Council	NSW
Carrathool Shire Council	NSW	Devonport City Council	TAS	Indigo Shire Council	VIC
Casey City Council	VIC	District Council of Ceduna	SA	Inverell Shire Council	NSW
Central Coast Council	TAS	District Council of Copper Coast	SA	Jerilderie Shire Council	NSW
Central Darling Shire Council	NSW	District Council of Grant	SA	Kangaroo Island Council	SA
Central Goldfields Shire Council	VIC	District Council of Lower Eyre Peninsula	SA	Katherine Town Council	NT
Cessnock City Council	NSW	District Council of Loxton Waikerie	SA	Kempsey Shire Council	NSW
Charters Towers Regional Council	QLD	District Council of Mallala	SA	King Island Council	TAS
City of Albany	WA	District Council of Streaky Bay	SA	Kingborough Council	TAS
City of Armadale	WA	District Council of Tumby Bay	SA	Kingston City Council	VIC
City of Bayswater	WA	District Council of Yankalilla	SA	Kingston District Council	SA
City of Bunbury	WA			Knox City Council	VIC
City of Canning	WA			Kogarah City Council	NSW

Council	State
KuJringJgai Council	NSW
Kyogle Council	NSW
Lake Macquarie City Council	NSW
Latrobe City Council	VIC
Latrobe Council	TAS
Launceston City Council	TAS
Leeton Shire Council	NSW
Leichhardt Municipal Council	NSW
Light Regional Council	SA
Lismore City Council	NSW
Lithgow City Council	NSW
Liverpool City Council	NSW
Liverpool Plains Shire Council	NSW
Lockhart Shire Council	NSW
Lockyer Valley Regional Council	QLD
Loddon Shire Council	VIC
Logan City Council	QLD
Longreach Regional Council	QLD
Macedon Ranges Shire Council	VIC
Mackay Regional Council	QLD
Maitland City Council	NSW
Manly Council	NSW
Manningham City Council	VIC
Mansfield Shire Council	VIC
Maribyrnong City Council	VIC
Maroondah City Council	VIC
Marrickville Council	NSW
Meander Valley Council	TAS
Melbourne City Council	VIC
Melton City Council	VIC
Mildura Rural City Council	VIC
Mitchell Shire Council	VIC
Moira Shire Council	VIC
Monash City Council	VIC
Moonee Valley City Council	VIC
Moorabool Shire Council	VIC
Moree Plains Shire Council	NSW
Moreland City Council	VIC
Moreton Bay Regional Council	QLD
Mornington Peninsula Shire Council	VIC
Mosman Municipal Council	NSW
Mount Alexander Shire Council	VIC
Moyne Shire Council	VIC
Murray Shire Council	NSW
Murrindindi Shire Council	VIC
Murrumbidgee Shire Council	NSW
Murweh Shire Council	QLD
Muswellbrook Shire Council	NSW
Nambucca Shire Council	NSW
Narrabri Shire Council	NSW
Narrandera Shire Council	NSW
Narromine Shire Council	NSW
Nillumbik Shire Council	VIC
North Sydney Council	NSW
Northern Grampians Shire Council	VIC
Northern Midlands Council	TAS
Oberon Council	NSW
Orange City Council	NSW
Palerang Council	NSW
Parramatta City Council	NSW

Council	State
Penrith City Council	NSW
Pittwater Council	NSW
Port Augusta City Council	SA
Port Phillip City Council	VIC
Port Pirie Regional Council	SA
Port Stephens Council	NSW
Pyrenees Shire Council	VIC
Queanbeyan City Council	NSW
Quilpie Shire Council	QLD
Randwick City Council	NSW
Redland City Council	QLD
Richmond Valley Council	NSW
Rockdale City Council	NSW
Rockhampton Regional Council	QLD
Ryde City Council	NSW
Scenic Rim Regional Council	QLD
Shellharbour City Council	NSW
Shire of Ashburton	WA
Shire of Augusta-Margaret River	WA
Shire of Bridgetown-Greenbushes	WA
Shire of Broomehill-Tambellup	WA
Shire of Bruce Rock	WA
Shire of Busselton	WA
Shire of Cocos (Keeling) Islands	WA
Shire of Collie	WA
Shire of Coolgardie	WA
Shire of Corrigin	WA
Shire of Cranbrook	WA
Shire of Cuballing	WA
Shire of Cue	WA
Shire of Dalwallinu	WA
Shire of Dowerin	WA
Shire of Esperance	WA
Shire of Exmouth	WA
Shire of Gingin	WA
Shire of Irwin	WA
Shire of Kellerberrin	WA
Shire of Kondinin	WA
Shire of Laverton	WA
Shire of Manjimup	WA
Shire of Mount Magnet	WA
Shire of Murchison	WA
Shire of Murray	WA
Shire of Nannup	WA
Shire of Peppermint Grove	WA
Shire of Plantagenet	WA
Shire of Ravensthorpe	WA
Shire of Sandstone	WA
Shire of Serpentine Jarrahdale	WA
Shire of Three Springs	WA
Shire of Wyalkatchem	WA
Shire of Wyndham East Kimberley	WA
Shoalhaven City Council	NSW
Singleton Council	NSW
Snowy River Shire Council	NSW
Somerset Regional Council	QLD
South Gippsland Shire Council	VIC
Southern Grampians Shire Council	VIC
Southern Mallee District Council	SA
Stonnington City Council	VIC
Strathbogie Shire Council	VIC

Council	State
Strathfield Municipal Council	NSW
Sunshine Coast Regional Council	QLD
Surf Coast Shire Council	VIC
Sutherland Shire Council	NSW
Swan Hill Rural City Council	VIC
Tablelands Regional Council	QLD
Tamworth City Council	NSW
Tasman Council	TAS
Tatiara District Council	SA
Temora Shire Council	NSW
Tenterfield Shire Council	NSW
The Barossa Council	SA
The Hills Shire Council	NSW
The Rural City of Murray Bridge	SA
Toowoomba Regional Council	QLD
Town of Bassendean	WA
Town of Cottesloe	WA
Town of East Fremantle	WA
Town of Gawler	SA
Town of Port Hedland	WA
Town of Victoria Park	WA
Town of Vincent	WA
Townsville City Council	QLD
Towong Shire Council	VIC
Tumbarumba Shire Council	NSW
Tweed Shire Council	NSW
Upper Hunter Shire Council	NSW
Upper Lachlan Shire Council	NSW
Wagait Shire Council	NT
Wagga Wagga City Council	NSW
Wakefield Regional Council	SA
Wakool Shire Council	NSW
Walcha Council	NSW
Wangaratta Rural City Council	VIC
Warringah Council	NSW
Warrnambool City Council	VIC
Waverley Council	NSW
Weddin Shire Council	NSW
Wellington Council	NSW
Wellington Shire Council	NSW
Wentworth Shire Council	NSW
West Wimmera Shire Council	VIC
Western Downs Regional Council	QLD
Whitehorse City Council	VIC
Whitsunday Regional Council	QLD
Whittlesea City Council	VIC
Willoughby City Council	NSW
Wingecarribee Shire Council	NSW
Wodonga City Council	VIC
Woolahra Municipal Council	NSW
Wudinna District Council	SA
Wyndham City Council	VIC
Wyong Shire Council	NSW
Yarra City Council	VIC
Yarra Ranges Shire Council	VIC
Yarriambiack Shire Council	VIC
Yass Valley Council	NSW

## 12 Attachment – Data Collection Overview

Below is a representation of the web tool data entry developed to capture the required data. Councils were provided with a unique log-in and were able to indicate that senior management authorisation for the data had been obtained prior to lodgement.

<b>Council</b>	<input type="text"/>			
<b>Asset Category</b>	Transport			
<b>Sealed Roads</b>				<b>Confidence</b> <input type="text"/>
				<b>Gross Current Replacement Cost</b> <input type="text" value="\$"/>
QUALITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
FUNCTION	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
CAPACITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
<b>Unsealed Roads</b>				<b>Confidence</b> <input type="text"/>
				<b>Gross Current Replacement Cost</b> <input type="text" value="\$"/>
QUALITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
FUNCTION	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
CAPACITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	

**Concrete Bridges**

			Confidence	Gross Current Replacement Cost
				\$
QUALITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
FUNCTION	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
CAPACITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	

**Timber Bridges**

			Confidence	Gross Current Replacement Cost
				\$
QUALITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
FUNCTION	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	
CAPACITY	Good/Very Good	Fair	Poor/Very Poor	0%
	0%	0%	0%	

NATIONAL

# *State of the Assets*

2013

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

NOVEMBER 2013

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