

2024 National State of the Assets Report

Future proofing our communities

Technical Report



Australian Local Government Association
July 2024



Author: Steve Verity | Principal Advisor Asset Management | IPWEA

Peer review by:

Kerry Brown | Professor of Employment and Industry | Edith Cowan University

Dr Penny Burns | Chair | Talking Infrastructure Association, Inc.

Joshua Devitt | Chief Engineer | IPWEA NSW & ACT

Ross Goyne | Chair Asset Management Committee | IPWEA

John Howard | Infrastructure Asset Management Specialist | Tasmania

David Jeffrey | Principal Infrastructure Associate | Infrastructure Associates (NZ)

Catrin Johnson | Asset Strategy Officer | City of Marion

Brendon Lyons | Unit Manager Asset Solutions | City of Marion

Adam Thomas | Director | Proven Intelligence

Acknowledgements

ALGA and IPWEA gratefully acknowledges the valued input from the local councils who participated and provided data for the report.

The high response rate demonstrates local government is well positioned to report on the state of their infrastructure assets providing an evidence base for an examination of local government infrastructure assets and associated management capabilities.

Ownership of intellectual property rights in this publication

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Institute of Public Works Engineering Australasia (referred to as IPWEA).

Disclaimer

The views expressed herein are those of IPWEA and do not purport to represent the position of the Australian Local Government Association. The material contained in this report is provided for information purposes only on the basis that all persons having access to it undertake responsibility for assessing the relevance and accuracy of its content.

Australian Local Government
Association (ALGA)
8 Geils Court
Deakin ACT 2600
Phone: (02) 6122 9400
Email: alga@alga.asn.au
Web: www.alga.asn.au

Institute of Public Works Engineering
Australasia (IPWEA)
Suite 6.03 | Level 6 | 99 Walker Street
North Sydney NSW 2060
Phone: 1300 416 745
Email: admin@ipwea.org
Web: www.ipwea.org

This document is available from the ALGA website.

Table of Contents

Purpose of this Report	iv
Structure	v
Executive Summary	1
Overview	1
Key Findings.....	3
Introduction	5
Methodology	13
Data Requirements	14
Data Confidence.....	16
Performance Indicators	17
Reporting Categories	20
Survey Response	23
Response by Australian Classification of Local Government	24
Response by State and Territory	24
Data Validation	25
An Overview of Local Government Infrastructure	26
Roads	28
Bridges	32
Buildings.....	35
Parks	36
Stormwater	37
Water & Wastewater	39
Airports & Aerodromes	40
Footpaths & Cycleways	41
Local Government Infrastructure Investment.....	42
Infrastructure Investment Performance	44
Local Government Infrastructure Planning	51
Asset Management Planning Performance	52
Long-term Financial Planning Performance	55
AM Plan financial projections included in the LTFP.....	57
Local Government Infrastructure Performance.....	61
Condition	62
Function	68
Capacity	73
Findings	78
Local Government Infrastructure	78
Local Government Infrastructure Investment.....	78
Local Government Infrastructure Planning	79
Local Government Infrastructure Performance.....	80
References.....	82
Appendices.....	83
Appendix A – Sample Data Collection Form	84
Appendix B – Infrastructure Performance Grading System	88
Appendix C – Australian Classification of Local Government.....	90
Appendix D – List of responding councils by State & Territory	91

List of Tables

Table 1 Measures of data confidence.....	16
Table 2 Infrastructure Investment Indicators.....	17
Table 3 Infrastructure Planning Indicators	18
Table 4 Infrastructure Performance Indicators.....	19
Table 5 Local government by ACLG.....	20
Table 6 Local government by population	21
Table 7 Local government by state & territory (June 2023)	22
Table 8 Local roads in Australia by ACLG (2020).....	29
Table 9 Local roads in Australia by state & territory (2020)	30
Table 10 Local government bridges and major culverts by ACLG (2020)	33
Table 11 Local government bridges and major culverts by state & territory (2020)	34
Table 12 Local government infrastructure valuations by asset class (June 2023)	43
Table 13 Asset consumption ratio – trend analysis	47
Table 14 Asset depreciation rate – trend analysis	50
Table 15 AM Plans adopted	52
Table 16 AM Plans adopted – trend analysis	54
Table 17 Long-term financial plans adopted.....	55
Table 18 Long-term financial plans adopted – trend analysis.....	57
Table 19 AM Plan financial projections included in the LTFP	57
Table 20 AM Plan financial projections included in the LTFP – trend analysis.....	59
Table 21 Condition by asset class (June 2023)	62
Table 22 Assets in poor condition – trend analysis.....	66
Table 23 Function by asset class (June 2023)	68
Table 24 Assets with poor function – trend analysis.....	72
Table 25 Capacity by asset class (June 2023)	73
Table 26 Assets with poor capacity – trend analysis	77

List of Figures

Figure 1 The asset categories examined.....	iv
Figure 2 Local government asset portfolio and infrastructure components (June 2023) .	1
Figure 3 Rural and urban local government infrastructure investment by asset class	7
Figure 4 Local government by population (June 2023).....	21
Figure 5 Local councils by state & territory (June 2023)	22
Figure 6 Number and proportion of councils responding to the survey	23
Figure 7 Response rate by ACLG.....	24
Figure 8 Response rate by state & territory	24
Figure 9 Financial and non-financial assets controlled by local government (June 2023)	27
Figure 10 Local roads as a proportion of the Australian road network.....	28
Figure 11 Sealed and unsealed local road length by ACLG (2010-2020).....	29
Figure 12 Sealed and unsealed local road length by state & territory (2010-2020)	30
Figure 13 N ^o of bridges and major culverts by ACLG (2010-2020).....	32
Figure 14 N ^o of bridges and major culverts by state & territory (2010-2020)	33
Figure 15 Average annual water balances from households, various cities	37
Figure 16 Local government infrastructure asset values (2014 - 2023).....	44
Figure 17 Asset consumption ratio trend by asset class.....	45
Figure 18 Asset consumption ratio trend by ACLG.....	46
Figure 19 Asset consumption ratio trend by state & territory	46
Figure 20 Asset depreciation rate trend by asset class	49
Figure 21 Asset depreciation rate trend by ACLG	49
Figure 22 Asset depreciation rate trend by state & territory	50
Figure 23 AM Plans adopted – trend since 2015.....	52
Figure 24 AM Plans adopted – trend by ACLG.....	53
Figure 25 AM Plans adopted – trend by state & territory	53
Figure 26 LTFPs adopted – trend since 2013.....	55
Figure 27 LTFPs adopted – trend by ACLG	56
Figure 28 LTFPs adopted – trend by state & territory	56
Figure 29 AM Plan financial projections included in the LTFP – trend since 2015	58
Figure 30 AM Plan financial projections included in the LTFP – trend by ACLG	58
Figure 31 AM Plan financial projections included in the LTFP – trend state & territory .	59
Figure 32 Condition trend by asset class.....	63
Figure 33 Condition data confidence by asset class.....	64
Figure 34 Condition trend by ACLG.....	64
Figure 35 Condition data confidence by ACLG.....	65
Figure 36 Condition trend by state & territory	65
Figure 37 Condition data confidence by state & territory	66
Figure 38 Function trend by asset class	69
Figure 39 Function data confidence by asset class	70
Figure 40 Function trend by ACLG	70
Figure 41 Function data confidence by ACLG.....	71
Figure 42 Function trend by state & territory.....	71
Figure 43 Function data confidence by state & territory	72
Figure 44 Capacity trend by asset class.....	74
Figure 45 Capacity data confidence by asset class.....	75
Figure 46 Capacity trend by ACLG.....	75
Figure 47 Capacity data confidence by ACLG.....	76
Figure 48 Capacity trend by state & territory	76
Figure 49 Capacity data confidence by state & territory	77
Figure 50 Combined data confidence by condition, function and capacity	81

Purpose of this Report

Since 2013, the Australian Local Government Association has encouraged every local government in Australia to participate in a self-assessment survey of their primary public works infrastructure on a regular basis.

Known as the National State of the Assets (NSoA) report, the report is a technical assessment of the state of local government non-financial assets. It is strategic in nature and its main purpose is to:

- Inform stakeholders on the performance, costs, and risks of local government infrastructure in a way that is easily understood.
- Enable policymakers, through an evidence-based approach, to identify infrastructure shortfalls.
- Enable decision-makers to develop holistic measures to close infrastructure funding and capability gaps.
- Assess potential threats and opportunities in identified trends that provide decision support for stronger communities, sustainable economies, and efficient expenditure of public funds.

The asset categories examined in this report are shown in Figure 1.



Figure 1 The asset categories examined

ALGA has partnered with IPWEA to deliver this report.¹ To date, 85% of local governments in Australia have participated in the NSoA survey which is completely voluntary.

This sixth report looks at the findings and outcomes of more than ten years of evidence-based research into the investment, planning, and performance of Australian local government infrastructure assets.

Commentary on technical matters such as definitions, data limitations and improvements in quality are welcome.

¹ IPWEA is the peak association for professionals who deliver public works and engineering services to communities in Australia and New Zealand.

Structure

The NSoA report comes in two parts:

1. Summary Report (separate document)

The Summary Report summarises each asset class, its challenges, and reports the investment, planning, and performance of local government infrastructure assets.

2. Technical Report (this document)

The Technical Report presents a detailed account of survey results and findings. The structure and summary of its content is outlined as follows.

The **Executive Summary** overviews the background, objectives, approach, lists the key findings based on the data contained in the report.

The **Introduction** provides the context and outlines the major local government infrastructure asset classes in Australia. It presents the need for regular and consistent infrastructure reporting and presents the background on the National State of the Assets Report to date, and the reporting framework being followed.

The **Methodology** provides the scope of assessment, detail on the data requirements, reporting categories and performance indicators and measures used to assess the state of infrastructure assets.

The **Survey Response** section presents the number of councils who participated in the survey and reports the number and proportion of responses for each reporting category.

An Overview of Local Government Infrastructure provides an examination of each major class of infrastructure managed by local governments to support the community.

Local Government Infrastructure Investment provides the current valuation results for each asset class, the level of current and past investment in local government infrastructure followed by a trend analysis against two financial indicators for each reporting category.

Local Government Infrastructure Planning details the extent to which long-term infrastructure asset and financial planning is adopted and aligned for each reporting category.

Local Government Infrastructure Performance presents an assessment of current and past trends that adds to our understanding of the state of local government infrastructure assets in terms of their condition, function, and capacity. Data confidence for each reporting category is also presented.

The **Findings** reports the key results and trends across each reporting category and performance measure and provides insight on the strengths, weaknesses, opportunities, and threats for local government.

Concluding Remarks summarises the report's findings, drawing inferences from the analysis and findings, offering commentary on areas of improvement.

References provides the list of research material sources to support the arguments presented in the report.

The **Appendices** contain supplementary material that is not essential to the main text in the report but offers additional information or context.

Executive Summary

Overview

During the period September to December 2023, ALGA (in partnership with IPWEA) invited the 537 local councils across the nation to update their data contained in the National State of the Assets (NSoA) Survey. This is the sixth report since the project commenced in 2013.

To date, 458 councils (or 85% of all councils) have now provided data for the project. 236 councils (or 44% of all councils) provided new and updated data for this report.

Measured on a consistent basis, the main objectives are to:

- Provide a scalable and consistent evidence-based infrastructure reporting framework for use by all levels of government.
- Monitor infrastructure investment, performance, and long-term infrastructure planning capability trends over time.
- Provide a foundation for strategic planning that helps secure funding and support for critical infrastructure projects and maintenance programs; and
- Identify activities and actions to elevate the nation's local government infrastructure to acceptable standards.

The report applies an evidenced-based approach to identify opportunities that strengthen local government's ability to effectively manage its non-financial (fixed) infrastructure assets.

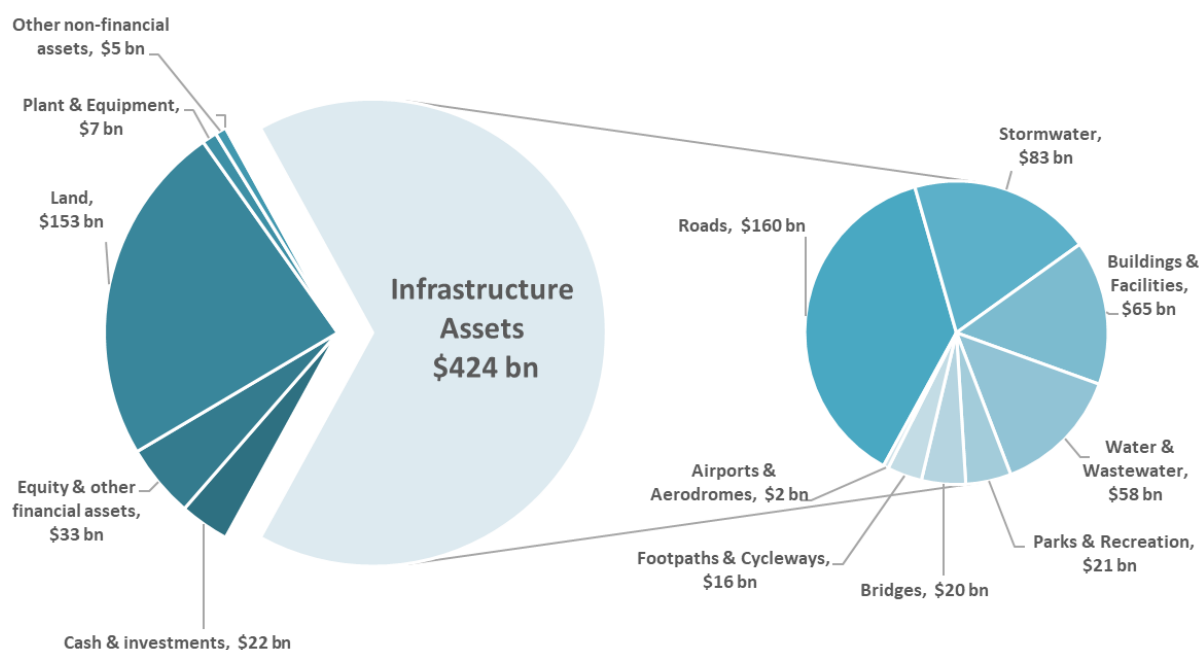


Figure 2 Local government asset portfolio and infrastructure components (June 2023)

At the end of the 2022-23 financial year, local government in Australia was responsible for managing a \$643 billion asset portfolio.²

The non-financial infrastructure asset component was valued at \$424 billion accounting for 66% of the total asset portfolio.

² 2022-23, ABS cat. no. 5512.0, TABLE 339, Total Local General Government Balance Sheet – Total Assets.

The estimated replacement cost of these infrastructure assets is in the order of \$665 billion.³

This figure represents an investment of approximately \$25,400 for each of the 26.2 million people in Australia.⁴

These infrastructure assets are estimated to be depreciating at around \$9.7 billion per year.⁵

As these assets age they require increasing maintenance, plus periodic replacement of components to compensate for wear and tear to ensure the economically efficient useful life of the aggregate components is realised.

The underpinning methodology for the report uses a series of infrastructure investment, planning and performance indicators that answer the question:

“Is local government infrastructure getting better, worse or staying the same?”

Consistent with the International Standards for Asset Management, this is a fundamental question that aligns with the intent of the local government integrated planning and reporting frameworks mandated in each state and territory.⁶

The infrastructure investment indicators determine the:

- Asset Consumption Ratio
- Depreciation Rate

The infrastructure planning indicators measure the rate of:

- Asset Management Plans Adopted
- Long-Term Financial Plans Adopted
- AM Plan financial projections included in the Long-term Financial Plan

The infrastructure performance indicators measure:

- | | | | |
|---|------------------|-------------|--------------------------------------|
| • | Condition | Quality | ...How good is the service? |
| • | Function | Suitability | ...Is it the right service? |
| • | Capacity | Utilisation | ...Do we need more or less services? |

The infrastructure performance indicators are measured as a proportion of the replacement cost in the following gradings:



³ The cost to replace the existing infrastructure assets with a new modern equivalent asset (not a second hand one) with the same economic benefits. Derived from the NSoA data.

⁴ ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2023, TABLE 4. Estimated Resident Population, States and Territories (Number) – Australian Capital Territory and overseas territories population excluded.

⁵ 2022-23, ABS cat. no. 5512.0, TABLE 339, Total Local General Government Operating Statement.

⁶ ISO 55000:2014 Asset Management — Overview, principles and terminology.

Key Findings

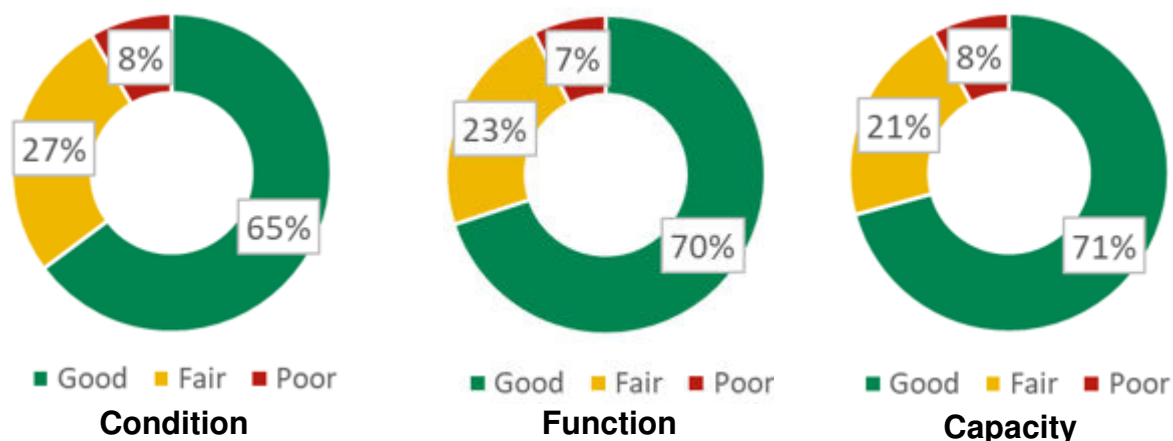
Findings relating to infrastructure investment:

- The value of **local government infrastructure** has grown at a steady rate of **6.7% per annum**.
- The **estimated replacement cost of local government infrastructure** is **\$665 billion**.
- **Assets are being consumed at an estimated rate of 1.6% or \$9.7 billion per year**, equivalent to \$371 per person across Australia each year.
- The **remaining service potential of local government infrastructure** has **increased**.
- The **average age of local government infrastructure** is **decreasing**.
- Infrastructure on average is **expected to last longer than originally anticipated**.
- **Councils in rural and remote areas** are more likely to hold an 'older' stock of infrastructure assets.

Findings relating to infrastructure planning:

- **One third of councils do not have an asset management plan** adopted for their major assets, or if they do, they are out of date.
- **88% of responding councils say they had adopted a long-term financial plan**, an increase from 72% in 2013.
- Of the 70% of councils who said they had asset management plans in place, **two thirds (67%) included the expenditure forecasts in the LTFP**.
- In other words, less than **50% of councils don't align their AM Plan forecasts with the financial plan**.
- **Councils in the urban areas indicate higher compliance** with the legislated asset management and financial planning and reporting requirements **compared with the lower populated councils in rural areas reporting a lower level of compliance**.

Overall findings relating to infrastructure performance:



- **8% (\$55bn) of community infrastructure assets are in poor condition.**
- **7% (\$50bn) have poor function** requiring upgrade in response to changing circumstances.
- **8% (\$52bn) have poor capacity** and/or utilisation requiring new assets in response to demand and growth pressures.

Performance by Asset Class

- **Roads** represent 38% or \$250 billion of the total infrastructure replacement cost. \$23.1 billion are in poor condition, \$18.7 billion have poor function and \$16.9 billion have poor capacity.
- **Bridges** represent 5% or \$31 billion of the total infrastructure replacement cost. \$2.1 billion are in poor condition, \$2.0 billion have poor function and \$2.1 billion have poor capacity.
- **Buildings** represent 15% or \$102 billion of the total infrastructure replacement cost. \$8.3 billion are in poor condition, \$7.2 billion have poor function and \$8.3 billion have poor capacity.
- **Parks & Recreation** assets represent 5% or \$32 billion of the total infrastructure replacement cost. \$2.9 billion are in poor condition, \$1.9 billion have poor function and \$2.1 billion have poor capacity.
- **Stormwater** assets represent 20% or \$130 billion of the total infrastructure replacement cost. \$7.9 billion are in poor condition, \$13.4 billion have poor function and \$15.2 billion have poor capacity.
- **Water & Wastewater** assets represent 14% or \$91 billion of the total infrastructure replacement cost. \$9.4 billion are in poor condition, \$4.4 billion have poor function and \$5.5 billion have poor capacity.
- **Airport & Aerodromes** assets represent less than 1% or \$4 billion of the total infrastructure replacement cost. \$437 million are in poor condition, \$5.4 million have poor function and \$513 million have poor capacity.
- **Footpaths & Cycleway** assets represent 4% or \$25 billion of the total infrastructure replacement cost. \$1.4 billion are in poor condition, \$1.4 billion have poor function and \$1.7 billion have poor capacity.

Performance by Australian Classification of Local Government groupings

- Urban metro and urban regional council's report the condition, function, and capacity of their infrastructure assets have improved.
- Councils in rural areas are reporting little change in the condition of their infrastructure overall.
- Councils in rural remote areas report more of their assets are in poor condition, function, and capacity compared to urban councils.

Performance by State and Territory

- The proportion of assets reported in poor condition has reduced in every state except for the Northern Territory.
- The Northern Territory has the highest and increasing proportion of assets with poor function
- The proportion of assets reporting poor capacity has remained steady in every state and territory since 2013.

Introduction

The Australian Local Government Association (ALGA) is the national voice of local government, representing 537 councils across the country.

The key role of local government is to manage and provide essential services and infrastructure that meet the needs of the local community.

Local governments are close to the communities they serve and have unique insights into community needs. Councils determine service provision according to these needs in accordance with state and territory planning and reporting requirements.

It is recognised that local government is highly diverse, both within and between jurisdictions. This diversity extends beyond the rural and urban divide. In addition to size and population, other significant differences between councils include the:

- Attitudes and aspirations of local communities.
- Fiscal position (including revenue-raising capacity), resources and skills base.
- Varying legislative frameworks in different states and territories.
- Physical, economic, social, and cultural environments; and the
- Range and scale of services they provide.

The supporting infrastructure assets that serve as the foundation for local communities, are critical in fostering economic activity and community wellbeing.

“The management of infrastructure remains a fundamental challenge for local government. Of the three levels of government, local government has the largest relative task in terms of asset management and the smallest relative revenue base.”

ALGA, Submission to Infrastructure Australia: Response to Infrastructure Australia's 'Infrastructure Audit 2019'

Local government is responsible for 32% of all public non-financial assets and around 75% of the total road length in Australia, but only raise 3.6% of Australia's taxes. Of the three levels of government in Australia, local government is the most asset intensive.⁷

Therefore, regular reporting on local government assets, specifically the non-financial infrastructure component, is of critical importance.

Measured on a consistent basis, the main objectives of the NSoA report are to:

- Provide a scalable and consistent evidence-based infrastructure reporting framework for use by all levels of government.
- Monitor infrastructure investment, performance, and long-term infrastructure planning capability trends over time.
- Provide a foundation for strategic planning that helps secure funding and support for critical infrastructure projects and maintenance programs; and
- Identify activities and actions to elevate the nation's local government infrastructure to acceptable standards.

⁷ Research undertaken by the Local Government Association in South Australia suggests that SA councils have approximately three times as many assets relative to income as the state government, and the state has about three times as many assets relative to income as the Commonwealth. It is reasonable to conclude local governments elsewhere would be similarly asset intensive. A high proportion of the operating costs they incur are associated with initially providing and then operating, maintaining, and renewing long-lived infrastructure assets.

Local government infrastructure

Local government infrastructure consists primarily of roads, bridges, buildings, parks, footpaths and cycleways, stormwater, water and wastewater, and airports and aerodromes.

At the end of the 2022-23 financial year reporting period, local government in Australia had control of financial and non-financial assets valued at \$643 billion.

The non-financial (infrastructure) asset component is valued at \$424 billion (66% of all assets), land accounted for \$153 billion (24%) and the remaining \$66 billion (10%) is attributed to other non-financial assets such as plant and equipment and financial assets such as cash, investments, and equity in other entities.⁸

While infrastructure assets are largely homogeneous within their respective asset classes, there can be differences in the services they provide. For example, specialised and non-specialised buildings provide a variety of services such as community health and well-being, recreation and/or administration functions. These structures can be complex in their design, consisting of a wide array of materials lasting anywhere between two and 80+ years.

Stormwater assets vary from open earth drains to complex rain harvesting and recycling systems. Even roads serve different purposes based on function and underneath the visible sealed surface there may be a wide range of historic patches and repairs with varying pavement thickness and materials.

More than half of all local governments in rural areas are responsible for an airport or aerodrome in some form.

There are also variations in the make-up of the infrastructure assets across the nation. For example, roads represent 38% of the national stock of local government infrastructure assets, however roads controlled by councils in rural remote areas can represent up to 60% of their total infrastructure.

Similarly, stormwater assets account for 20% of the national stock while in urban metropolitan areas it represents close to a third of all assets.

Councils in rural and regional areas of New South Wales and Queensland have responsibility for water and wastewater assets and services while in other areas water assets are owned and managed by a combination of government agencies, private companies, and public-private partnerships.

South Australian councils operate 175 Community Wastewater Management Systems (CWMS) throughout in that state.

Figure 3 shows the spread of investment in the infrastructure asset classes across the rural and urban council areas in Australia.

⁸ Written down value as per ABS, 2022-23 Local Government Balance Sheet.

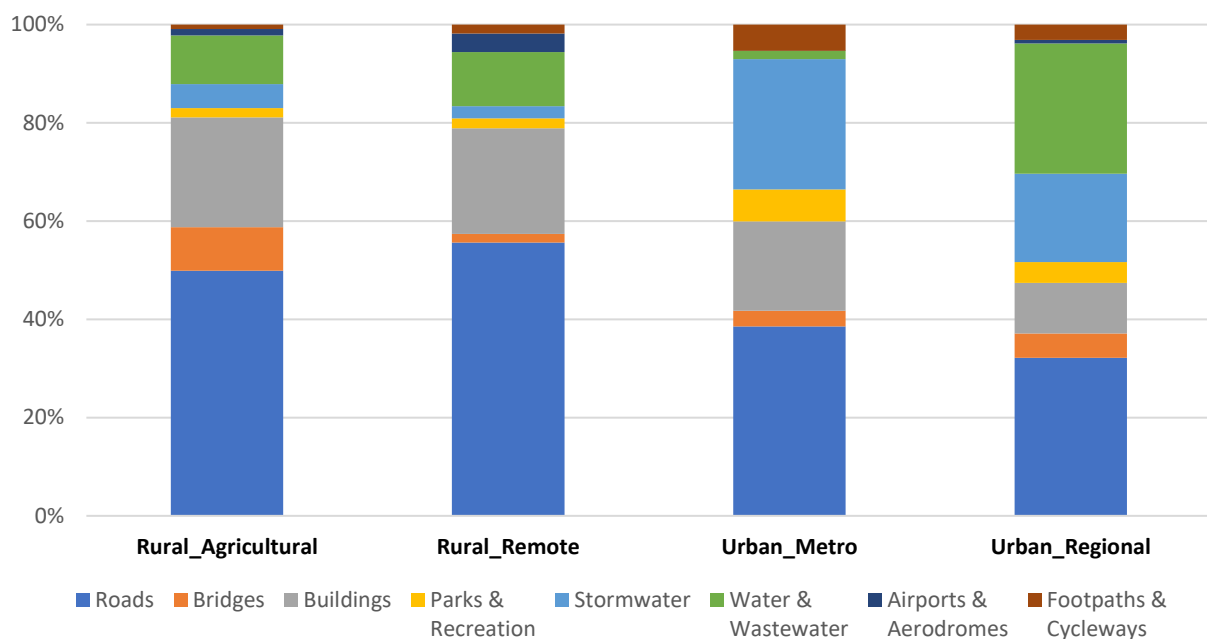


Figure 3 Rural and urban local government infrastructure investment by asset class

There are differences in the levels of service these infrastructure assets provide which are ultimately driven by the location of individual councils and the varying needs of their communities.

The need for regular and consistent infrastructure reporting

The first decade of the 21st century witnessed several national and state inquiries into the status and prospects of local government in Australia. The specific focus was on local government's financial health, especially the precarious position of small rural and remote councils, but also broader weaknesses in infrastructure planning and financial management. Australian local governments are very asset intensive, and many claimed they could not afford to address future asset renewal needs and increasing community expectations.

A 2003 Federal inquiry into local government and cost shifting, in part, recommended that local government be required to audit the state of their infrastructure (using a nationally accepted methodology) and provide status reports to the Commonwealth Grants Commission as one of the inputs into the needs-based formula for Federal Financial Assistance Grants to local government (Australian Government, 2003).⁹

In 2006, the Australian Local Government Association (ALGA) commissioned a study into the financial sustainability of the then 700 councils across the nation. A key finding of the report was that around 35% of councils were financially unsustainable.

The report recommended internal reform to improve efficiency and suggested changes to intergovernmental funding for those councils facing sustainability challenges.

⁹ Australian Government, 'Rates and Taxes: A Fair Share for Responsible Local Government', p. 62. The Financial Assistance Grants is a term used to describe jointly general-purpose grants and identified local road grants issued to local councils.

To address the issue, the then Local Government and Planning Ministers' Council (LGPMC) in 2007 agreed to develop a nationally consistent approach for assessing:

- Financial sustainability of local councils;
- Asset planning and management; and
- Financial planning and reporting.

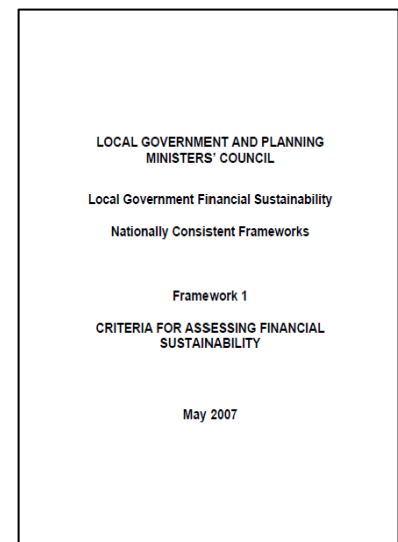
In 2009, the LGPMC endorsed the 'Local Government Financial Sustainability - Nationally Consistent Frameworks'. The federal, state and territory governments all agreed to implement the frameworks and the Federal Government allocated \$19M via the 'Local Government Reform Fund' to make it happen.

Progressively, all the states introduced legislative reform requiring local governments to prepare asset management plans linked to a long-term financial plan.

A separate 2010 'Local Roads Funding Gap' report recommended:¹⁰

'A continuing commitment to a whole of government approach to asset and financial management as the foundation for providing value for money services.'

The commitment from ALGA and its member associations is to provide a consistent 'state of the assets' report based on the infrastructure planning and reporting documents of every council.



¹⁰ ALGA, 'The Local Roads Funding Gap' 1999–00 to 2019–20, p.10.

The National State of the Assets Report to date

ALGA has built a strong evidence base for local government infrastructure reporting. This commenced in 1998 with the National Local Roads Data System (NLRDS). The NLRDS was designed to aggregate existing sources of local road inventory, expenditure, and valuation data to report against eight road system performance measures endorsed by the ALGA Roads and Transport Advisory Committee (RTAC).

In 2012, ALGA commissioned a pilot study: National State of the Assets Report (pilot).

This study built on the recommendations of earlier inquiries, the national assessment frameworks, subsequent institutional reform, and the work in 2010 that investigated the funding gap for local roads.

The focus of the pilot study was on sealed and unsealed local roads, plus concrete and timber bridges.

Together with each of the state and territory local government associations, ALGA identified 55 councils for inclusion in the study. These councils were selected to represent both rural and urban local governments across the nation.

The report provided a clearer picture about the state of local road assets in terms of condition, function, and capacity metrics.

It found councils generally had high levels of awareness of the structural condition of their road and bridge infrastructure. Council engineers reported they had low data confidence for function and capacity metrics of these assets.

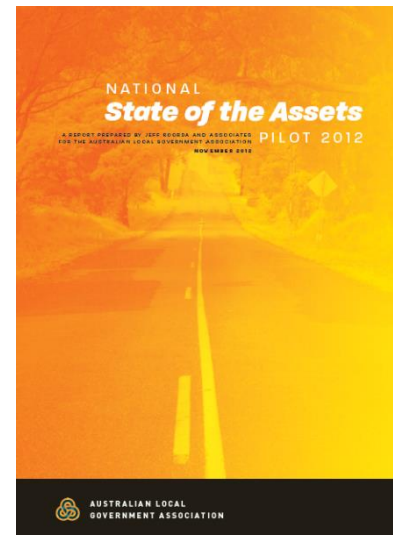
The assessment of whether the assets could meet their intended purpose is measured by function. Capacity metrics help us understand if the asset is under or over utilised and if we need more or less of these assets.

The pilot study demonstrated State of the Assets reporting was possible (recommendation from the 2003 federal inquiry) resulting in extending the survey to every council in Australia in 2013.

The first 'National State of the Assets Report' was launched at ALGA's National Local Roads and Transport Congress on 13th November 2013. The report was based on data provided by 344 (183 urban and 161 rural) councils, accounting for \$98.3 billion of road and bridge assets under management.

The report found that while councils indicated that most concrete bridges were in good condition, there was a large proportion of timber bridges in a poor to very poor state of repair. In total, \$1.4 billion in concrete and timber bridges were reported in a poor/very poor condition.

This risk prompted, in part, the implementation of the federal government 'Bridges Renewal Program', currently a \$760 million program funded over 10-years with an ongoing commitment of at least \$85 million per year from 2025-26.¹¹



¹¹ Australian Government, Bridges Renewal Program, website [accessed May 2021].

The second 'National State of the Assets Report' released in 2014 increased the sample size to 396 (70%) of all councils managing a total of \$104.8 billion of local road and bridge infrastructure.

The report also assessed the status of council's implementation of Asset Management and Long-Term Financial Plans. It found a high percentage of councils had adopted these plans however there was little evidence to suggest the service level cost projections and risks communicated in the asset management plans were incorporated in the long-term financial planning process.

A properly developed asset management plan provides a council with several important benefits and outcomes.

These include:

- Gaining an understanding of the options, costs and risks associated with the ongoing management of large-scale infrastructure.
- Having a basis for engagement with the community on funding levels, service levels, priorities, and associated trade-offs; and
- Producing a series of financial projections on the future operating and capital outlays needed to sustain infrastructure services at an affordable level for incorporation into the long-term financial planning process.

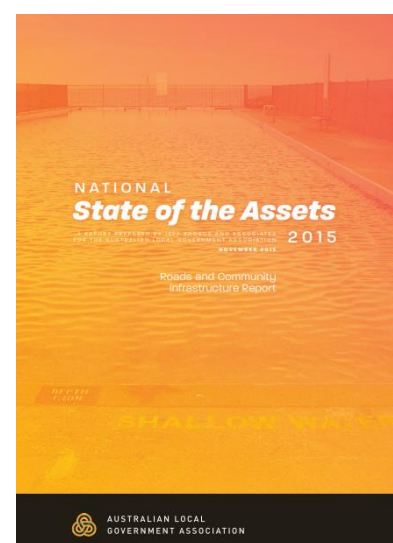
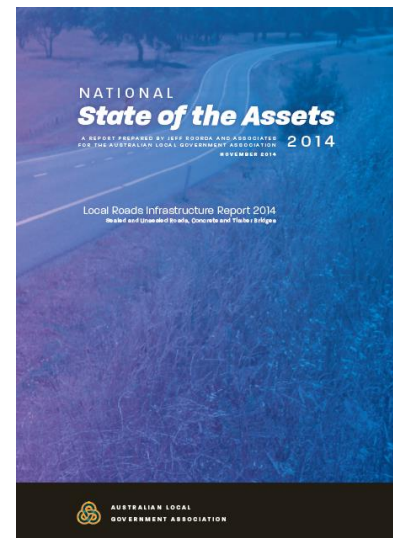
The replacement cost of local road infrastructure reported in poor to very poor condition was \$11.7 billion.

The NSoA Report was expanded in 2015 to include other key asset groups for which local government typically has responsibility including:

- Building & Facilities.
- Parks & Recreation.
- Stormwater.
- Water & Wastewater; and
- Airports & Aerodromes.

The NSoA 2015 Report highlighted the need for local governments across Australia to address the following challenges:

- Infrastructure ownership is highly concentrated in local government, which raised around 3.6 per cent of Australia's total tax revenue in the 2016–17 financial year¹² while accounting for six per cent of total public-sector spending¹³ and evidence suggests local infrastructure plans have been poorly integrated with state and federal initiatives.



¹² 5506.0 - Taxation Revenue, Australia, 2016-17.

¹³ 5512.0 - Government Finance Statistics, Australia, 2016-17.

- Infrastructure needs are changing fast due to new technologies and an increasing (and ageing) population forcing a reallocation of the available resources to where the greatest need is; and
- Long term national infrastructure plans needing to account for regional differences in population, climate, and topography, to manage risk and to ensure equitable access to local services and infrastructure for all communities.

Key findings from the 2015 report identified 11% or \$47 billion of assets were in poor to very poor condition. Data confidence remained low for function and capacity metrics.

Asset management planning required further development encouraging community engagement on service level and risk scenarios to balance revenues and affordability.

In 2018, the fourth report identified an increasing cost to replace ageing infrastructure. Infrastructure built during the 'baby boom' and the rapid growth period in the 1960's and 70's was reported as showing signs of deterioration.

Despite a steady increase in renewal spending, the proportion of local government infrastructure in poor condition was not decreasing, indicating an increasing need for councils to move into a major renewal phase over the coming 20 years to sustain service levels.

This challenge was compounded by the need to upgrade existing and acquire new infrastructure to meet changing circumstances, growth, and demand.

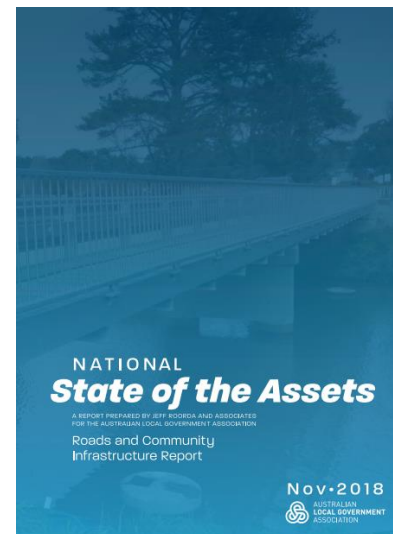
Councils estimated \$24 billion of its existing infrastructure had poor capacity. The cost of retrofitting infrastructure in poor capacity is expensive as it requires careful assessment, planning and coordination. Think of land acquisitions in urban settings or narrow winding local roads in rural areas in need of widening and realignment to meet safety standards to cater for the needs of larger vehicles to access farm gate and local distribution centres.

Asset management plans are an essential planning document for local government to report infrastructure funding needed for the next 10+ years to achieve productivity and risk targets. Despite this requirement, the report identified the adoption rate of asset management plans was in decline across all the key asset classes. The report demonstrated councils' performance in aligning the funding needed to deliver services in the asset management plan with the long-term financial plan had deteriorated since the 2009 'Local Government Reform' initiatives were implemented.

In 2021, the fifth report highlighted 60%-70% of local government assets were in relatively good condition, function reasonably and are well utilised. However, approximately 20 – 26% of local government assets were fair, and around 10% were in a poor to very poor state of repair.

The report showed that within existing resources and capacity constraints the condition, function and capacity of local government assets had essentially plateaued.

The estimated replacement cost of all poor to very poor assets was \$51 billion.



The 2024 report

The focus of the NSoA report is on infrastructure assets that have, or have potential to have, a material impact on the long-term financial performance of each council.

Given the value of healthy and sustainable communities, it was decided to include footpaths and cycleways into the reporting for the 2024 report.

This 2024 NSoA report builds on previous State of the Assets Reports and looks at how Australian local governments invest, plan, and report on their local infrastructure.

Data is collected for each of the following eight classes of infrastructure:

1. Roads – Sealed & Unsealed
2. Bridges – Concrete & Timber
3. Building & Facilities
4. Parks & Recreation
5. Stormwater
6. Water & Wastewater
7. Airports & Aerodromes; and
8. Footpaths & Cycleways

The research and underpinning data reports across three key areas:

- Investment
- Planning; and
- Performance

While the report is aimed to be a communication document for stakeholders, the report also aims to **improve safety, equity, and productivity for communities at the local, regional, and national level** by:

- Identifying current and future infrastructure challenges and opportunities.
- Providing opportunities to invest in local government infrastructure to ensure communities can meet the demands of changing circumstances.
- Presenting a basis for ongoing measurement regarding infrastructure service levels and risk management that provides:
 - A framework for accountability and value for money; and
 - A measure of asset management and long-term financial planning capability.

The report answers the question:

“Is the local government infrastructure getting better, worse or staying the same?”

It also provides a consistent and evidence-based approach for infrastructure reporting that provides insight to the challenges facing local government in Australia.

Future reports could include other groups of assets that provide community, social, and environmental value such as recycling, and waste management services.

Methodology

To achieve the objectives of the report, data requirements have purposely been kept at a high level to ease the burden of data provision by each council. Data is readily available from planning and reporting documents legislated in each state and territory.

These documents are the:

- Strategic asset management plan and/or supporting infrastructure plan(s).
- Annual report and supporting financial statements.

The aim is to ensure infrastructure assets that have a material impact on the balance sheet are regularly assessed.

The data collected for the NSoA report is validated to enable meaningful comparisons from which conclusions can be drawn. Details on the validation process can be found in the Survey Response section.

The NSoA report is focused on the underlying drivers of managing infrastructure. The methodology groups councils according to size, location, and jurisdictional control. It does not make comparisons between individual councils.

Data has been collected regularly on a consistent basis since 2013 enabling sufficient trend analysis that reports past, present, and considers possible future trends on levels of infrastructure:

- Investment
- Planning; and
- Performance

Councils are asked to provide data for the most recent financial reporting period (i.e., the 2024 NSoA report is based on data provided for the financial reporting period ending 30th June 2023).

Whilst the data provided is checked, the validation process does not audit the:

- Currency or accuracy of the data; and
- Maturity of the asset and financial management plans.

Despite the data is being provided on a voluntary basis, the sample size (currently 458 or 85% of all councils) is suitably sufficient for comparable analysis across all measures and asset classes. The low margins of error identified during the validation process gave us confidence in the data.¹⁴

The following outlines the:

- Data requirements.
- Data confidence.
- Performance indicators; and
- Reporting categories.

Subsequent assessment enables the findings and conclusions to be formed leading to a list of recommendations being presented.

¹⁴ ALGA, 2024 Data Validation Report.

Data Requirements

Data is collected for the following infrastructure asset classes deemed to have a material impact on a councils' Balance Sheet:

1. Roads – Sealed & Unsealed.
2. Bridges – Concrete & Timber.
3. Building & Facilities.
4. Parks & Recreation.
5. Stormwater.
6. Water & Wastewater.
7. Airports & Aerodromes; and
8. Footpaths & Cycleways.

For each asset class, the following infrastructure investment, planning and performance data was requested:

Infrastructure Investment

Given local government is required to report the value of their infrastructure assets using fair value principles, councils were asked to provide their valuation data.¹⁵

The valuation data collected for each asset class, where applicable, is:

- Replacement Cost (RC).
- Depreciable Amount (DA).
- Current Replacement Cost (CRC); and
- Annual Depreciation (AnnDep)

Analysis of the financial valuation data provides insight to the:

- Quantum of capital investment in local government infrastructure.
- Comparison of capital investment between asset groupings.
- Remaining service potential of the assets.
- Average age of council's physical infrastructure assets.
- Rate of consumption; and the
- Average estimated useful life of infrastructure assets.

Infrastructure Planning

The quality of infrastructure planning is measured by the extent to which long-term Asset Management and Financial Plans are adopted and aligned.

Councils were asked to provide data on the status of their:

- Asset Management Plan for each asset category; and
- Long-Term Financial Plan (LTFP) development.

and the extent to which the

Forecast outlays from each Asset Management Plan are included in the LTFP.

¹⁵ Fair value defined in AASB 116, para 6. (i.e., the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction).

Infrastructure Performance

Asset performance data collected for each asset class, where applicable, is:¹⁶

- **Condition** Quality ...How good is the service?
- **Function** Suitability ...Is it the right service?
- **Capacity** Utilisation ...Do we need more or less services?

The measurement framework allows data to be:

- Provided by professional judgement of experienced staff in a very short time.
- Sourced from mandated planning and reporting documents.
- Easily verifiable by council information systems and/or the community.
- Progressively linked to asset management plans if not already.
- Repeatable and auditable to produce material levels of accuracy; and
- Materially consistent and practical to complete regardless of the size and complexity of the council.

Each infrastructure performance measure is calculated and reported as a proportion of the replacement cost against three grades based on the IPWEA International Infrastructure Management Manual (IIMM) 1 to 5 rating scale for each asset category.

The three-point grading is best described as follows.

1. Good to very good grading (Rating 1 and 2).
2. Fair grading (3); and
3. Poor to very poor grading (4 and 5).

The underpinning infrastructure performance grading system for condition, function and capacity is detailed in Appendix B.

¹⁶ Not every council has responsibility for each of the reported asset classes. For example, outside rural regional New South Wales and Queensland, councils do not have responsibility for water and wastewater infrastructure. Around 50 South Australian councils currently operate 175 Community Wastewater Management Systems (CWMS), and most rural regional councils have responsibility for an airport, aerodrome or airstrip in some form.

Data Confidence

Councils need to be confident that the data in their information systems is materially accurate and up to date so they can use it to make effective evidence-based decisions.

While data for this report is provided voluntarily, councils were asked to indicate the level of confidence they had in their infrastructure performance data being provided based on the metrics described in Table 1.

Table 1 Measures of data confidence

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

Data reliability and integrity provides clarity over the robustness of plans, and the degree of contingency that may need to be built in to achieve effective asset management performance.

The NSoA report emphasises that data confidence is inextricably linked to:

- Organisational capacity to engage with external stakeholders.
- Asset management and financial planning and reporting, knowledge, and capability.
- Information and predictive modelling systems.
- Decision support for affordable service delivery options; and ultimately
- Investment decisions on acquiring new assets, plus ongoing operation, maintenance, renewal and/or upgrade of existing assets.

Performance Indicators

The NSoA report provides the evidence for all levels of government to make informed decisions about the future of local government infrastructure.

This evidence is presented in a performance indicator framework that reports past, present, and forecasts possible future trends on levels of infrastructure:

- Investment.
- Planning; and
- Performance.

A summary of the performance indicators is presented below. Detail on the metrics of each performance indicator can be found in the Appendices.

The infrastructure investment indicators are best described in the following table.

Table 2 Infrastructure Investment Indicators

Indicator	What it measures	How is it measured?	Desired Target
Asset Consumption Ratio	The level of service potential ('as new' condition) remaining in existing infrastructure.	The percentage of current replacement cost over the 'gross' replacement cost. ¹⁷	Notionally between 40% and 80%.
	What does it mean? A high ratio indicates assets have greater service potential remaining. A low ratio indicates assets have lesser service potential remaining. An upward trend indicates the service potential is increasing (i.e., the average age of assets is decreasing, and overall performance may be improving). A downward trend indicates the service potential is decreasing (i.e., the average age of assets is increasing, and overall performance may be declining). If local government is maintaining and renewing/replacing its assets in accordance with a well-prepared asset management plan, then the fact that its Asset Consumption Ratio may be relatively low and/or declining should not be a cause for concern – providing it is operating sustainably.		
Depreciation Rate	The estimated useful life of the assets.	The percentage of annual depreciation over the depreciable amount.	Not applicable.
	What does it mean? A high rate indicates assets are being consumed over a shorter period. A low rate indicates assets are being consumed over a longer period. An upward trend indicates assets are expected to have a shorter life. A downward trend indicates assets are expected to last longer.		

¹⁷ Current replacement cost = Gross replacement cost less accumulated obsolescence.

The infrastructure planning indicators are best described in the following table.

Table 3 Infrastructure Planning Indicators

Indicator	What it measures	How is it measured?	Desired Target
Asset Management Plan Adopted	The degree of asset management planning capability.	• Yes, • No, • Out of Date, or • Not Applicable¹⁸	100% adopted
	What does it mean? The extent to which councils have an up-to-date plan to communicate the trade-offs on infrastructure performance, cost, and risk for an agreed and affordable funding scenario.		
Long-Term Financial Plan Adopted	The degree of long-term financial planning capability.	• Yes, • No, • Out of Date	100% adopted
	What does it mean? The extent to which councils have a plan to generate, spend and save future income to fund existing and future services.		
AM Plan financial projections included in the Long-term Financial Plan	The degree to which the forecast outlays from each AM Plan are included in the LTFP.	• Yes, • No, • Out of Date, or • Not Applicable	100% included
	What does it mean? If the trade-offs on infrastructure performance, cost, and risk for an agreed and affordable funding scenario from the AM Plan are incorporated in the LTFP, council can demonstrate with confidence the timing and resource requirements to deliver services that the community value.		

¹⁸ Not Applicable represents those asset classes council does not have responsibility or control over.

The infrastructure performance indicators are best described in the following table.

Table 4 Infrastructure Performance Indicators

Indicator	What it measures	How is it measured?	Desired Target
Condition	The quality of the service being provided. Helps us understand how good the service is and where it is in its lifecycle.	Proportion of asset replacement cost in good, fair, and poor condition using the IIMM condition grading system.	Less than 10% in poor condition depending on risk profile.
	What does it mean? Helps us evaluate remaining useful life and can assist in estimating the year of acquisition.		
Function	If it is the right asset? Helps us understand future needs in response to changing circumstances.	Proportion of asset replacement cost that meets its intended purpose, using good, fair, and poor metrics adapted from Cloake & Sui, 2002.	Less than 10% in poor function depending on risk profile.
	What does it mean? Function helps us understand if the assets are suitable for their current purpose and if they need upgrading in response to changing circumstances.		
Capacity	The utilisation of the assets. Helps us understand if the service is under or over utilised. The proportion of asset value in need of investment to meet utilisation needs now and in the future.	Proportion of asset replacement cost that is operating within targeted capacity, using good, fair, and poor metrics adapted from Cloake & Sui, 2002.	Less than 10% in poor capacity depending on risk profile.
	What does it mean? It informs us if we need more, or less assets to meet future needs due to demand and growth.		

For NSoA reporting, indicators are considered network indicators. In other words, they indicate the performance of local government infrastructure in the context of all assets contained in each classification.

The focus of reporting is on the proportion of assets in a poor to very poor state of condition, function, and capacity as this is where local government typically spends most of its energy ensuring these assets are fit for purpose.

The underpinning infrastructure performance grading system for condition, function and capacity is detailed in Appendix B.

Reporting Categories

Reporting categories are used to enable meaningful comparisons from which conclusions can be drawn. Each performance indicator reports against:

1. Infrastructure asset class.
2. The Australian Classification of Local Governments (ACLG); and¹⁹
3. State and territory jurisdiction.

When assigning the ACLG groupings for this report, each council is placed into one of four sub-categories depending on their rural or urban classification as follows:

- Rural:
 1. Agricultural – small, medium, large, and very large populations; and
 2. Remote – very small, small, medium, and large populations.
- Urban:
 3. Metropolitan – capital cities, developed (suburban) and urban fringe metropolitan councils; and
 4. Regional – non-metropolitan councils with urban centres in regional areas.

Table 5 shows the number and proportion of local councils ACLG grouping as of June 2023.

Table 5 Local government by ACLG

ACLG Grouping	Total	
	(N ^o)	(%)
Rural Agricultural	222	41%
Rural Remote	75	14%
Urban Metropolitan	134	25%
Urban Regional	106	20%
Total	537	100%

Of the 537 councils in Australia:

- 297 (55%) are in rural agricultural and remote areas; compared with
- 240 (45%) in urban metropolitan and regional areas.

Alternatively,

- 403 (75%) are in the rural agricultural, remote, and regional areas; compared to
- 134 (25%) located in urban metropolitan areas.

¹⁹ The Australian Classification of Local Governments (ACLG) classifies councils into 22 categories according to their population, socioeconomic characteristics, and their capacity to deliver a range of services to the community. Refer Appendix C for more explanation.

Table 6 shows the number and proportion of local councils by population, as of June 2023.

Table 6 Local government by population

Population type	Population	Total	
		(Nº)	(%)
Very Small	<5,000	183	34%
Small	5,000 – 30,000	178	33%
Medium	30,000 – 70,000	84	16%
Large	>70,000	92	17%
Total		537	100%

Of the 537 councils in Australia:

- 183 (34%) serve very small populations less than 5,000.
- 178 (33%) serve small populations between 5,000 and 30,000; and
- 176 (33%) serve medium to large populations greater than 30,000.

Figure 4 shows the proportion of council groupings by population.

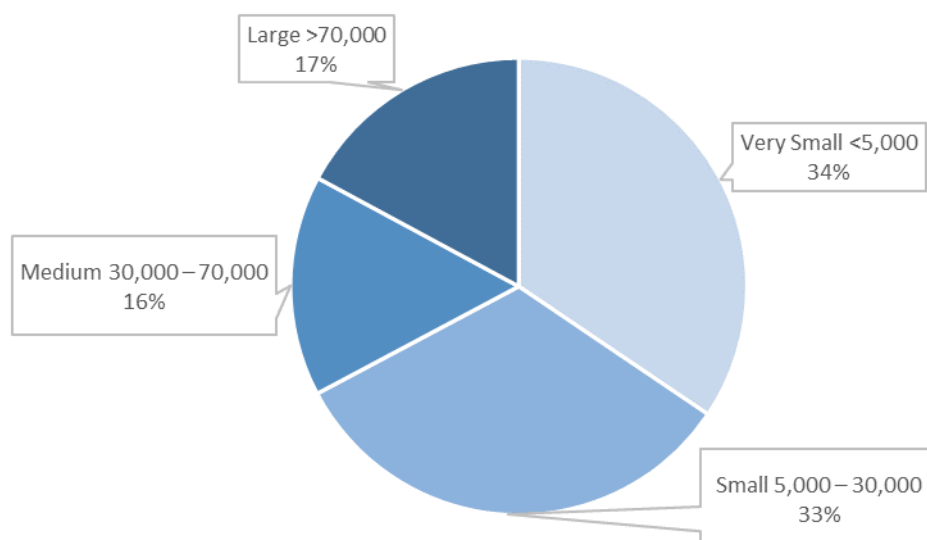


Figure 4 Local government by population (June 2023)

It shows:

- Two thirds (67%) or 361 councils serve populations less than 30,000.
- One third (33%) or 176 serve medium to large populations greater than 30,000; and
- 92 (17%) serve populations greater than 70,000.

Table 7 shows the population and the number and proportion of councils in each state and territory, as of June 2023.

Table 7 Local government by state & territory (June 2023)

State & Territory	Population	Total	
		(Nº)	(%)
New South Wales	8,341,272	128	24%
Northern Territory	244,534	17	3%
Queensland	5,456,169	77	14%
South Australia	1,846,535	68	13%
Tasmania	573,156	29	5%
Victoria	6,814,488	79	15%
Western Australia	2,883,681	139	26%
Total	26,159,835	537	100%

Figure 5 shows the proportion of councils by state and territory.

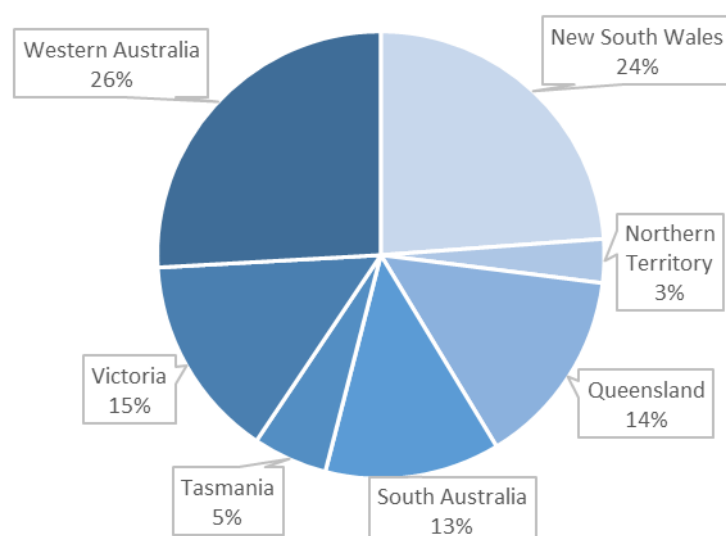


Figure 5 Local councils by state & territory (June 2023)

Of the six states and territory responsible for local government in Australia, New South Wales, and Western Australia combined account for 267 (50%) of the 537 local governments.

The Northern Territory and Tasmanian councils have the smallest representation at 17 (3%) and 29 (5%) respectively.

On average, New South Wales, Queensland, and Victorian councils have less councils per population.

Overall, New South Wales, Queensland, and Victorian councils serve approximately 20 million people, approximately 79% of the total Australian population.

Survey Response

Since 2013, ALGA and its member state and territory local government associations have encouraged every local government in Australia to participate in a self-assessment survey of their major infrastructure assets across three areas:

- Investment.
- Planning; and
- Performance.

During the most recent data collection phase, the number and proportion of councils who provided new and updated data for the reporting period ending June 2023 was 236 (44%).

Five councils participated for the first time increasing the total number of councils who have participated to date to 458. This is 85% of the 537 councils across the nation.

Of these,

- 236 (44%) councils provided new or updated data.
- 222 (41%) councils chose to roll-over their pre-existing data; and
- 79 (15%) councils are yet to participate.

Figure 6 shows the number and proportion of councils who:

- Provided new and updated data from previous surveys.
- Chose to roll-over their pre-existing data; and
- Are yet to participate.

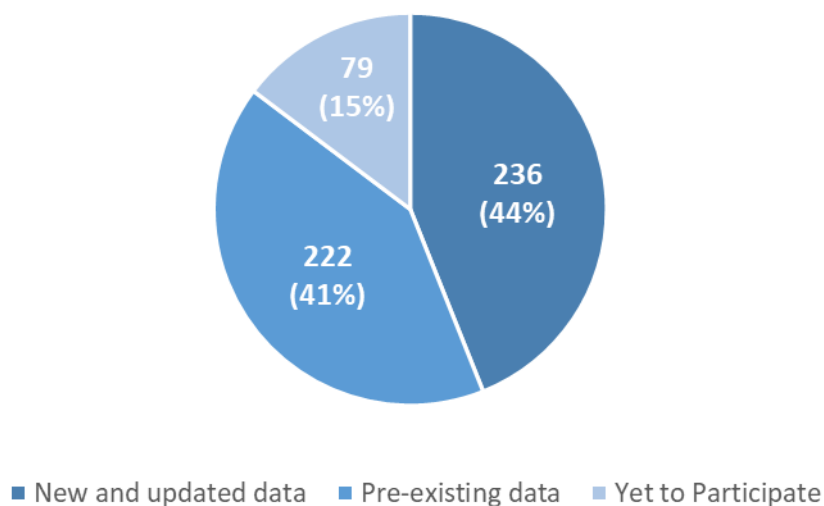


Figure 6 Number and proportion of councils responding to the survey

These results provide an indication of the importance (and capability) local government places on reporting within a nationally consistent reporting framework.

It could be argued 56% of responding councils do not see the survey as important. It may also reflect the priority management places on sharing and communicating core level data and information essential for infrastructure public policy development and maintenance.

A list of responding councils in the NSoA survey can be found in Appendix D.

Response by Australian Classification of Local Government

The response rate grouped by the Australian Classification of Local Government (ACLG) criteria for the reporting period ending June 2023 is summarised in Figure 7.

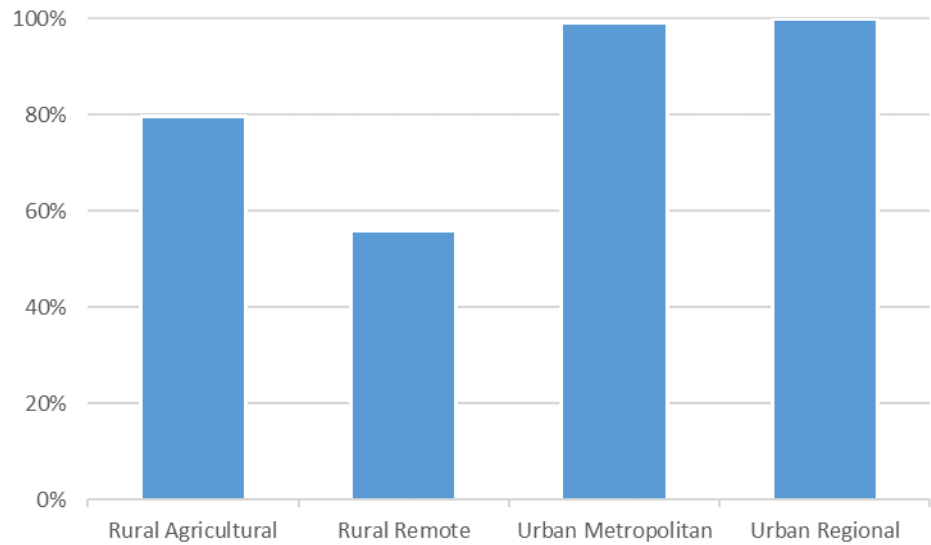


Figure 7 Response rate by ACLG

The response rate is highest in the urban metropolitan (99%) and regional towns (100%). It is lowest for those councils serving populations less than 20,000 people in the rural areas – 80% for rural agricultural and 56% for rural remote councils.

Response by State and Territory

The response rate by each state and territory for the reporting period ending June 2023 is shown in Figure 8.

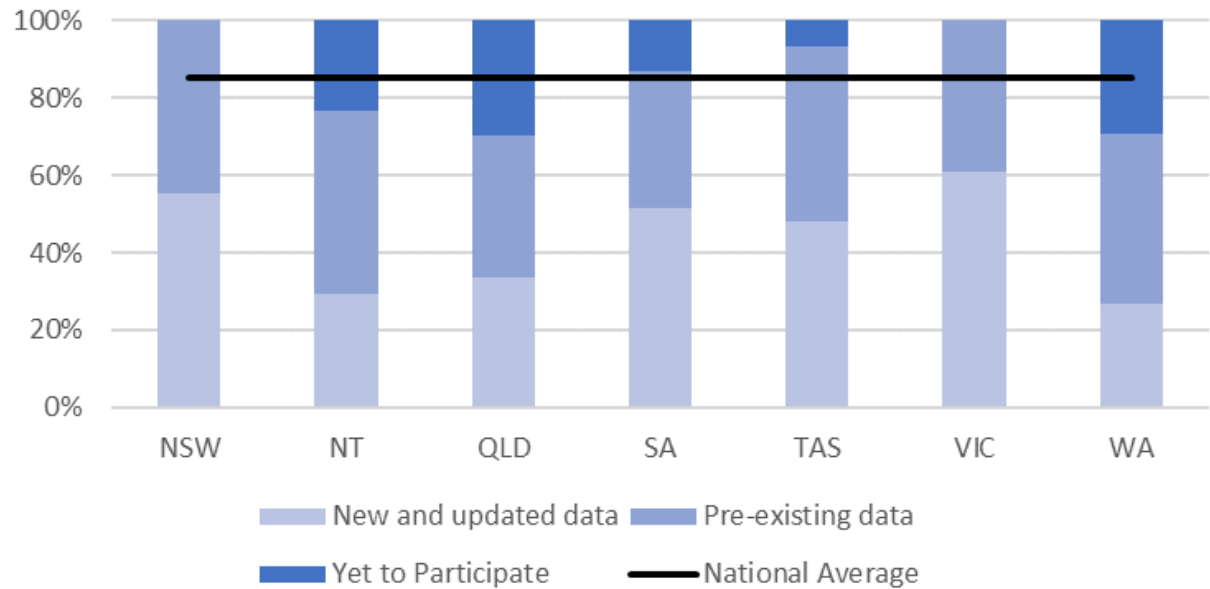


Figure 8 Response rate by state & territory

The states with 100% response rate were New South Wales and Victoria. Tasmania and South Australia response rate was above the national average of 85% at 97% and 86% respectively. The Northern Territory, Western Australia and Queensland were below the national average at 76%, 71% and 70% respectively.

Data Validation

Ensuring the evidence base is credible, IPWEA undertook a validation exercise to ensure the data received from local councils meet predefined requirements and standards.

A check for completeness, accuracy, and reliability was undertaken. This check mitigates the risk of basing decisions on data with imperfections which are not materially representative of the situation at hand.

To ensure the sample data was suitable for extrapolation at a national level, a 95% confidence interval analysis was executed to inform conclusions on the asset consumption ratio, depreciation rate and the proportion of gross replacement cost in good/fair/poor condition, function, and capacity for each asset category.

The 95% confidence interval defines a range of values that we can be 95% certain contains the population mean. In other words, we can state we are confident 95% of inputs will fall in the range specified, for example, in 95% of instances councils report an Asset Consumption Ratio between 68% and 71% for Sealed Roads.

The post validation results suggest that the sample size is suitably sufficient for comparable analysis across all measures and the low margin of error provides confidence in the data.

The validated data is therefore well positioned to extrapolate the results and findings across the nation for all reporting categories.

An Overview of Local Government Infrastructure

Local government infrastructure is the backbone of local communities in Australia. It provides access to social health and well-being, education, transport, sport and recreation services. It serves key environmental functions as well, such as water and waste collection and recycling.

Inadequate investment in the infrastructure that provides these services leads to constrained economic activity, lower productivity and competitiveness, reduced amenity for users and declining social equity. It imposes substantial, and at times un-necessary costs, and ultimately Australia's economy and society lose out.²⁰

Together, the three levels of government are searching for better ways to deliver their infrastructure in a sustainable and affordable way for current and future generations.

The importance of planning, investing, and monitoring infrastructure performance is demonstrated in the Local Government Act of each state and territory. Each council therefore has a stewardship responsibility for taking good care of these assets.

Assets owned and controlled by local government include financial assets such as cash, investments, equity, and non-financial assets such as infrastructure, land, plant, and equipment. Infrastructure is by far the biggest investment.

The focus of this report is on the non-financial 'infrastructure assets' of local government. Infrastructure assets are defined in the International Infrastructure Management Manual (IIMM, 2020) as:

... long-lived physical assets that are essential for the functioning of a society and economy.

At the end of the 2022-23 financial year, local government in Australia had control of financial and non-financial assets valued at \$643 billion.²¹

The non-financial infrastructure component was valued at \$424 billion accounting for 66% of all assets, land accounted for \$153 billion (24%) and the remaining \$66 billion (10%) was attributed to other non-financial assets such as plant and equipment and financial assets such as cash, investments, and equity in other entities.²²

The value and proportion of non-financial infrastructure asset classes was calculated from the aggregated valuation inputs received from responding councils.

- The value of road infrastructure represents the major proportion of local government infrastructure assets at \$160 billion (38%).
- Stormwater assets are valued at \$83 billion (20%).
- Buildings are valued at \$65 billion (15%).
- Water & Wastewater are valued at \$58 billion (14%).
- Parks & Recreation assets are valued at \$21 billion (5%).
- Bridges are valued at \$20 billion (5%).
- Footpaths & Cycleways are valued at \$16 billion (4%); and
- Airports & Aerodromes represent the least in terms of asset value at \$2 billion (1%).

²⁰ Wiewiora et al.: Opportunities and challenges in engaging citizens

²¹ 2022-23, ABS cat. 5512.0, TABLE 339, Total Local Government Balance Sheet – Total Assets.

²² *ibid.*

The value and proportion of each local government infrastructure asset class in the context of all financial and non-financial assets controlled by local government is shown in Figure 9.

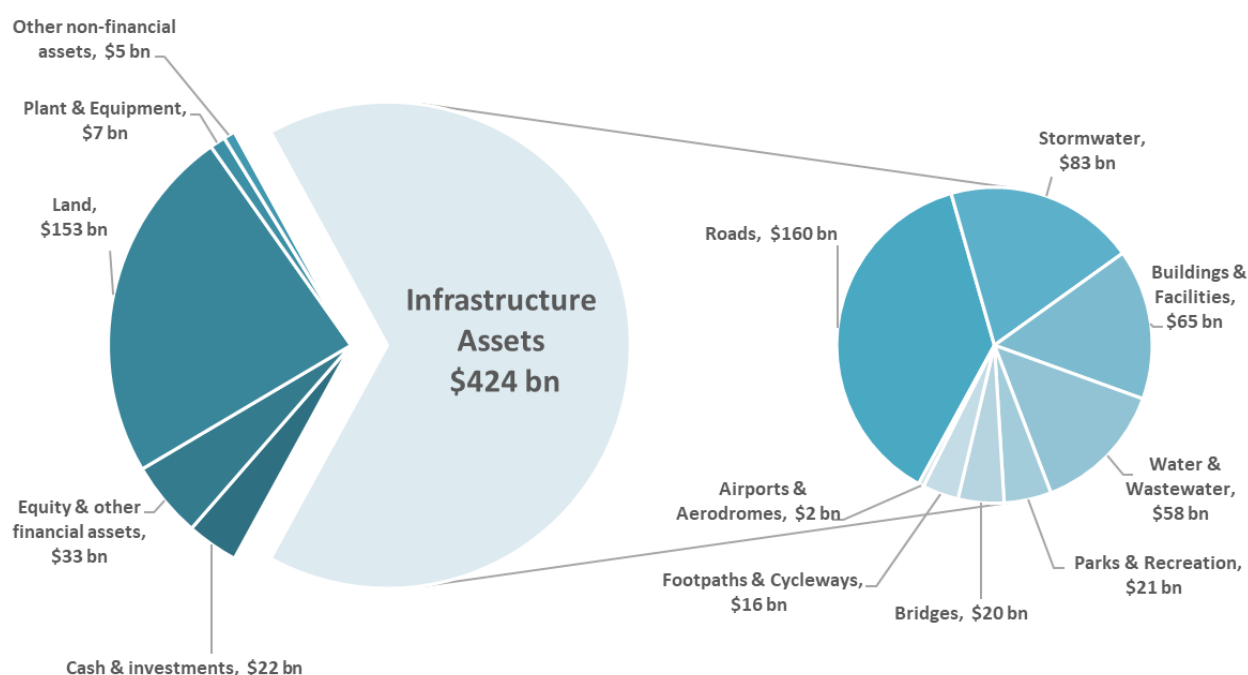


Figure 9 Financial and non-financial assets controlled by local government (June 2023)

The replacement cost of the non-financial infrastructure assets is higher than what is reported on the balance sheet. The estimated replacement cost of these infrastructure assets is \$665 billion representing an investment of approximately \$25,400 for each of the 26.2 million people in Australia.²³

These infrastructure assets are estimated to be depreciating at around \$9.7 billion per year.²⁴

²³ ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2023, TABLE 4. Estimated Resident Population, States and Territories (Number) – Australian Capital Territory and overseas territories population excluded.

²⁴ 2022-23, ABS cat. no. 5512.0, TABLE 339, Total Local General Government Operating Statement.

Roads

Local government provides a vital role in the provision and management of Australia's road transport system. Although national highways, state and arterial roads carry the major portion of the road traffic by volume, local government is responsible for approximately 678,000 km road by length.²⁵ This is approximately 77% of total road length in Australia.

Figure 10 shows the proportion of local government controlled sealed and unsealed roads as a proportion of the Australian road network.

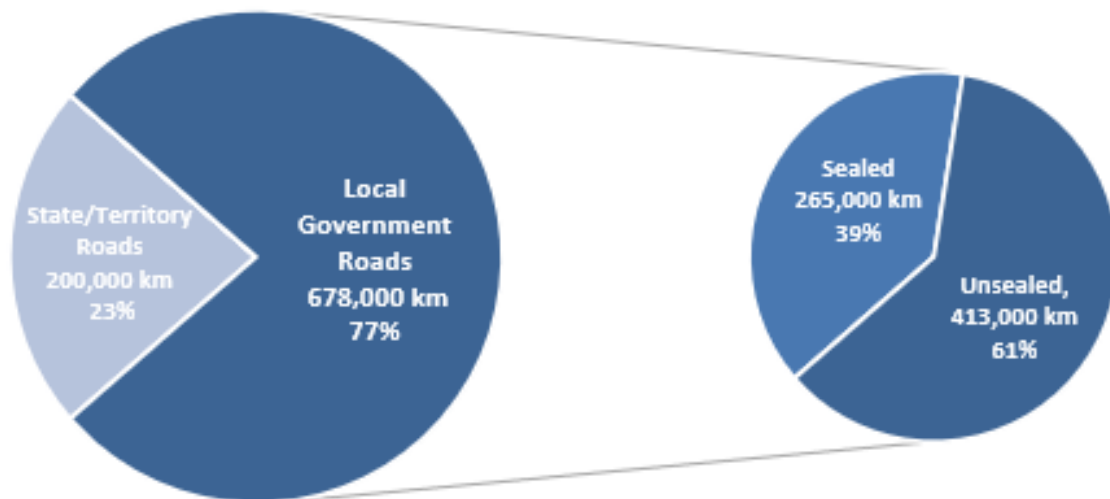


Figure 10 Local roads as a proportion of the Australian road network

Of the 678,000 km of roads controlled by local government in Australia, 265,000 km (39%) are sealed, and 413,000 km (61%) are unsealed.

A sealed road is defined as:

- A formed road with a pavement of imported or stabilised in-situ material (i.e., crushed rock and/or natural gravels) and a waterproof sealed surface.
- The sealed surface may comprise bitumen, asphalt, chip seal, concrete, or segmented (concrete or clay) pavers to hold the road surface together.

An unsealed road is defined as:

- A formed road with a pavement of imported materials (consisting of natural gravels and/or crushed rock) with a compacted surface.
- A formed or unformed road consisting of locally available earth material with little to no imported processed gravel. May also be a cleared flat graded track providing seasonal access. Includes open fire access tracks on gazetted road reserves.

²⁵ National Local Roads Data System, ALGA

Figure 11 shows the sealed and unsealed road length controlled by ACLG (2010-2020).

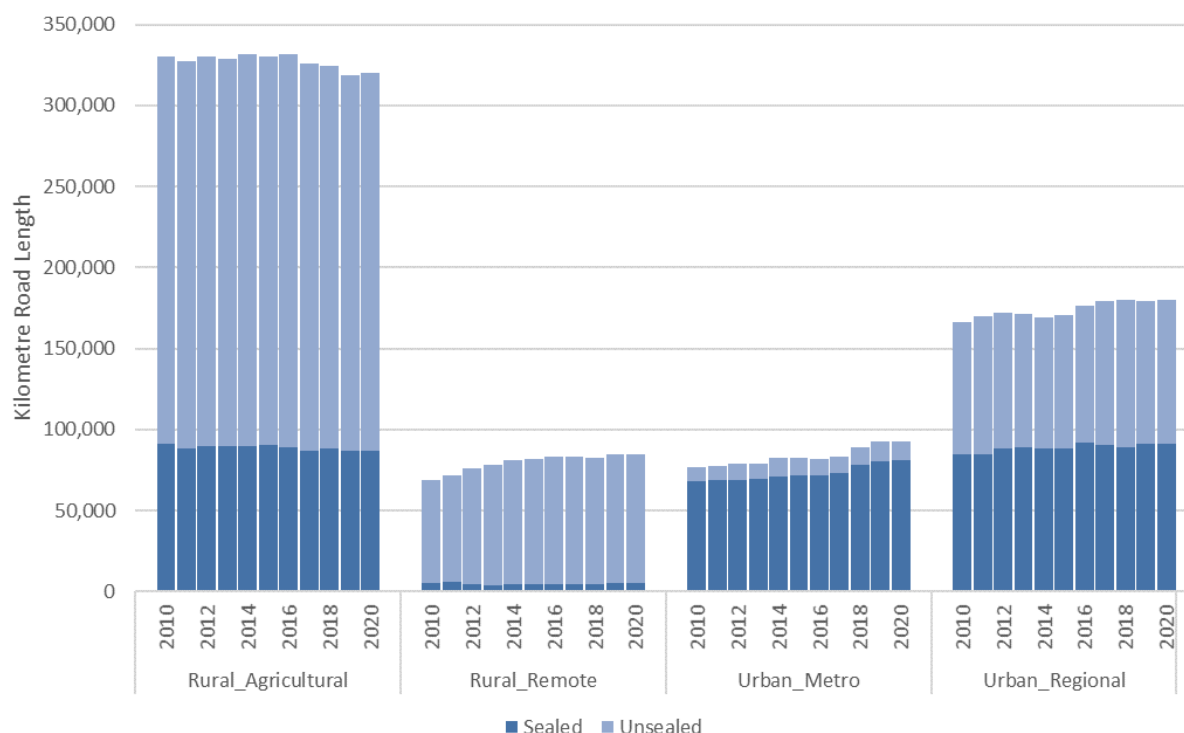


Figure 11 Sealed and unsealed local road length by ACLG (2010-2020)

Rural agricultural councils account for approximately 320,000 km (47%) of the total local road length in Australia.

Outside the urban metropolitan areas, rural (agricultural and remote) and regional councils are responsible for approximately 585,000 km (86%) of the total local road length in Australia.

Approximately 80,000 km (94%) of local roads controlled by rural remote councils are unsealed, compared to 12,000 km (13%) controlled by urban metro councils.

Table 8 provides an overview of the local government-controlled roads in Australia grouped by rural agricultural, remote, urban metropolitan and regional councils.

Table 8 Local roads in Australia by ACLG (2020)

	Rural Agricultural	Rural Remote	Urban Metropolitan	Urban Regional	TOTAL
Local road length (km)	320,000	85,000	93,000	180,000	678,000
%	47.2%	12.5%	13.7%	26.6%	100%
Population	1,487,177	216,606	16,305,749	6,906,985	24,916,517
%	6.0%	0.9%	65.4%	27.7%	100%
Population per km	5	3	175	38	37

Population is based on 2019 ABS cat. 3235.0 data for 537 local governments.

The cost of maintaining a kilometre of local government road in urban metropolitan councils is shared between 175 people, while the cost is shared between less than five people per kilometre in rural agricultural and remote council areas. This situation is partly a consequence of lower population density and councils in the rural/remote areas having responsibility for all but the higher order roads.

Figure 12 shows the local government road length by State & Territory (2010-2020).

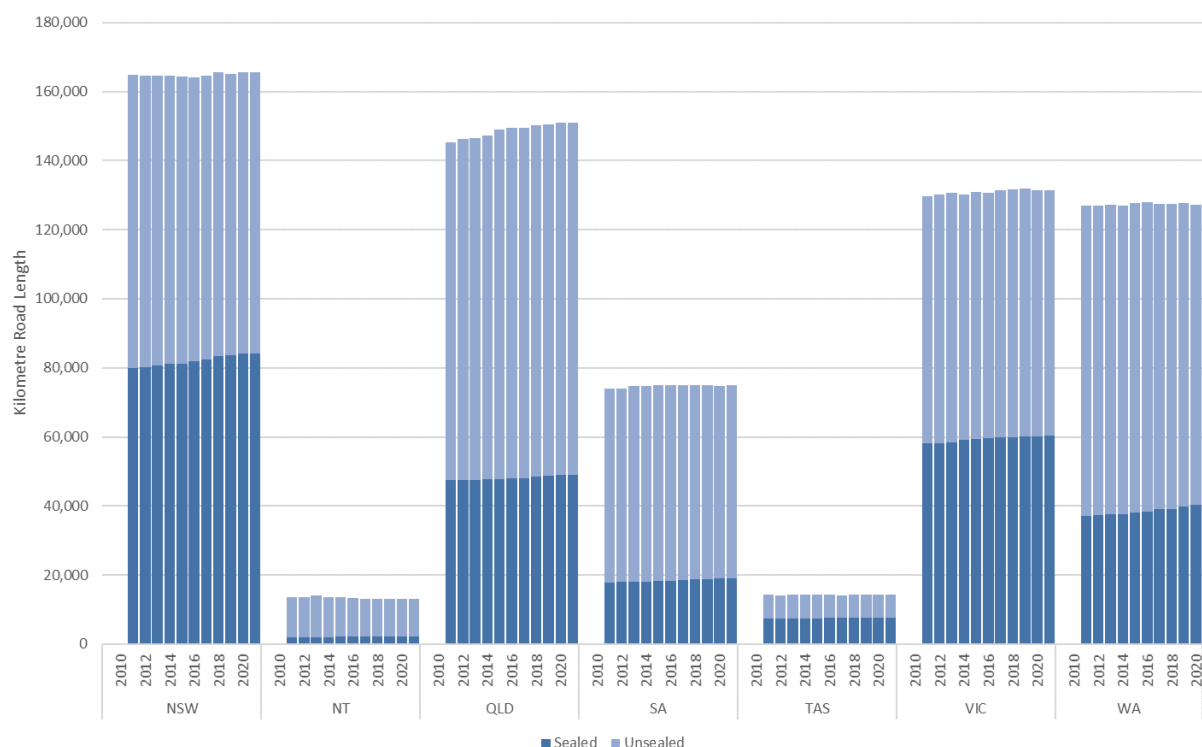


Figure 12 Sealed and unsealed local road length by state & territory (2010-2020)

New South Wales councils are responsible for approximately 165,500 km (24%) of the total local road length in Australia. The Northern Territory and Tasmania combined are responsible for approximately 27,500 km (4%) of the total local road length.

New South Wales has the highest length (84,200 km) and proportion (51%) of sealed roads. The Northern Territory has the lowest number of sealed roads (23,000 km) with the highest proportion (83%) being unsealed roads.

Queensland has the highest length of unsealed roads, estimated to be in the order of 100,000 km.

Table 9 provides an overview of the local government-controlled roads in Australia grouped by each State and Territory.

Table 9 Local roads in Australia by state & territory (2020)

	NSW	NT	QLD	SA	TAS	VIC	WA	TOTAL
Local road length (km)	165,500	13,200	151,000	75,000	14,300	131,500	127,500	678,000
%	24.4%	1.9%	22.3%	11.1%	2.1%	19.4%	18.8%	100%
Population	8,086,543	238,553	5,092,425	1,745,812	534,457	6,595,158	2,623,569	24,916,517
%	32.5%	1.0%	20.4%	7.0%	2.1%	26.5%	10.5%	100%
Population per km	49	18	34	23	37	50	21	37

Population is based on 2019 ABS cat. 3235.0 data for 537 local governments.

The ACT is not included as all local roads are managed by the Territory government.

The cost of maintaining a kilometre of local government road in New South Wales and Victoria is shared between 50 people. In Queensland and Tasmania, it is shared between 34 and 37 people whilst Northern Territory, South Australia and Western Australia share the cost between 18 to 23 people.

Key Challenges

Local road infrastructure faces several challenges:

1. **Funding and Budget Constraints:**
Local governments often operate with constrained budgets, making it challenging to allocate sufficient funds for road maintenance and upgrades.
Competing priorities for limited financial resources can lead to underinvestment in road infrastructure.
2. **Ageing Infrastructure:**
Many local roads are aging and were not designed to handle current traffic volumes and vehicle loads, leading to accelerated wear and tear.
Deferred maintenance can result in a significant backlog of repairs, increasing long-term costs and safety risks.
3. **Increased Traffic Volume:**
Growing populations and increased vehicle use lead to congestion, causing delays and reducing the efficiency of the road network.
Increased use of heavy vehicles, such as trucks for freight, accelerates road deterioration.
4. **Environmental and Weather Impacts:**
More frequent extreme weather events, such as heavy rainfall, flooding, and heatwaves, can damage road surfaces and infrastructure.
Balancing road construction and maintenance with environmental sustainability and minimizing the ecological footprint is a complex challenge.
5. **Safety Concerns:**
Ensuring the safety of all road users, including pedestrians, cyclists, and motorists, requires continuous improvement in road design, signage, and maintenance.
Implementing measures to reduce accidents and improve response times for emergencies is critical.
6. **Technological Integration:**
Incorporating new technologies, such as smart traffic management systems and autonomous vehicle infrastructure, requires significant investment and technical expertise.
Existing infrastructure needs to be upgraded to support modern technological advancements, which can be costly and complex.
7. **Coordination and Planning:**
Effective road infrastructure management often requires coordination between multiple agencies and jurisdictions, which can be challenging.
Developing and implementing long-term infrastructure plans that accommodate future growth and technological changes while securing the necessary funding is a continuous challenge.

Addressing these challenges requires innovative solutions, strategic planning, and often, collaboration with regional and national governments to secure the necessary resources and expertise.

Bridges

Bridges are an important part of the road transport network and come in many forms of construction. There are more than 45,000 road bridges and major culverts in Australia. Slightly less than half are managed by the state and territory governments, who, in the main, manage the high-capacity structures, while local councils manage about 24,000 of the structures.²⁶

The definition of a bridge and major culvert varies between road agencies and ALGA provides clarity by defining bridges and major culverts as structures that:

- Span a waterway area, or other obstruction, more than three (3) square metres; or
- Exceed 1.8 metres in diameter; and
- Located on a declared road or public reserve.
- Pedestrian bridges are also included.

The actual life of a bridge and major culvert varies considerably depending primarily on material composition, traffic loading and climatic conditions. With sound management general expectations range from 50-years for timber bridges to more than 100-years for concrete and steel structures.

Figure 13 shows the number of local government-controlled bridges and major culverts grouped by rural agricultural, remote, urban metropolitan and regional councils since 2010.

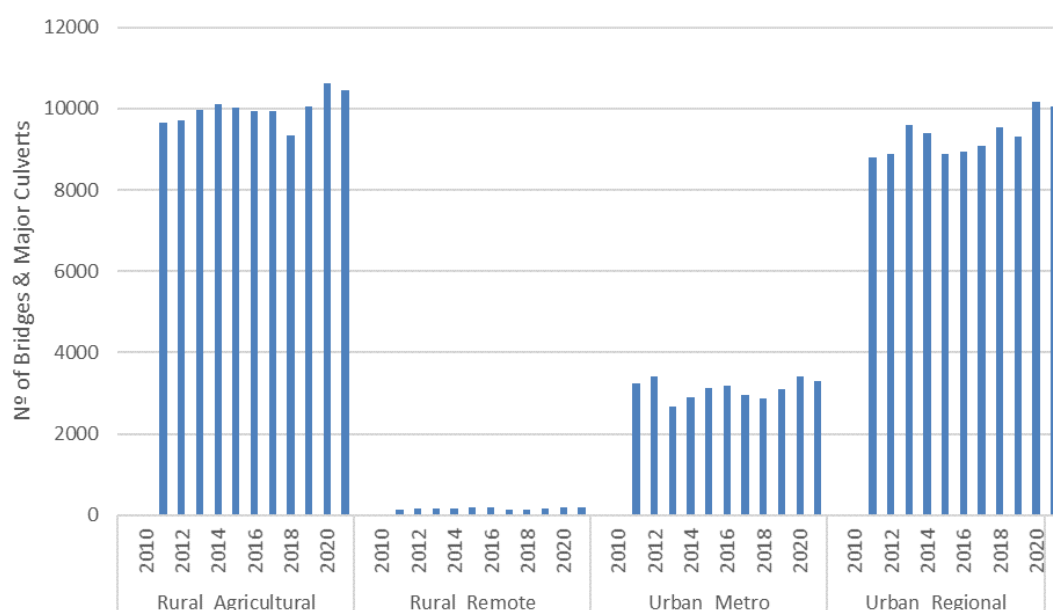


Figure 13 N° of bridges and major culverts by ACLG (2010-2020)

Rural agricultural and urban regional councils have by far the greatest number of bridges and major culverts (20,700) under their control. This is approximately 86% of the total local government-controlled bridges.

Rural remote councils have the least number of bridges and major culverts (195) under their control.

Urban metropolitan councils have 3,305 (14%) of all bridges and major culverts under their control.

²⁶ Austroads (2018), Guide to Asset Management, Part 13, p.2.

Table 10 provides an overview of the local government-controlled bridges and major culverts in Australia grouped by rural agricultural, remote, urban metropolitan and regional councils.

Table 10 Local government bridges and major culverts by ACLG (2020)

	Rural Agricultural	Rural Remote	Urban Metropolitan	Urban Regional	TOTAL
Nº of bridges	10,450	195	3,305	10,050	24,000
%	43.5%	0.8%	13.8%	41.9%	100%
Population	1,487,177	216,606	16,305,749	6,906,985	24,916,517
%	6.0%	0.9%	65.4%	27.7%	100%
Population per bridge	142	1,111	4,934	687	1,038

Population is based on 2019 ABS cat. 3235.0 data for 537 local governments.

The cost of maintaining a local government bridge in urban metropolitan councils is shared between 4,934 people, while the cost is shared between less than 142 people in rural agricultural council areas. This is partly a consequence of lower population density and councils in the rural areas being responsible for all but the higher order roads and bridges. It is worth noting, the size and cost of building bridges in an urban metropolitan area would most likely be larger and more expensive.

Figure 14 shows the number of local government-controlled bridges and major culverts by state and territory reported since 2010.

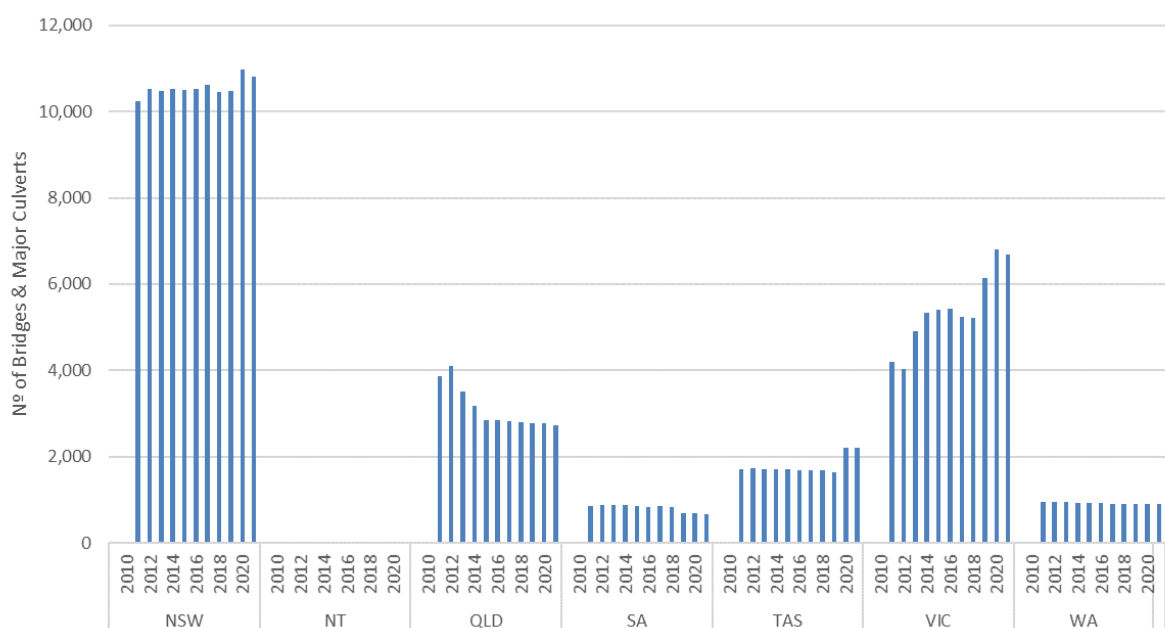


Figure 14 Nº of bridges and major culverts by state & territory (2010-2020)

Variations in the numbers over time are due to new construction, assets not previously accounted for in information systems, asset transfer from other levels of government and possible input errors during data collection and maintenance.

New South Wales councils are responsible for approximately 10,810 bridges and have the highest proportion (45%) of all local government-controlled bridges and major culverts in Australia.

South Australia and Western Australia at 670 (2.8%) and 900 (3.8%) respectively have the lowest number of local government-controlled bridges and major culverts in Australia.

Table 11 provides an overview of the local government-controlled bridges and major culverts in Australia grouped by each State and Territory.

Table 11 Local government bridges and major culverts by state & territory (2020)

	NSW	NT	QLD	SA	TAS	VIC	WA	TOTAL
Nº of bridges	10,810	Not reported	2,740	670	2,200	6,680	900	24,000
%	45.0%	0.0%	11.4%	2.8%	9.2%	27.8%	3.8%	100%
Population	8,086,543	238,553	5,092,425	1,745,812	534,457	6,595,158	2,623,569	24,916,517
%	32.5%	1.0%	20.4%	7.0%	2.1%	26.5%	10.5%	100%
Population per bridge	748		1,859	2,606	243	987	2,915	1,038

Population is based on 2019 ABS cat. 3235.0 data for 537 local governments.

The ACT is not included as all local roads are managed by the Territory government.

The Northern Territory councils do not report the number of bridges and major culverts in the NLRDS.

The cost of maintaining a local government bridge in Western Australia is shared between 2,915 people, while the cost in Tasmania is shared between 243 people.

Key Challenges

Bridges are high-cost investments and have a high consequence of failure if not managed properly. Poor management can significantly shorten a bridge's life and increase its lifecycle costs.

It is therefore necessary to manage all bridges and major culverts effectively, ensuring they are maintained in a safe and good state of repair with the most cost-efficient use of available resources.

For the past seventy years, all Australian State Road Authorities and local government have invested in widespread bridge construction. Design and construction of bridges in the mid-20th century were sometimes undertaken by personnel, suppliers and contractors who had limited experience in the bridge field. The main objective at that time was to establish new road systems as quickly as possible to meet rapid growth in road transport and full consideration was not always given to the long-term effects of such policies.

At the same time there has been a significant increase in the volume, size, mass, and speed of commercial vehicles using the road system. Older existing bridges have been subjected to far greater loads than they were originally designed for, resulting in more rapid deterioration and a greater maintenance requirement.

There are also significant numbers of bridges older than seventy years which are still in service, some dating back to the 19th century.

Federal and state/territory funding programs have been essential in keeping bridges safe and open to traffic however a 2023 IPWEA (NSW & ACT) timber bridge study reported the number of timber bridges in poor condition has increased to 453, the highest number since 2014.²⁷

Most of this funding appears to be allocated to structures on 'higher order' roads while many local government timber bridges are located on 'low order' roads having many 'first and last mile' implications if left in a poor state of repair. The consequence of this situation is that load restrictions and possible bridge closures will persist unless there is a targeted program of resources to address the problem.

²⁷ 2023 Timber Bridge Management Report, IPWEA (NSW & ACT).

Buildings

There are many specific building assets that are managed by local government in their overall operations. Compared to most other local government assets, council buildings serve a multitude of functions. For a typical local government, these functions can include:

- Administration
- Libraries
- Community Halls
- Art Galleries/Cultural Centres
- Entertainment Centres
- Sport and Recreation Facilities
- Housing
- Works Depots

It is also recognised that in many cases, many buildings are managed on a day-to-day basis by other entities such as sporting clubs, community groups or other such parties that may have built on council land under a lease arrangement. Often these leases provide for the building ownership to ultimately reside with the council. Accordingly, these building assets should be recognised by the council on its asset register, valued and accounted for under the Accounting Standards. They should also be subject to the normal risk assessment, condition and performance monitoring principles as required for other infrastructure assets owned by council.

Representing 15% of total local government infrastructure replacement cost, buildings are estimated to cost \$102 billion to replace in 2023. Councils indicate around 68% of this investment ensures buildings are fit for purpose, while 7% (\$7.2bn) of buildings have limited ability to meet program/service needs or exceed their original functional design intent.

In 2023, about a half of all local councils who had responsibility for a building portfolio had an asset management plan in place to help prioritise their capital and operations/maintenance investments. This is the same result as in 2015.

Sustained application of asset management plans enables councils to proactively manage their building infrastructure and community service needs.

Key Challenges

Buildings are complex assets with many material components lasting from between two and 80+ years. The task of monitoring and maintenance of these components is resource intensive, requiring skilled professionals to make careful judgements on the remaining life of a vast array of materials and critical components.

Combined with increasing demand for greater efficiency of energy systems that support many buildings addressing these challenges require careful planning, innovative solutions, and often, securing additional funding or partnerships to support sustainable building management practices.

Parks

Australians spend a lot of time visiting local parks and recreational facilities. A typical council park may contain several types of assets, such as a:

- Playground
- Toilet Block
- BBQ(s); and
- Trees and other natural assets.

For the asset manager, a park generally has a higher operating cost compared to capital investment ratio than any other asset class local government has responsibility for considered in this report.

For example, where a council invests \$10,000 in purchasing a new BBQ, it must consider the ongoing costs of maintaining and servicing that BBQ over the life of the asset. If it costs \$10,000 per year to operate, maintain and clean the BBQ and the life of that asset is 10 years, the total cost of that asset becomes \$110,000, rather than the initial outlay of \$10,000. Councils must consider these long-term costs, even for seemingly small items, when making expenditure decisions to ensure financial sustainability and value for their communities.

Key Challenges

Limited space in urban areas is causing local governments to be more creative by building park projects that provide mutually beneficial functions, such as public access spaces that also serve as flood control.

Another concern for local government is the ongoing cost of maintaining a new park, cycleway or play space, which have been contributed at no cost or funded from external sources.

Urban tree management in public spaces is an ongoing challenge particularly from a public safety perspective.

Stormwater

Stormwater systems range from large concrete open channel storm drains, roadside drains, underground pipe networks, pollutant traps and flood detention basins to water sensitive urban designs and natural riverine systems.

While stormwater management is the responsibility of both state and local governments, it is local government that collectively manages around \$83 billion of stormwater infrastructure assets.

As our cities, towns and suburbs expand, the amount of stormwater runoff increases due to the greater number of impervious surfaces, (i.e., more concrete, paved roads and roofing). Coupled with increasing intense rainfall events, there is potential to overwhelm the existing stormwater infrastructure networks, which were designed for lower levels of rainfall intensity and runoff.

There is no clear record of stormwater volumes, however, estimates of runoff in Australian cities exceeds the volume of water that the cities draw from their catchments and groundwater sources, which is estimated to total 2,100 gegalitres.²⁸

Figure 15 indicates how, for selected cities, the average annual volume of stormwater per household is similar to, and in some cases exceeds, the volume of other types of water used in the city.

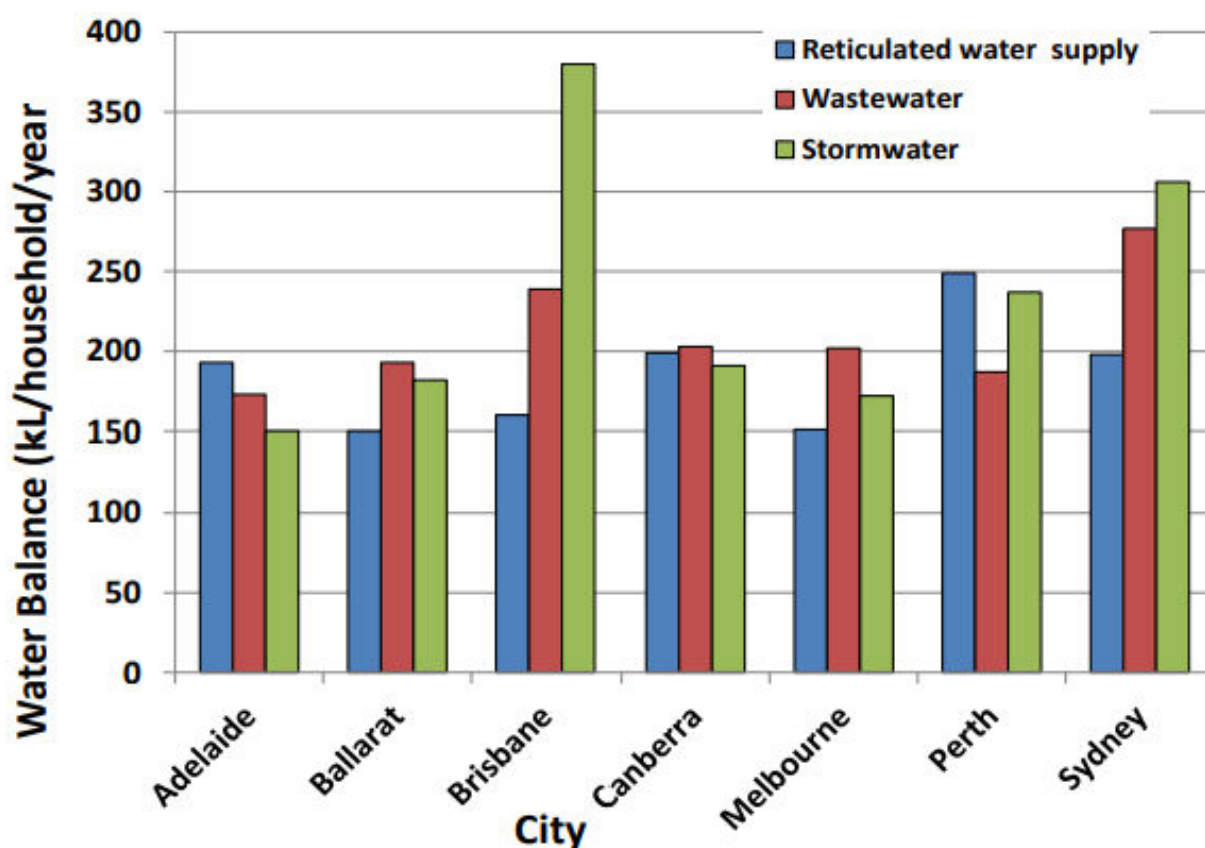


Figure 15 Average annual water balances from households, various cities²⁹

²⁸ Stormwater Australia, Submission 19, p. 3, to the 2015 Senate Inquiry into Stormwater.

²⁹ Urban Water Cycle Solutions, Submission 41, p. 5, to the 2015 Senate inquiry into Stormwater.

Key Challenges

Most stormwater assets in Australian urban areas are made of concrete. These assets are expected to last over 100 years. Given the expected life of these assets, examples of deterioration and ageing is apparent. The City of Melbourne, for example, advised that most of its drainage infrastructure is over 60 years old, although some drains date back to the 1850s. This infrastructure was built when flood mapping 'was poorly charted and understood', which has implications for effective stormwater management. The city noted that 'much of the existing drain infrastructure is reportedly designed to accommodate one-in-five-year events and many road locations are not designed to adequately accommodate overland flow'.³⁰

Given the many, often competing priorities of local government, stormwater management has tended not to receive the focus it could have, and many of the public good outcomes that could be achieved from better stormwater management are not within the mandate of local government to deliver.

Many of the country's legacy urban stormwater systems are struggling with the high cost of retrofits needed to address urban flooding and climate change. Upgrading large networks of ageing systems underneath densely populated areas carries significant costs and engineering challenges.

Open channel drains in rural areas are generally designed to achieve a lower flood immunity than those in urban environments. Consequently, rural drains may need to be upgraded or replaced with ones that are more appropriate when urban areas expand into these locations. This is rarely an issue in large urban redevelopments as trunk infrastructure may already exist.

With few dedicated funding sources, multi governance and ownership structures, expansive networks of ageing assets, increasingly stringent water quality regulations, and concerning climate change projections, the expected performance of stormwater systems is likely to decline without sufficient and effective intervention.

³⁰ City of Melbourne, Submission 43 to the 2015 Senate inquiry into Stormwater.

Water & Wastewater

Water & wastewater infrastructure directly affects our public health. When it's working properly, this infrastructure provides us with safe drinking water and limits the pollution of our local rivers and streams. If it's not maintained effectively, it can lead to contamination affecting the overall health and well-being of a community and region.

The Australian local government water and wastewater sector is capital intensive - these assets are estimated to cost \$91 billion to replace in 2023. Councils indicate around 95% of these assets are operating at the original design capacity, while the remaining 5% (\$4.3bn) has reached or exceeded it.

Local government, primarily in regional and rural parts of New South Wales, Queensland, are responsible for the pipes and facilities that bring clean water to our homes, collect, and treat wastewater, which are essential to the day-to-day functioning of our communities.

Fifty South Australian councils currently operate 175 Community Wastewater Management Systems (CWMS) throughout that state.

In 2023, about a half of all local councils who have responsibility for water and wastewater systems had an asset management plan in place to help prioritise their lifecycle investments. This is the same result as in 2015.

Whilst tighter planning and reporting controls exist for water & wastewater functions controlled by local government, there is a case for greater scrutiny to ensure councils can proactively manage water and wastewater infrastructure investment rather than reactively respond to pipeline and equipment failures.

Key Challenges

The 2019 Australian Infrastructure Audit found that the 'urban water sector faces challenges, including the impacts of climate change, population growth, ageing assets, and changing needs and expectations from users.' Failure to adequately address these challenges could lead to rising water bills, as well as exposing users to risks of declining service quality and reliability.

Variances in governance and planning processes are identified as the main issues in efficient asset management practices.³¹

Without good governance in place for these challenges, there could be severe urban water shortages or restrictions in many parts of the country.

For regional towns, water utilities often rely on a single supply source, with no physical link to an alternative bulk water supply. The lack of supply diversification creates further water security risks for these communities.

³¹ Mardiasmo et al.: Asset Management and Governance

Airports & Aerodromes

In Australia, there are around 340 airports certified or registered by the Civil Aviation Safety Authority (CASA) as having significant regular passenger transport services and some 2,000 much smaller aerodromes, airfields, and landing strips across the country.³²

The 11 largest airports in Australia (all capital cities, plus Gold Coast, Cairns and Alice Springs) account for about 84 per cent of overall passenger traffic and make the greatest economic contribution in terms of direct and indirect employment.

The remaining are primarily local government-owned or operated regional and remote airports that play a significant role in the national aviation network. In 2022, these airports handled 19 million passengers (or 16 per cent) of the national aviation passenger task and facilitated 364,000 (28 per cent) scheduled air transport aircraft movements. These airports support approximately 4000 staff either directly and indirectly employed in aviation operations or on the precinct.³³

From the 1950s, ownership of many Australian government-owned airports was transferred to local governments. Between 1989 and 1993 local governments were given full management and financial responsibility for these airports.

Under the transfer deeds, councils are obliged to continue owning and operating these aerodrome facilities unless they receive federal government permission to close or privatise.

These local government-controlled airports and aerodromes provide essential services for the local community including passenger transport, tourism, postal services, air ambulances, emergency services, crop dusting, surveying, and flight training. In some cases, the airport is the only means of passenger access to and from the local community, for example King Island and Flinders Council in the Bass Strait and remote communities in northern Australia during the wet season.

The composition of these airports typically include land, runways, taxiways, aprons, control tower, general aviation storage & maintenance facilities, terminal & administration buildings, parking, roads, drainage, water & wastewater systems, power supply and associated operating assets that provide essential services to a range of customers.

Key Challenges

A 2019 Productivity Commission report found that at least one-third of 35 regional airports it surveyed had negative operating margins, with these airports relying on local government or other financial assistance to cover their operating, maintenance and upgrading costs.³⁴

A 2016 Australian Airports Association regional airport infrastructure study identified many regional airports are operating runways and infrastructure that is 70+ years old, with substantial upgrades needed to meet modern aviation safety standards.³⁵

At the time, it was reported the annual budget deficit will be \$17 million per year, equating to a \$170 million shortfall in essential infrastructure and maintenance funding at regional airports over the next 10 years.

³² Airservices Australia - Aeronautical Information Package (AIP).

³³ Deloitte Access Economics for the Australian Airports Association (2023), Taking Flight: The economic and social contribution of Australia's airports, p. 10 & 16.

³⁴ Productivity Commission (2019), Economic Regulation of Airports, Inquiry Report No. 92, p. 111-2.

³⁵ Regional Airport Infrastructure Study (AAA, 2016).

Footpaths & Cycleways

Footpaths and cycleways are essential components of urban and suburban infrastructure. They play a crucial role in promoting active transportation, enhancing public health, and improving the overall liveability of communities.

Footpaths provide safe and accessible routes for pedestrians, including children, the elderly, and people with disabilities.

They are typically made from concrete or asphalt, with considerations for width, gradient, and surface texture to ensure accessibility and safety. They often include amenities like benches, lighting, landscaping, and shade structures.

Cycleways facilitate safe and efficient cycling routes, encouraging more people to use bicycles for commuting, recreation, and exercise.

They can be on-road (bike lanes) or off-road (dedicated cycle paths). Off-road cycleways are often separated from motor vehicle traffic to enhance safety. Features may include signage, bike racks, repair stations, and markings to indicate lanes and directions.

Collectively, footpaths and cycleways promote physical activity reducing the risk of lifestyle-related diseases. They also promote a shift from car use to walking and cycling, reducing greenhouse gas emissions and improving air quality and support sustainable urban mobility and reducing the reliance on fossil fuels.

Key Challenges

Footpath and cycleway infrastructure faces several challenges:

1. **Design and Planning:**
Designing footpaths and cycleways that are well-connected and integrated into the broader transportation network, providing safe and convenient routes for users.
Addressing the diverse needs of pedestrians and cyclists, including accessibility for people with disabilities, safe crossings, and adequate lighting.
2. **Safety Concerns:**
Implementing measures to prevent accidents and injuries, such as clear signage, proper lighting, and safe intersections.
Minimising conflicts between pedestrians, cyclists, and motor vehicles, particularly in high-traffic areas.
3. **Infrastructure Integration:**
Creating multi-use paths that can accommodate both pedestrians and cyclists safely and comfortably.
Ensuring seamless integration with public transportation systems, parks, and other community amenities.

Addressing these challenges requires coordinated efforts between local governments, urban planners, community organizations, and the public to create safe, sustainable, and user-friendly footpath and cycleway infrastructure.

Local Government Infrastructure Investment

Every local government has an obligation to report the value of their non-financial assets in accordance with *AASB 116 Property, Plant and Equipment*. The standard prescribes the accounting treatment for property, plant, and equipment so that users of the financial report can discern information about an entity's investment in its property, plant and equipment and the changes in such investment.

AASB 13 Fair Value Measurement, refers to the measurement of assets and liabilities - primarily investments - at the expected price they would bring in the current market. When determining fair value, councils must establish how much an asset is expected to sell or trade for - or how much it would cost to dispose of a liability as of the measurement date (periodic revaluations are required with sufficient regularity to ensure reported valuations are materially reliable).

All assets and liabilities must be measured using fair value principles in accordance with a hierarchy of inputs specified in *AASB 13*.

Unless there is a market, local government infrastructure assets are generally valued using the 'cost approach'. This is the cost of replacing the gross future economic benefits (service potential) of the existing asset (adjusted for physical, functional, and technological obsolescence) and deducting the economic benefits that have been consumed since the assets were commissioned or last replaced.

In other words, the replacement cost of a "reference asset"³⁶ (being a modern equivalent or replica asset), less the accumulated obsolescence will determine the current replacement cost.³⁷ Obsolescence includes physical deterioration, functional obsolescence and economic obsolescence, and is broader concept than depreciation.

Fair value measurement using the cost approach is generally considered more relevant for public sector infrastructure asset decision support than historical cost.³⁸

Infrastructure valuations also provide valuable information for asset custodians who provide services from infrastructure. This includes determining and allocating costs, pricing and funding levels, managing risks, performance measurement and benchmarking, developing asset management and long-term financial plans.

The replacement cost of fixed assets supporting the various economic (e.g., roads, buildings, water supply, etc.) and social services (e.g., health, welfare services, etc.) is estimated to be in the order of \$665 billion as reported at the end of June 2023.

This represents an investment of \$25,400 for each of the 26.2 million people in Australia.³⁹

The current replacement cost (i.e., written down value) of local government infrastructure assets is estimated to be \$424 billion and are currently depreciating at approximately \$9.7 billion per year.

Table 12 shows the total estimated infrastructure investment (i.e., asset valuations) across each asset class for every local government as of 30th June 2023.

³⁶ Refer AASB 2022-10 para F10

³⁷ Current replacement cost is often referred to as carrying amount, written down value, book or net value, depending on the jurisdiction.

³⁸ Sec. 6.2.2, International Infrastructure Financial Management Manual (IIFMM, IPWEA, 2024).

³⁹ ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2023, TABLE 4. Estimated Resident Population, States and Territories (Number) – Australian Capital Territory and overseas territories population excluded.

Table 12 Local government infrastructure valuations by asset class (June 2023)

Asset Class	Replacement Cost (\$m)	Depreciable Amount (\$m)	Current Replacement Cost (\$m)⁴⁰	Annual Depreciation (\$m)⁴¹
Roads	\$250,169	\$223,136	\$162,656	\$3,937
Bridges	\$31,346	\$29,175	\$19,099	\$340
Buildings & Facilities	\$102,479	\$99,312	\$63,752	\$1,814
Parks & Recreation	\$32,237	\$30,059	\$20,038	\$882
Stormwater	\$130,021	\$124,414	\$87,224	\$1,180
Water & Wastewater	\$90,999	\$87,886	\$53,934	\$1,089
Airport & Aerodromes	\$3,624	\$3,519	\$2,218	\$76
Footpaths & Cycleways	\$24,744	\$24,006	\$15,568	\$394
TOTAL	\$665,619	\$621,417	\$424,489	\$9,713

*Values extrapolated from NSoA valuation data provided by 458 (85% of) councils.

Replacement Cost

Sometimes referred to as gross replacement cost, the International Infrastructure Financial Management Manual (IIFMM) defines replacement cost as the cost the entity would incur to acquire an equivalent new asset on the reporting date.

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

Calculation: [Sum of (Asset Quantity x Unit Replacement Rate)]

The estimated replacement cost of local government infrastructure assets is \$665 billion.

Depreciable Amount

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value as reported at the end of the reporting period.⁴²

The depreciable amount excludes the value of any non-depreciating assets such as earthworks and land.

The Depreciable Amount cannot be greater than Replacement Cost.

⁴⁰ The current replacement cost is reported on the balance sheet. In some jurisdictions it may be referred to as carrying amount, written down value, book or net value. \$424 billion reconciles with 'ABS Government Finance Statistics, Australia, 2022-23, cat. no. 5512.0, TABLE 339, Total Local General Government Balance Sheet – Buildings and structures.'

⁴¹ The annual depreciation expense is reported in the operating (profit/loss) statement.

⁴² Based on IIFMM, IAS 16 Para 53 and AASB116. Residual value is the estimated amount that an entity would currently obtain from disposal of an asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life (IASB IAS16 Para 6).

Calculation: [Sum of (Replacement Cost – Residual Value, where applicable)]

The estimated depreciable amount of local government infrastructure assets is \$621 billion.

Current Replacement Cost

AASB 13 defines current replacement cost as "...the amount that would be required currently to replace the service capacity of an asset".

In some jurisdictions it may be referred to as written down value, book or net value, or carrying amount.

The Current Replacement Cost cannot be greater than the Replacement Cost.

Calculation: [Sum of (Replacement Cost – Accumulated Depreciation)]

The estimated current replacement cost of local government infrastructure assets is \$424 billion. This reconciles with 'ABS Government Finance Statistics, Australia, 2022-23, cat. no. 5512.0, TABLE 339' for 'buildings and structures.'

Annual Depreciation

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life as reported at the end of the reporting period.⁴³

The annual depreciation expense for each asset class is reported in the operating statement and supporting notes of the audited financial statements.

The estimated annual depreciation expense of local government infrastructure assets is \$9.7 billion.

Infrastructure Investment Performance

Figure 16 shows the growth in value of local government infrastructure over the last decade. The value of the asset stock has grown at a steady annual average rate of 6.7% from \$254 billion in 2014 to \$424 billion in 2023. Growth in value is derived from capital investment and asset revaluation.

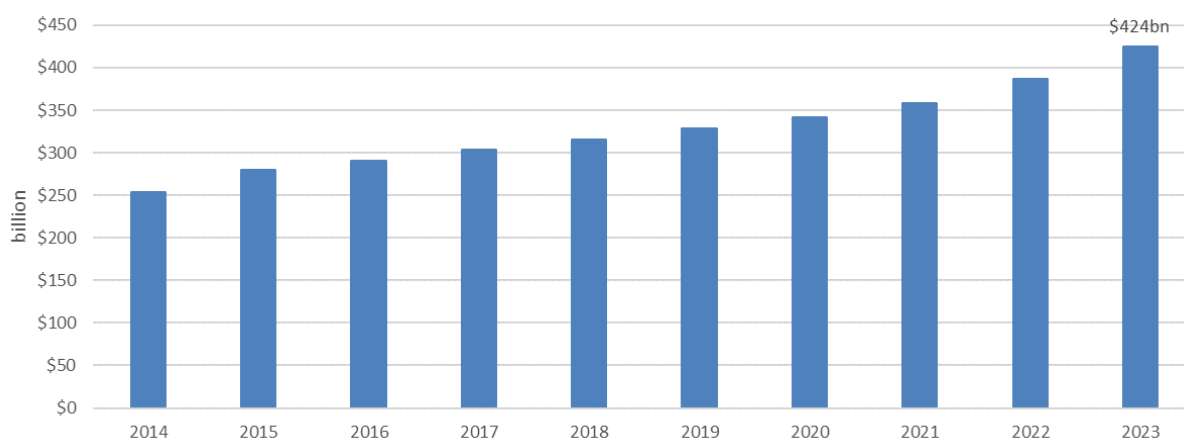


Figure 16 Local government infrastructure asset values (2014 - 2023)⁴⁴

⁴³ IIMM, IIFMM, IAS 16 Para 6 and AASB116. Useful life is the period over which an asset is expected to be available for use.

⁴⁴ ABS, 5512.0, Table 339.

The Asset Consumption Ratio indicates the level of service potential ('as new condition') remaining in existing infrastructure managed by local government. The higher the percentage, the greater future service potential is available to provide services to the community. It seeks to highlight the aged condition of local government's stock of infrastructure assets.

The reliability of this performance measure is dependent on the accuracy and currency of financial reporting of fixed assets (i.e., infrastructure) and the assumptions used in valuing these assets from time to time. The current replacement cost and annual depreciation of infrastructure will depend on forecasts regarding useful lives, and these will invariably be an estimate that can vary depending on preferred affordable service levels and local operating and environmental conditions.

A downward trend over time indicates the service potential remaining is reducing, i.e., the average age of the assets is increasing, and the overall performance (as measured by condition, function, and capacity for example) may be declining.

A steady trend indicates that the service potential of the assets is being maintained at a constant or steady level.

An upward trend indicates that the service potential remaining in the assets is increasing, i.e., the average age of the assets is decreasing, and the overall performance (as measured by condition, function, and capacity for example) may be improving.

The Asset Consumption Ratio trend for each local government asset class since 2013 is shown below.

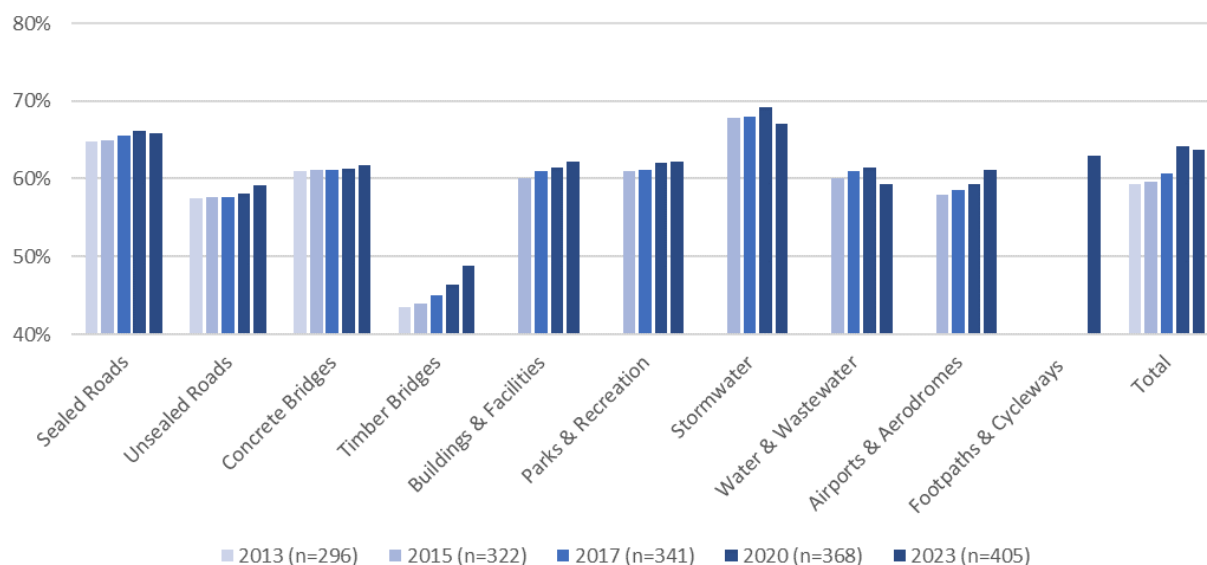


Figure 17 Asset consumption ratio trend by asset class

Responding councils report the asset consumption ratio of their infrastructure assets overall is generally increasing. In other words, infrastructure assets on average are younger than they have been in the past with service potential increasing, suggesting the overall performance could be improving.

Timber bridges on average have the lowest consumption ratio (i.e., older assets), stormwater assets have the highest (i.e., younger assets).

If local government is maintaining and renewing/replacing its assets in accordance with a well-prepared asset management plan, then the fact that its Asset Consumption Ratio may be relatively low should not be a cause for concern – providing it is operating sustainably.

Figure 18 shows the asset consumption ratio trend of local government infrastructure assets by ACLG grouping since 2013.

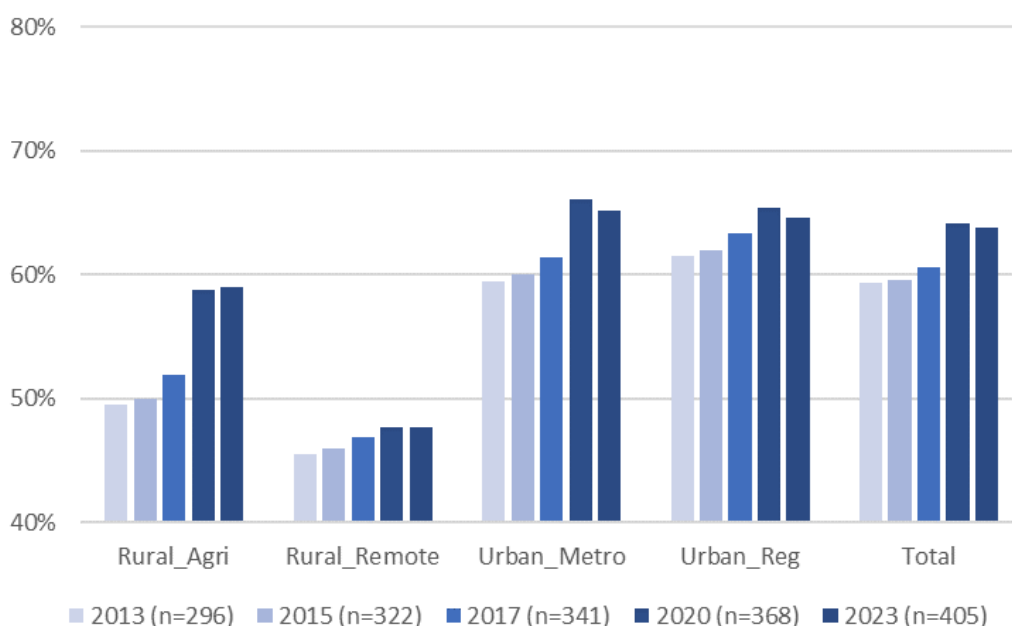


Figure 18 Asset consumption ratio trend by ACLG

Rural remote councils on average have the lowest consumption ratio, urban councils on average have the highest. This reinforces the need for rural councils, particularly those in remote areas, to ensure they are operating sustainably.

A council that can generate sufficient operating revenue over time to offset all operating expenses including depreciation is deemed to be operating sustainably.

Figure 19 shows the asset consumption ratio trend of local government infrastructure assets by state and territory since 2013.

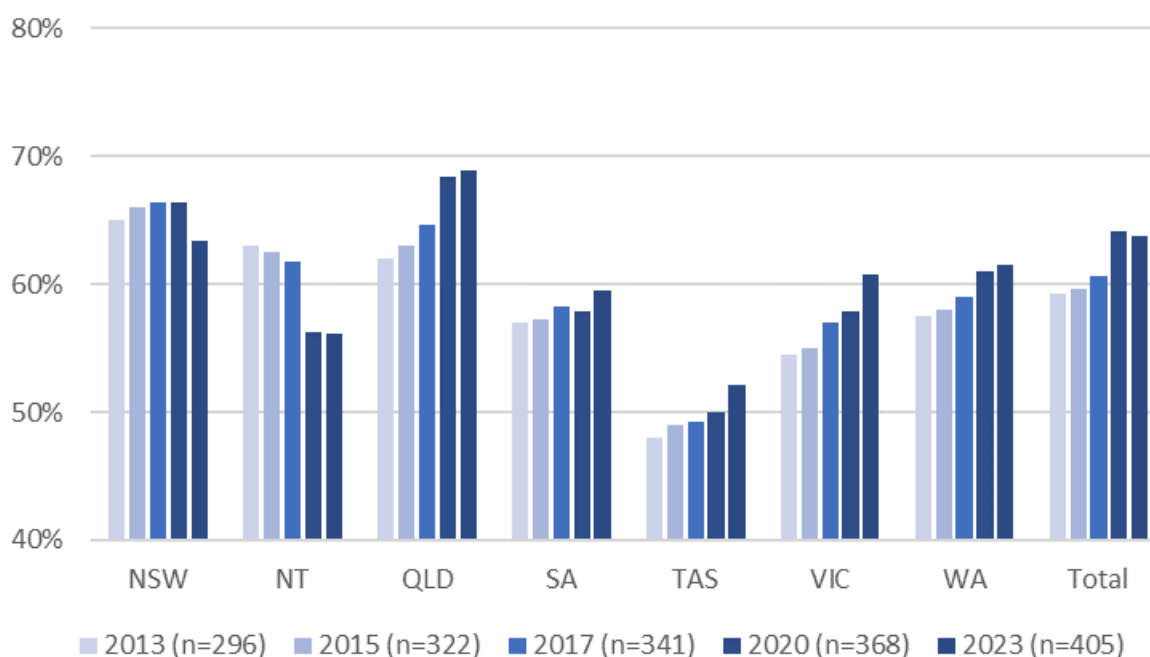


Figure 19 Asset consumption ratio trend by state & territory

Tasmanian councils on average have the lowest consumption ratio, Queensland councils on average have the highest.

The desired, actual, and forecast trend indicating the level of service potential remaining in existing infrastructure is reported in Table 13.

Table 13 Asset consumption ratio – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Asset Consumption Ratio (%)	Not applicable			Industry target is between 40% and 80%. Trend shows an increase from 60% in 2013 to 64% in 2023. This tells us, on average, the service potential of the asset portfolio is increasing. This could be a consequence of new assets being acquired at a greater rate than existing ones are being replaced. Rural councils more so than urban ones have a lower consumption ratio demonstrating a greater need to ensure they are operating sustainably (i.e., ensuring asset management plan forecasts are included in the LTFP).

The Depreciation Rate indicates the asset's estimated in-service useful life. A downward trend indicates that councils have taken steps to reduce the rate of consumption of assets - indicating they are lasting longer. This may be due to councils:

- implementing improved asset management practices,
- increasing their knowledge on performance of their assets under local operating conditions,
- introducing hierarchies and matching levels of service with customer expectations and available funds – may result in accepting lower levels of service in some areas to improve financial sustainability,
- realising efficiencies in operation and maintenance of assets to lower life cycle costs,
- improving maintenance practices to extend asset life,
- introducing cost efficient technologies, and/or
- reporting this improved knowledge in financial reports.

A steady trend indicates that assets are being consumed at a constant rate. An upward trend indicates that assets are being consumed at an increasing rate – indicating their useful life is reducing.

The reliability of this performance measure is dependent on the accuracy and currency of financial reporting of infrastructure and its measure of annual consumption (depreciation), including estimates of useful lives. The written down value and annual depreciation of infrastructure will for example depend on forecasts regarding such assets' useful lives and these will invariably be an estimate that can vary depending on preferred affordable service levels and local operating and environmental conditions.

When data was originally collected via the National Local Roads Data System not all states required local government to regularly revalue their long-lived infrastructure and consequentially many councils were recording the depreciated value of infrastructure based on historical costs of acquisition. Australian Accounting Standards effectively provide the option of adopting the 'cost' or 'revaluation' model for infrastructure valuations (refer AASB 116).

Progressively, all jurisdictions now require local government to adopt the revaluation model for valuing major infrastructure, but this was not so until 2015. Revaluations of infrastructure are now regularly reviewed (at least every 3 to 5 years) and are typically based on modern equivalent or replica asset replacement costs. Regular revaluations involve an assessment of asset remaining useful lives and thus should help improve ongoing refinement of both assets' written down value and annual depreciation.

A council that can generate sufficient operating revenue over time to offset all operating expenses including depreciation should have sufficient funds (at least on average over time) to accommodate asset renewal needs. Although, it may need to borrow for new additional (not replacement) capital works in such circumstances.

The Depreciation Rate trend for each local government asset class since 2013 is shown in Figure 20.

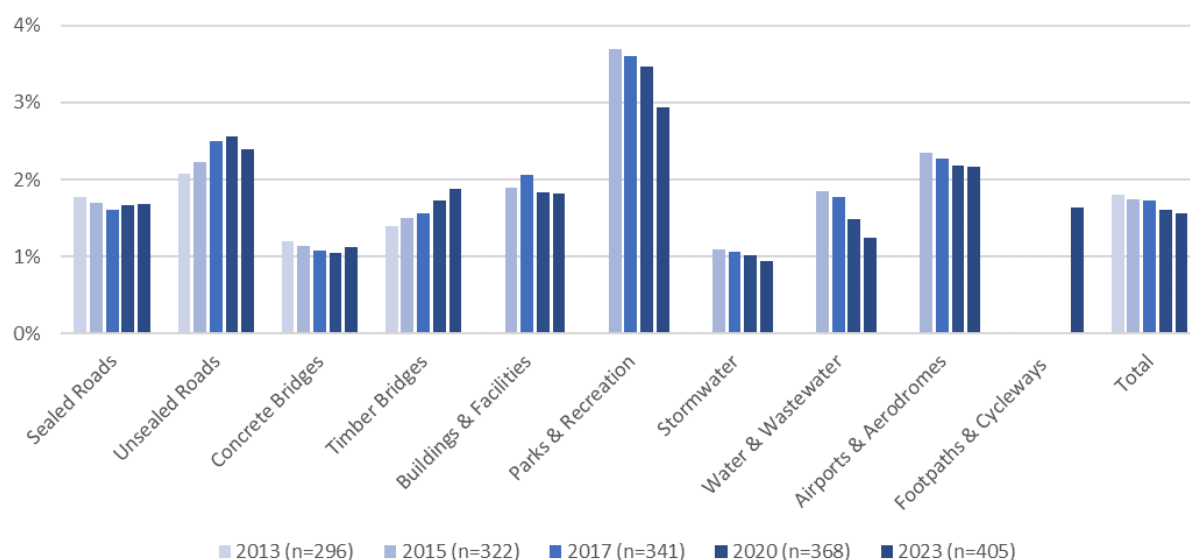


Figure 20 Asset depreciation rate trend by asset class

Responding councils report the depreciation rate of their infrastructure assets overall is decreasing. Trend shows a decrease from 1.8% in 2013 to 1.6% in 2023. This means assets on average are expected to last more than 60-years.

Concrete assets such as bridges and stormwater assets average around 1% per annum suggesting they are lasting 100-years on average. Unsealed roads, parks and aerodromes are lasting on average between 30 and 50 years.

Timber bridges show an upward trend indicating they are being consumed at a higher rate than originally anticipated.

Figure 21 shows the asset depreciation rate trend by ACLG grouping since 2013.

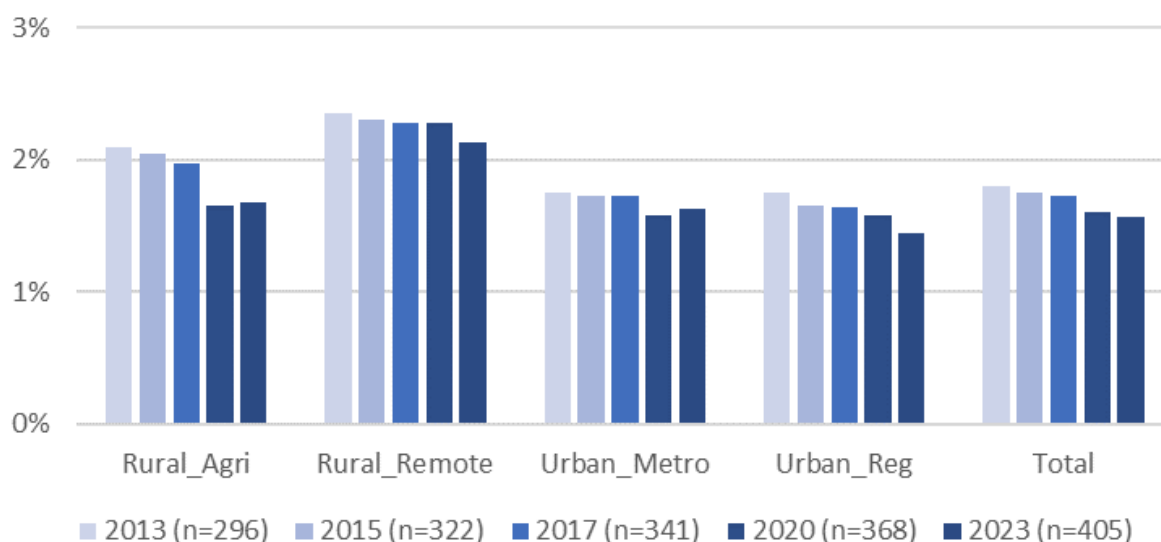


Figure 21 Asset depreciation rate trend by ACLG

On average, the depreciation rate is decreasing across all rural and urban locations. Councils in rural remote areas have a higher depreciation rate suggesting assets are being consumed faster than councils in rural agricultural, urban metro, and urban regional locations. This is likely due to rural remote councils having a larger stock of assets with shorter useful lives such as unsealed roads.

Figure 22 shows the asset depreciation rate trend by state and territory since 2013.

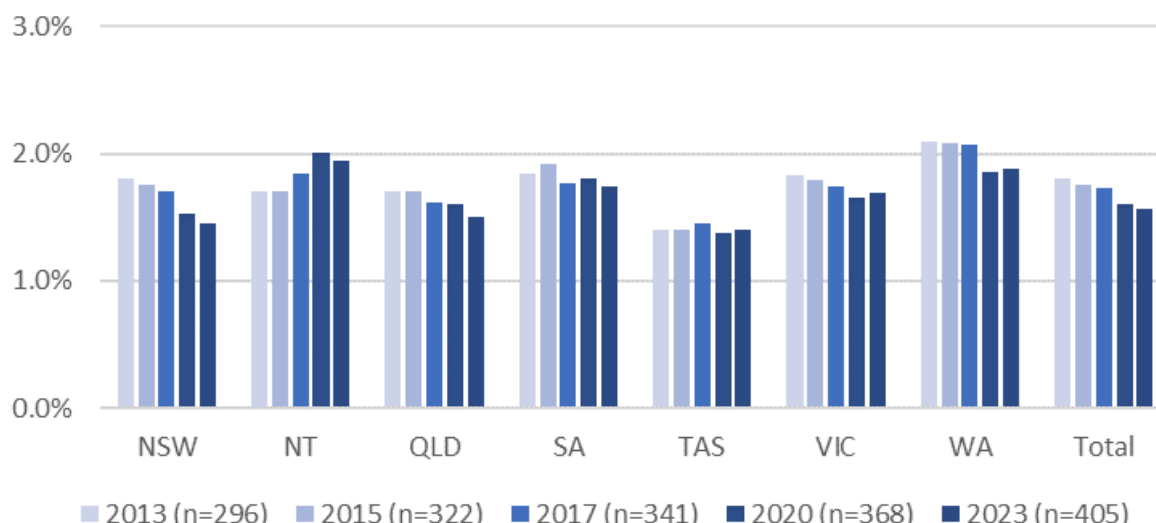


Figure 22 Asset depreciation rate trend by state & territory

Overall, the trend indicates responding councils estimate the useful lives of local government infrastructure assets are lasting longer than originally anticipated.

Northern Territory councils show a general upward trend indicating they are being consumed at a higher rate than originally anticipated. Tasmanian councils have the lowest rate of depreciation suggesting that their mix of assets are anticipated to last longer than the mix in other states.

The desired, actual, and forecast trend on how long infrastructure assets is anticipated to last is reported in Table 14.

Table 14 Asset depreciation rate – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Depreciation Rate (%)	Not applicable	↓	↓	Indicates infrastructure on average is estimated to last longer than originally anticipated. Trends show a decrease from 1.8% in 2013 to 1.6% in 2023. On average, assets are expected to last more than 60-years.

Local Government Infrastructure Planning

This section includes the following infrastructure planning indicators:

- Asset Management Plans Adopted
- Long-Term Financial Plans Adopted
- AM Plan financial projections included in the Long-term Financial Plan

It is important that decision makers in local government, such as elected members and senior management, have access to all the information they need to make informed choices about infrastructure assets and the services they provide. This is critical when they are considering the annual budget so the long-term financial, social, and environmental implications of those decisions can be understood.

The best way to provide decision makers with reliable asset information is by using a regularly reviewed and updated Asset Management Plan (AM Plan). The AM Plan is considered the business case for the long-term sustainability of infrastructure assets and the value they provide. The AM Plan is best supported by an Asset Management Strategy and Policy.⁴⁵

The AM Plan should tell the 'story' of the current and future predicted state of the assets, the capacity of the assets to meet the current, preferred, and affordable service demands placed on them, the lifecycle strategies to address any gaps and how much it will cost to manage the assets over the long-term aligned to an affordable financial strategy.

A good AM Plan should have at least one scenario balanced to the long-term financial plan that communicates the trade-offs on performance, cost, and risk.

The Asset Management Plan considers:

- Asset Portfolio (what assets you have)
- Levels of Service (what value the assets provide)
- Demand Management (planning for the future)
- Lifecycle Management (what, how and when is the service provided)
- Risk Management (risks, opportunities and managing resilience)
- Financial Management/Summary (what will it cost)
- Continuous Improvement (Improve what we are doing)

Since and leading up to 2009, when the then Local Government and Planning Ministers' Council (LGPMC) endorsed the Financial Sustainability Nationally Consistent Frameworks, the states have introduced legislative reform requiring local governments to prepare asset management plans linked to the long-term financial plan.

While variances exist in each state and territory, in-principle many of the core planning documents require a minimum 10-year planning period and encourage councils to strive for small ongoing operating surpluses based on accrual accounting principles.

The NSoA study recognises that, in achieving safe, equitable, and compliant services from infrastructure assets for current and future generations it is essential for the long-term sustainability of local communities across the nation.

⁴⁵ ISO55000: 2014

Asset Management Planning Performance

Good practice in managing infrastructure assets can be demonstrated by the adoption and use of methods and procedures for managing and communicating service levels, costs, and risk. This is documented in an Asset Management Plan (AM Plan), a mandated requirement in every state and territory in Australia.

Local governments were asked if they had an adopted up to date AM Plan for each of their major asset classes. The response from participating local governments is shown in Table 15.

Table 15 AM Plans adopted

Asset Class	Yes	No	Out of Date	N/A*	Sample Size	
					N°	%
Roads	81%	8%	11%	-	451	84%
Building & Facilities	71%	15%	13%	-	415	77%
Parks & Recreation	60%	29%	11%	-	414	77%
Stormwater	65%	25%	10%	-	412	77%
Water & Wastewater	58%	31%	11%	49%	413	77%
Airports & Aerodromes	45%	50%	5%	46%	391	73%
Footpaths & Cycleways	74%	17%	8%	-	180	34%

* Councils saying asset classes that are not applicable are excluded from the assessment.

81% of local councils state they had an adopted AM Plan for road infrastructure. 71% (296) of responding councils said they had an adopted AM Plan for building assets. 60% (250) for park and recreation assets and 65% (266) for stormwater assets.

Of the 209 councils who said they had responsibility for water and wastewater assets, 58% (122) said they had an adopted AM Plan.

Of the 210 councils who said they had responsibility for an airport or aerodrome, 45% (95) said they had a plan to manage the infrastructure located at these locations.

Assuming all councils have at least road, building, park and stormwater assets, the trend for AM Plans adopted across these asset classes since 2015 is shown in Figure 23.

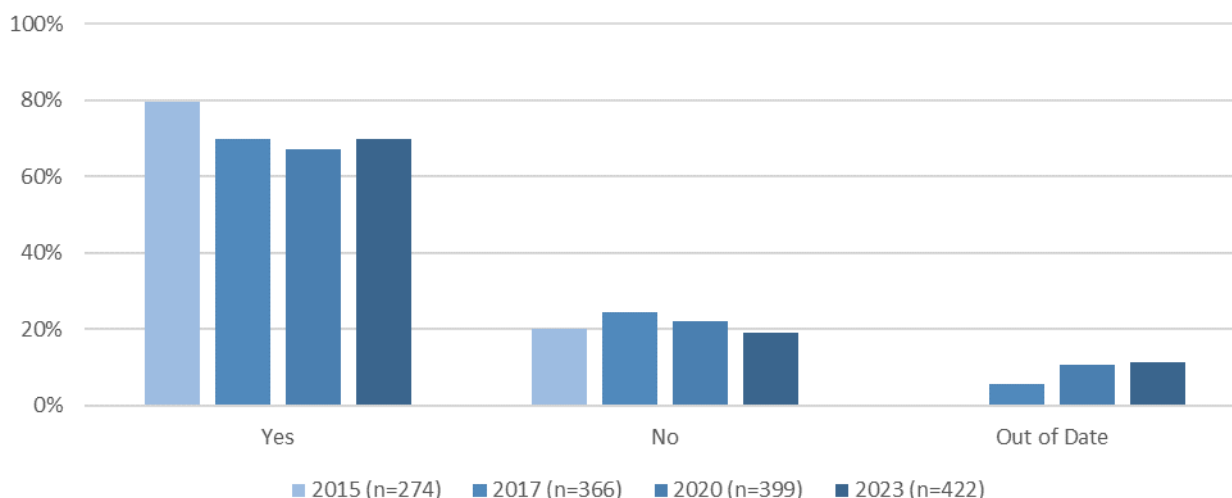


Figure 23 AM Plans adopted – trend since 2015

The average proportion of responding councils who said they had AM Plans adopted across each of their major asset classes declined from 80% in 2015 to 70% in 2017, recent data suggests this result has plateaued. In other words, around one third of councils do not have an AM Plan adopted for their major assets, or if they do, they are out of date.

While 148 more councils have responded to the survey since 2015, on average, more are saying their AM Plans are out of date.

It is assumed non-responding councils would follow a similar pattern, if not worse, if they had participated.

Figure 24 shows the trend of AM Plans adopted for combined road, buildings, parks, and stormwater assets from responding councils for each ACLG grouping.

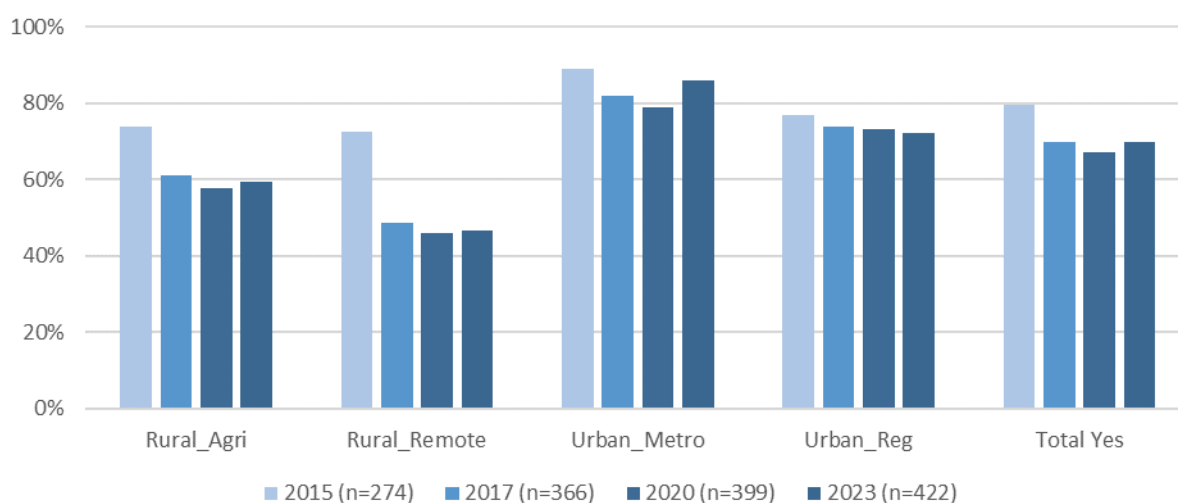


Figure 24 AM Plans adopted – trend by ACLG

On average, councils in higher populated urban areas have a higher rate of having an AM Plan adopted than those in the lower populated rural areas.

Figure 25 shows the trend of AM Plans adopted for combined road, building, park, and stormwater assets by responding councils for each state and territory since 2015.

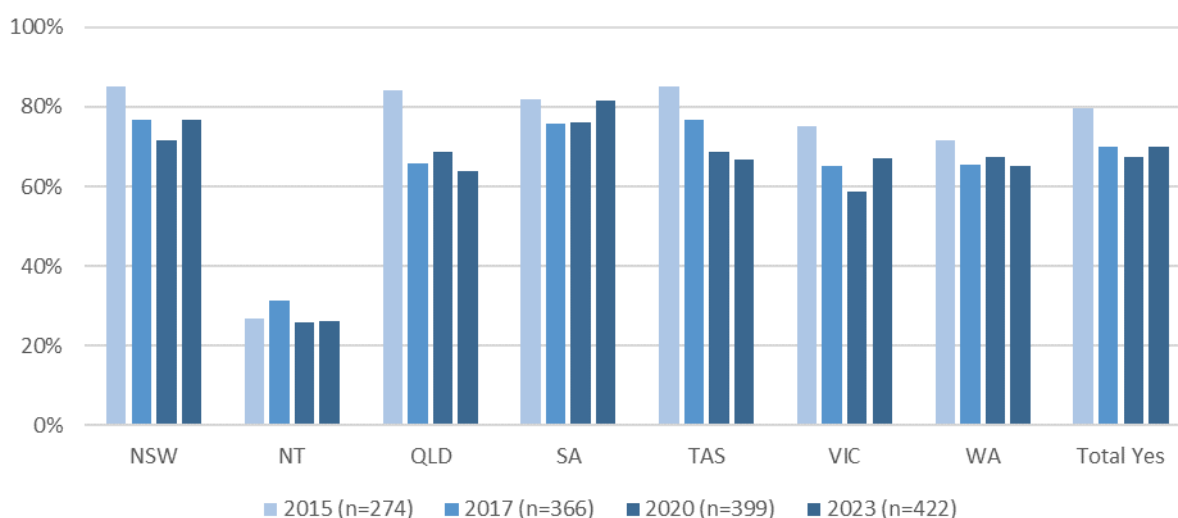


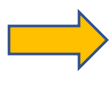
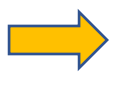
Figure 25 AM Plans adopted – trend by state & territory

On average, councils in the state jurisdictions have the highest rate of AM Plans adopted compared with those in the Northern Territory.

There is an increase in the AM Plan adoption rate in New South Wales, South Australia and Victoria since the 2021 report. This, in part, may be due to an increased focus by the regulator on having these plans in place.

The desired, actual, and forecast trend for assessing the extent that asset management plans are adopted is shown in Table 16.

Table 16 AM Plans adopted – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Asset Management Plans Adopted				One third of councils do not have an AM Plan adopted for their major assets, or if they do, they are out of date. Indicates more work is needed to ensure councils can reliably take full and appropriate account of the financial and service risks that they may be exposed to. Strong leadership is needed to improve the current trend.

Long-term Financial Planning Performance

Long-term financial planning is critical for local governments as they generally have a very large value of infrastructure assets relative to their income base. It assists with funding asset renewal and upgrade when required, ensures ongoing service delivery and determining and achieving affordable service level objectives.

A long-term financial plan (LTFP) is an essential consideration when generating, spending, and investing future income and raising and repaying borrowings as appropriate. It enables a long-term strategy to balance competing priorities with the available finance.

Having a long-term financial plan seeks to accommodate, efficiently and equitably, the ongoing funding of:

- Existing services – operations, maintenance, asset renewal and upgrade; and
- New services and assets as required.

Each council was asked if they had adopted a LTFP. Table 17 shows the response from responding councils who said they had a LTFP adopted as of the end of June 2023.

Table 17 Long-term financial plans adopted

Description	Yes	No	Out of Date	Sample Size	
				N°	%
Councils with an adopted LTFP	88%	11%	1%	456	85%

The trend for LTFPs adopted across the nation since 2013 is shown in Figure 26 below.

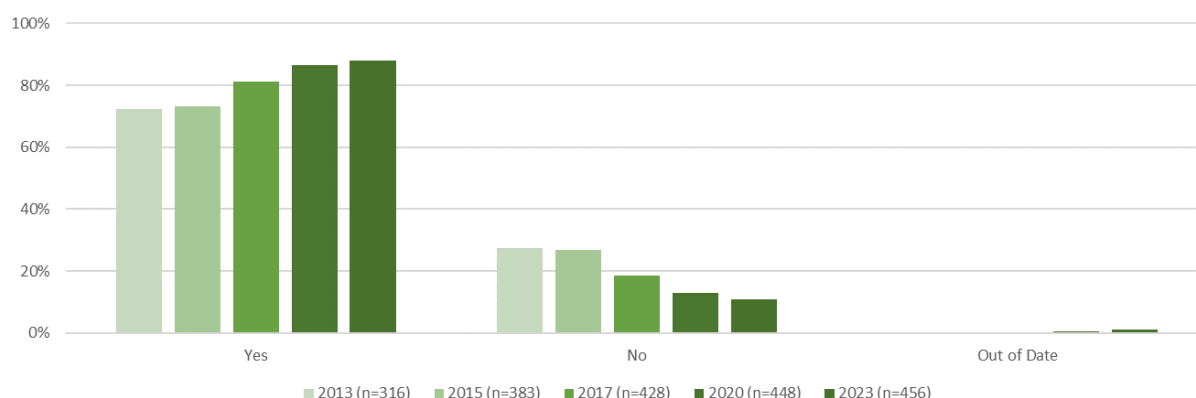


Figure 26 LTFPs adopted – trend since 2013

The average proportion of responding councils that said they had a LTFP adopted has increased from 72% in 2013 to 88% in 2023. 12% (55) of responding councils said they did not have LTFP adopted, or if they did it was out of date.

It is assumed non-responding councils may follow a similar pattern if they had participated however, we cannot be certain.

The trend of Long-term Financial Plans adopted by responding councils and ACLG since 2013 is shown below.

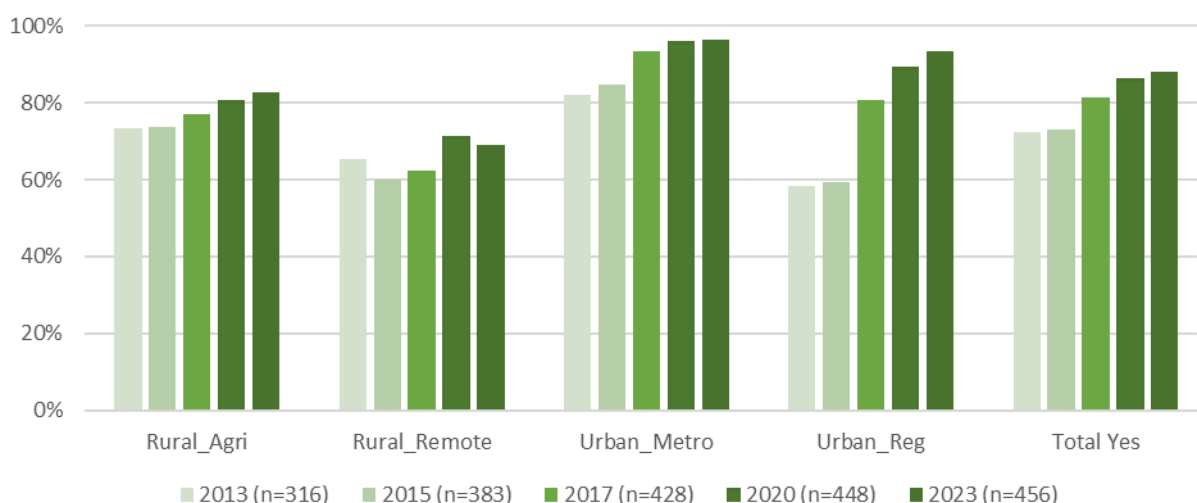


Figure 27 LTFPs adopted – trend by ACLG

On average, councils in higher populated urban areas have a higher rate of LTFPs adopted than those in the lower populated rural areas.

On average, one in five councils in the rural areas say they do not have a long-term financial plan however, this result has been improving since 2015.

The trend of LTFPs adopted by responding councils and state and territory since 2013 is shown below.

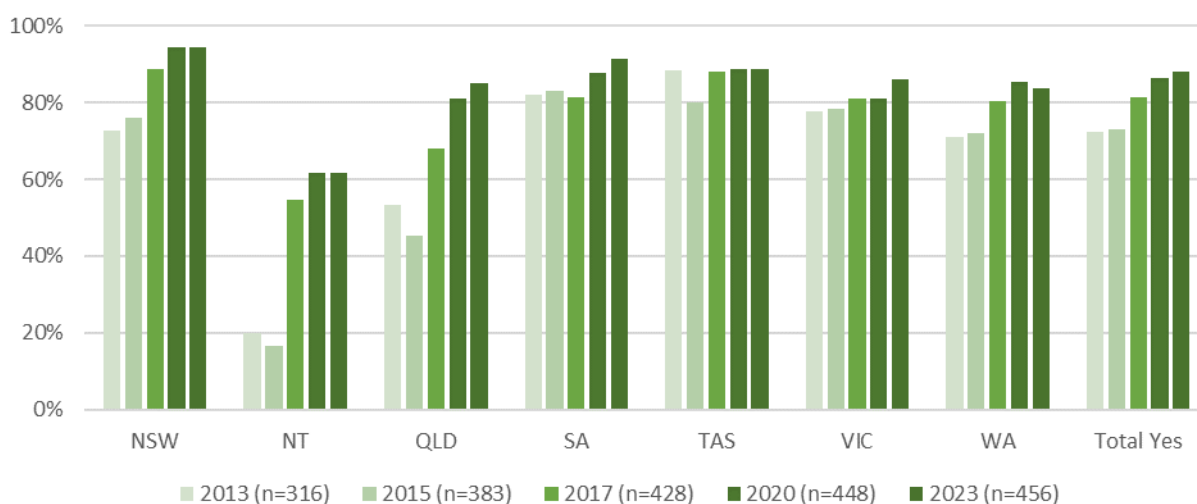


Figure 28 LTFPs adopted – trend by state & territory

The trend for the proportion of LTFPs adopted across the nation has increased from 72% in 2013 to 83% in 2023.

Across the nation, this potentially means at least one in ten councils do not have an adopted LTFP.

On average, councils in the state jurisdictions have the highest rate of long-term financial plans adopted compared with those in the Northern Territory.

The desired, actual, and forecast trend for assessing long term financial planning capability is reported in Table 18.

Table 18 Long-term financial plans adopted – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Long-Term Financial Plans Adopted				1 in 5 councils in rural areas say they do not have a long-term financial plan, or if they do, it is out of date. Rural councils will need to ensure they have sufficient resources and commitment, and may need additional support, to achieve desired (and mandatory) outcomes.

AM Plan financial projections included in the LTFP

Councils who said they had adopted an Asset Management Plan (AM Plan), were asked if the financial projections from the AM Plan were included in the LTFP.

The financial projections from the AM Plan relate to the timing and costs to deliver services that the community value. The AM Plan also enables decision makers to consider the infrastructure risks when adopting the LTFP.

It is the cost and risk trade-offs that impact service delivery outcomes and having service level cost outlays forecast in the AM Plan included (and aligned) with the LTFP enables an assessment of the financial capacity of the council to provide the services and the risks that come with those decisions.

It is therefore critical that not only forecast outlays are included but the infrastructure risks are also considered in the long-term financial planning process.

For the reporting period ending June 2023, the response from responding councils saying they had included the financial projections in the LTFP is shown in Table 19.

Table 19 AM Plan financial projections included in the LTFP

Asset Class	Yes	No	Out of Date	*N/A	Sample Size	
					N°	%
Roads	76%	17%	7%	-	451	84%
Building & Facilities	68%	21%	10%	-	412	77%
Parks & Recreation	61%	31%	8%	-	409	76%
Stormwater	61%	32%	7%	-	408	76%
Water & Wastewater	50%	38%	12%	63%	209	63%
Airports & Aerodromes	45%	50%	5%	45%	210	59%
Footpaths & Cycleways	74%	17%	8%	-	180	34%

* Councils saying asset classes that are not applicable are excluded from the assessment.

76% of councils who said they had a road AM Plan considered the infrastructure risks and included the forecasts outlays in the LTFP. 68% (282) of responding councils said they included the forecasts outlays in the LTFP for building assets. 61% (251) for park and recreation assets and 61% (250) for stormwater assets.

Of the 209 councils who said they had responsibility for water and wastewater assets, 50% (105) said they included the forecasts outlays in the LTFP for these assets.

Of the 210 councils who said they had responsibility for an airport or aerodrome, 45% (95) said they included the forecasts outlays in the LTFP for these assets.

Assuming all councils have at least road, building, park and stormwater assets, the trend for including the financial projections from the AM Plan in the LTFP since 2015 is shown below.

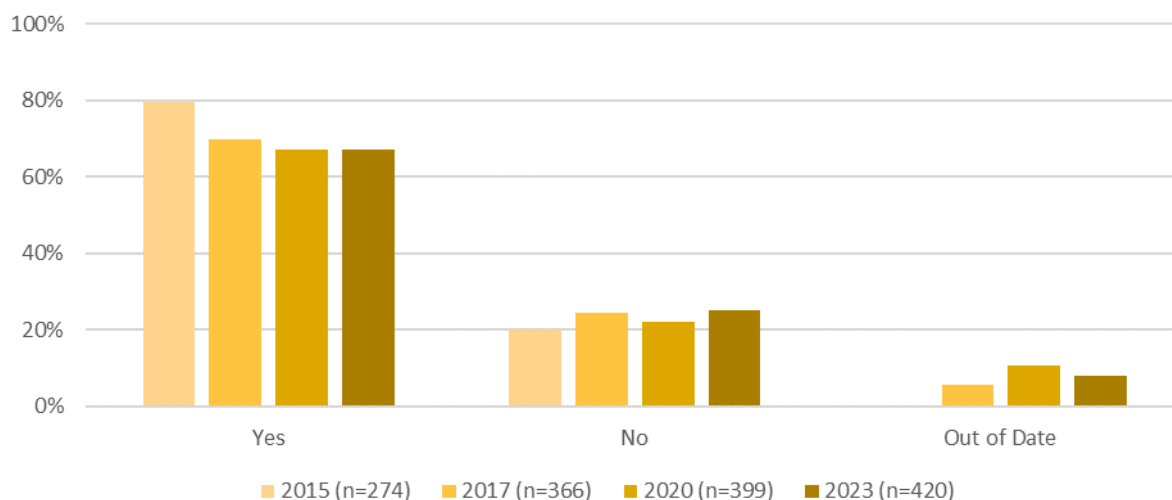


Figure 29 AM Plan financial projections included in the LTFP – trend since 2015

The average proportion of LTFPs including the financial projections from the AM Plan(s) across the nation has remained steady at 67%. In other words, of the 70% of councils who said they had an asset management plan, two thirds said the forecast outlays were included in the LTFP. This is around 50% of councils don't align their AM Plan forecasts with the financial plan.

It is assumed non-responding councils are more likely on average not to include the forecast outlays in their LTFP.

Figure 34 shows the trend of financial projections from the AM Plan included in the LTFP for the combined road, building, park, and stormwater assets by responding councils for each ACLG grouping since 2015.

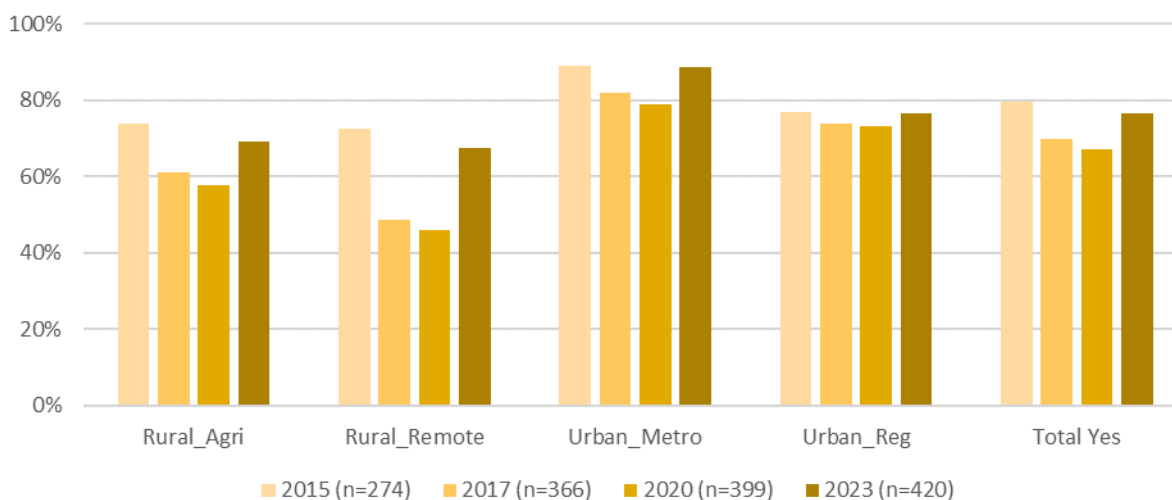


Figure 30 AM Plan financial projections included in the LTFP – trend by ACLG

On average, councils in higher populated urban areas have a higher rate of including the infrastructure risks in the LTFP than those in the lower populated rural areas.

Figure 31 shows the trend of financial projections from the AM Plan included in the LTFP for combined road, buildings, parks, and stormwater assets by responding councils for each state and territory since 2015.

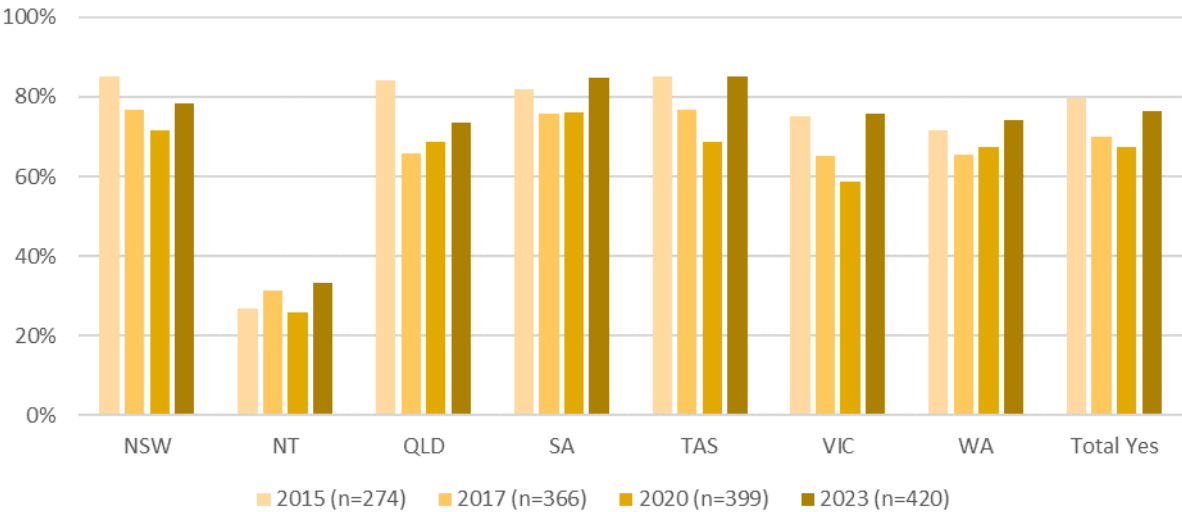


Figure 31 AM Plan financial projections included in the LTFP – trend state & territory

On average, councils in New South Wales, South Australia, and Tasmania have the highest rate of financial projections from the AM Plan(s) included in the LTFP compared with those in Northern Territory, Queensland, Victoria, and Western Australia.

The desired, actual, and forecast trend for assessing if the financial projections from the AM Plan(s) are included in the LTFP is shown in Table 20.

Table 20 AM Plan financial projections included in the LTFP – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
AM Plan financial projections included in the Long-term Financial Plan				If the financial projections from the AM Plan are not incorporated into the LTFP, there is likely to be a diminishing ability to communicate the trade-offs on performance, cost and risk and finance future infrastructure needs effectively.

The asset management planning performance findings raise questions around leadership and the ability of councils, particularly the smaller rural ones, to meet the minimum planning and reporting requirements to achieve the outcomes prescribed in legislation.

For those councils that indicated that they do meet the minimum planning and reporting requirements it is likely that in at least some instances more work is necessary to reliably take full and appropriate account of the financial and service risks to which a council may be exposed.

It is important that asset management and long-term financial plans are regularly updated. An annual update ensures organisational resilience to deal with emerging unplanned expenditure during times of significant disruption and changing circumstances. It is noted, the NSoA survey does not audit:

- The currency or frequency of any updates; and
- The degree of maturity of the asset and financial management plans.

A simple ongoing program that audits asset and financial plans to understand their currency, update frequency and maturity would help ensure alignment with Local Government and Planning Ministers' Council decision and the National Framework. This need not be costly or complex or require additional auditing analytical skills. Instead, it could simply assess whether up-to-date plans that meet minimal legislative requirements exist.

Past and current data trends presented in this report indicate the continuing state of under investment in local government capability and capacity building in managing community assets across Australia. Under investment in infrastructure asset management has far-reaching, long-term repercussions locally and nationally, leading to an increased risk of skills shortage, a decrease in safety and productivity and a likely unplanned reduction in levels of service.

The report identifies the urgent need for federal, state and territory governments to provide support for financial planning and reporting and asset management planning assistance to build skills and lift capacity within the local government sector.

The following section presents a summary (of past and current trends) that adds to our understanding of the state of local government infrastructure in terms of:

- Its physical condition – how good is the service and does meet its intended level of service?
- Its ability to meet functional needs now and in the future – is it the right service? and
- Its ability to meet service delivery needs now and, in the future – do we need more, or less, of these assets in the future?

Local Government Infrastructure Performance

Infrastructure performance monitoring and reporting is how local government can demonstrate they are delivering the agreed and affordable levels of service to their customers. This aspect is broadly measured in terms of:

- **Condition** Quality ...How good is the service?
- **Function** Suitability ...Is it the right service?
- **Capacity** Utilisation ...Do we need more or less services?

This is critical information for determining the remaining useful life of an asset and more importantly the timing for possible intervention steps to bring levels of service, provided by the asset, back to a desired standard.

More importantly, understanding how the performance of the assets is changing over time can assist with determining the best time to intervene with maintenance, rehabilitation, capital replacement (renewal), upgrade, disposal and/or acquisition of new assets.

While it is acknowledged that other factors contribute to the useful life of infrastructure assets, it is widely accepted that condition, function, and capacity are the key drivers in estimating remaining life of assets and assist in developing lifecycle expenditure forecasts in the asset management plan. In some jurisdictions, councils are required to report on the condition of their assets in their financial statements.

It is therefore critical that asset intensive service organisations, such as local government, have a clear knowledge of the condition of their assets and how they are performing in terms of function and capacity. All management decisions regarding maintenance, rehabilitation, renewal, and acquisition revolve around these two aspects.

Not knowing the current condition or performance of an asset may lead to the premature failure, which leaves the council with only one option - to replace the asset (generally the most expensive option). The unforeseen failure of an asset can have major consequences that constitute a business risk or potential loss to the organisation.

Therefore, the benefits of knowing the current condition and performance level of an asset are the:

- Ability to plan for and manage the delivery of the required level of service.
- Avoidance of premature asset failure, leaving open the option of cost-effective renovation.
- Risk management associated with asset failures, and mitigation of the consequences of failure.
- Accurate prediction of future expenditure requirements through understanding remaining asset life and capital investment needs.
- Refinement of maintenance and rehabilitation strategies.

The underpinning infrastructure performance grading system for condition, function and capacity is detailed in Appendix B.

Condition

Understanding the condition of infrastructure assets helps us appreciate how good the asset is and where it is in its lifecycle. Condition measures the physical integrity of an asset and can indicate the likelihood of failure.

In short, condition informs us how good the asset is.

It is important to appreciate that condition alone is not the only driver to determine current and future infrastructure needs. An asset may be in good condition however, if it is not meeting its functional requirements or is poorly utilised (poor capacity) there may be a need to intervene or accept a lower level of service. Should intervention be deemed necessary, it will come at a cost, or council may need to lower service expectations which is not always driven by the condition of the asset.

Condition helps us understand how good the asset is and where it is in its lifecycle.

Detail on the condition grading system can be found in Appendix B.

Local governments were asked to report the condition profile of their infrastructure assets as a proportion of replacement cost for each asset class as of 30th June 2023. The aggregated condition result for each asset class from responding councils is shown below.

Table 21 Condition by asset class (June 2023)

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	65%	26%	9%	434	81%
Unsealed Roads	52%	35%	13%	350	65%
Concrete Bridges	75%	19%	6%	347	65%
Timber Bridges	44%	38%	18%	223	42%
Building & Facilities	61%	31%	8%	351	65%
Parks & Recreation	61%	30%	9%	319	59%
Stormwater	72%	22%	6%	330	61%
Water & Wastewater	62%	27%	10%	153	28%
Airports & Aerodromes	68%	20%	12%	113	21%
Footpaths & Cycleways	60%	34%	6%	189	35%
TOTAL	65%	27%	8%		

Responding councils report the estimated replacement cost of local government infrastructure assets in poor condition at the end of June 2023 to be:

- 9% (\$19.2bn) of sealed roads are in poor condition.
- 13% (\$ 3.9bn) of unsealed roads are in poor condition.
- 6% (\$ 1.7bn) of concrete bridges are in poor condition.
- 18% (\$ 365m) of timber bridges are in poor condition.
- 8% (\$ 8.3bn) of building & facilities are in poor condition.

- 9% (\$ 2.9bn) of parks & recreation assets are in poor condition.
- 6% (\$ 7.9bn) of stormwater assets are in poor condition.
- 10% (\$ 9.5bn) of water & wastewater assets are in poor condition.
- 12% (\$ 437m) of airports & aerodromes are in poor condition; and
- 6% (\$ 1.4bn) of footpaths & cycleways are in poor condition.

The combined estimated replacement cost of local government infrastructure reported in poor condition is \$55 billion.

Figure 32 shows the trend of local government infrastructure assets in good, fair, poor condition as a proportion of replacement cost since 2013.



Figure 32 Condition trend by asset class

Responding councils report:

- Sealed road condition has improved from 11% in poor condition in 2013 to 9% in 2023.
- Unsealed road condition has improved from 17% in poor condition in 2013 to 13% in 2023.
- Concrete bridges have the lowest proportion in poor condition with around 6% in poor condition.
- Timber bridges have the highest proportion of assets in poor condition at 18%, but it has been improving since 2013.
- Buildings and park infrastructure condition remains relatively unchanged at 8 and 9% respectively.
- Stormwater condition has improved from 9% in poor condition in 2013 to 6% in 2023.
- Water & wastewater condition has improved from 12% in poor condition in 2013 to 10% in 2023.
- Airport & aerodrome condition has declined from 5% in poor condition in 2013 to 12% in 2023.
- Approximately 6% of footpath & cycleway infrastructure is in poor condition.

Overall, responding councils report the proportion of infrastructure assets in a poor state of repair has steadily improved from the twelve percentage points reported in 2013 to eight percent in 2023.

Figure 33 shows the level of confidence responding councils have in their condition data by infrastructure asset class.

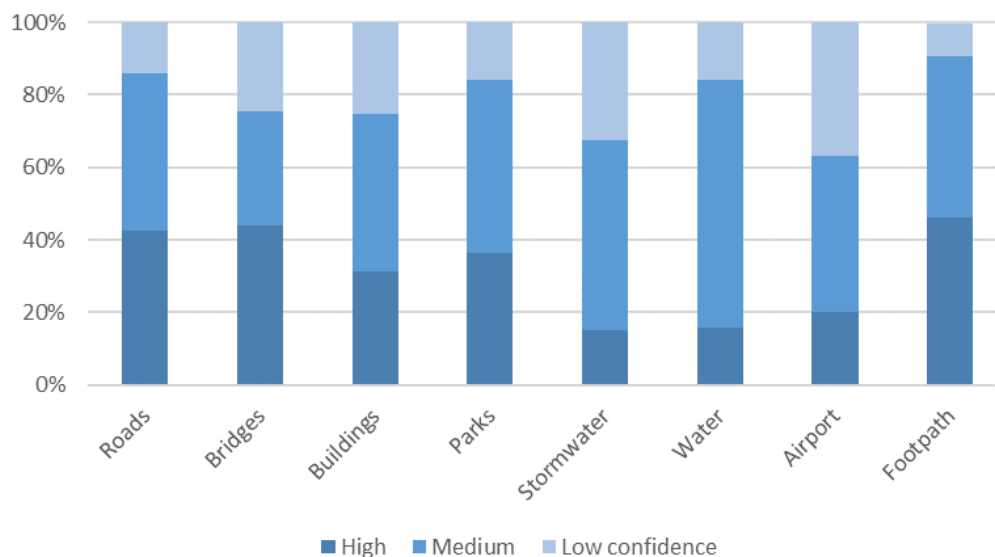


Figure 33 Condition data confidence by asset class

Local government has greater data confidence in the condition reporting of road, bridge, park, water and footpath infrastructure than any other asset class.

Figure 34 shows the trend of local government infrastructure assets in good, fair, poor condition as a proportion of replacement cost by ACLG grouping since 2013.

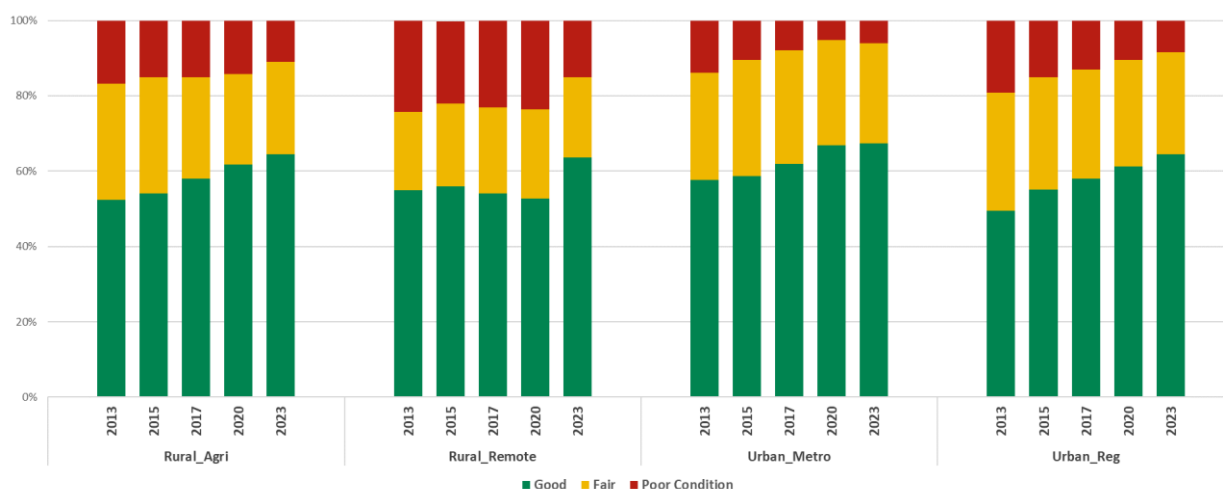


Figure 34 Condition trend by ACLG

The proportion of asset replacement cost reported in poor condition has improved in the urban metro and urban regional areas.

Urban metro council's report the smallest proportion of assets in poor condition.

Councils in rural remote areas report more than 20% of their asset replacement cost in poor condition. Overall, councils in rural areas are reporting little change in the condition of their infrastructure.

Figure 35 shows the level of confidence responding councils have in their condition data by ACLG grouping.

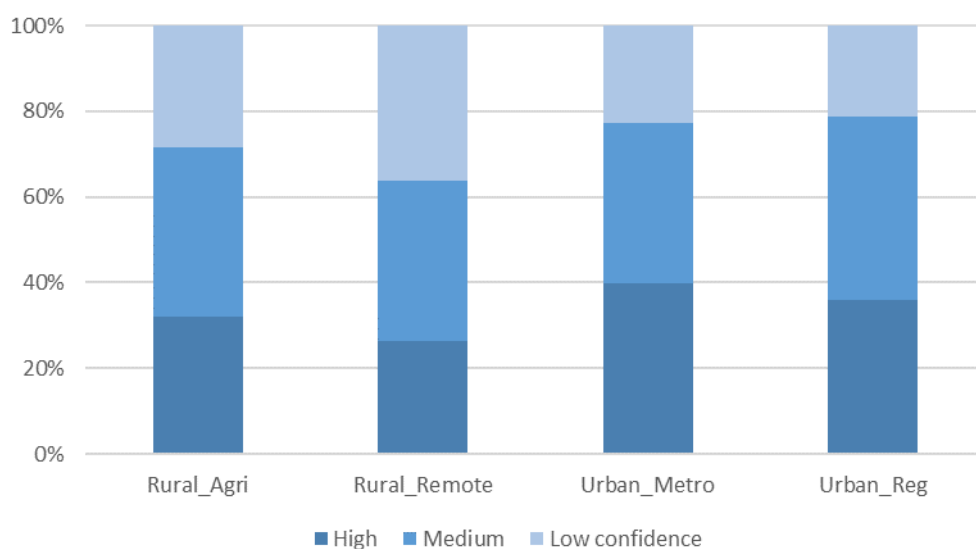


Figure 35 Condition data confidence by ACLG

Councils in urban areas have greater data confidence in the condition reporting of infrastructure assets.

Figure 36 shows the trend of local government infrastructure assets in good, fair, poor condition as a proportion of replacement cost by state and territory since 2013.

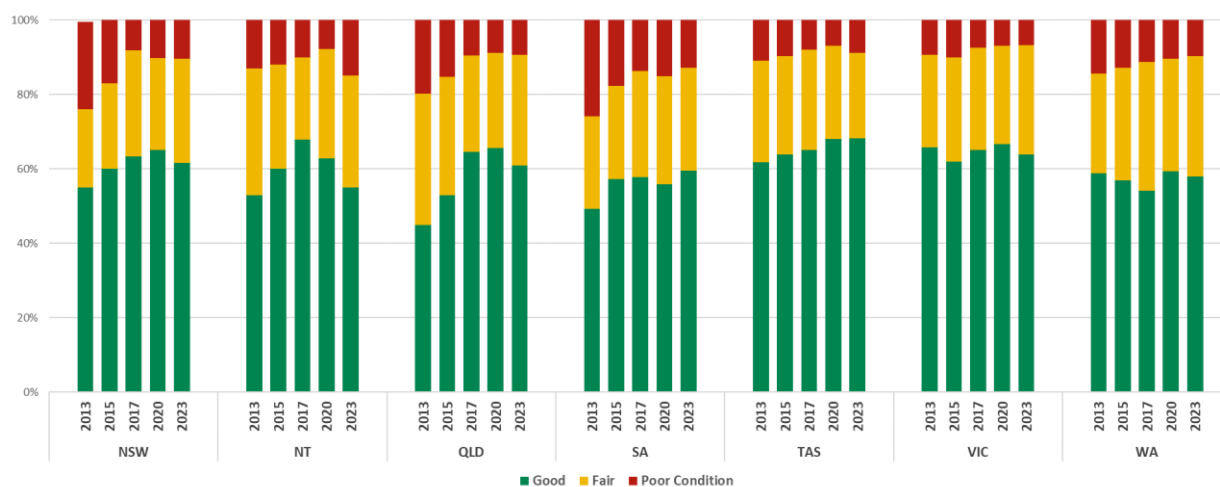


Figure 36 Condition trend by state & territory

Since 2013, the proportion of asset replacement cost reported in poor condition has reduced in every jurisdiction except for the Northern Territory.

Queensland, Tasmania and Victoria report less than 10% of their infrastructure assets are in poor condition.

Figure 37 shows the level of confidence responding councils have in their condition data by state and territory.

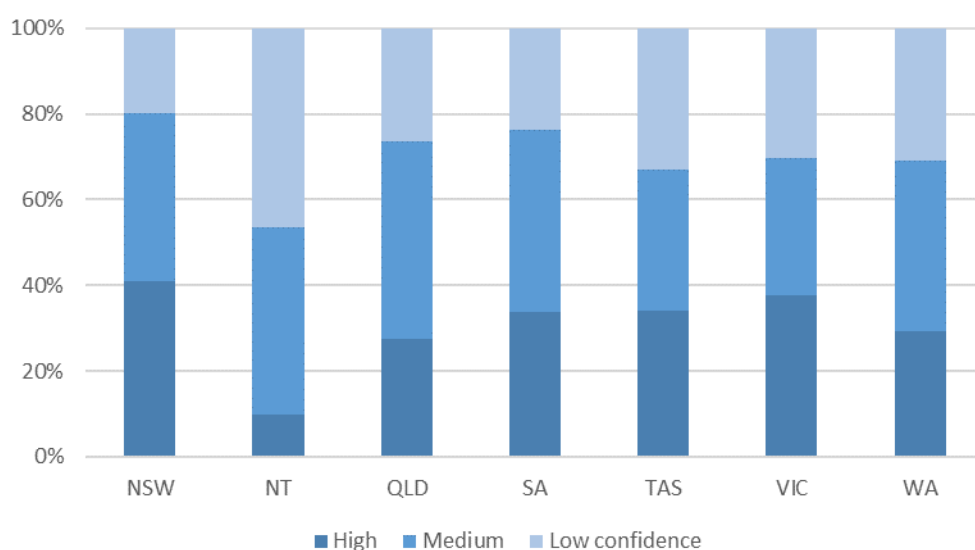


Figure 37 Condition data confidence by state & territory

Councils in New South Wales have the greatest confidence in their condition data compared to other jurisdictions. The Northern Territory has the lowest confidence.

The desired, actual, and forecast trend indicating the condition of existing infrastructure assets is reported in Table 22.

Table 22 Assets in poor condition – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Condition	↑	↑	↑	8% (\$55bn) of infrastructure assets are in a poor state of repair. We do not know how much of the \$55bn in poor condition is high risk. The proportion of infrastructure assets in a poor state of repair has steadily improved from the twelve percentage points reported in 2013 to eight percent in 2023. Timber bridges have the highest proportion of assets in poor condition Councils in rural areas are reporting little change in the condition of their infrastructure overall.

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
				Councils in rural remote areas have more than 20% of their asset replacement cost in poor condition. Based on recent trends, the forecast condition of existing infrastructure assets is expected to improve. Condition data is primarily based on moderate to high quality evidence, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample.

Function

Understanding the function of infrastructure assets helps us determine if they are suitable for their intended (current and future) purpose, meet user and program delivery needs and if they need to adapt (i.e., upgrade) in response to changing circumstances.

In short, function informs us if the assets are providing the right service.

By assessing the suitability of an asset for its intended purpose, opportunities for varying the level of service, and hence the cost of service, can be considered.

Function helps us understand future needs in response to changing circumstances.

Detail on the function grading system can be found in Appendix B.

An ongoing challenge with function assessment is that standards change and invariably improve. In many cases, standards (i.e., expectations and at times legislative requirements) can rise every five to ten years. If existing assets are judged against these new standards, then function performance may fall as they were likely designed and constructed with lower expectations in mind.

Local governments were asked to report the function profile of their infrastructure assets as a proportion of replacement cost for each asset class as of 30th June 2023. The aggregated function result for each asset class from responding councils is shown below.

Table 23 Function by asset class (June 2023)

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	73%	20%	7%	333	62%
Unsealed Roads	57%	33%	9%	273	51%
Concrete Bridges	76%	18%	6%	263	49%
Timber Bridges	56%	29%	14%	172	32%
Building & Facilities	68%	25%	7%	251	47%
Parks & Recreation	71%	23%	6%	232	43%
Stormwater	63%	27%	10%	239	45%
Water & Wastewater	77%	18%	5%	108	20%
Airports & Aerodromes	72%	14%	14%	84	16%
Footpaths & Cycleways	68%	27%	6%	115	21%
TOTAL	70%	23%	7%		

Responding councils report the estimated replacement cost of local government infrastructure assets in poor function at the end of June 2023 to be:

- 7% (\$16.0bn) of sealed roads have poor function.
- 9% (\$ 2.7bn) of unsealed roads have poor function.

- 6% (\$ 1.8bn) of concrete bridges have poor function.
- 14% (\$ 292m) of timber bridges have poor function.
- 7% (\$ 7.2bn) of building & facilities have poor function.
- 6% (\$ 1.9bn) of parks & recreation assets have poor function.
- 10% (\$13.4bn) of stormwater assets have poor function.
- 5% (\$ 4.3bn) of water & wastewater assets have poor function.
- 14% (\$ 504m) of airports & aerodromes have poor function; and
- 6% (\$ 1.5bn) of footpaths & cycleways have poor function.

The combined estimated replacement cost of local government infrastructure reported with poor function is \$50 billion.

Figure 38 shows the trend of local government infrastructure assets in good, fair, poor function as a proportion of replacement cost since 2013.

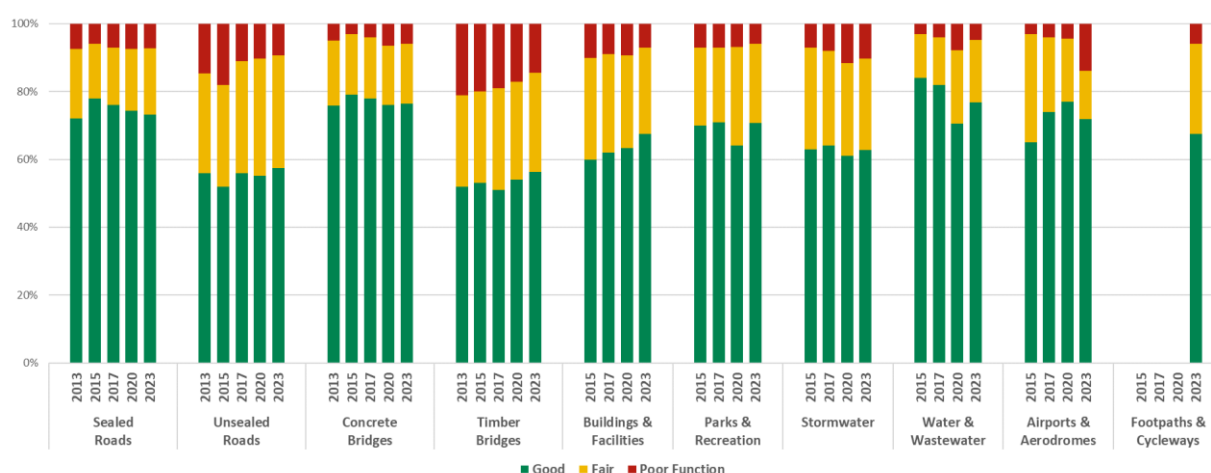


Figure 38 Function trend by asset class

While the infrastructure function demands vary across each asset class around 50 to 80 percent of all assets are meeting program and service needs.

Timber bridges have the highest proportion in poor function, however responding councils report a steady improvement in the function of timber bridges. This is possibly due to increased investment (i.e., maintenance, rehabilitation, and upgrades) to ensure they remain operational and fit for purpose.

Airports and aerodromes indicate an increase in poor function indicating more are not meeting program and service needs.

Figure 39 shows the level of confidence responding councils have in their function data by infrastructure asset class.

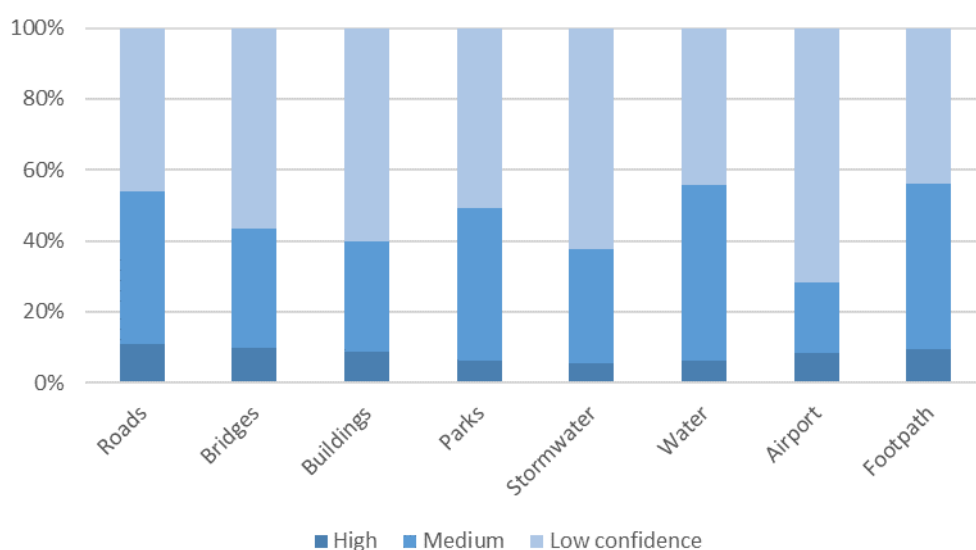


Figure 39 Function data confidence by asset class

On average, around 50 percent of responding councils report having a low confidence in the function reporting of their infrastructure assets.

Local government has the lowest data confidence in the function reporting of airport & aerodrome infrastructure than any other asset class.

Figure 40 shows the trend of local government infrastructure assets in good, fair, poor function as a proportion of replacement cost by ACLG grouping since 2013.

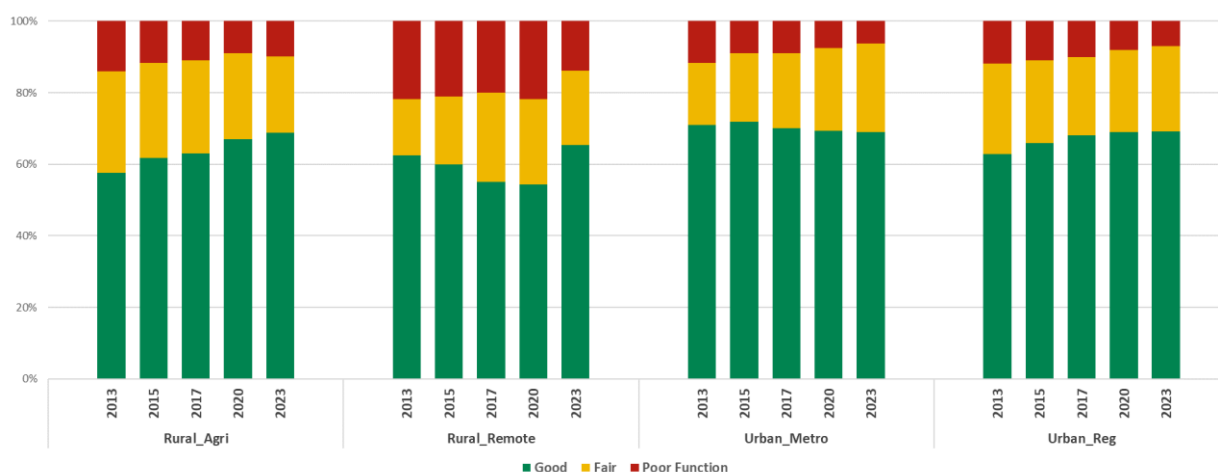


Figure 40 Function trend by ACLG

The proportion of asset replacement cost reported in poor function has been improving in the rural agricultural, urban metro and urban regional areas since 2013.

Rural agricultural, urban metro and regional area council's report the smallest proportion of asset replacement cost in poor function.

Councils in rural remote areas report around 15 to 20 percent of their assets are not meeting program and service needs.

Figure 41 shows the level of confidence responding councils have in their function data by ACLG grouping.

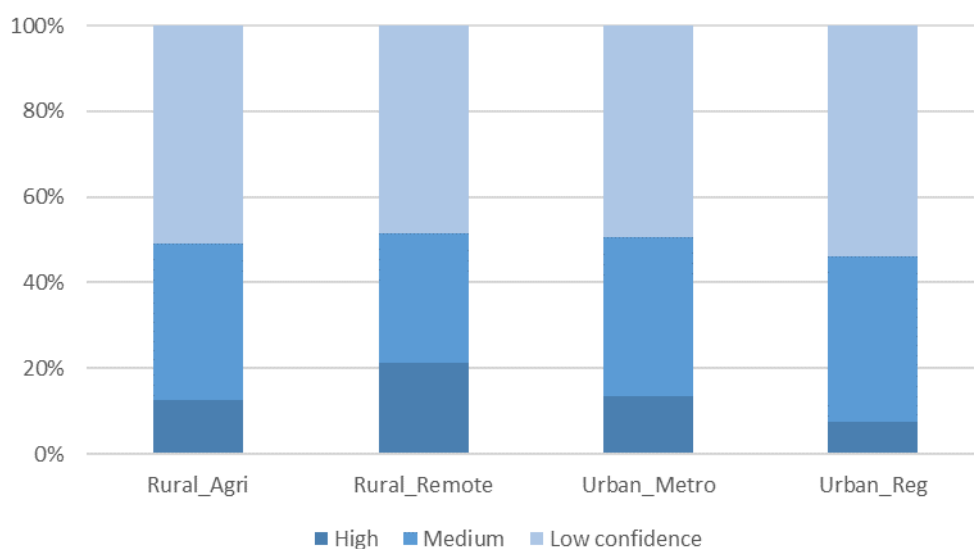


Figure 41 Function data confidence by ACLG

Regardless of location around 50 percent of responding councils report having a low confidence in the function reporting of their infrastructure assets.

Figure 42 shows the trend of local government infrastructure assets in good, fair, poor function as a proportion of replacement cost by state and territory since 2013.



Figure 42 Function trend by state & territory

The proportion of assets reported in poor function is lowest in Tasmania.

The Northern Territory has the highest and increasing proportion of assets with poor function.

Function has improved in NSW, Victoria, and Western Australia. The other states and the Northern Territory have plateaued.

Figure 43 shows the level of confidence responding councils have in their function data by state and territory.

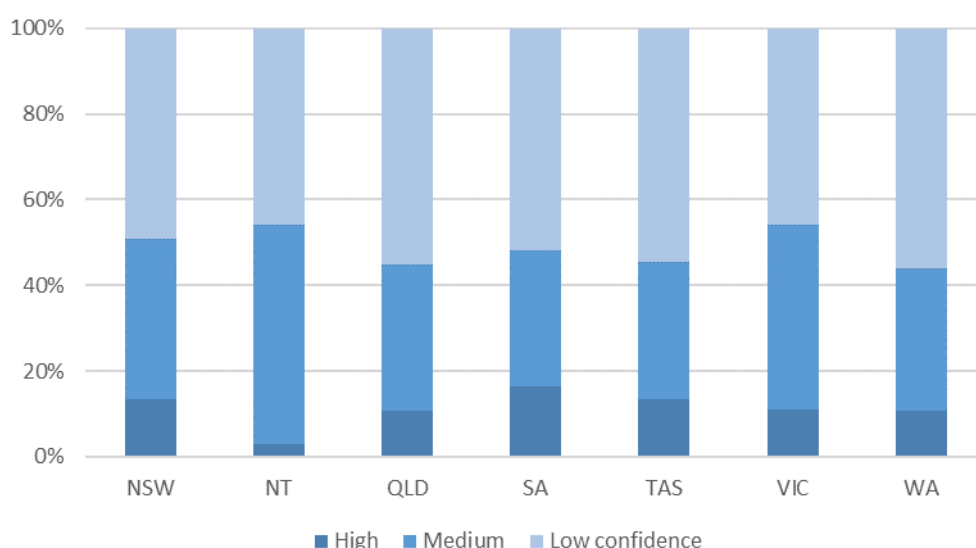


Figure 43 Function data confidence by state & territory

There is no great variation in the function data confidence between jurisdictions.

The desired, actual, and forecast trend indicating if councils have the right assets to meet community expectations and regulatory requirements is reported in Table 24.

Table 24 Assets with poor function – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Function	↑	↑	↓	7% (\$50bn) of infrastructure assets have poor function requiring upgrade in response to emerging local, regional, and state targets for safety, compliance, social, environmental, and economic performance. We do not know how much of the \$50 billion in poor function is high risk. Councils in rural remote areas have up to 20% of their assets with a poor function rating. Councils overall have marginally improved assets to be fit for purpose, but this trend is expected to decrease as community expectations and regulatory requirements increase. Regardless of location around 50 percent of responding councils report having a low confidence in the function reporting of their infrastructure assets.

Capacity

Understanding the capacity of infrastructure assets helps us optimise existing assets and understand future needs due to demand and growth.

Capacity relates to utilisation of assets. It helps us understand if asset form and size is appropriate to usage and service hierarchy.

In short, capacity informs us if we need more or less of these assets.

Assets must be utilised effectively to provide the maximum return on investment and to deliver the required levels of service.

If considerable investment is required for an asset that will be used only 10% of the time, then very high standing charges will need to be met, and the asset may tie up considerable capital resources unnecessarily.

Capacity helps us optimise existing assets and understand future needs due to demand and growth.

Wherever possible the aim should be to ensure sufficient resources are allocated to provide the service without interruption at the desired performance.

Capacity (or utilisation) is therefore seen as an indicator of economic return and value-for-money for community infrastructure.

Detail on the capacity grading system can be found in Appendix B.

Local governments were asked to report on the capacity profile of their infrastructure assets as a proportion of replacement cost for each asset class as of 30th June 2023. The aggregated capacity result for each asset class from responding councils is shown below.

Table 25 Capacity by asset class (June 2023)

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	74%	19%	7%	329	61%
Unsealed Roads	65%	26%	8%	257	48%
Concrete Bridges	73%	20%	6%	263	49%
Timber Bridges	58%	27%	15%	169	31%
Building & Facilities	68%	24%	8%	246	46%
Parks & Recreation	70%	24%	6%	229	43%
Stormwater	62%	27%	12%	236	44%
Water & Wastewater	80%	14%	6%	106	20%
Airports & Aerodromes	69%	16%	14%	84	16%
Footpaths & Cycleways	69%	25%	7%	111	21%
TOTAL	71%	21%	8%		

Responding councils report the estimated replacement cost of local government infrastructure assets in poor capacity at the end of June 2023 to be:

- 7% (\$14.5bn) of sealed roads have poor capacity.
- 8% (\$ 2.4bn) of unsealed roads have poor capacity.
- 6% (\$ 1.8bn) of concrete bridges have poor capacity.
- 15% (\$ 304m) of timber bridges have poor capacity.
- 8% (\$ 8.3bn) of building & facilities have poor capacity.
- 6% (\$ 2.1bn) of parks & recreation assets have poor capacity.
- 12% (\$15.2bn) of stormwater assets have poor capacity.
- 6% (\$ 5.5bn) of water & wastewater assets have poor capacity.
- 14% (\$ 513m) of airports & aerodromes have poor capacity; and
- 7% (\$ 1.6bn) of footpaths & cycleways have poor capacity.

The combined estimated replacement cost of local government infrastructure reported with poor capacity is \$52 billion.

Figure 44 shows the trend of local government infrastructure assets in good, fair, poor capacity as a proportion of replacement cost since 2013.

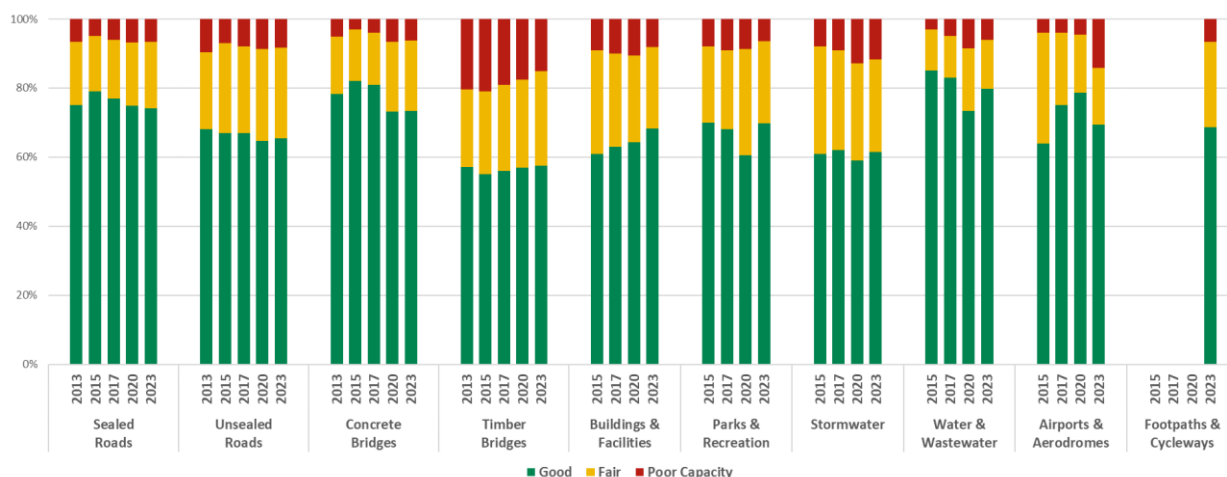


Figure 44 Capacity trend by asset class

The capacity of infrastructure to meet demand and growth pressures varies across each asset class. While timber bridges report the highest proportion with poor capacity, the actual trend has improved slightly.

Responding councils report stormwater assets and airport & aerodrome assets have increased the proportion of assets with poor capacity.

Figure 45 shows the level of confidence responding councils have in their capacity data by infrastructure asset class.

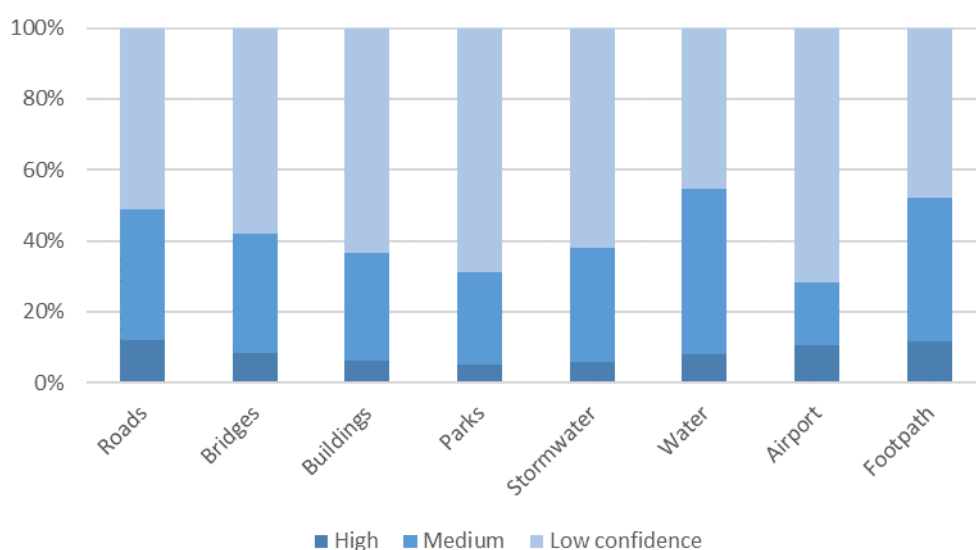


Figure 45 Capacity data confidence by asset class

On average, more than 50 percent of responding councils report having a low confidence in the capacity reporting of infrastructure assets.

Local government has the lowest data confidence in the capacity reporting of parks and airport & aerodrome infrastructure than any other asset class.

Figure 46 shows the trend of local government infrastructure assets in good, fair, poor capacity as a proportion of replacement cost by ACLG since 2013.

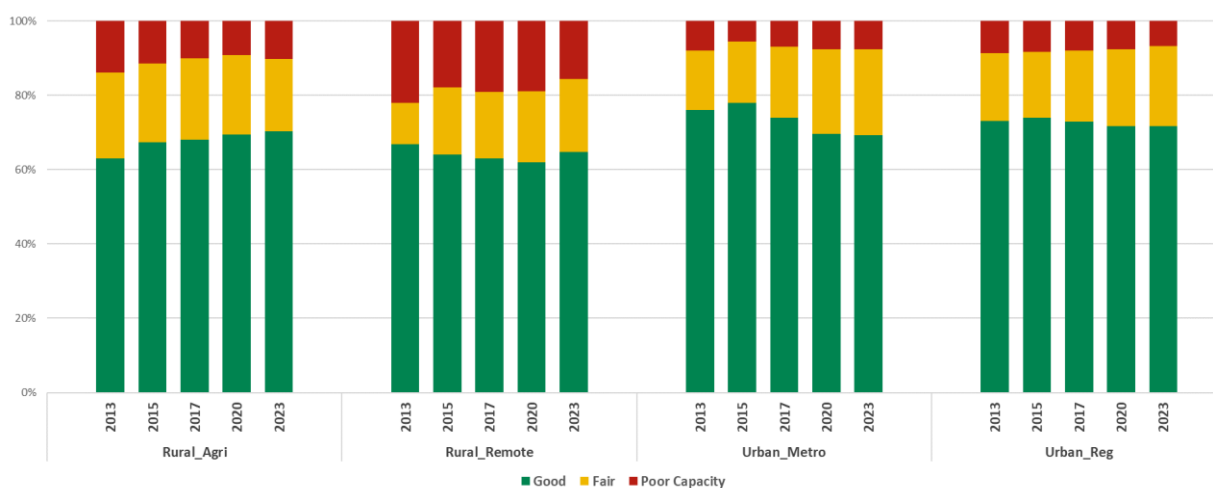


Figure 46 Capacity trend by ACLG

The proportion of asset replacement cost reported in poor capacity has improved slightly in rural agricultural areas.

Urban metro and urban regional council's report the smallest proportion of asset replacement cost in poor capacity.

Councils in rural remote areas report close to 20% of their assets with poor capacity.

Figure 47 shows the level of confidence responding councils have in their capacity data by ACLG grouping.

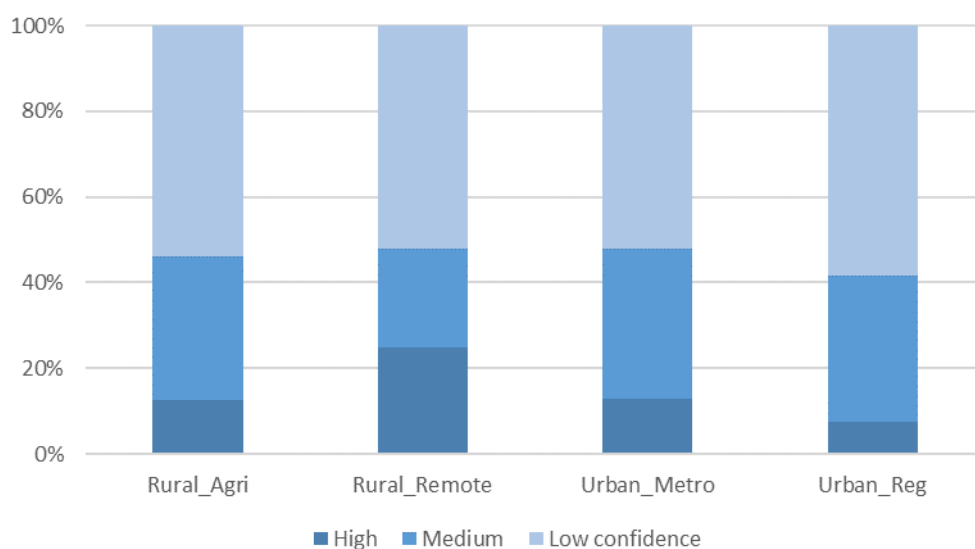


Figure 47 Capacity data confidence by ACLG

Regardless of location more than 50 percent of responding councils report having a low confidence in the capacity reporting of their infrastructure assets.

Figure 48 shows the trend of local government infrastructure assets in good, fair, poor capacity as a proportion of replacement cost by state and territory since 2013.



Figure 48 Capacity trend by state & territory

The proportion of asset replacement cost reported in poor capacity has remained steady in every state and territory since 2013.

The Northern Territory and Tasmania report the smallest proportion of asset replacement cost in poor capacity.

Figure 49 shows the level of confidence responding councils have in their capacity data by state and territory.

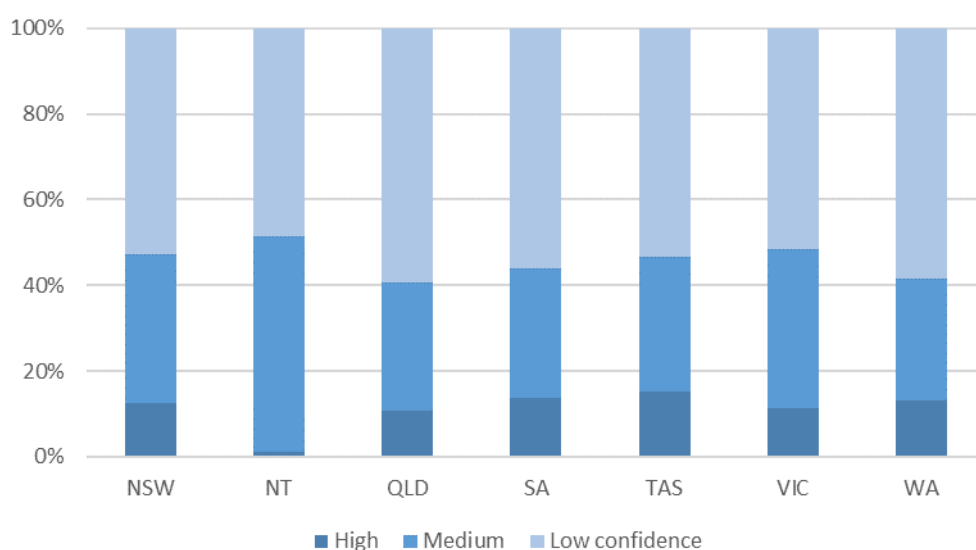


Figure 49 Capacity data confidence by state & territory

There is no great variation in the capacity data confidence between jurisdictions.

The desired, actual, and forecast trend indicating the proportion of existing assets that are under or over utilised is reported in Table 26.

Table 26 Assets with poor capacity – trend analysis

Measure	Desired Trend	Actual Trend	Forecast Trend	Comment
Capacity	↑	→	↓	8% (\$52bn) of infrastructure assets have poor capacity and/or utilisation requiring upgrade to support demand and growth pressures. We do not know how much of the \$52 billion in poor capacity is high risk. Councils in rural remote areas have close to 20% of their assets with poor capacity. The ability of existing assets to respond to population growth and more frequent and intense rain events has plateaued but is expected to decrease. Regardless of location more than 50 percent of responding councils report having a low confidence in the capacity reporting of their infrastructure assets.

Findings

Local Government Infrastructure

Local government in Australia reported the value of its assets under its control at \$643 billion in the financial year ending 2022-23. 66% of this asset value was attributed to infrastructure assets.

This built infrastructure consists primarily of roads, bridges, footpaths, cycleways, buildings, parks, stormwater, water & wastewater, and airports and aerodromes.

The levels of service provided by these assets varies depending on the location of individual councils, proximity to resources and the varying needs of their communities.

Roads account for 38% of local government infrastructure. In rural remote areas, roads can be more than 60% of the total infrastructure assets controlled by local government.

While the size and nature of asset holdings of individual councils vary, they all face the challenge of maintaining and modernising service delivery ensuring the most value is gained from their investment.

Local Government Infrastructure Investment

The value of **local government infrastructure has grown at a steady rate of 6.7% per annum** on average from \$254 billion in 2014 to \$424 billion in 2023.

At the end of June 2023, **the estimated replacement cost of local government infrastructure was \$665 billion.**

This represents an investment of approximately \$25,400 for each of the 26.2 million people in Australia.

These **assets are being consumed at an estimated rate of 1.6% or \$9.7 billion per year**, equivalent to \$371 per person across Australia each year.

On average, **the remaining service potential of local government infrastructure has increased** four percentage points since 2013 to 64% in 2023. This suggests **the average age of local government infrastructure is decreasing**, possibly in response to new assets being acquired and existing assets being replaced. It also suggests the overall performance (as measured by condition, function, and capacity for example) could be improving.

At the same time, responding councils indicate **infrastructure on average is expected to last longer than originally anticipated.** The rate of depreciation has decreased from 1.8% in 2013 to 1.6% in 2023, suggesting on average, assets are expected to last more than 60-years.

It is worth noting however, **councils in rural and remote areas are more likely to hold an 'older' stock of infrastructure assets** compared to higher populated councils in urban settings, therefore placing greater emphasis on the need to ensure they are operating sustainably (i.e., ensuring credible, reliable, and up to date asset management plans are in place).

Local Government Infrastructure Planning

The Nationally Consistent Frameworks for local government asset and financial management - and associated programs such as the 2009 Local Government Reform Fund - have succeeded in creating momentum for improved return on investment in building skills in asset management planning and reporting.

However, unfinished business remains as trends indicate planning capability not only varies across the sector but overall has declined. There is a clear need to rebuild, sustain and support capability levels, particularly for the small rural, regional, and remote councils.

Key findings include:

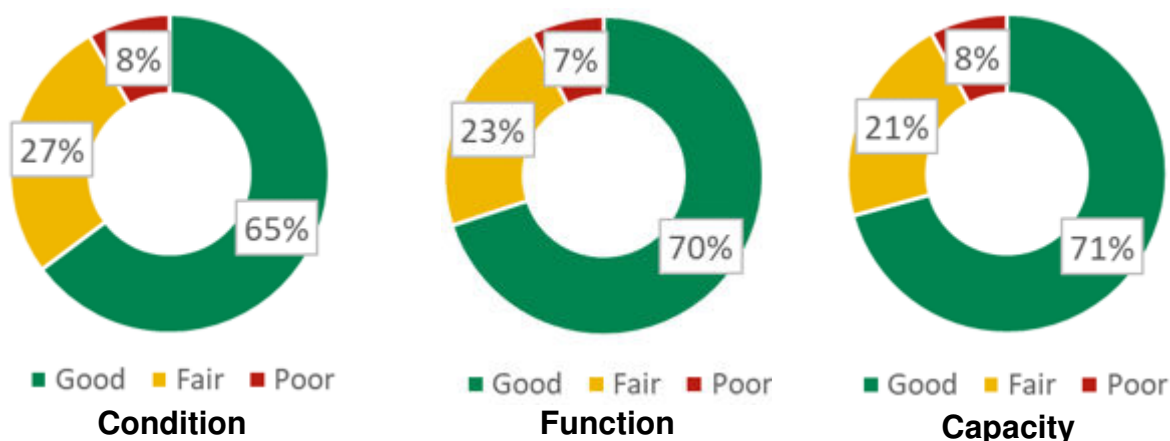
- The average proportion of responding councils who said they had asset management plans adopted has plateaued at 70% since 2017. In other words, around **one third of councils do not have an asset management plan adopted for their major assets**, or if they do, they are out of date.
- **88% of responding councils say they had adopted a long-term financial plan**, an increase from 72% in 2013.
- Of the 70% of councils who said they had asset management plans in place, **two thirds (67%) included the expenditure forecasts in the LTFP**.
- In other words, less than **50% of councils don't align their AM Plan forecasts with the financial plan**.
- **Councils in the urban areas indicate higher compliance** with the legislated asset management and financial planning and reporting requirements **compared with the lower populated councils in rural areas reporting a lower level of compliance**.

These findings indicate improvement is needed to ensure councils meet their asset management and financial planning and reporting obligations.

Without intervention, future performance will likely lead to a diminishing ability to forecast and finance future infrastructure needs effectively. The trends are likely to exacerbate in rural areas without effective improvement strategies being employed given the constrained environment in which they operate.

Progress was made in implementing asset management and financial planning and reporting frameworks from 2010. However, this report suggests there is a need for an ongoing process of continuous improvement in the local government sector for the foreseeable future with a specific focus on the smaller populated councils in the rural areas of the country.

Local Government Infrastructure Performance



Collectively, local government reports:

- **8% or \$55 billion of community infrastructure assets are in poor condition.**
- The forecast condition of existing infrastructure assets is expected to improve.
- **7% or \$50 billion of community infrastructure assets have poor function** requiring upgrade in response to changing circumstances.
- The forecast demands on existing assets to meet community expectations and changing circumstances is expected to increase.
- **8% or \$52 billion of infrastructure assets have poor capacity** and/or utilisation requiring augmentation to support demand and growth pressures.
- The forecast demands on the capacity thresholds of existing assets is expected to increase.

Performance by Asset Class

- **Roads** represent 38% or \$250 billion of the total infrastructure replacement cost. \$23.1 billion are in poor condition, \$18.7 billion have poor function and \$16.9 billion have poor capacity.
- **Bridges** represent 5% or \$31 billion of the total infrastructure replacement cost. \$2.1 billion are in poor condition, \$2.0 billion have poor function and \$2.1 billion have poor capacity.
- **Buildings** represent 15% or \$102 billion of the total infrastructure replacement cost. \$8.3 billion are in poor condition, \$7.2 billion have poor function and \$8.3 billion have poor capacity.
- **Park & Recreation** assets represent 5% or \$32 billion of the total infrastructure replacement cost. \$2.9 billion are in poor condition, \$1.9 billion have poor function and \$2.1 billion have poor capacity.
- **Stormwater** assets represent 20% or \$130 billion of the total infrastructure replacement cost. \$7.9 billion are in poor condition, \$13.4 billion have poor function and \$15.2 billion have poor capacity. Stormwater assets are twice as likely to have function and capacity constraints than condition.

- **Water & Wastewater** assets represent 14% or \$91 billion of the total infrastructure replacement cost. \$9.4 billion are in poor condition, \$4.4 billion have poor function and \$5.5 billion have poor capacity.
- **Airport & Aerodrome** assets represent less than 1% or \$4 billion of the total infrastructure replacement cost. \$437M are in poor condition, \$5.4M have poor function and \$513M have poor capacity.
- **Footpaths & Cycleway** assets represent 4% or \$25 billion of the total infrastructure replacement cost. \$1.4 billion are in poor condition, \$1.4 billion have poor function and \$1.7 billion have poor capacity.

Performance by Australian Classification of Local Government groupings

- Urban metro and urban regional council's report the condition, function, and capacity of their infrastructure assets have improved.
- Councils in rural areas are reporting little change in the condition of their infrastructure overall.
- Councils in rural remote areas report more of their assets are in poor condition, function, and capacity compared to urban councils.

Performance by State and Territory

- Since 2013, the proportion of assets reported in poor condition has reduced in every state except for the Northern Territory.
- The proportion of assets reported in poor function is lowest in Tasmania.
- The Northern Territory has the highest and increasing proportion of assets with poor function
- The proportion of assets reporting poor capacity has remained steady in every state and territory since 2013.

A note on data confidence

The combined condition, function and capacity data confidence reported by local government highlights most base their infrastructure performance assessment on low to medium quality evidence, procedures, investigations, and analysis which is incomplete, unsupported, or extrapolated from a limited sample.

Figure 50 shows the level of confidence responding councils had in their infrastructure performance data for condition, function and capacity.

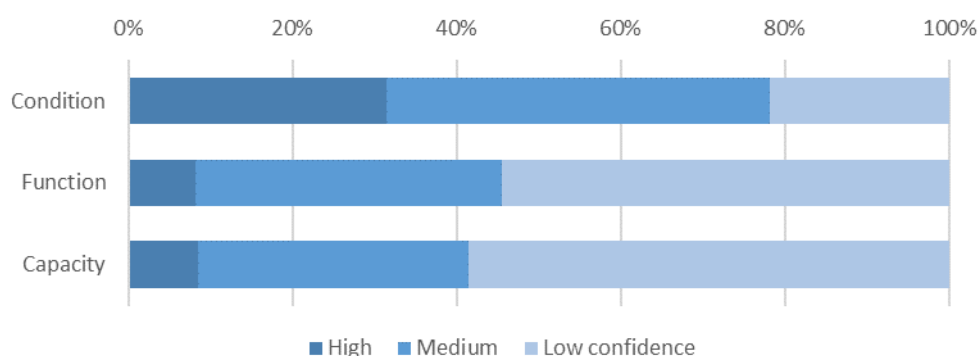


Figure 50 Combined data confidence by condition, function and capacity

Councils express higher confidence in their condition assessment data compared to function and capacity data.

References

AASB 13 Fair Value Measurement

ACIL Allen Consulting, Regional Airport Infrastructure Study – A report to the Australian Airports Association, September 2016.

Australian Bureau of Statistics, cat. no. 3101.0 - Australian Demographic Statistics, June 2023, TABLE 4. Estimated Resident Population, States and Territories (Number), Jun 2023", Canberra, 2024.

Australian Bureau of Statistics, cat. no. 5512.0, "Table 339, 55120DO019_202223 Government Finance Statistics, Australia, 2022-23, Table 1 & 3, Australian Bureau of Statistics, Canberra, 26th April 2024.

Australian Government, House of Representatives Economics, Finance and Public Administration Committee, *Rates and Taxes: A Fair Share for Responsible Local Government*, (Canberra: Commonwealth of Australia, 2003)

ALGA, 'The Local Roads Funding Gap' Study of local roads funding in Australia 1999–00 to 2019-20, October 2010.

City of Melbourne, Submission 43 to the 2015 Federal Government Senate inquiry into Stormwater

Cloake, T., Siu, K.L., 2002, Standardized Classification System to Assess the State and Condition of Infrastructure in Edmonton, Proc INFRA 2002, Montreal, Canada

Infrastructure Australia, 2019 Australian Infrastructure Audit.

IPWEA, International Infrastructure Management Manual. Institute of Public Works Engineering Australasia. Retrieved from <https://www.ipwea.org/publications/ipweabookshop/iimm>

IPWEA 2015, Australian Infrastructure Financial Management Manual (AIFMM). Institute of Public Works Engineering Australasia. Retrieved from <https://www.ipwea.org/publications/ipweabookshop/aifmm>

IPWEA 2024, National Local Roads Data System (NLRDS) (n.d.) [Online], [Accessed 28th May 2024].

IPWEA 2024, International Infrastructure Financial Management Manual (IIFMM). Institute of Public Works Engineering Australasia. Retrieved from <https://www.ipwea.org/publications/ipweabookshop/iifmm>

IPWEA (NSW & ACT), 2023 Timber Bridge Management Report, Road Asset Benchmarking Project, October 2023.

ISO55000: 2014 Asset Management — Overview, principles and terminology

Mardiasmo, D., Tywoniak, S., Brown, K., & Burgess, K. (2008). Asset management and governance: Analysing vehicle fleets in asset-intensive organisations. In The Twelfth Annual Conference of the International Research Society for Public Management (IRSPM XII) (pp. 1-20).

Wiewiora, A., Keast, R., & Brown, K. (2016). Opportunities and challenges in engaging citizens in the co-production of infrastructure-based public services in Australia. *Public Management Review*, 18(4), 483-507.

Appendices

Appendix A - **Sample Data Collection Form**

Appendix B - **Infrastructure Performance Grading System**

Appendix C - **Australian Classification of Local Government**

Appendix D - **List of responding councils by State & Territory**

Appendix A – Sample Data Collection Form

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



Update 2022/2023 Data

Welcome to the NSoA Community Infrastructure Report data portal

Since 2012, the Australian Local Government Association (ALGA) has encouraged every local government in Australia to participate in an annual self-assessment survey of its infrastructure performance and management practices known as the National State of the Assets (NSoA) Project.

Data is collected for each of the following class of assets:

- Roads – Sealed and Unsealed,
- Bridges – Concrete and Timber,
- Building & Facilities,
- Parks & Recreation,
- Stormwater,
- Water & Wastewater,
- Airports & Aerodromes, and
- Footpaths & Cycleways.

Financial and Asset management data should be sourced from existing systems and public or statutory reporting documents such as the Annual Report, Financial Statements, Asset Management and Long-Term Financial Plans for the most recent end of financial year reporting period.

On completion, your data remains vested to your organisation and will be locked for validation, analysis and reporting at an aggregated level for the purposes of the project.

2019/2020 Data

2020/2021 Data

Your assistance in updating your organisation's data is greatly appreciated. Should you have any questions or require assistance accessing your organisation's data contact admin@ipwea.org.

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



Asset Knowledge & Capability	Completed
Sealed Roads	Completed
Unsealed Roads	Completed
Bridges & Major Culverts	Completed
Timber Bridges	Completed
Buildings & Facilities	Completed
Parks & Recreation	Completed
Stormwater	Completed
Water & Wastewater	No Assets in this Category
Airports & Aerodromes	Completed
Footpaths & Cycleways	Completed

Institute of Public Works Engineering Australasia Limited

NSoA24 - Data collection for the 2022/23 financial period is open. Complete each area and update the Status at the bottom of each page to show In Progress, Completed or Signed Off /No Assets in this Category. Values from the previous year have been pre-populated for easy reference.

Once the Signed Off or No Assets in this Category option has been selected, you will no longer be able to edit/update the values.

Click here for answers to some [Frequently Asked Questions](#).

Download Data Report

Back

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



Institute of Public Works Engineering Australasia Limited 2023	Area (square km):	80,000	Population:	80,000
--	-------------------	--------	-------------	--------

Asset Knowledge & Capability

Status of Asset Management Plan development

Are asset management plans in place for:

Roads	Yes
Buildings & Facilities	No
Parks & Recreation	Out of Date
Stormwater	Not Applicable
Water & Wastewater	Yes
Airport & Aerodromes	Out of Date
Footpaths & Cycleways	Yes

Status of Long Term Financial Plan development

Does council have a long-term financial plan in place?	Out of Date
--	-------------

Are the financial projections from the AM Plans included in the LTFP for:

Roads	Yes
Buildings & Facilities	No
Parks & Recreation	Out of Date
Stormwater	Not Applicable
Water & Wastewater	Yes
Airport & Aerodromes	Out of Date
Footpaths & Cycleways	Yes

Back	Status	Completed	Save
------	--------	-----------	------

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



Institute of Public Works Engineering Australasia Limited 2023	Area (square km):	80,000	Population:	80,000
			Replacement Cost per capita:	\$ 2,711

Sealed Roads

Replacement Cost

216,944,818

Depreciable Amount

216,944,818

Current Replacement Cost

134,430,821

Annual Depreciation

2,895,000

Assets were last revalued in the 2022/23 FY.

Condition

% In Condition 1 & 2 Good

66.00

% In Condition 3 Fair

23.00

% In Condition 4 & 5 Poor

11.00

Confidence

Medium

% TOTAL

100.00

Function

% In Function 1 & 2 Good

74.00

% In Function 3 Fair

19.00

% In Function 4 & 5 Poor

7.00

Confidence

Low

% TOTAL

100.00

Capacity/Utilisation

% In Capacity 1 & 2 Good

80.00

% In Capacity 3 Fair

15.00

% In Capacity 4 & 5 Poor

5.00

Confidence

Low

% TOTAL

100.00

Back

Update Status

Completed

Save

Appendix B – Infrastructure Performance Grading System

The NSoA infrastructure performance grading system uses three very simple indicators that answer the question:

“Is local government infrastructure getting better, worse or staying the same?”

This is a fundamental question that local government should be positioned to answer within their asset management system and supporting plans.

The three indicators are:

- **Condition** Quality ...How good is the service?
- **Function** Suitability ...Is it the right service?
- **Capacity** Utilisation ...Do we need more or less services?

The indicators are measured as a proportion of the total replacement cost of each asset class in the following gradings:



This approach is consistent with the ‘core’ level approach methodology as outlined in the International Infrastructure Management Manual (IIMM). Each performance metric (condition, function, and capacity) is based on the simple 5-level ranking system where 1 is ‘Very Good’ and 5 is ‘very poor’.

The IPWEA’s National Asset Management Strategy and supporting guidance material such as the IIMM recommends performance data be stored and be capable of conversion into a 1 to 5 rating scale.

It is important that a consistent approach is used in reporting asset performance to provide effective decision support. A finer grading system may be used at a more advanced level, however, for NSoA reporting results are translated from a core level 1 – 5 grading system as per IIMM to a Good, Fair, Poor grading scale for ease of communicating the results.

Condition grading system

Condition is measured as the percentage of replacement cost in good, fair, and poor condition. Condition helps us understand how good the service is and where it is in its lifecycle.

Condition data helps us evaluate remaining useful life and can assist in estimating the year of acquisition.

National Standard for Condition Grading Scores

Condition Grading		Description of Condition
Good	1	Very Good: free of defects, only planned and/or routine maintenance required
	2	Good: minor defects, increasing maintenance required plus planned maintenance
Fair	3	Fair: defects requiring regular and/or significant maintenance to reinstate service
Poor	4	Poor: significant defects, higher order cost intervention likely
	5	Very Poor: physically unsound and/or beyond rehabilitation, immediate action required

Source: Based on IPWEA IIMM Sec 2.5.4

Function grading system

Function is measured as the percentage of replacement cost that provides an acceptable functional service.

Function helps us understand if the service is suitable for its intended purpose – is it the right service?

Function data helps us understand future needs in response to changing circumstances.

National Standard for Function Grading Scores

Function Grading		Description of Function
Good	1	Very Good: meets program/service delivery needs in a fully efficient and effective manner
	2	Good: meets program/service delivery needs in an acceptable manner
Fair	3	Fair: meets most program/service needs with some inefficiencies and ineffectiveness present
Poor	4	Poor: limited ability to meet program/service needs
	5	Very Poor: critically deficient, does not meet program/service needs, neither efficient or effective

Source: Adapted from Cloake & Sui, 2002

Capacity grading system

Capacity is measured as the percentage of replacement cost that is operating within targeted capacity.

Capacity helps us understand if the service is under or over utilised – do we need more or less of these assets?

Capacity data helps us understand future needs due to demand and growth.

National Standard for Capacity Grading Scores

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

Source: Adapted from Cloake & Sui, 2002

Appendix C – Australian Classification of Local Government

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

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

For example, a medium-sized council in a rural agricultural area with an approximate 4,000 population would be classified as RAM—rural, agricultural, medium. If it were in a remote area, it would be classified as RTM—rural, remote, medium. An urban metropolitan council with up to 30,000 population would be classified as UDS. The table below provides information on the structure of the classification system.

Step 1	Step 2	Step 3	Identifiers	Category
URBAN (U)				
Population more than 20 000	CAPITAL CITY (CC)	Not applicable		UCC
OR	METROPOLITAN DEVELOPED (D)	SMALL	up to 30 000	UDS
If population less than 20 000,	Part of an urban centre of more than 1 000 000 or population density more than 600 per square kilometre	MEDIUM	30 001–70 000	UDM
EITHER		LARGE (L)	70 001–120 000	UDL
Population density more than 30 persons per square kilometre		VERY LARGE (V)	more than 120 000	UDV
OR	REGIONAL TOWNS/CITY (R)	SMALL	up to 30 000	URS
90 per cent or more of the local governing body population is urban	Part of an urban centre with population less than 1 000 000 and predominantly urban in nature	MEDIUM	30 001–70 000	URM
		LARGE (L)	70 001–120 000	URL
		VERY LARGE (V)	more than 120 000	URV
	FRINGE (F)	SMALL	up to 30 000	UFS
	A developing LGA on the margin of a developed or regional urban centre	MEDIUM	30 001–70 000	UFM
		LARGE (L)	70 001–120 000	UFL
		VERY LARGE (V)	more than 120 000	UFV
RURAL (R)				
A local governing body with population less than 20,000	SIGNIFICANT GROWTH (SG)	Not applicable		RSG
AND	Average annual population growth more than three per cent, population more than 5000 and not remote			
Population density less than 30 persons per square kilometre	AGRICULTURAL (A)	SMALL	up to 2000	RAS
AND		MEDIUM	2001–5000	RAM
Less than 90 per cent of local governing body population is urban		LARGE (L)	5001–10 000	RAL
		VERY LARGE (V)	10 001–20 000	RAV
	REMOTE	EXTRA SMALL (X)	up to 400	RTX
		SMALL	401–1000	RTS
		MEDIUM	1001–3000	RTM
		LARGE (L)	3001–20 000	RTL

When applying the ACLG groupings for this report, each council was assigned into one of four categories depending on their rural or urban classification, broadly as follows:

- Rural:
 1. Agricultural – small, medium, large, and very large populations; and
 2. Remote – very small, small, medium, and large populations.
- Urban:
 1. Metropolitan - capital cities, developed (suburban) and urban fringe metropolitan councils; and
 2. Regional - non-metropolitan councils with urban centres in regional areas.

Appendix D – List of responding councils by State & Territory

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Albury City Council	NSW	URM	✓	City of Newcastle	NSW	URV	✓
Armidale Regional Council	NSW	URM	✓	City of Parramatta	NSW	UDV	✓
Ballina Shire Council	NSW	URM	✓	City of Ryde	NSW	UDL	✓
Balranald Shire Council	NSW	RAM	✓	City of Sydney	NSW	UCC	✓
Bathurst Regional Council	NSW	URM	✓	Clarence Valley Council	NSW	URM	✓
Bayside Council	NSW	UDL	✓	Cobar Shire Council	NSW	RTL	✓
Bega Valley Shire Council	NSW	URM	✓	Coffs Harbour City Council	NSW	URM	✓
Bellingen Shire Council	NSW	RAV	✓	Coolamon Shire Council	NSW	RAM	✓
Berrigan Shire Council	NSW	RAL	✓	Coonamble Shire Council	NSW	RAM	✓
Blacktown City Council	NSW	UDV	✓	Cootamundra-Gundagai Regional Council	NSW	RAL	✓
Bland Shire Council	NSW	RAL	✓	Cowra Shire Council	NSW	RAV	✓
Blayney Shire Council	NSW	RAL	✓	Cumberland City Council	NSW	UDV	✓
Blue Mountains City Council	NSW	UFL	✓	Dubbo Regional Council	NSW	URM	✓
Bogan Shire Council	NSW	RAM	✓	Dungog Shire Council	NSW	RAL	✓
Bourke Shire Council	NSW	RAM	✓	Edward River Council	NSW	RAL	✓
Brewarrina Shire Council	NSW	RAM	✓	Eurobodalla Shire Council	NSW	URM	✓
Broken Hill City Council	NSW	URS	✓	Fairfield City Council	NSW	UDV	✓
Burwood Council	NSW	UDM	✓	Federation Council	NSW	RAS	✓
Byron Shire Council	NSW	URM	✓	Forbes Shire Council	NSW	RAV	✓
Cabonne Shire Council	NSW	RAV	✓	Georges River Council	NSW	UDL	✓
Camden Council	NSW	UFM	✓	Gilgandra Shire Council	NSW	RAM	✓
Campbelltown City Council (NSW)	NSW	UDV	✓	Glen Innes Severn Council	NSW	RAL	✓
Canterbury Bankstown Council	NSW	UDV	✓	Goulburn Mulwaree Council	NSW	URS	✓
Carrathool Shire Council	NSW	RAM	✓	Greater Hume Shire Council	NSW	RAV	✓
Central Coast Council (NSW)	NSW	URV	✓	Griffith City Council	NSW	URS	✓
Central Darling Shire Council	NSW	RTM	✓	Gunnedah Shire Council	NSW	RAV	✓
Cessnock City Council	NSW	URM	✓	Gwydir Shire Council	NSW	RAL	✓
City of Canada Bay Council	NSW	UDM	✓	Hawkesbury City Council	NSW	UFM	✓
City of Lithgow Council	NSW	URS	✓	Hay Shire Council	NSW	RAM	✓
				Hilltops Council	NSW	RAV	✓
				Hornsby Shire Council	NSW	UFV	✓

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Hunter's Hill Council	NSW	UDS	✓	Parkes Shire Council	NSW	RAV	✓
Inner West Council	NSW	UDV	✓	Penrith City Council	NSW	UFV	✓
Inverell Shire Council	NSW	RAV	✓	Port Macquarie-	NSW	URL	✓
Junee Shire Council	NSW	RAL	✓	Hastings Council			
Kempsey Shire Council	NSW	URS	✓	Port Stephens Council	NSW	URM	✓
Kiama Municipal Council	NSW	URS	✓	Queanbeyan-			
Ku-ring-gai Council	NSW	UDL	✓	Palerang Regional Council	NSW	URM	✓
Kyogle Council	NSW	RAL	✓	Randwick City Council	NSW	UDV	✓
Lachlan Shire Council	NSW	RAL	✓	Richmond Valley Council	NSW	URS	✓
Lake Macquarie City Council	NSW	URV	✓	Shellharbour City Council	NSW	URM	✓
Lane Cove Municipal Council	NSW	UDM	✓	Shoalhaven City Council	NSW	URL	✓
Leeton Shire Council	NSW	RAV	✓	Singleton Council	NSW	URS	✓
Lismore City Council	NSW	URM	✓	Snowy Monaro Regional Council	NSW	URS	✓
Liverpool City Council	NSW	UFV	✓	Snowy Valleys Council	NSW	RAL	✓
Liverpool Plains Shire Council	NSW	RAL	✓	Strathfield Municipal Council	NSW	UDM	✓
Lockhart Shire Council	NSW	RAM	✓	Sutherland Shire Council	NSW	UDV	✓
Maitland City Council	NSW	URM	✓	Tamworth Regional Council	NSW	URM	✓
Mid Western Regional Council	NSW	URS	✓	Temora Shire Council	NSW	RAL	✓
MidCoast Council	NSW	URL	✓	Tenterfield Shire Council	NSW	RAL	✓
Moree Plains Shire Council	NSW	RAV	✓	The Hills Shire Council	NSW	UFV	✓
Mosman Municipal Council	NSW	UDS	✓	Tweed Shire Council	NSW	URL	✓
Murray River Council	NSW	RAL	✓	Upper Hunter Shire Council	NSW	RAV	✓
Murrumbidgee Council	NSW	RAM	✓	Upper Lachlan Shire Council	NSW	RAL	✓
Muswellbrook Shire Council	NSW	RAV	✓	Uralla Shire Council	NSW	RAL	✓
Nambucca Shire Council	NSW	RAV	✓	Wagga Wagga City Council	NSW	URM	✓
Narrabri Shire Council	NSW	RAV	✓	Walcha Council	NSW	RAM	✓
Narrandera Shire Council	NSW	RAL	✓	Walgett Shire Council	NSW	RAL	✓
Narromine Shire Council	NSW	RAL	✓	Warren Shire Council	NSW	RAM	✓
North Sydney Council	NSW	UDM	✓	Warrumbungle Shire Council	NSW	RAV	✓
Northern Beaches Council	NSW	UDV	✓	Waverley Council	NSW	UDM	✓
Oberon Council	NSW	RAL	✓	Weddin Shire Council	NSW	RAM	✓
Orange City Council	NSW	URM	✓				

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Wentworth Shire Council	NSW	RAL	✓	Barcaldine Regional Council	QLD	RTL	
Willoughby City Council	NSW	UDM	✓	Barcoo Shire Council	QLD	RTX	
Wingecarribee Shire Council	NSW	URM	✓	Blackall-Tambo Regional Council	QLD	RTM	
Wollondilly Shire Council	NSW	UFM	✓	Boulia Shire Council	QLD	RTS	
Wollongong City Council	NSW	URV	✓	Brisbane City Council	QLD	UCC	✓
Woollahra Municipal Council	NSW	UDM	✓	Bulloo Shire Council	QLD	RTX	
Yass Valley Council	NSW	RAV	✓	Bundaberg Regional Council	QLD	URL	✓
Alice Springs Town Council	NT	URS	✓	Burdekin Shire Council	QLD	RAV	✓
Barkly Regional Council	NT	RTL	✓	Burke Shire Council	QLD	RTS	✓
Belyuen Shire Council	NT	RTX		Cairns Regional Council	QLD	URV	✓
Central Desert Shire Council	NT	RTL	✓	Carpentaria Shire Council	QLD	RTM	✓
City of Palmerston	NT	URM	✓	Cassowary Coast Regional Council	QLD	URS	✓
Coomalie Community	NT	RTM	✓	Central Highlands Regional Council	QLD	URM	✓
Government Council	NT	RTM	✓	Charters Towers Regional Council	QLD	RAV	✓
Darwin City Council	NT	UCC	✓	Cherbourg Aboriginal Shire Council	QLD	RTM	✓
East Arnhem Shire Council	NT	RTL	✓	City of Gold Coast	QLD	URV	✓
Katherine Town Council	NT	URS	✓	Cloncurry Shire Council	QLD	RTL	
Litchfield Shire Council	NT	UFS	✓	Cook Shire Council	QLD	RTL	✓
Macdonnell Regional Council	NT	RTL		Croydon Shire Council	QLD	RTX	✓
Roper Gulf Regional Council	NT	RTL	✓	Diamantina Shire Council	QLD	RTX	✓
Tiwi Islands Shire Council	NT	RTM		Doomadgee Aboriginal Shire Council	QLD	RTM	
Victoria Daly Regional Council	NT	RTL		Douglas Shire Council	QLD	RAV	✓
Wagait Shire Council	NT	RTS	✓	Etheridge Shire Council	QLD	RTS	✓
West Arnhem Regional Council	NT	RTL	✓	Flinders Shire Council	QLD	RAS	✓
West Daly Regional Council	NT	RTL	✓	Fraser Coast Regional Council	QLD	URL	✓
Aurukun Shire Council	QLD	RTM		Gladstone Regional Council	QLD	URM	✓
Balonne Shire Council	QLD	RAM	✓	Goondiwindi Regional Council	QLD	RAV	✓
Banana Shire Council	QLD	RAV	✓	Gympie Regional Council	QLD	URM	✓

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Hinchinbrook Shire Council	QLD	RAV	✓	Pormpuraaw Aboriginal Shire Council	QLD	RTS	
Hope Vale Aboriginal Shire Council	QLD	RTM		Quilpie Shire Council	QLD	RTM	✓
Ipswich City Council	QLD	UFV	✓	Redland City Council	QLD	UFV	✓
Isaac Regional Council	QLD	URS	✓	Richmond Shire Council	QLD	RTS	
Kowanyama Aboriginal Shire Council	QLD	RTM	✓	Rockhampton Regional Council	QLD	URL	✓
Livingstone Shire Council	QLD	UFM	✓	Scenic Rim Regional Council	QLD	URM	✓
Lockhart River Aboriginal Shire Council	QLD	RTS		Somerset Regional Council	QLD	UFS	✓
Lockyer Valley Regional Council	QLD	URM	✓	South Burnett Regional Council	QLD	URM	✓
Logan City Council	QLD	UFV	✓	Southern Downs Regional Council	QLD	URM	✓
Longreach Regional Council	QLD	RTL	✓	Sunshine Coast Council	QLD	URV	✓
Mackay Regional Council	QLD	URL	✓	Tablelands Regional Council	QLD	URM	✓
Mapoon Aboriginal Shire Council	QLD	RTX		Toowoomba Regional Council	QLD	URV	✓
Maranoa Regional Council	QLD	RAV	✓	Torres Shire Council	QLD	RTL	
Mareeba Shire Council	QLD	URS	✓	Torres Strait Island Regional Council	QLD	RTL	✓
McKinlay Shire Council	QLD	RTS		Townsville City Council	QLD	URV	✓
Moreton Bay Regional Council	QLD	UFV	✓	Western Downs Regional Council	QLD	URM	✓
Mornington Shire Council	QLD	RTM	✓	Whitsunday Regional Council	QLD	URM	✓
Mount Isa City Council	QLD	URS	✓	Winton Shire Council	QLD	RTM	
Murweh Shire Council	QLD	RTL	✓	Woorabinda Aboriginal Shire Council	QLD	RTS	
Napranum Aboriginal Shire Council	QLD	RTS		Wujal Wujal Aboriginal Shire Council	QLD	RTX	
Noosa Council	QLD	UFM	✓	Yarrabah Aboriginal Shire Council	QLD	RTM	✓
North Burnett Regional Council	QLD	RAV		Adelaide Hills Council	SA	UFM	✓
Northern Peninsula Area Regional Council	QLD	RTM		Adelaide Plains Council	SA	RAL	✓
Palm Island Aboriginal Shire Council	QLD	RTM		Alexandrina Council	SA	UFS	✓
Paroo Shire Council	QLD	RTM		Berri Barmera Council	SA	RAV	
				Campbelltown City Council (SA)	SA	UDM	✓
				City of Adelaide	SA	UCC	✓

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
City of Burnside	SA	UDM	✓	District Council of Loxton Waikerie	SA	RAV	✓
City of Charles Sturt	SA	UDL	✓	District Council of Mount Barker	SA	URM	✓
City of Holdfast Bay	SA	UDM	✓	District Council of Mount Remarkable	SA	RAM	✓
City of Marion	SA	UDL	✓	District Council of Orroroo Carrieton	SA	RAS	
City of Mitcham	SA	UDM	✓	District Council of Peterborough	SA	RAS	
City of Mount Gambier	SA	URS	✓	District Council of Robe	SA	RAS	
City of Norwood, Payneham & St Peters	SA	UDM	✓	District Council of Streaky Bay	SA	RAM	✓
City of Onkaparinga	SA	UFV	✓	District Council of Tumby Bay	SA	RAM	✓
City of Playford	SA	UFL	✓	District Council of Yankalilla	SA	RAL	✓
City of Port Adelaide Enfield	SA	UDV	✓	Flinders Ranges Council	SA	RAS	✓
City of Port Lincoln Council	SA	URS	✓	Kangaroo Island Council	SA	RAM	✓
City of Prospect	SA	UDS	✓	Kingston District Council	SA	RAM	✓
City of Salisbury	SA	UDV	✓	Light Regional Council	SA	RAV	✓
City of Tea Tree Gully	SA	UDL	✓	Mid Murray Council	SA	RAL	✓
City of Unley	SA	UDM	✓	Naracoorte Lucindale Council	SA	RAL	
City of Victor Harbor	SA	URS	✓	Northern Areas Council	SA	RAM	
City of West Torrens	SA	UDM	✓	Port Augusta City Council	SA	URS	✓
Clare and Gilbert Valleys Council	SA	RAL		Port Pirie Regional Council	SA	RAV	✓
Coorong District Council	SA	RAL		Regional Council of Goyder	SA	RAM	
District Council of Barunga West	SA	RAM	✓	Renmark Paringa Council	SA	RAL	✓
District Council of Ceduna	SA	RAM	✓	Roxby Downs Council	SA	URS	✓
District Council of Cleve	SA	RAS	✓	Rural City of Murray Bridge	SA	URS	✓
District Council of Coober Pedy	SA	URS	✓	Southern Mallee District Council	SA	RAM	✓
District Council of Copper Coast	SA	RAV	✓	Tatiara District Council	SA	RAL	✓
District Council of Elliston	SA	RAS	✓	The Barossa Council	SA	UFS	✓
District Council of Franklin Harbour	SA	RAS	✓	Town of Gawler	SA	UFS	✓
District Council of Grant	SA	RAL	✓	Town of Walkerville	SA	UDS	✓
District Council of Karoonda East Murray	SA	RAS	✓				
District Council of Kimba	SA	RAS	✓				
District Council of Lower Eyre Peninsula	SA	RAL	✓				

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Wakefield Regional Council	SA	RAL	✓	Ararat Rural City Council	VIC	RAV	✓
Wattle Range Council	SA	RAV	✓	Banyule City Council	VIC	UDL	✓
Whyalla City Council	SA	URS	✓	Bass Coast Shire Council	VIC	UFS	✓
Wudinna District Council	SA	RAS	✓	Baw Baw Shire Council	VIC	URM	✓
Yorke Peninsula Council	SA	RAV	✓	Bayside City Council	VIC	UDL	✓
Break O'Day Council	TAS	RAL	✓	Benalla Rural City Council	VIC	RAV	✓
Brighton Council	TAS	URS	✓	Brimbank City Council	VIC	UDV	✓
Burnie City Council	TAS	URS	✓	Buloke Shire Council	VIC	RAL	✓
Central Coast Council (Tas)	TAS	URS	✓	Campaspe Shire Council	VIC	URM	✓
Central Highlands Council	TAS	RAM	✓	Cardinia Shire Council	VIC	UFM	✓
Circular Head Council	TAS	RAL	✓	Casey City Council	VIC	UFV	✓
City of Launceston	TAS	URM	✓	Central Goldfields Shire Council	VIC	RAV	✓
Clarence City Council	TAS	UFM	✓	City of Ballarat	VIC	URL	✓
Derwent Valley Council	TAS	RAL	✓	City of Boroondara	VIC	UDV	✓
Devonport City Council	TAS	URS	✓	City of Greater Dandenong	VIC	UDV	✓
Dorset Council	TAS	RAL	✓	City of Greater Geelong	VIC	URV	✓
Flinders Council	TAS	RAS		City of Melbourne	VIC	UCC	✓
George Town Council	TAS	RAL	✓	City of Port Phillip	VIC	UDL	✓
Glamorgan Spring Bay Council	TAS	RAM	✓	City of Stonnington	VIC	UDL	✓
Glenorchy City Council	TAS	UFM	✓	City of Whittlesea	VIC	UFL	✓
Hobart City Council	TAS	UCC	✓	Colac-Otway Shire Council	VIC	URS	✓
Huon Valley Council	TAS	RAV	✓	Corangamite Shire Council	VIC	RAV	✓
Kentish Council	TAS	RAL	✓	Darebin City Council	VIC	UDV	✓
King Island Council	TAS	RAS	✓	East Gippsland Shire Council	VIC	URM	✓
Kingborough Council	TAS	UFM	✓	Frankston City Council	VIC	UDL	✓
Latrobe Council	TAS	RAL	✓	Gannawarra Shire Council	VIC	RAV	✓
Meander Valley Council	TAS	RAV	✓	Glen Eira City Council	VIC	UDV	✓
Northern Midlands Council	TAS	RAV	✓	Glenelg Shire Council	VIC	RAV	✓
Sorell Council	TAS	RAV	✓	Golden Plains Shire Council	VIC	URS	✓
Southern Midlands Council	TAS	RAL	✓	Greater Bendigo City Council	VIC	URL	✓
Tasman Council	TAS	RAM	✓	Greater Shepparton City Council	VIC	URM	✓
Waratah Wynyard Council	TAS	RAV	✓				
West Coast Council	TAS	RAL					
West Tamar Council	TAS	UFS	✓				
Alpine Shire Council	VIC	RAV	✓				

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Hepburn Shire Council	VIC	RAV	✓	Queenscliffe Borough Council	VIC	UFS	✓
Hindmarsh Shire Council	VIC	RAL	✓	Rural City of Wangaratta	VIC	URS	✓
Hobsons Bay City Council	VIC	UDL	✓	Shire of Nillumbik	VIC	UFM	✓
Horsham Rural City Council	VIC	RAV	✓	Shire of Strathbogie	VIC	RAL	✓
Hume City Council	VIC	UFV	✓	South Gippsland Shire Council	VIC	URS	✓
Indigo Shire Council	VIC	RAV	✓	Southern Grampians Shire Council	VIC	RAV	✓
Kingston City Council	VIC	UDV	✓	Surf Coast Shire Council	VIC	UFS	✓
Knox City Council	VIC	UDV	✓	Swan Hill Rural City Council	VIC	URS	✓
Latrobe City Council	VIC	URL	✓	Towong Shire Council	VIC	RAL	✓
Loddon Shire Council	VIC	RAL	✓	Warrnambool City Council	VIC	URS	✓
Macedon Ranges Shire Council	VIC	URM	✓	Wellington Shire Council	VIC	URM	✓
Manningham City Council	VIC	UDL	✓	West Wimmera Shire Council	VIC	RAL	✓
Mansfield Shire Council	VIC	RAL	✓	Whitehorse City Council	VIC	UDV	✓
Maribyrnong City Council	VIC	UDM	✓	Wodonga City Council	VIC	URM	✓
Maroondah City Council	VIC	UDL	✓	Wyndham City Council	VIC	UFL	✓
Melton City Council	VIC	UFM	✓	Yarra City Council	VIC	UDM	✓
Mildura Rural City Council	VIC	URM	✓	Yarra Ranges Council	VIC	UFV	✓
Mitchell Shire Council	VIC	URS	✓	Yarriambiack Shire Council	VIC	RAL	✓
Moira Shire Council	VIC	URS	✓	City of Albany	WA	URM	✓
Monash City Council	VIC	UDV	✓	City of Armadale	WA	UFM	✓
Moonee Valley City Council	VIC	UDL	✓	City of Bayswater	WA	UDM	✓
Moorabool Shire Council	VIC	URS	✓	City of Belmont	WA	UDM	✓
Moreland City Council	VIC	UDV	✓	City of Bunbury	WA	URM	✓
Mornington Peninsula Shire Council	VIC	UFV	✓	City of Busselton	WA	URS	✓
Mount Alexander Shire Council	VIC	RAV	✓	City of Canning	WA	UDL	✓
Moyne Shire Council	VIC	RAV	✓	City of Cockburn	WA	UDL	✓
Murrindindi Shire Council	VIC	RAV	✓	City of Fremantle	WA	UDS	✓
Northern Grampians Shire Council	VIC	RAV	✓	City of Gosnells	WA	UDL	✓
Pyrenees Shire Council	VIC	RAL	✓	City of Greater Geraldton	WA	URM	✓
				City of Joondalup	WA	UDV	✓
				City of Kalamunda	WA	UFM	✓
				City of Kalgoorlie-Boulder	WA	UFM	✓
				City of Karratha	WA	URS	✓
				City of Kwinana	WA	UFS	✓

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
City of Mandurah	WA	URM	✓	Shire of Donnybrook-	WA	RAL	
City of Melville	WA	UDL	✓	Balingup			
City of Nedlands	WA	UDS	✓	Shire of Dowerin	WA	RAS	✓
City of Perth	WA	UCC	✓	Shire of Dumbleyung	WA	RAS	
City of Rockingham	WA	UFL	✓	Shire of Dundas	WA	RTM	✓
City of South Perth	WA	UDM	✓	Shire of East Pilbara	WA	RTL	
City of Stirling	WA	UDV	✓	Shire of Esperance	WA	RAV	✓
City of Subiaco	WA	UDS	✓	Shire of Exmouth	WA	RTM	✓
City of Swan	WA	UFL	✓	Shire of Gingin	WA	RAM	✓
City of Vincent	WA	UDM	✓	Shire of	WA	RAS	✓
City of Wanneroo	WA	UFV	✓	Gnowangerup			
Shire of Ashburton	WA	RTL	✓	Shire of Goomalling	WA	RAS	✓
Shire of Augusta-	WA	RAL	✓	Shire of Halls Creek	WA	RTL	✓
Margaret River				Shire of Harvey	WA	URS	✓
Shire of Beverley	WA	RAS	✓	Shire of Irwin	WA	RAM	✓
Shire of Boddington	WA	RAS	✓	Shire of	WA	RAS	
Shire of Boyup Brook	WA	RAS	✓	Jerramungup			
Shire of Bridgetown-	WA	RAM	✓	Shire of Katanning	WA	RAM	
Greenbushes				Shire of Kellerberrin	WA	RAS	✓
Shire of Brookton	WA	RAS		Shire of Kent	WA	RAS	
Shire of Broome	WA	RTL	✓	Shire of Kojonup	WA	RAM	
Shire of Broomehill -	WA	RAS	✓	Shire of Kondinin	WA	RAS	✓
Tambellup				Shire of Koorda	WA	RAS	
Shire of Bruce Rock	WA	RAS	✓	Shire of Kulin	WA	RAS	✓
Shire of Capel	WA	RSG	✓	Shire of Lake Grace	WA	RAS	✓
Shire of Carnamah	WA	RAS		Shire of Laverton	WA	RTS	✓
Shire of Carnarvon	WA	RAL		Shire of Leonora	WA	RTM	
Shire of Chapman	WA	RAS		Shire of Manjimup	WA	RAL	✓
Valley				Shire of Meekatharra	WA	RTM	
Shire of Chittering	WA	RAM		Shire of Menzies	WA	RTX	✓
Shire of Christmas	WA	RTM		Shire of Merredin	WA	RAM	
Island				Shire of Mingenew	WA	RAS	
Shire of Cocos	WA	RTS	✓	Shire of Moora	WA	RAM	
(Keeling) Islands				Shire of Morawa	WA	RAS	
Shire of Collie	WA	RAL	✓	Shire of Mount	WA	RTM	✓
Shire of Coolgardie	WA	RTL	✓	Magnet			
Shire of Coorow	WA	RAS	✓	Shire of Mt Marshall	WA	RAS	✓
Shire of Corrigin	WA	RAS	✓	Shire of Mukinbudin	WA	RAS	✓
Shire of Cranbrook	WA	RAS	✓	Shire of Mundaring	WA	UFM	✓
Shire of Cuballing	WA	RAS	✓	Shire of Murchison	WA	RTX	✓
Shire of Cue	WA	RTX	✓	Shire of Murray	WA	RSG	✓
Shire of Cunderdin	WA	RAS		Shire of Nannup	WA	RAS	✓
Shire of Dalwallinu	WA	RAS	✓	Shire of Narembeen	WA	RAS	
Shire of Dandaragan	WA	RAM		Shire of Narrogin	WA	RAS	✓
Shire of Dardanup	WA	RSG	✓	Shire of	WA	RTM	✓
Shire of Denmark	WA	RAL	✓	Ngaanyatjarraku			
Shire of Derby/West	WA	RTL		Shire of Northam	WA	RAM	✓
Kimberley				Shire of	WA	RAM	
				Northampton			

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Shire of Nungarin	WA	RAS		Shire of Wickpin	WA	RAS	
Shire of Peppermint Grove	WA	UDS	✓	Shire of Williams	WA	RAS	
Shire of Perenjori	WA	RAS		Shire of Wiluna	WA	RTS	✓
Shire of Pingelly	WA	RAS		Shire of Wongan-Ballidu	WA	RAS	
Shire of Plantagenet	WA	RAM	✓	Shire of Woodanilling	WA	RAS	
Shire of Quairading	WA	RAS		Shire of Wyalkatchem	WA	RAS	✓
Shire of Ravensthorpe	WA	RAM	✓	Shire of Wyndham-East Kimberley	WA	RTL	✓
Shire of Sandstone	WA	RTX	✓	Shire of Yalgoo	WA	RTX	
Shire of Serpentine Jarrahdale	WA	UFM	✓	Shire of Yilgarn	WA	RAS	
Shire of Shark Bay	WA	RTS	✓	Shire of York	WA	RAM	✓
Shire of Tammin	WA	RAS	✓	Town of Bassendean	WA	UDS	✓
Shire of Three Springs	WA	RAS	✓	Town of Cambridge	WA	UDS	✓
Shire of Toodyay	WA	RAM	✓	Town of Claremont	WA	UDS	✓
Shire of Trayning	WA	RAS		Town of Cottesloe	WA	UDS	✓
Shire of Upper Gascoyne	WA	RTX		Town of East Fremantle	WA	UDS	✓
Shire of Victoria Plains	WA	RAS		Town of Mosman Park	WA	UDS	
Shire of Wagin	WA	RAS	✓	Town of Port Hedland	WA	RTL	✓
Shire of Wandering	WA	RAS		Town of Victoria Park	WA	UDM	✓
Shire of Waroona	WA	RAM					
Shire of West Arthur	WA	RAS	✓				
Shire of Westonia	WA	RAS					