

Australia's Local Government 2021 National State of the Assets

Shining a spotlight on
Australia's Local Government Infrastructure Assets

Technical Report



Australian Local Government Association
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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 assets and associated management capabilities.

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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 manner 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.
- Identify potential threats and opportunities in trends providing stronger communities, sustainable economies, and efficient expenditure of public funds.

The key asset categories examined are shown in Figure 1.

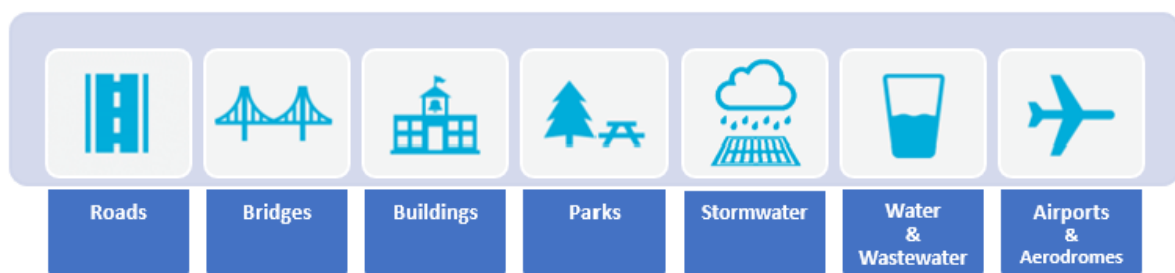


Figure 1 The Asset Categories Examined

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

This report looks at the findings and outcomes of close to 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.

Structure of the NSoA report

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

The **Survey Response** section presents the number of councils who participated in the survey and reports the proportion of responding councils for each reporting category. Data confidence is also discussed.

An Overview of Local Government Infrastructure provides an overview of the inventory, value, and challenges faced for each asset class.

Local Government Infrastructure Investment provides the level of current investment in local government infrastructure followed by current and past trends on infrastructure investment performance.

Local Government Infrastructure Planning details the degree of long-term infrastructure asset and financial planning.

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.

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 findings, drawing inferences from the analysis, and offers commentary on areas of improvement.

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

The **Appendices** contain material that is too detailed to include in the main report.

Executive Summary

Overview

During September 2020, ALGA (in partnership with IPWEA) invited the 537 local councils across the nation to participate in the National State of the Assets (NSoA) Survey. This is the fifth round of data collection since the project commenced in 2013.

454 (85%) councils have now provided data for the report.

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

- Provide consistent, evidence-based infrastructure reporting for use by all levels of government;
- Monitor infrastructure investment, performance, and long-term infrastructure planning capability trends over time;
- Improve the management capability of infrastructure owned and operated by local government; 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.

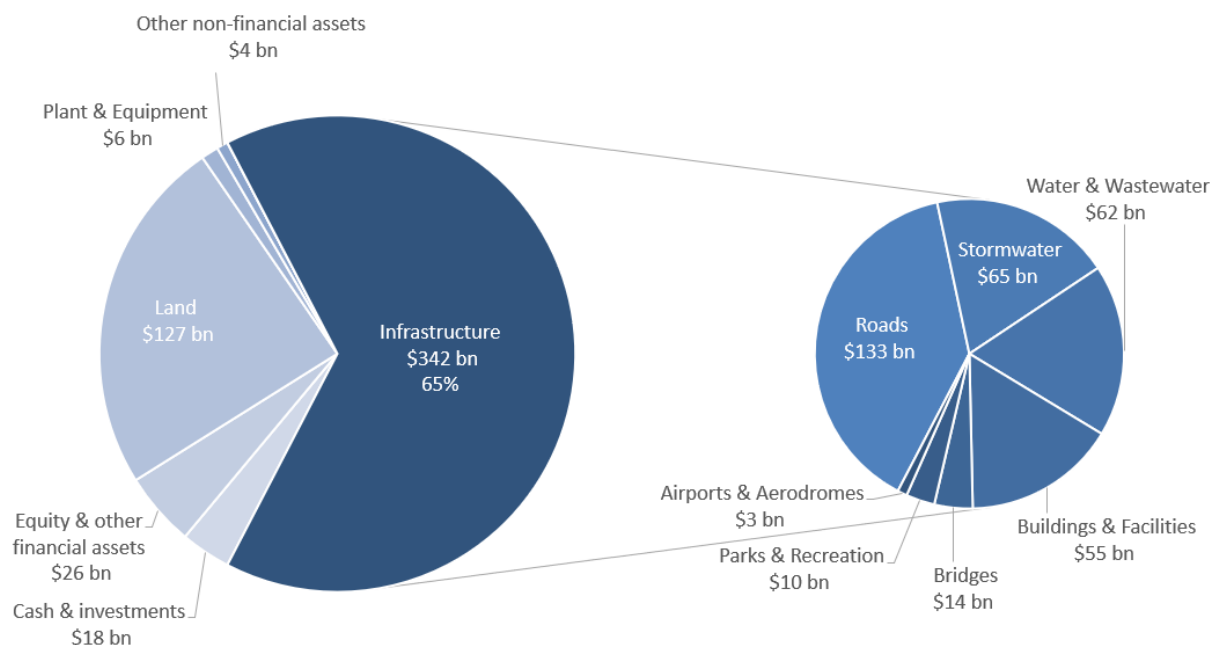


Figure 2 Value of financial and non-financial assets controlled by local government (June 2020)

At the end of the 2019-20 financial year, local government in Australia had control of a \$523bn asset portfolio.²

The non-financial infrastructure asset component was valued at \$342bn accounting for 65% of the total asset portfolio. These infrastructure assets were estimated to be depreciating at \$7.7bn per year.³

² 2019-20, ABS cat. no. 5512.0, TABLE 339, Total Local General Government Balance Sheet – Total Assets.

³ Ibid.

The estimated replacement cost of these infrastructure assets is in the order of \$533bn.⁴

This represents an investment of approximately \$21,000 for each of the 25.3 million people in Australia.⁵

These assets require increasing maintenance as they age, and periodic replacement of components is required 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?”

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.

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** Fit for purpose ...Is it the right service?
- **Capacity** Utilisation ...Do we need more or less of these services?

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

 Good to Very Good  Fair  Poor to Very Poor

⁴ The cost to replace the existing infrastructure assets with a new modern equivalent asset (not a second hand one) with the same economic benefits.

⁵ ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2020, TABLE 4. Estimated Resident Population, States and Territories (Number) – Australian Capital Territory population excluded.

Key Findings

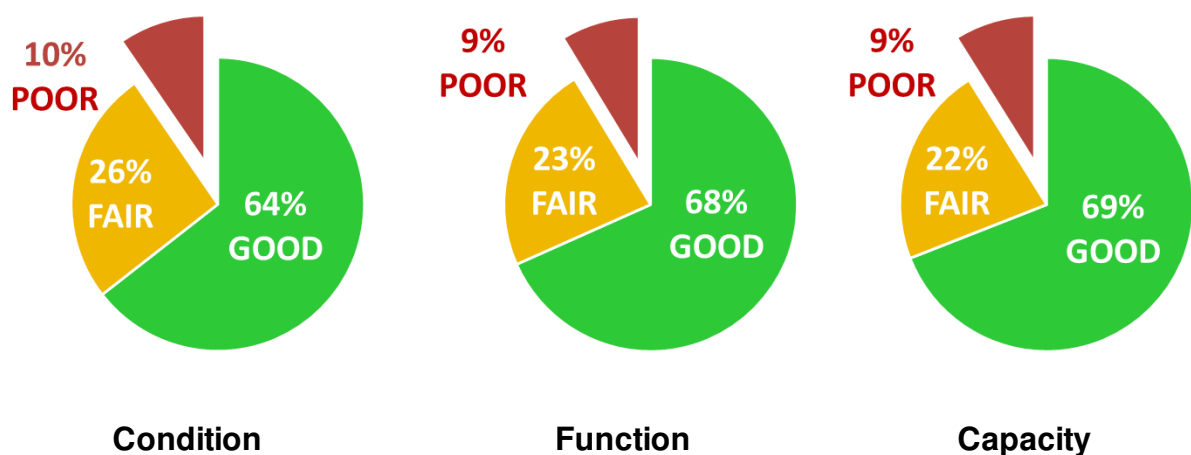
Findings relating to infrastructure investment:

- The value of **local government infrastructure** has grown at a steady rate of **6.4% per annum**.
- The **estimated replacement cost of local government infrastructure** is **\$533bn**.
- **Assets are being consumed at an estimated rate of 1.6% or \$7.7 billion per year**, equivalent to \$304 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 the rural 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.
- **86% of responding councils say they had adopted a long-term financial plan**, an increase from 72% in 2013.
- Of the 67% of councils who said they had asset management plans in place, only **two thirds of councils (66%) included the financial projections in 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 the rural areas report a lower level of compliance**.

Findings relating to infrastructure performance:



- **10% (\$51bn) of community infrastructure assets are in poor condition.**
- **9% (\$46bn) have poor function** requiring upgrade in response to emerging local, regional, and state targets for safety, compliance, social, environmental, and economic performance.
- **9% (\$48bn) have poor capacity** and/or utilisation requiring augmentation or acquisition of new assets in response to demand and growth pressures.

Performance by Asset Class

- **Roads** represent 39% or \$204bn of the total infrastructure replacement cost. \$17.8bn are in poor condition, \$16.0bn have poor function and \$14.3bn have poor capacity.
- **Bridges** represent 4% or \$26bn of the total infrastructure replacement cost. \$1.6bn are in poor condition, \$1.8bn have poor function and \$1.9bn have poor capacity.
- **Buildings** represent 16% or \$91bn of the total infrastructure replacement cost. \$9.2bn are in poor condition, \$8.5bn have poor function and \$9.6bn have poor capacity.
- **Park & Recreation** assets represent 3% or \$16bn of the total infrastructure replacement cost. \$1.3bn are in poor condition, \$1.1bn have poor function and \$1.4bn have poor capacity.
- **Stormwater** assets represent 19% or \$94bn of the total infrastructure replacement cost. \$5.3bn are in poor condition, \$11.0bn have poor function and \$12.1bn have poor capacity. Stormwater assets are twice as likely to have function and capacity constraints than condition.
- **Water & Wastewater** assets represent 18% or \$99bn of the total infrastructure replacement cost. \$15.5bn are in poor condition, \$7.8bn have poor function and \$8.3bn have poor capacity.
- **Airport & Aerodromes** assets represent less than 1% or \$3bn of the total infrastructure replacement cost. \$414M are in poor condition, \$133M have poor function and \$142M have poor capacity.

Performance by ACLG

- Urban metro and urban regional area council's report the condition, function, and capacity of their infrastructure assets has improved.
- Councils in rural areas are reporting little change in the condition of their infrastructure overall.
- Councils in rural remote areas report around 20% of their asset replacement cost is in poor condition, function, and capacity.

Performance by State and Territory

- The proportion of asset replacement cost reported in poor condition has reduced in every State and Territory since 2013.
- The proportion of asset replacement cost reported in poor function and 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 condition, function, and capacity.

Introduction

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

The main roles of local government are the provision of infrastructure, recreation facilities and property services, planning and development approval, community services, and regulation.

Local governments are close to their communities and have unique insights into local and community needs. Councils determine service provision according to these needs while meeting the requirements of state and territory legislation.

It is recognised that local government is highly diverse, both within and between jurisdictions. This diversity extends beyond rural and metropolitan differences. 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, including planning and environmental requirements for example;
- Physical, economic, social, and cultural environments; and
- Range and scale of functions.

Local governments therefore provide a range of essential services, and the supporting infrastructure assets serve as the foundation for local, rural, regional, and metropolitan communities, and 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.⁶

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

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

- Provide consistent, evidence-based infrastructure reporting for use by all levels of government;

⁶ Research undertaken by the Local Government Association of South Australia suggests that SA councils have approximately three times as many assets relative to income as the State Government, and the State Government has about three times as many assets relative to income as the Commonwealth. There is no reason to believe local governments elsewhere would be less 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. Depreciation alone represented 21% of total local government GFS expenses in 2019-20. ABS Cat. 5512.

- Monitor infrastructure investment, performance, and long-term infrastructure planning capability trends over time;
- Improve the management capability of infrastructure owned and operated by local government; and
- Identify activities and actions to elevate the nation's local government infrastructure to acceptable standards.

Local government infrastructure

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

At the end of the 2019-20 financial year reporting period, local government in Australia had control of financial and non-financial assets valued at \$523bn.

The non-financial (infrastructure) asset component was valued at \$342bn (65%), land accounted for \$127bn (24%) and the remaining \$54bn (11%) was attributed to other non-financial assets such as plant and equipment and financial assets such as cash, investments, and equity in other entities.⁷

Whilst the infrastructure assets are largely homogeneous within their respective groups, there can be differences in how they function. 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 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, repairs and historic 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 key asset classes across the nation. For example, road infrastructure represents 39% of the national stock of local government infrastructure assets, while road networks controlled by councils in rural remote areas this number can represent more than 60% of their total infrastructure.

Similarly, stormwater assets account for 19% of the national stock while in urban metropolitan areas it represents 27%. Similar differences exist for water & wastewater assets where in rural and regional areas of New South Wales and Queensland they have responsibility for these assets and services while in urban metropolitan areas and the other states they do not.

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

⁷ Written down value as per ABS, 2019-20 Local Government Balance Sheet.

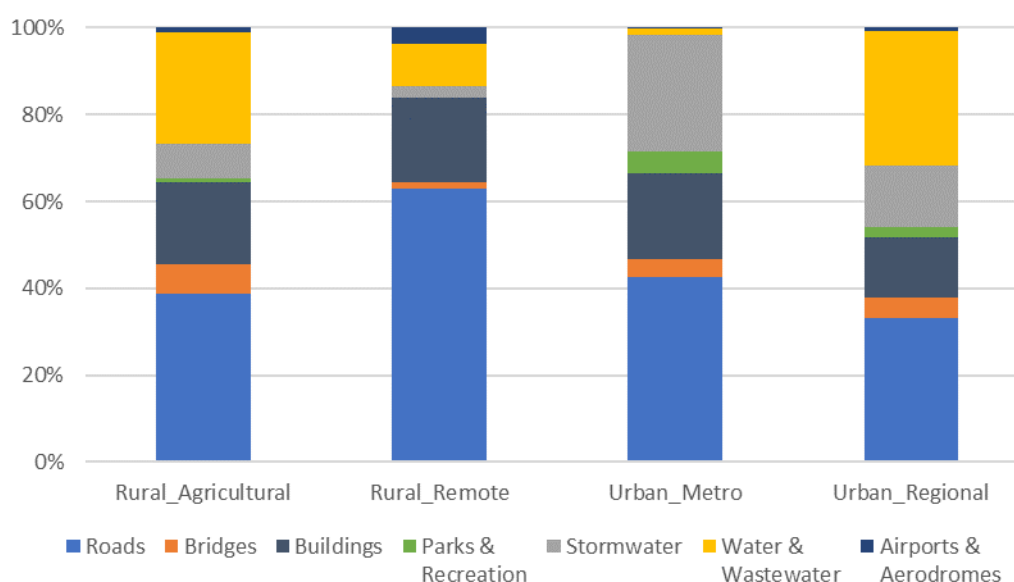


Figure 3 Rural and urban local government infrastructure investment by asset class

There are notable 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 a host of national and state inquiries into the status and prospects of local government in Australia. Specific focus was on local government's financial health, especially the precarious position of small rural and remote councils, but also broader weaknesses in asset 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.

The 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).⁸

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 intergovernment funding for those councils facing sustainability challenges.

⁸ 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.

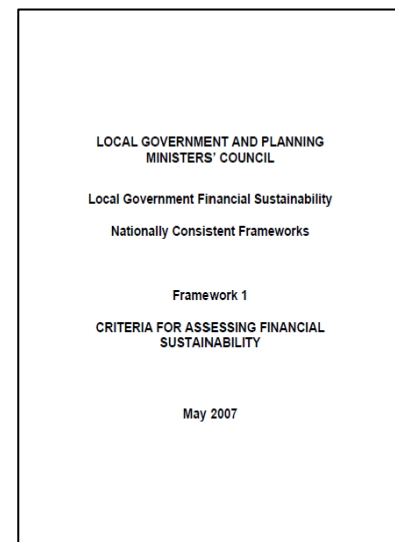
In 2009, the LGPMC endorsed the 'Local Government Financial Sustainability - Nationally Consistent Frameworks'. The Federal, State and Territory governments all agreed to implement the frameworks and the Federal Government allocated \$19M via the 'Local Government Reform Fund' to make it happen.

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:⁹

'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 was to provide a consistent 'state of the assets' reporting based on the adopted Asset and Financial Management Plans of every council.



⁹ 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 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 the Northern 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.

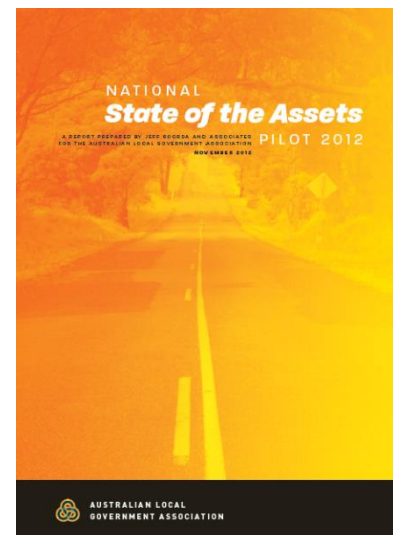
The assessment of whether the assets could meet their intended purpose is measured by function. Capacity metrics help us understand if the asset is under or over utilised and if we need more or less of these assets.

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 2013 '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 \$98.3bn 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, \$1.4bn 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 2025-26.¹⁰



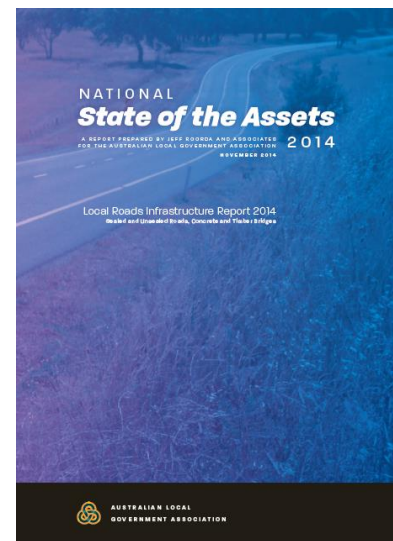
¹⁰ Australian Government, Bridges Renewal Program, website [accessed May 2021].

The 2014 'National State of the Assets Report' 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 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 long-term 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.



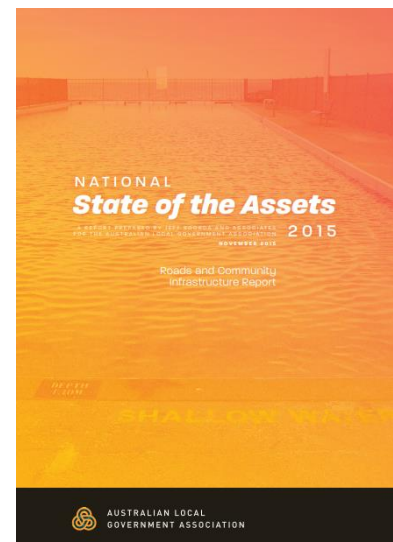
The replacement cost of local road infrastructure reported in poor to very poor condition was \$11.7 billion.

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

- 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 year¹¹ while accounting for six per cent of total public-sector spending¹² and evidence suggests local infrastructure plans have been poorly integrated with state and federal initiatives;



¹¹ 5506.0 - Taxation Revenue, Australia, 2016-17.

¹² 5512.0 - Government Finance Statistics, Australia, 2016-17.

- Infrastructure needs are changing fast due to new technologies and an increasing (and aging) 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.

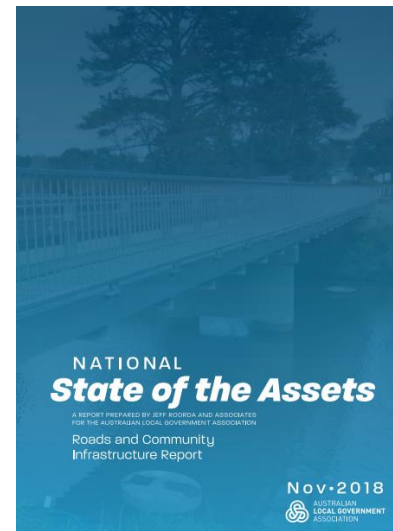
The 2018 report identified an increasing cost to replace ageing infrastructure. Infrastructure built during the 'baby boom' and the rapid growth period in the 1960's and 70's was reported as showing signs of deterioration.

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

This 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 upgrade cost of poor capacity infrastructure is likely to be up to five times that value. Think of retrofits and land acquisitions in urban settings and narrow winding local roads in rural areas in need of widening and realignment to meet safety standards and cater for the needs of larger vehicles to access farm gate and local distribution centres.

Asset management plans are an essential planning document 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.



Moving forward

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.

This 2021 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 class of assets:

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

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 key 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.
- Providing opportunities to invest in local government infrastructure to ensure our 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 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 and social value such as footpaths and cycleways, recycling, and waste management facilities.

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 could be drawn.

The NSoA report is focused on the underlying drivers of managing assets and 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 future trends on infrastructure:

- Investment;
- Planning; and
- Performance.

Councils are asked to provide data for the most recent financial reporting period (i.e., the 2021 NSoA report is based on data provided for the financial reporting period ending 30th June 2020).

Whilst the data provided is validated, 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 being subjective and provided voluntarily, the sample size (currently 85%) 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.¹³

The following outlines the:

- Data requirements;
- Reporting categories; and
- Performance measures.

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

¹³ Refer: '2021 Data Validation Report' (ALGA, 2021).

Data Requirements

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

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

For each asset class, infrastructure investment, planning and performance data was requested as follows:

Infrastructure Investment

Councils are required to report the value their infrastructure assets using fair value principles (i.e., the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction).¹⁴

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 categories;
- Remaining service potential the assets provide;
- Average age of council's physical infrastructure assets;
- Rate of consumption; and the
- Average estimated life of infrastructure assets.

Infrastructure Planning

The extent of infrastructure planning is measured by the degree of long-term Asset Management and Financial Plans that 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 that the:

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

¹⁴ AASB 116, para 6.

Infrastructure Performance

Asset performance data collected for each asset class, where applicable, was:¹⁵

- **Condition** Quality ...How good is the asset?
- **Function** Fit for purpose ...Is it the right asset providing the service?
- **Capacity** Utilisation ...Do we need more or less of these assets?

The data relating to condition, function and capacity has been collected to ensure a measurement framework that can be:

- made by professional judgement of experienced staff that manage the infrastructure assets in a very short time if not already reported in their mandated planning and reporting documents;
- easily verifiable by council and/or the community;
- progressively linked to substantiation in asset management plans regardless of maturity level;
- 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 performance measure is calculated and reported as a proportion of the replacement cost against three grades based on the International Infrastructure Management Manual (IIMM, IPWEA) 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.

¹⁵ 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. Fifty 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.

Reporting Categories

Two types of council groupings were used to enable meaningful comparisons from which conclusions could be drawn. Councils are grouped according to:

1. The Australian Classification of Local Governments (ACLG); and¹⁶
2. State and territory jurisdiction.

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.

Table 1 shows the number and proportion of local councils by rural or urban classification as of June 2020.

Table 1 Local Councils by Rural and Urban Classification

ACLG Grouping	Total	
	(Nº)	(%)
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.

¹⁶ 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 2 shows the number and proportion of local councils by population, as of June 2020.

Table 2 Local Councils by Population

Population type	Population	Total	
		(N ^o)	(%)
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.

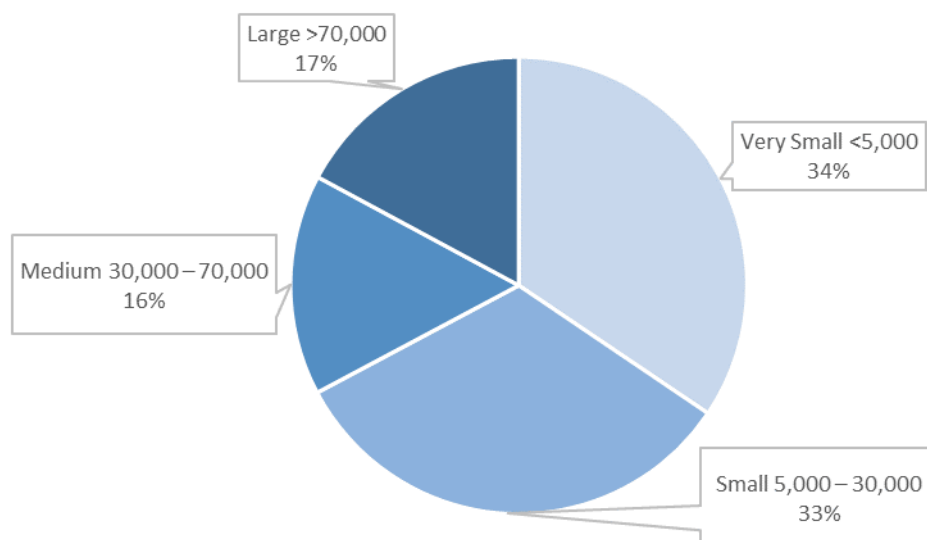


Figure 4 Local councils by population (June 2020)

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 3 shows the population and the number and proportion of councils in each state and territory, as of June 2020.

Table 3 Local Councils by State & Territory (June 2020)

State & Territory	Population	Total	
		(Nº)	(%)
New South Wales	8,167,532	128	24%
Northern Territory	246,143	17	3%
Queensland	5,176,186	77	14%
South Australia	1,770,375	68	13%
Tasmania	540,780	29	5%
Victoria	6,696,670	79	15%
Western Australia	2,663,561	139	26%
Total	25,261,247	537	100%

Figure 5 shows the proportion of council groupings by state and territory.

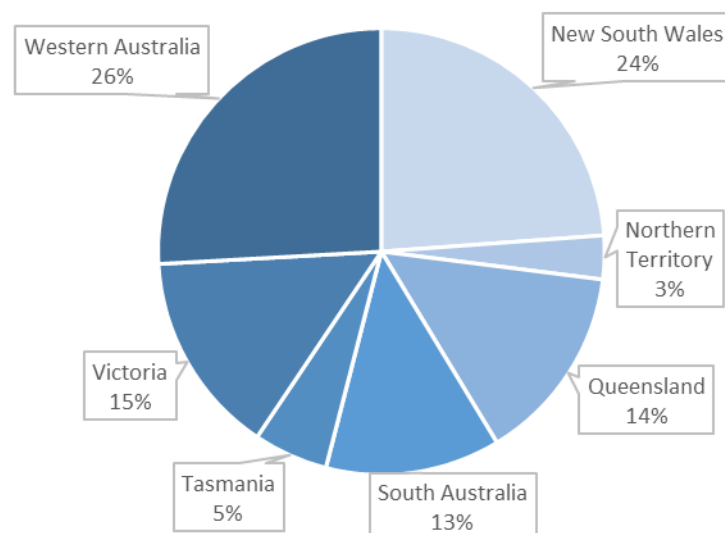


Figure 5 Local Councils by State & Territory (June 2020)

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

The Northern Territory and Tasmania 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.

Performance Indicators

The NSoA report provides the evidence for asset custodians to make informed decisions about the future of local government infrastructure for local and regional communities that serve a much broader context at the state and national level.

This evidence is presented in a performance indicator framework that reports past, present, and future trends in infrastructure:

- Investment;
- Planning; and
- Performance.

A summary of the performance indicators is presented in Tables 4, 5 and 6. Detail on the metrics of each performance indicator can be found in the relevant Appendices.

The Infrastructure Investment indicators are best described in the following table.

Table 4 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 replacement cost.	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.		

The Infrastructure Planning indicators are best described in the following table.

Table 5 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 Applicable¹⁷	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.		

¹⁷ 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 6 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 based on Function and Capacity are considered Network Indicators. In other words, they indicate the performance of local government infrastructure in the context of state and national networks.

The focus for reporting is the proportion of assets in a poor to very poor state of condition, function, and capacity.

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

Survey Response

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

- Investment;
- Planning; and
- Performance.

As of March 2021, the number and proportion of councils providing data for the reporting period ending June 2020 was 454 (85%).

Of these,

- 241 (45%) councils provided new or updated data from previous submissions;
- 213 (40%) councils chose to roll-over their pre-existing data.

At the time of writing this report, 83 (15%) councils were yet to participate.

Figure 6 shows the number and proportion of councils who:

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

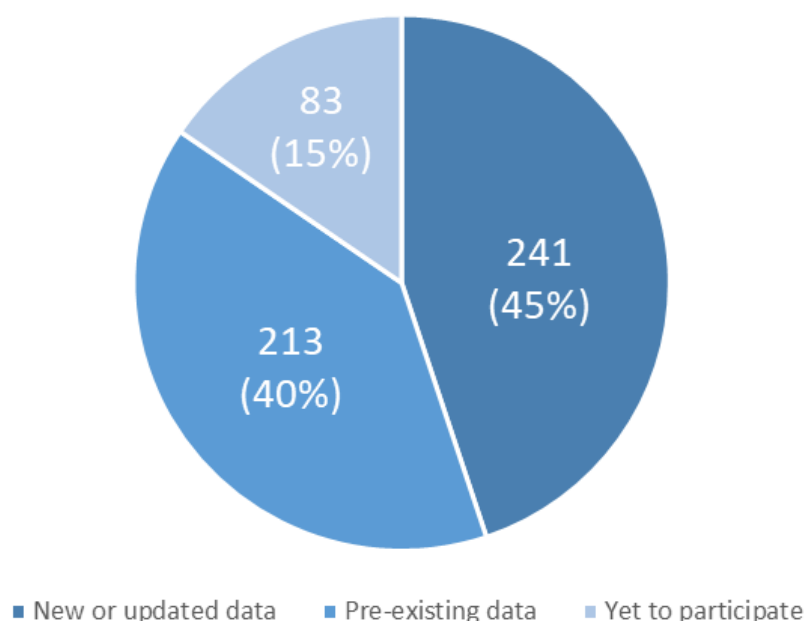


Figure 6 Number and proportion of councils responding to the survey, March 2021

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 55% of responding councils do not see the survey as important for telling their story of providing services from infrastructure, or they do not have the capacity and/or capability to do so. It may also reflect the priority management places on sharing and communicating core level data and information essential for infrastructure planning and reporting.

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 at the end of March 2021 is summarised in Table 7.

Table 7 Response rate by ACLG, March 2021

ACLG Grouping	Response	
	(N ^o)	(%)
Rural Agricultural	175	79%
Rural Remote	42	56%
Urban Metropolitan	132	99%
Urban Regional	105	99%
TOTAL	454	85%

The response rate is highest in the urban metropolitan (99%) and regional towns (99%), and lowest for those councils serving populations less than 20,000 people in the rural areas – 79% for rural agricultural and 56% for rural remote.

The response rate trend since 2013 by ACLG is shown in Figure 7.

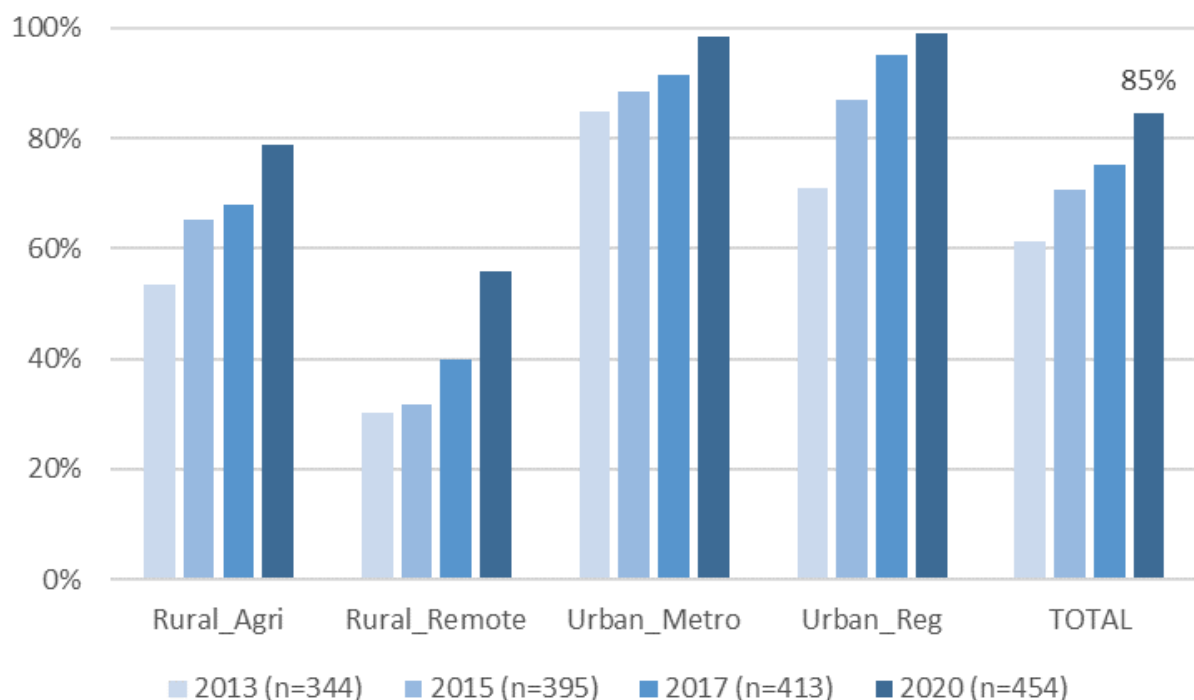


Figure 7 Response rate trend since 2013 by ACLG

Urban councils with higher populations have a higher response rate than the rural councils with lower populations.

Further analysis reveals only seven (17%) of the 42 rural remote councils who responded updated their data in the latest round of data collection. Compared to 72 (41%) of the 175 rural agricultural, 88 (67%) of the 132 urban metropolitan and 74 (70%) of the urban regional councils.

Response by State and Territory

The response rate by each State and Territory for the reporting period ending June 2020 is shown in Figure 8.

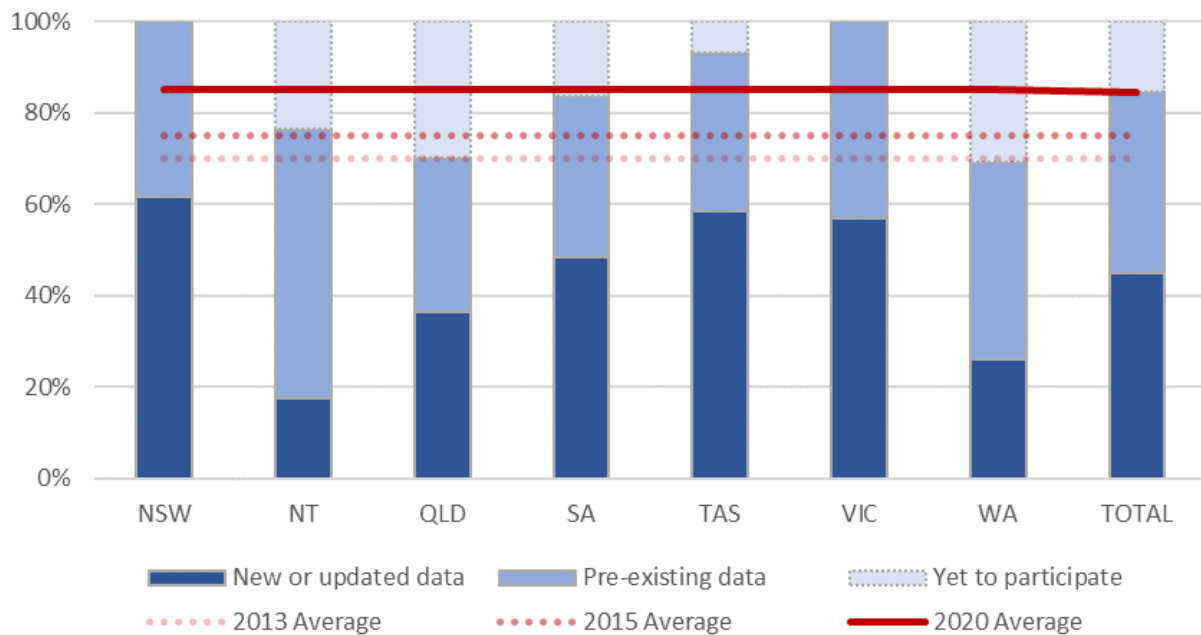


Figure 8 Response rate by State & Territory, March 2021

As of March 2021, the States with the highest response rate were New South Wales (100%), Tasmania (93%) and Victoria (100%). South Australia was close to the national average at 84%, and the Northern Territory (76%), Queensland (70%), and Western Australia (70%) have the lowest response rate.

The response rate trend since 2013 by State and Territory is shown in Figure 9.

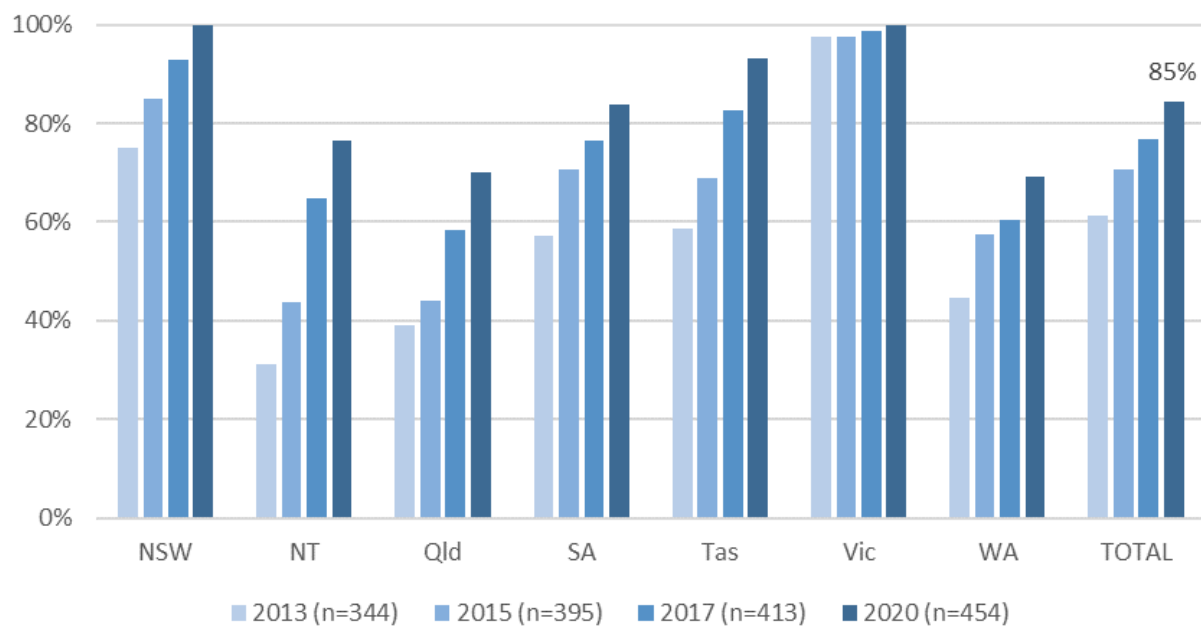


Figure 9 Response rate trend since 2013 by State & Territory

The response rate between the States and Territory varies and has increased at different rates since 2013.

Victoria has responded at a consistently high rate and New South Wales has increased its participation to a point where both states are now at 100%.

New South Wales, Tasmania and Victoria have consistently responded at a rate greater than the national average. South Australia has increased its response rate in recent times while Northern Territory, Queensland, and Western Australia have consistently responded at a rate lower than the national average.

Data Confidence

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

Whilst data for this report is provided voluntary, 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 8.

Table 8 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:

- 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 and/or renewal of existing assets; and
- Organisational capacity to engage with external stakeholders.

Since the NSoA project commenced in 2013, 454 (85%) councils have now provided data enabling greater certainty and scope for analysis.

Councils that report increasing confidence in the integrity of the underlying data used by their systems can rely upon it to make sound decisions, highlight opportunities, plus identify, and manage risks.

Figure 10 shows the level of confidence responding councils had in their infrastructure performance data for each asset class.

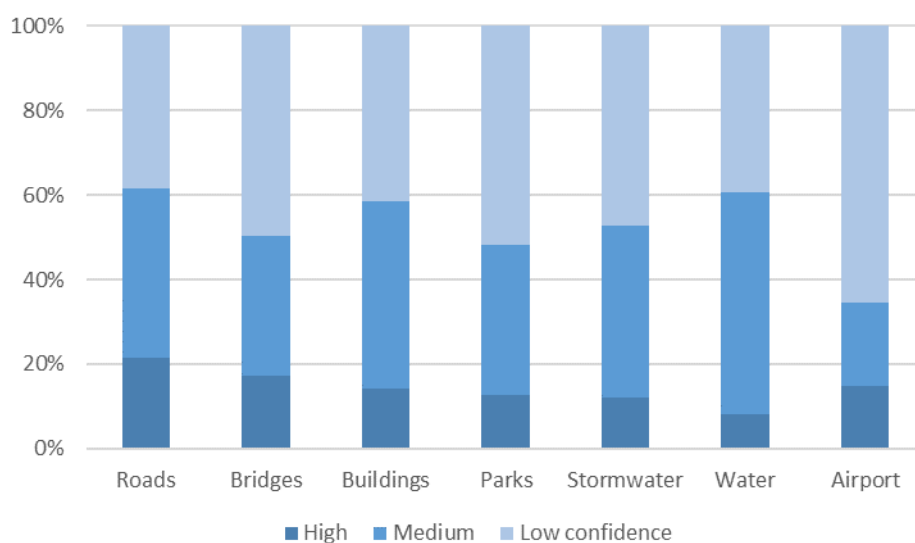


Figure 10 Data confidence by asset class

Figure 11 shows the level of confidence responding councils had in their infrastructure performance data reported by ACLG council grouping.

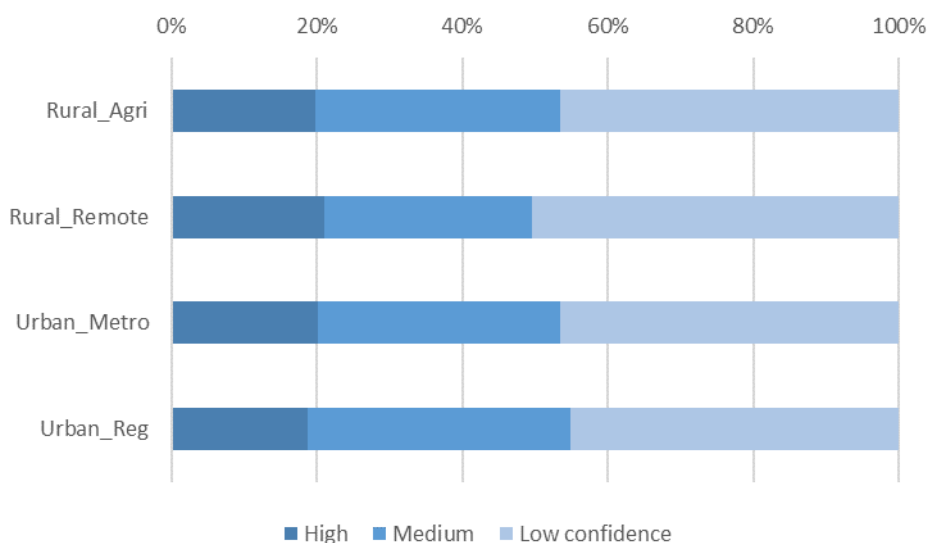


Figure 11 Data confidence by ACLG

Councils expressed similar levels of data confidence regardless of location.

Figure 12 shows the level of confidence responding councils had in their infrastructure performance data for each performance indicator.

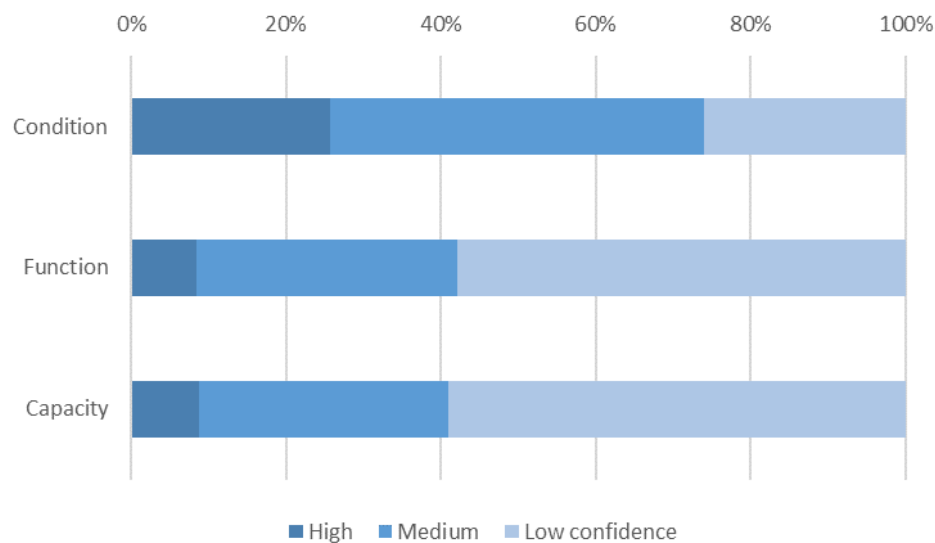


Figure 12 Data confidence by Condition, Function and Capacity

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

Overall, less than 20% of councils say they base their infrastructure performance data on high quality evidence, such as sound and current records, procedures, investigations, and analysis.

Most infrastructure performance data is based on low to medium quality evidence, procedures, investigations, and analysis which is incomplete, unsupported, or extrapolated from a limited sample.

This is a worrying observation as NSoA data flows to/from the audited financial statements and raises doubt on the effectiveness of the investment decisions being made when around 50% of councils state data is based on judgement or low-quality evidence.

An Overview of Local Government Infrastructure

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

Together, the three levels of government are searching for ways to deliver this infrastructure in a way that is sustainable and affordable 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.

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

Stationary systems forming a network or a portfolio of assets serving whole communities, where the system as a whole is intended to be maintained indefinitely at a particular level of service potential by the continuing replacement and refurbishment of its components.

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 13

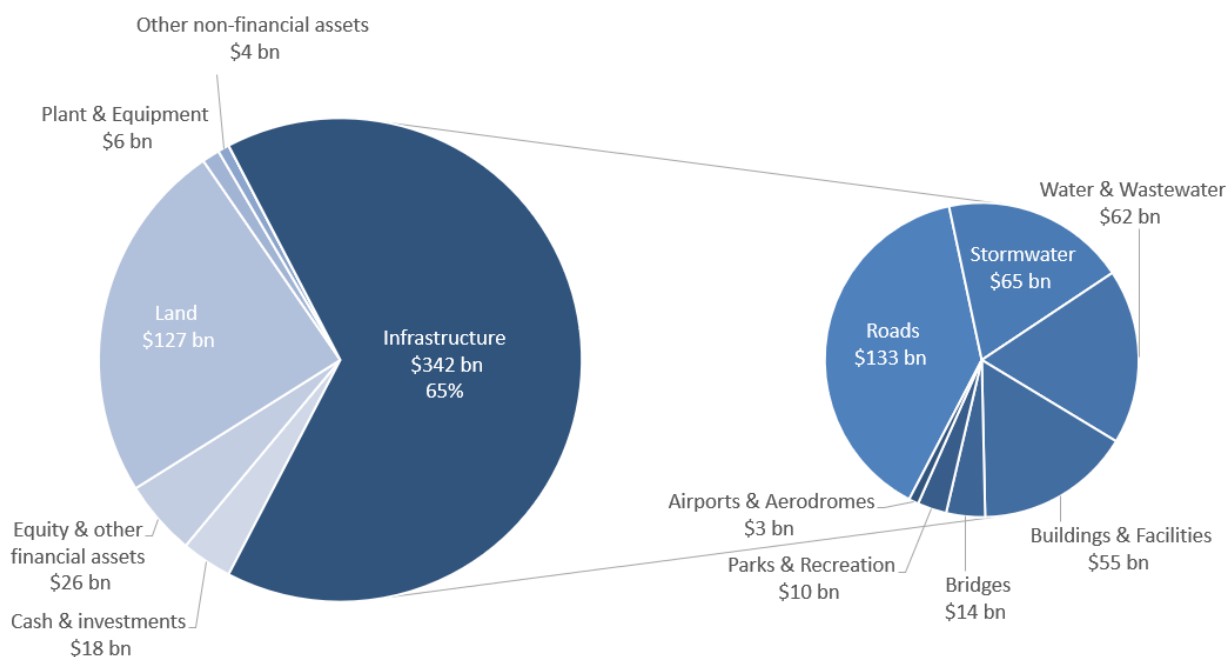


Figure 13 Value of financial and non-financial assets controlled by local government (June 2020)

In 2019-20, local government in Australia had control of financial and non-financial assets valued at \$523bn.

The non-financial (infrastructure) asset component was valued at \$342bn (65%), land accounted for \$127bn (24%) and the remaining \$54bn (11%) was attributed to other non-financial assets such as plant and equipment and financial assets such as cash, investments, and equity in other entities.¹⁸

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

- The value of road infrastructure represents the major proportion of local government infrastructure assets at \$133bn (39%).
- Stormwater assets are valued at \$65bn (19%);
- Water & Wastewater are valued at \$62bn (18%);
- Buildings are valued at \$55bn (16%);
- Bridges are valued at \$14bn (4%);
- Parks & Recreation assets are valued at \$10bn (3%); and
- Airports & Aerodromes represent the least in terms of asset value at \$3bn (1%).

The estimated replacement cost of these infrastructure assets is \$533bn representing an investment of approximately \$21,000 for each of the 25.3 million people in Australia.^{19 20}

¹⁸ 2019-20, ABS cat. no. 5512.0, TABLE 339, Total Local General Government Balance Sheet.

¹⁹ The cost to replace the existing infrastructure assets with a new modern equivalent asset (not a second hand one) with the same economic benefits.

²⁰ ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2020, TABLE 4. Estimated Resident Population, States and Territories (Number) – Australian Capital Territory population excluded.

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.²¹ This is approximately 77% of total road length in Australia.

Figure 14 shows the proportion of local government controlled sealed and unsealed roads as a proportion of the Australian road network.

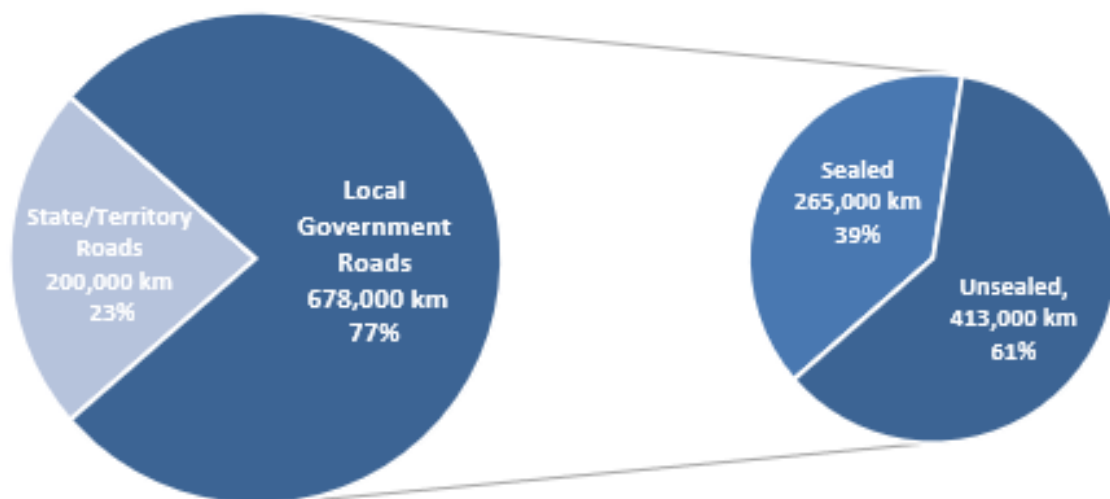


Figure 14 Local government-controlled roads as a proportion of the Australian road network

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.

²¹ National Local Roads Data System, ALGA

Figure 15 shows the sealed and unsealed road length controlled by ACLG (2010-2020).

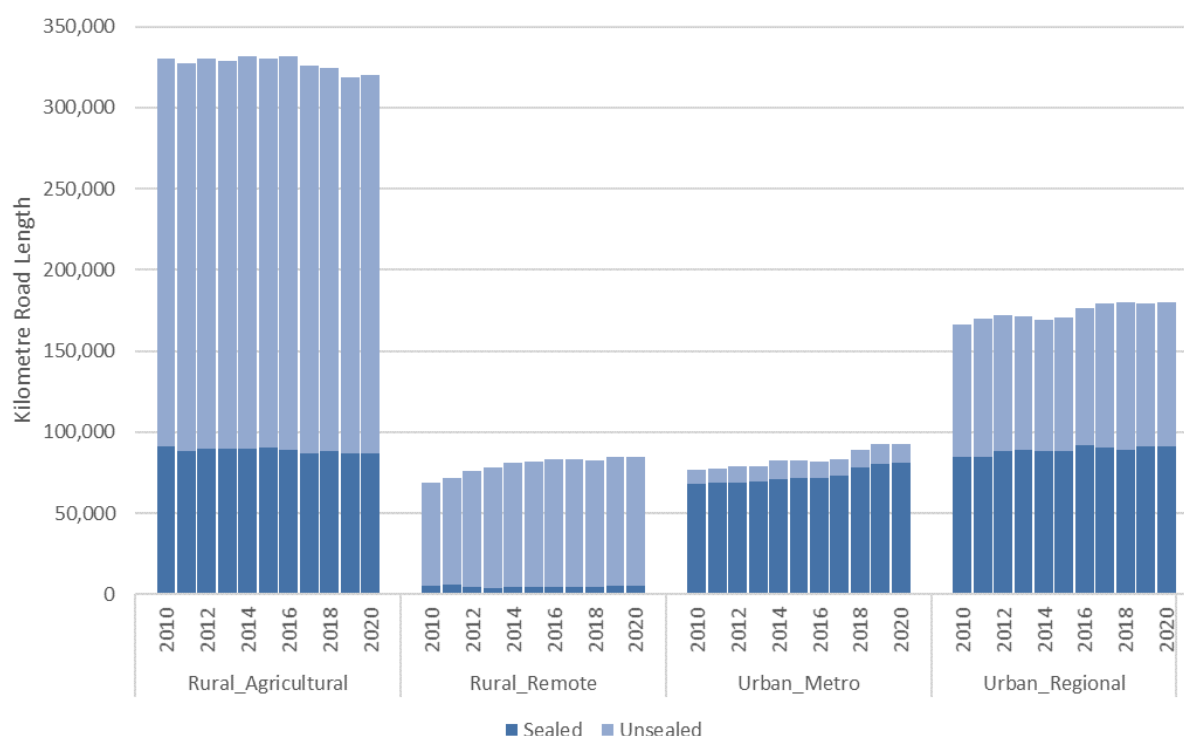


Figure 15 Sealed and Unsealed local road length by ACLG (2010-2020)

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

Table 9 Local Government 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 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 16 shows the local government road length by State & Territory (2010-2020).

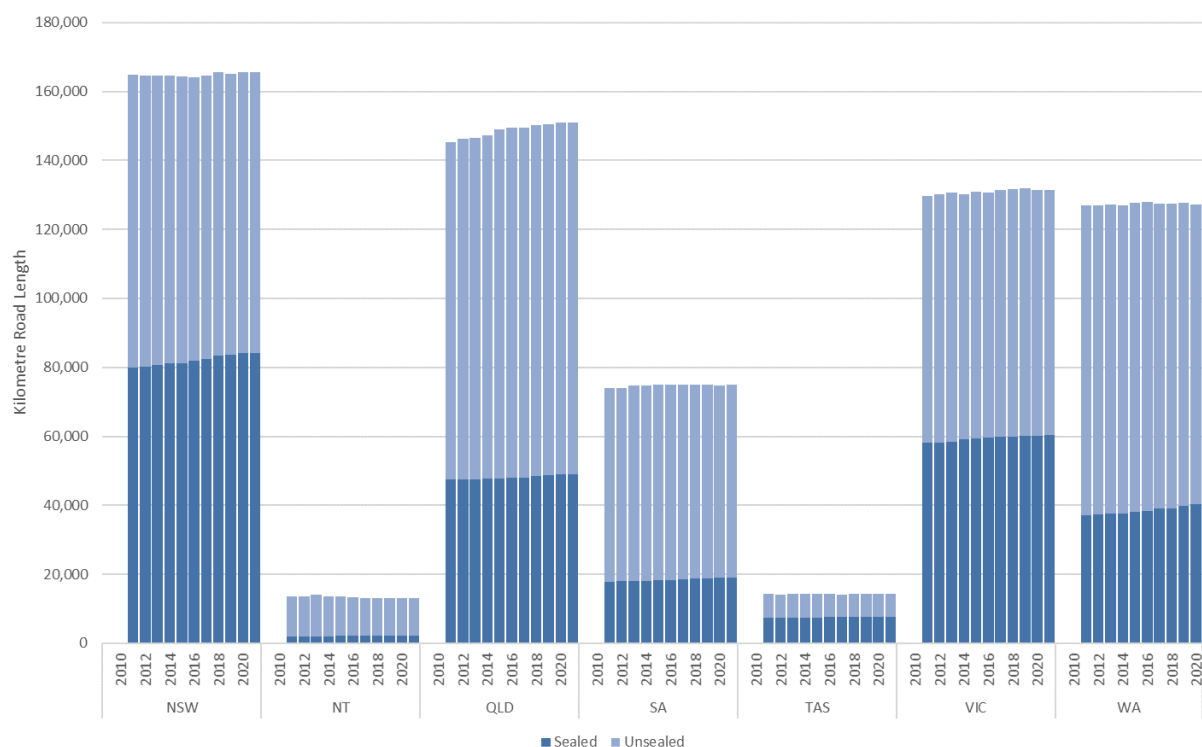


Figure 16 Sealed and Unsealed local road length by State & Territory (2010-2020)

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

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

Table 10 provides an overview of the local government-controlled roads in Australia grouped by each State and Territory.

Table 10 Local Government 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.

Bridges

Bridges are an important part of the road transport network and come in many forms. 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.²²

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

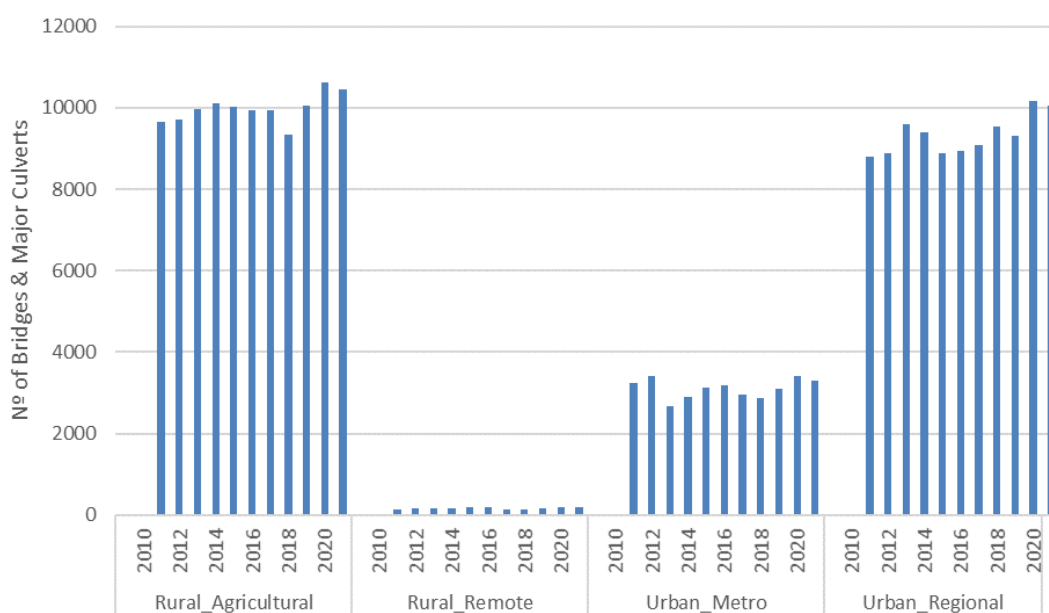


Figure 17 N° of Council controlled Bridges and Major Culverts by ACLG (2010-2020)

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.

²² Austroads (2018), Guide to Asset Management, Part 13, p.2.

Table 11 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 11 Local Government Bridges and Major Culverts in Australia 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 per bridge in rural agricultural council areas. This is partly a consequence of lower population density and councils in the rural areas are responsible for all but the higher order roads and bridges. It is worth noting, the size and cost of urban metropolitan bridges would most likely be larger and more expensive.

Figure 18 shows the number of local government-controlled bridges and major culverts by State and Territory reported since 2010.

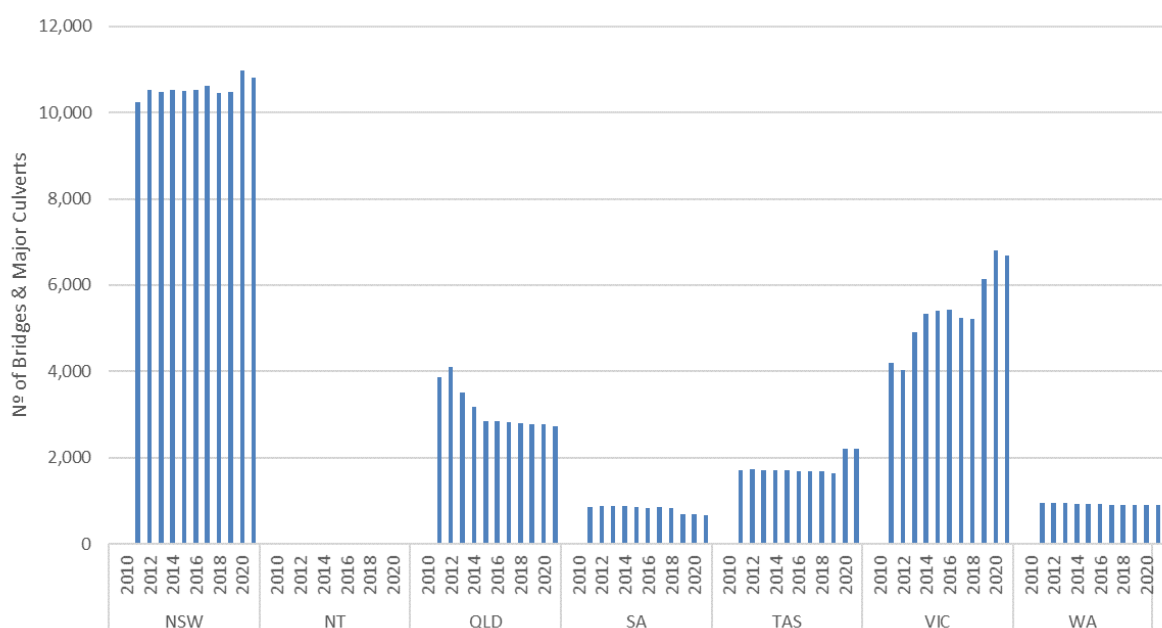


Figure 18 Local Government Bridges and Major Culverts by State & Territory (2010-2020)

Variations in the numbers over time is due to new constructions, assets not previously accounted for in the 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 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 12 provides an overview of the local government-controlled bridges and major culverts in Australia grouped by each State and Territory.

Table 12 Local Government Bridges and Major Culverts in Australia 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%	27.8%	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.

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 on 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.

Recent federal and state/territory funding programs have been essential in keeping bridges safe and open to traffic however a 2019 IPWEA (NSW) timber bridge study reported 23% of local government-controlled timber bridges in NSW are in poor condition, a slight improvement from 25% in 2005.²³

Most of this funding appears to be allocated to structures on 'high 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.

²³ 2019 Timber Bridge Management Report, IPWEA (NSW).

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 16% of total local government infrastructure replacement cost, buildings are estimated to cost \$91bn to replace in 2019-20. Councils indicate around 63% of this investment ensures buildings are fit for purpose, while 9.4% (\$8.5bn) of buildings have limited ability to meet program/service needs or exceed their original functional design intent.

In 2020, 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 anywhere between two and 80+ years. The task of monitoring the performance 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.

Understanding the remaining life of critical components helps determine the timing of future outlay requirements ensuring the asset provides the services the community expect. It is therefore critical data and information systems are configured to support this objective.

Combined with increasing demand for greater efficiency of energy systems that support many buildings are two critical challenges facing many local councils who manage a complex array of buildings.

Parks

Australians spend a lot of time visiting local parks and recreational facilities. A typical council park may contain several assets, including;

- Playground
- Toilet Block
- BBQ Area

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, 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 \$65bn of stormwater infrastructure assets.

As our cities, towns and suburbs expand the increased run off due to the greater number of impervious surfaces, (i.e., more concrete, paved roads and roofing), the amount of stormwater runoff increases. 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.²⁴

Figure 19 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.

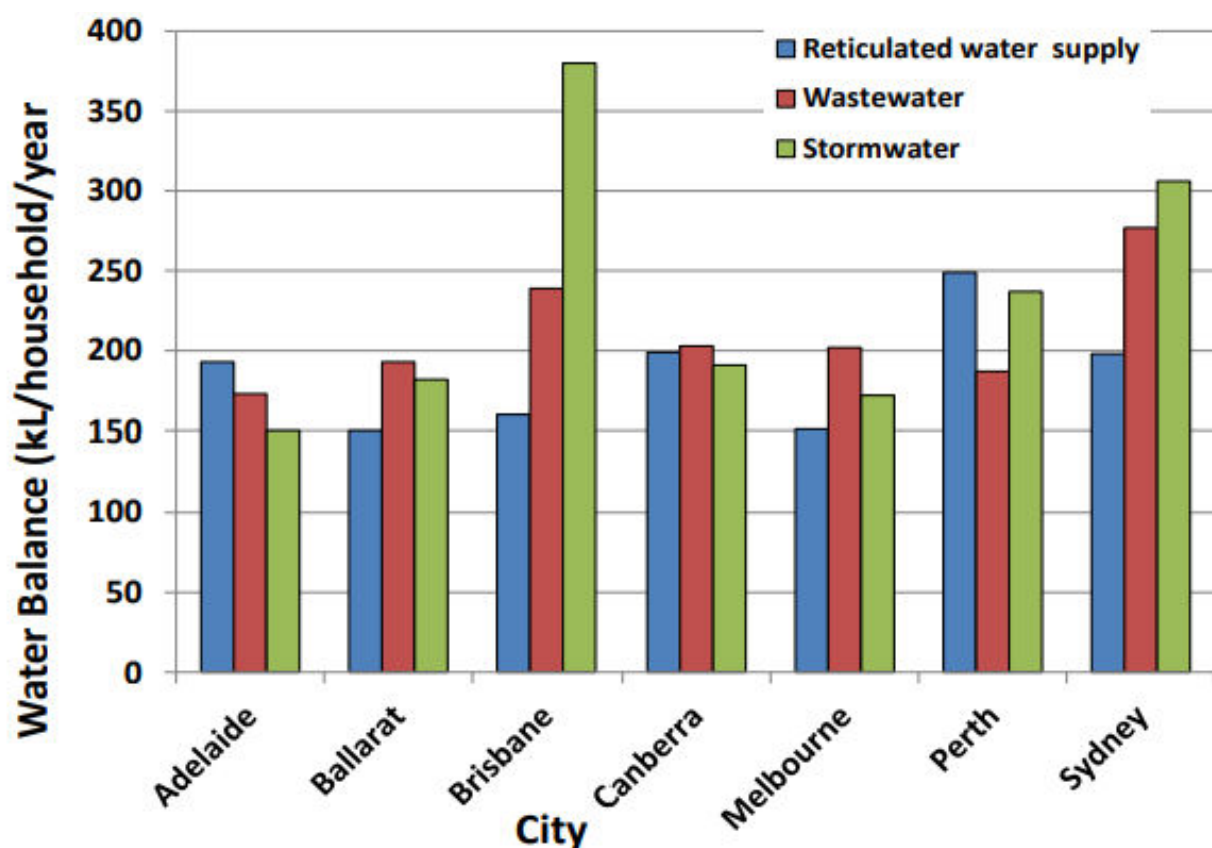


Figure 19 Average annual water balances from households, various cities²⁵

²⁴ Stormwater Australia, Submission 19, p. 3, to the 2015 Senate Inquiry into Stormwater.

²⁵ 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 and generally require replacement every 100 to 150 years. Given the expected life of stormwater infrastructure, examples of ageing urban infrastructure are 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.²⁶ 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'.

Given the many priorities that local governments have, 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 aging systems underneath densely populated areas carries significant costs and engineering challenges.

Rural areas serviced by open channel drains are not designed to achieve urban drainage outcomes. 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 already exists.

With few dedicated funding sources, multi governance and ownership structures, expansive networks of aging 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.

²⁶ City of Melbourne, Submission 43, p. 1., to the 2015 Senate inquiry into Stormwater.

Water & Wastewater

Water & wastewater infrastructure directly affects our public health. When it's working properly, it provides us with safe drinking water and limits the pollution of our local rivers and streams. If it's not maintained and kept up to date, it can lead to contamination that can make people sick.

The local government water and wastewater sector is capital intensive - these assets are estimated to cost \$98.5bn to replace in 2020. Councils indicate around 91.6% of this replacement cost is operating at the original design capacity, while the remaining 8.4% (\$8.3bn) has reached or exceeded it.

Local government, primarily in regional and rural parts of New South Wales and 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 2020, 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.

Without good governance and planning processes 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.

Airports & Aerodromes

In Australia, there are around 320 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.²⁷

The 11 largest airports in Australia (all capital cities, plus Gold Coast, Cairns and Alice Springs) account for about 87 per cent of overall passenger traffic and make the greatest economic contribution in terms of direct and indirect employment.

Except for several defence and private airfields, most of the remaining airports are owned and operated by approximately 200 local government entities in the regional, rural, and remote areas of the country, each having a fundamental role in serving both their local communities and the Australian economy more broadly.

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

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

Despite their importance, Australia's regional airports face significant challenges in maintaining the service they provide to their local communities. Many regional airports in Australia are operating at a loss each year and are heavily dependent upon cross-subsidisation by their local government owners who face multiple and competing demands on their limited financial resources.

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.²⁸

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.

²⁷ Airservices Australia - Aeronautical Information Package (AIP).

²⁸ Regional Airport Infrastructure Study (AAA, 2016).

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 'unobservable inputs' as an active market for public works infrastructure rarely exists.²⁹

Consequently, the fair value inputs are determined 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 new asset, or modern equivalent, less the accumulated depreciation will determine the current replacement cost.³⁰

Fair value measurement using the cost approach is generally considered more relevant for infrastructure asset decision support than historical cost.³¹

Furthermore, 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 land and 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 \$533bn as reported at the end of June 2020.

This represents an investment of \$21,000 for each of the 25.3 million people in Australia.³²

The current replacement cost (i.e., written down value) of local government infrastructure assets is estimated to be \$342bn and are currently depreciating at approximately \$7.7bn per year.

Table 13 shows the total estimated infrastructure investment (i.e., asset valuations) across each asset class for every local government as of 30th June 2020.

²⁹ AASB 13 Level 3 inputs: Unobservable inputs for the asset or liability.

³⁰ Current replacement cost is often referred to as depreciated replacement cost, written down value, book or net value, and net carrying amount depending on the jurisdiction.

³¹ Sec. 6.2.1, International Infrastructure Financial Management Manual (IIFMM, IPWEA, 2020).

³² ABS cat. no. 3101.0 - Australian Demographic Statistics, June 2020, TABLE 4. Estimated Resident Population, States and Territories (Number).

Table 13 Local Government Infrastructure Valuations by Asset Class, June 2020

Asset Class	Replacement Cost (\$M)	Depreciable Amount (\$M)	Current Replacement Cost (\$M)³³	Annual Depreciation (\$M)³⁴
Roads	\$204,164	\$162,848	\$132,998	\$2,863
Bridges	\$25,472	\$23,409	\$15,343	\$256
Buildings	\$90,845	\$87,492	\$55,849	\$1,601
Parks	\$16,279	\$15,076	\$10,113	\$524
Stormwater	\$94,298	\$89,873	\$65,242	\$918
Water / Wastewater	\$98,512	\$97,908	\$60,461	\$1,461
Airport / Aerodromes	\$3,084	\$2,928	\$1,831	\$64
TOTAL	\$532,655	\$479,535	\$341,837	\$7,687

*Values extrapolated from NSoA valuation data provided by 454 (85% of) councils.

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 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 Valuation Rate)]

The estimated replacement cost of local government infrastructure assets is \$533bn.

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.^{35 36}

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.

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

The estimated depreciable amount of local government infrastructure assets is \$480bn.

³³ The current replacement cost is reported in the balance sheet. In some jurisdictions it may be referred to as written down value, book or net value, or net carrying amount. \$342bn reconciles with 'ABS Government Finance Statistics, Australia, 2019-20, cat. no. 5512.0, TABLE 339, Total Local General Government Balance Sheet – Buildings and structures.'

³⁴ The annual depreciation expense is reported in the operating (profit/loss) statement.

³⁵ Based on IIFMM, IAS 16 Para 53 and AASB116.

³⁶ 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 IAS 16 Para 6).

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 net 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 \$342bn. This reconciles with 'ABS Government Finance Statistics, Australia, 2019-20, 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.^{37 38}

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 \$7.7bn.

Infrastructure Investment Performance

Figure 20 shows the growth in value of local government infrastructure over the last decade. The value of the asset stock has grown at a steady rate of 6.4% per annum on average from \$209bn in 2011 to \$342bn in 2020. Growth in value is derived from capital investment and asset revaluation.

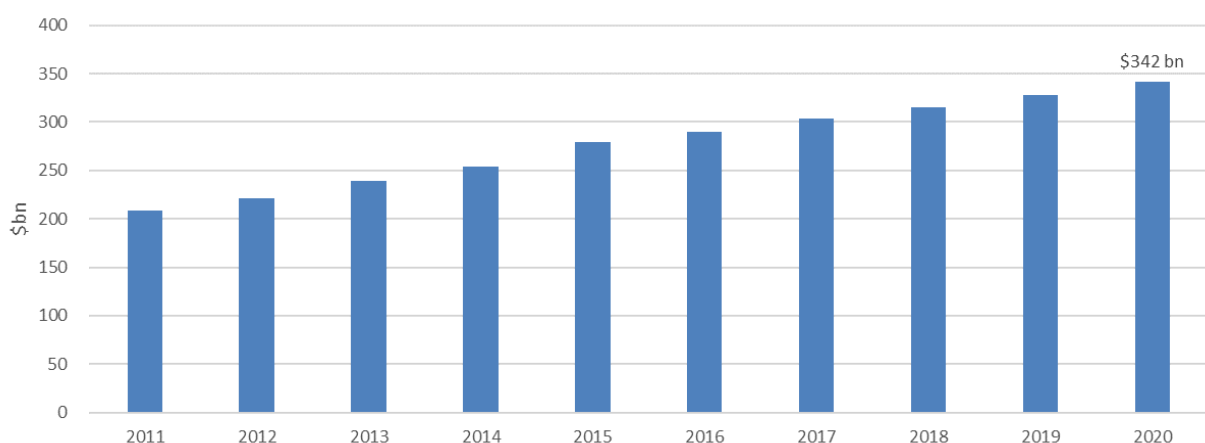


Figure 20 Local government infrastructure asset values (2011 - 2020)³⁹

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.

³⁷ IIMM, IIFMM, IAS 16 Para 6 and AASB116.

³⁸ Useful life is the period over which an asset is expected to be available for use by the council.

³⁹ ABS, 5512.0, Table 339.

The reliability of this performance measure is dependent on the accuracy and currency of financial reporting of fixed assets (i.e., infrastructure) and its annual consumption (depreciation). 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.

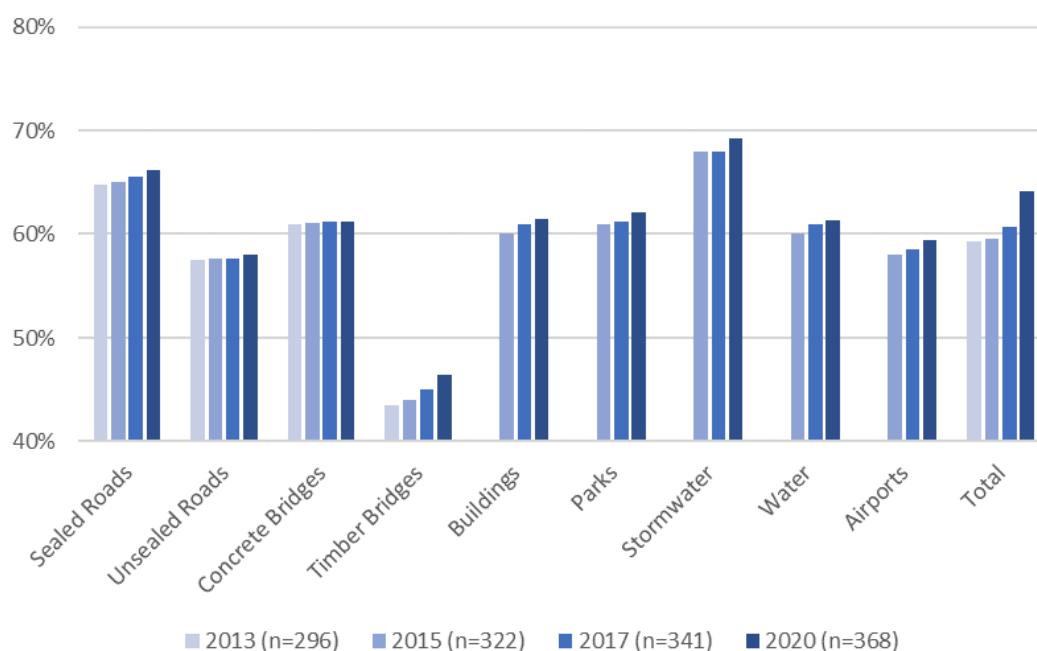


Figure 21 Asset Consumption Ratio Trend by Asset Class

Responding councils report the asset consumption ratio of their infrastructure assets overall is increasing. In other words, the service potential is increasing, suggesting the overall performance could be improving.

Timber bridges on average have the lowest consumption ratio, stormwater assets have the highest.

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

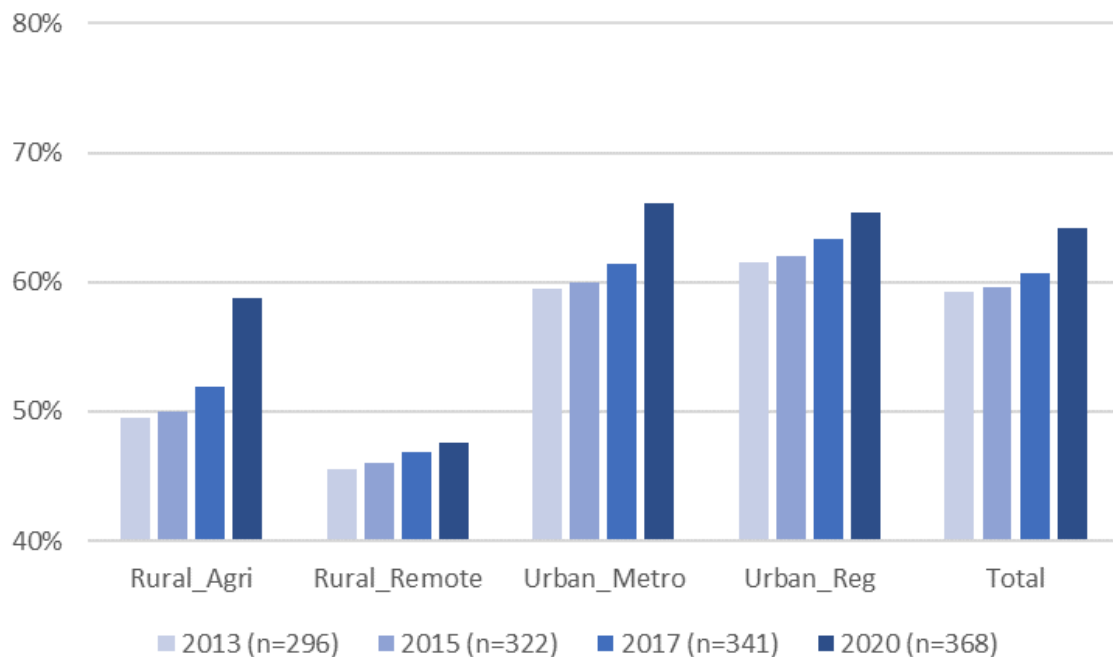


Figure 22 Asset Consumption Ratio Trend by ACLG

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 the 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 23 shows the asset consumption ratio trend of local government infrastructure assets by State and Territory since 2013.

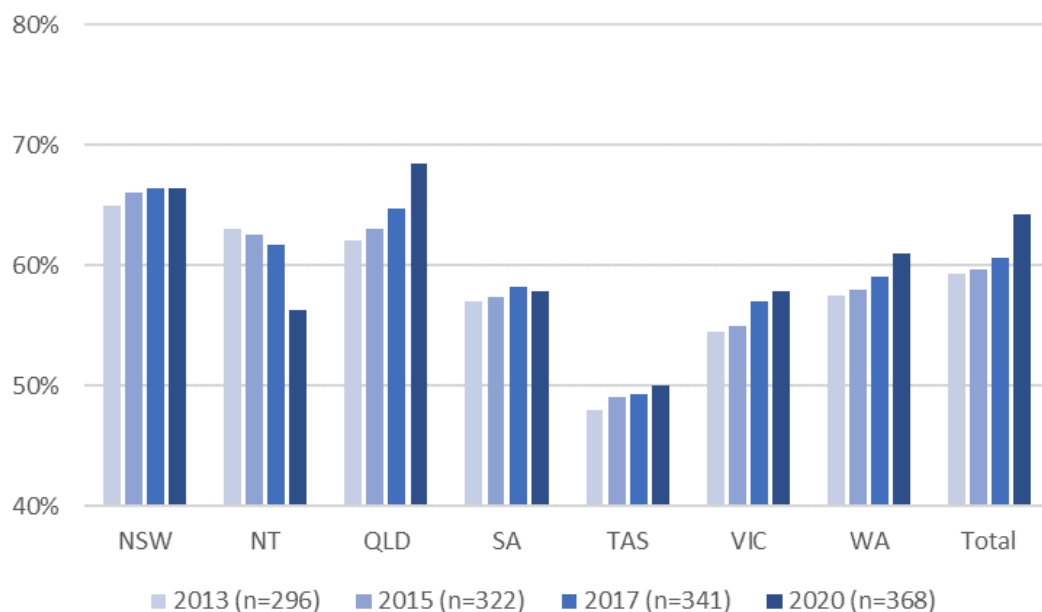


Figure 23 Asset Consumption Ratio Trend by State & Territory

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 14.

Table 14 Asset Consumption Ratio -Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	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 2020. 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 (i.e., shorter lives).

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). 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 jurisdictions 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 have required councils 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 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 24.

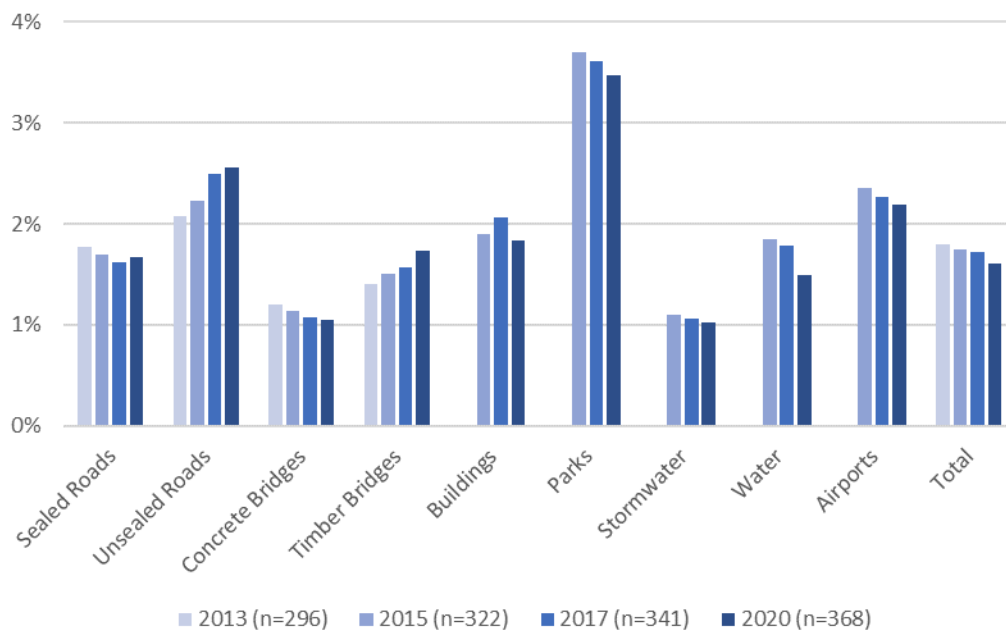


Figure 24 Asset Depreciation Rate Trend by Asset Class

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 2020. 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. Parks and unsealed roads are lasting on average 30 and 40 years, respectively.

Unsealed roads and timber bridges show an upward trend indicating they are being consumed at a higher rate than originally anticipated.

Figure 25 shows the asset depreciation rate trend by ACLG grouping since 2013.

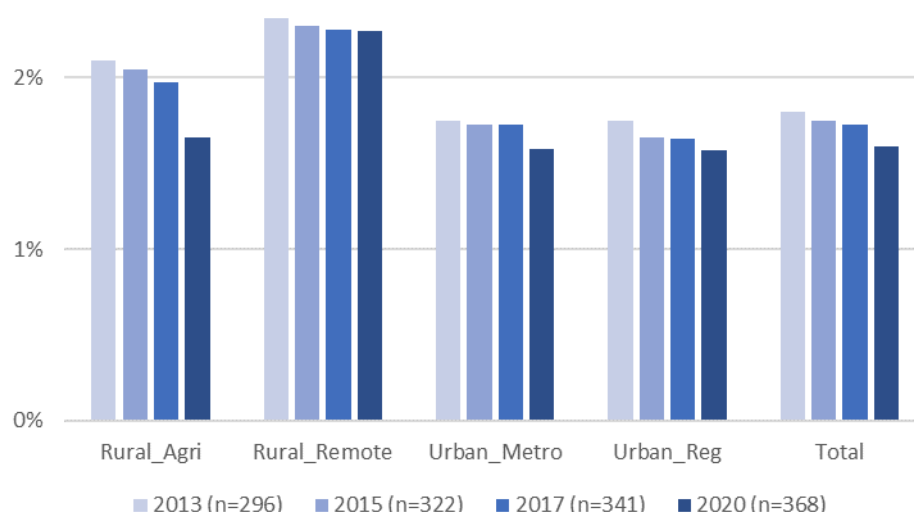


Figure 25 Asset Depreciation Rate Trend by ACLG

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 large stock of unsealed roads with shorter useful lives.

Figure 26 shows the asset depreciation rate trend by State and Territory since 2013.

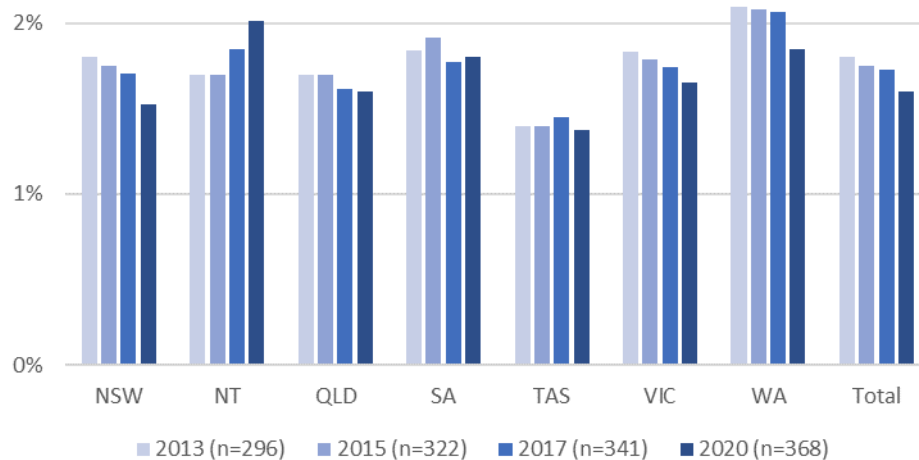


Figure 26 Asset Depreciation Rate Trend by State & Territory

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

Northern Territory councils show an 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 15.

Table 15 Asset Depreciation Rate -Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	Forecast Trend	Comment
Depreciation Rate (%)	Not applicable	↓	↓	Indicates infrastructure on average is lasting longer than originally anticipated. Trend shows a decrease from 1.8% in 2013 to 1.6% in 2020. On average, assets are expected to last more than 60-years.

Local Government Infrastructure Planning

It is important that decision makers in local government, such as elected officials and senior management, have access to all the information they need to make informed decisions 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 the assets and the value they provide, ...and is best supported by a sound Asset Management Strategy and Policy.

AM Plans are considered the business case for the financial forecasts to be considered in the long-term financial plan. They should tell the 'story' of the current and future predicted state of the assets, that is, 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.

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

The NSoA study acknowledges the critical role councils have in managing infrastructure assets.

It also recognises that, in achieving safe, equitable, and compliant services from infrastructure assets for current and future generations it is essential to support productivity both locally and nationally.

Therefore, assessing, improving, and maintaining asset and financial management planning and reporting maturity is paramount for the long-term sustainability of local communities across the nation.

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, a mandated requirement in every State and Territory in Australia.

Local governments were asked if they had an adopted up to date Asset Management Plan for each of their major asset classes. The response from participating local governments is shown in Table 16.

Table 16 Asset Management Plans Adopted

Asset Class	Yes	No	Out of Date	*N/A	Sample Size	
					N°	%
Roads	80%	9%	11%	-	436	81%
Building & Facilities	69%	19%	12%	-	393	73%
Parks & Recreation	57%	34%	9%	-	391	73%
Stormwater	62%	28%	10%	0%	376	70%
Water & Wastewater	54%	35%	11%	47%	370	69%
Airports & Aerodromes	33%	63%	4%	48%	383	71%

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

80% of councils say they had an adopted Asset Management Plan for road infrastructure. 271 (69%) of responding councils said they had an adopted Asset Management Plan for building assets. 222 (57%) for park and recreation assets and 233 (62%) for stormwater assets.

Of the 195 councils who said they had responsibility for water and wastewater assets, 106 (54%) said they had an adopted Asset Management Plan.

Of the 201 councils who said they had responsibility for an airport or aerodrome, 67 (33%) said they had a plan to manage the infrastructure located at these locations.

Assuming all councils have at least road, buildings, parks and stormwater assets, the trend for asset management plans adopted across these asset classes since 2015 is shown in Figure 27.

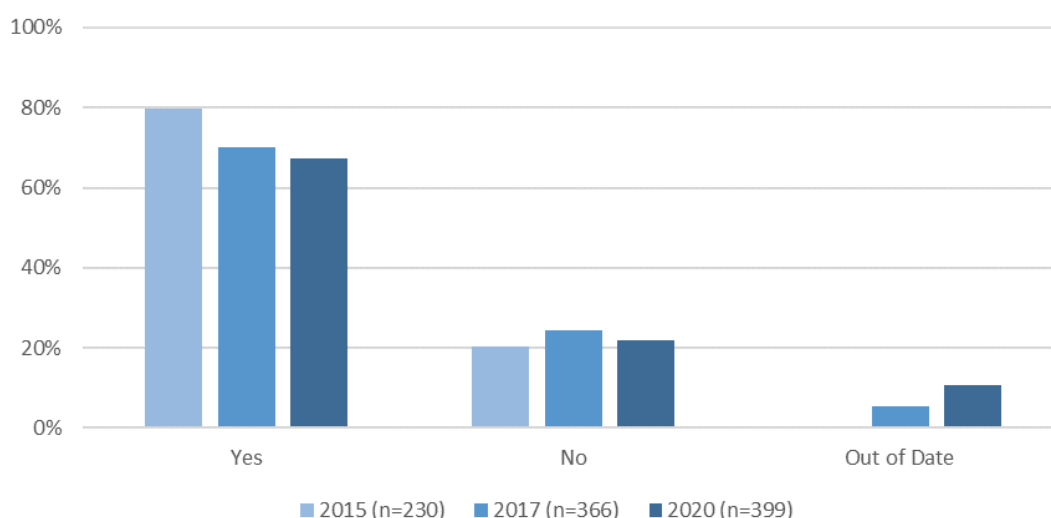


Figure 27 Asset Management Plans adopted since 2015

The average proportion of responding councils who said they had asset management plans adopted across each of their major asset classes has declined from 80% in 2015 to 67% in 2020. In other words, 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.

While 169 more councils have responded to the survey since 2015, on average, more are saying their asset management plans are either out of date or they do not have an adopted asset management plan.

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

Figure 28 shows the trend of Asset Management Plans adopted for combined road, buildings, parks, and stormwater assets from responding councils for each ACLG grouping.

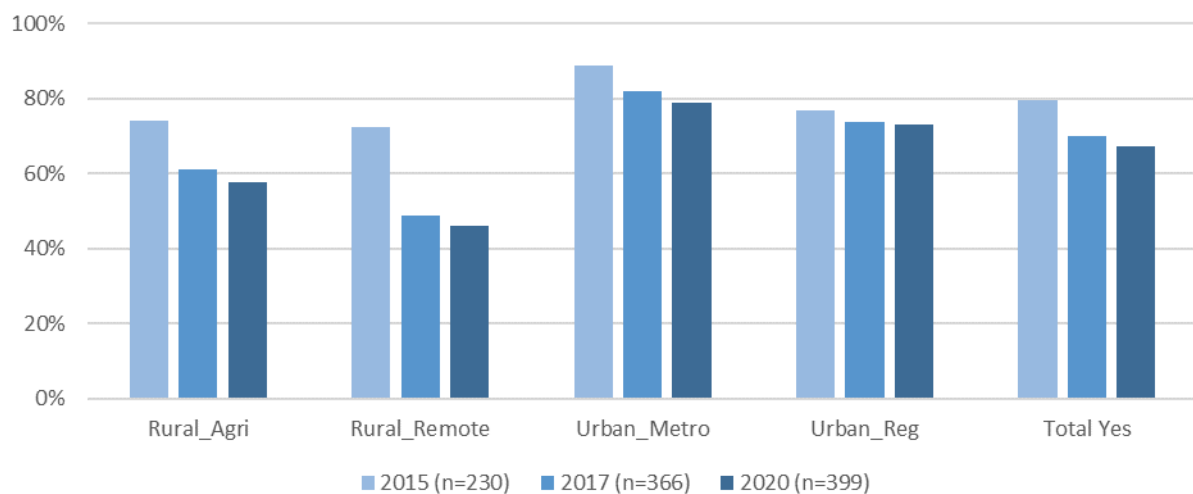


Figure 28 Asset Management Plans adopted – Trend by ACLG

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

Figure 29 shows the trend of asset management plans adopted for combined road, buildings, parks, and stormwater assets by responding councils for each State and Territory since 2015.

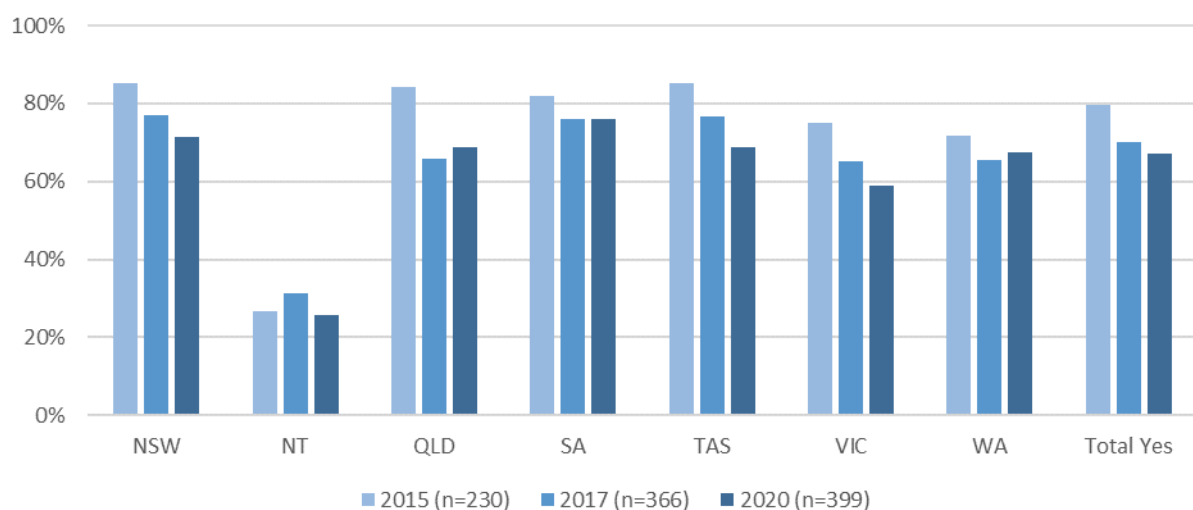


Figure 29 Asset Management Plans adopted – Trend by State & Territory

On average, councils in New South Wales, Queensland, South Australia, and Tasmania have the highest rate of asset management plans adopted compared with those in Northern Territory, Victoria, and Western Australia.

The desired, actual, and forecast trend for assessing the extent that asset management plans are adopted is shown in Table 17.

Table 17 Asset Management Plans Adopted - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	Forecast Trend	Comment
Asset Management Plans Adopted				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. 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 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 18 shows the response from responding councils who said they had a LTFP adopted as of the end of June 2020.

Table 18 Long-term Financial Plans Adopted

Description	Yes	No	Out of Date	Sample Size	
				N°	%
Councils with an adopted LTFP	86%	13%	1%	448	83%

The trend for LTFPs adopted across the nation since 2013 is shown in Figure 30 below.



Figure 30 LTFPs adopted since 2013

The average proportion of responding councils that said they had a LTFP adopted has increased from 72% in 2013 to 86% in 2020. 61 (14%) of responding councils say they do not have LTFP adopted, or that they are 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.

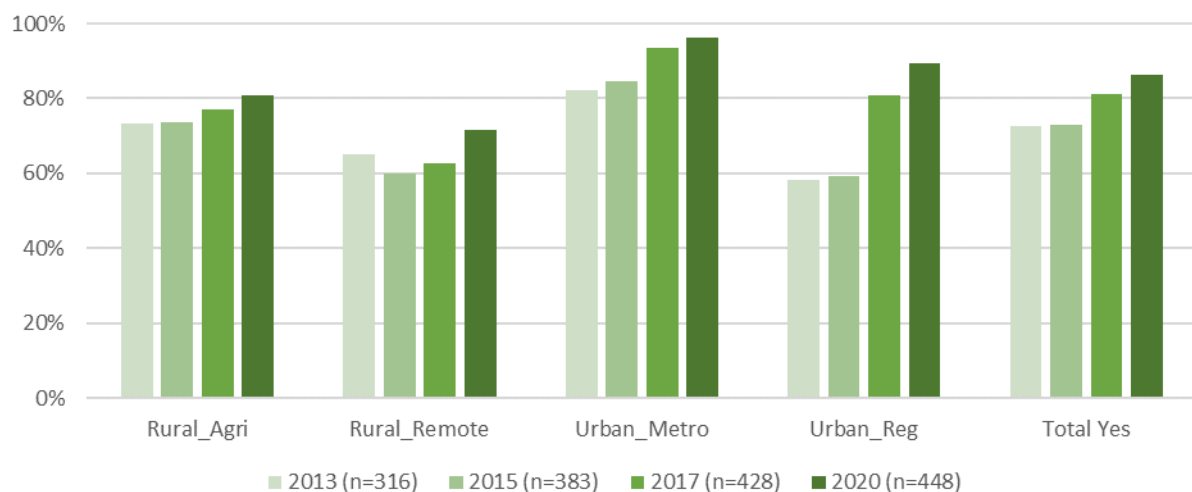


Figure 31 LTFPs adopted – trend by ACLG

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, or that they are out of date.

The trend of LTFPs adopted by responding councils and State and Territory since 2013 is shown below.

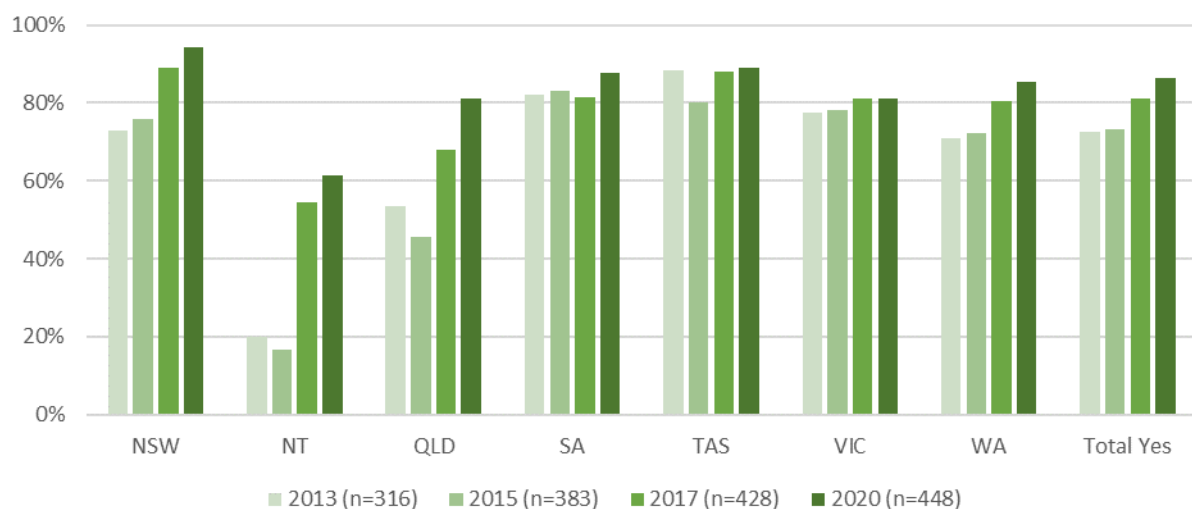


Figure 32 LTFPs adopted – trend by State and Territory

On average, councils in New South Wales, South Australia, and Tasmania have the highest rate of LTFPs adopted. Those in the Northern Territory, Queensland, Victoria, and Western Australia have the lowest.

The trend for the proportion of LTFPs adopted across the nation has increased from 72% in 2013 to 86% in 2020.

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

The desired, actual, and forecast trend for assessing long term financial planning capability is reported in Table 19.

Table 19 Long-term Financial Plans Adopted - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	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, were asked if the financial projections from the Asset Management Plan were included in the LTFP.

The financial projections from the Asset Management Plan relate to the timing and costs to deliver services that the community value. The Asset Management 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 Asset Management 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 2020, the response from responding councils saying they had included the financial projections in the LTFP is shown in Table 20.

Table 20 AM Plan Financial Projections included in the LTFP

Asset Class	Yes	No	Out of Date	*N/A	Sample Size	
					N°	%
Roads	78%	16%	6%	-	434	81%
Building & Facilities	69%	23%	8%	-	391	73%
Parks & Recreation	60%	34%	6%	-	385	72%
Stormwater	58%	36%	6%	0%	389	72%
Water & Wastewater	50%	44%	7%	47%	382	71%
Airports & Aerodromes	30%	67%	3%	45%	382	71%

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

78% of councils who said they had a road asset management plan considered the infrastructure risks and included the forecasts outlays in the LTFP. 268 (69%) of responding councils said they included the forecasts outlays in the LTFP for building assets. 231 (60%) for park and recreation assets and 224 (58%) for stormwater assets.

Of the 204 councils who said they had responsibility for water and wastewater assets, 101 (50%) said they included the forecasts outlays in the LTFP for these assets.

Of the 201 councils who said they had responsibility for an airport or aerodrome, 62 (30%) said they included the forecasts outlays in the LTFP for these assets.

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

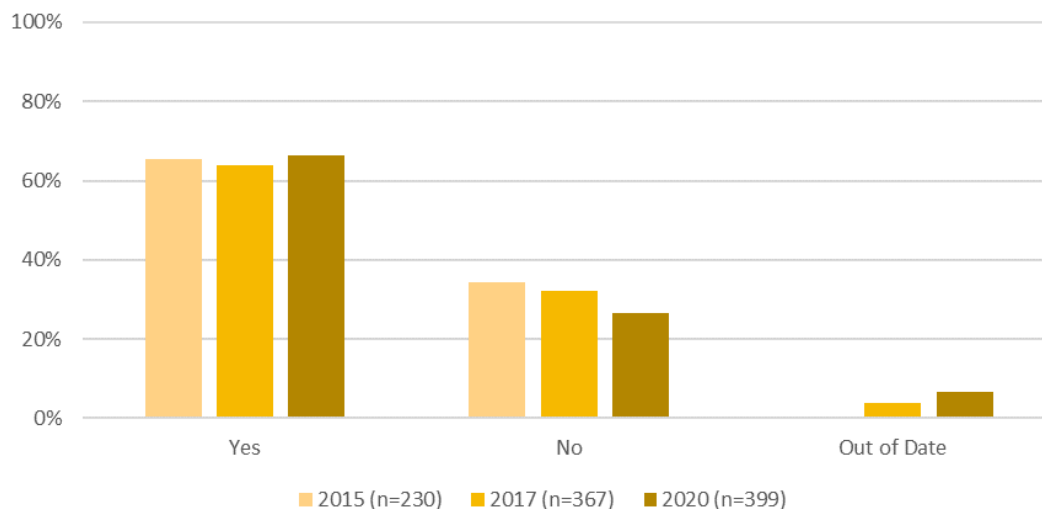


Figure 33 AM Plan Financial Projections included in the LTFP since 2015

The average proportion of LTFPs including the financial projections from the AM Plan(s) across the nation has remained steady at 66%. In other words, two thirds of councils who said they had an asset management plan said the forecast outlays were included in the LTFP.

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, buildings, parks, and stormwater assets by responding councils for each ACLG grouping since 2015.



Figure 34 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 35 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.

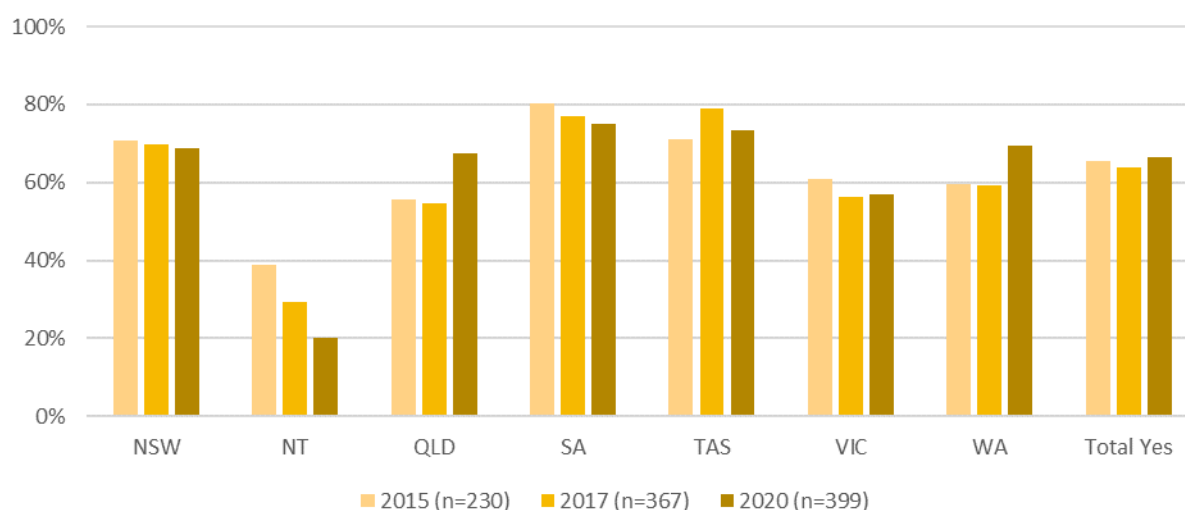


Figure 35 AM Plan Financial Projections included in the LTFP - Trend by State & Territory

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 21.

Table 21 AM Plan Financial Projections included in the LTFP - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	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 in to 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 this discipline 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 organisations demonstrate they are delivering the agreed and affordable levels of service to their customers. This is broadly measured in terms of:

- **Condition** Quality ...How good is the asset?
- **Function** Fit for purpose ...Is it the right asset providing the service?
- **Capacity** Utilisation ...Do we need more or less of these assets?

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 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 2020. The aggregated condition result for each asset class from responding councils is shown below.

Table 22 Condition by Asset Class, June 2020

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	67%	25%	8%	429	80%
Unsealed Roads	50%	35%	14%	351	65%
Concrete Bridges	75%	20%	5%	342	64%
Timber Bridges	45%	37%	18%	228	42%
Building & Facilities	60%	30%	10%	334	62%
Parks & Recreation	58%	34%	8%	299	56%
Stormwater	71%	23%	6%	317	59%
Water & Wastewater	59%	25%	16%	146	27%
Airports & Aerodromes	71%	15%	13%	104	19%

When we consider the estimated replacement cost of local government infrastructure assets with poor condition in 2020, responding councils report:

- 8% (\$14.0bn) of sealed roads are in poor condition;
- 14% (\$ 3.8bn) of unsealed roads are in poor condition;
- 5% (\$ 1.2bn) of concrete bridges are in poor condition;
- 18% (\$ 310M) of timber bridges are in poor condition;
- 10% (\$ 9.3bn) of building & facilities are in poor condition;

- 8% (\$ 1.3bn) of parks & recreation assets are in poor condition;
- 6% (\$ 5.3bn) of stormwater assets are in poor condition;
- 16% (\$15.5bn) of water & wastewater assets are in poor condition; and
- 13% (\$ 414M) of airports & aerodromes are in poor condition.

The combined estimated replacement cost of local government infrastructure reported in poor condition is \$51 billion.

Figure 36 shows the trend of local government infrastructure asset replacement cost in good, fair, poor condition by asset class since 2013.

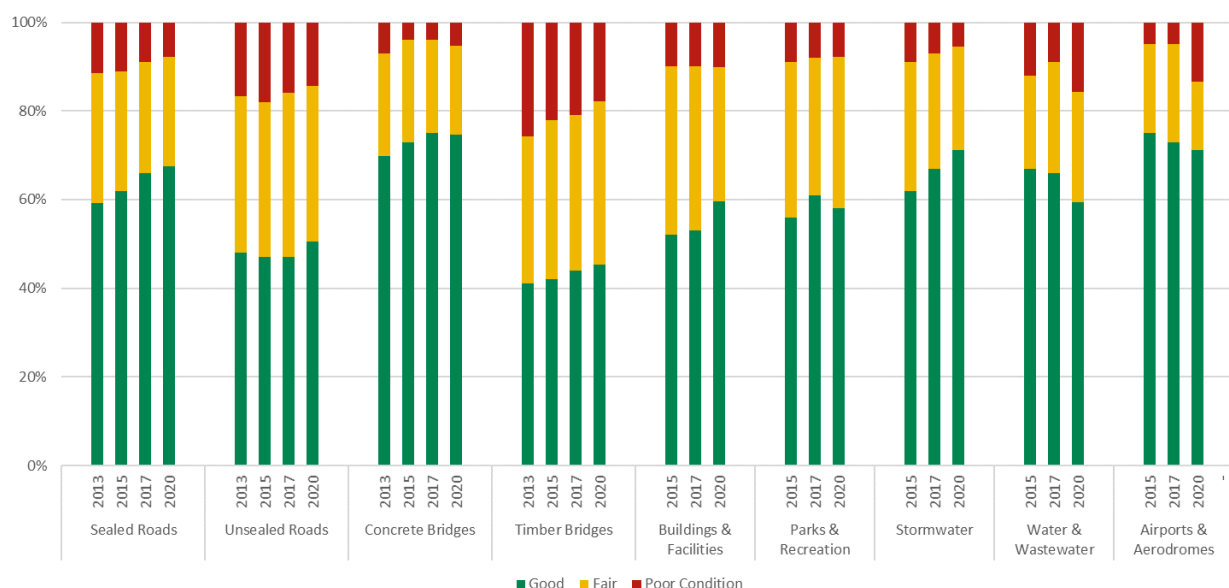


Figure 36 Condition Trend by Asset Class

Responding councils report:

- Sealed road condition is improving.
- Unsealed roads, timber bridges, and water & wastewater assets have the highest proportion in poor condition.
- Concrete bridges have the lowest proportion in poor condition.
- Timber bridges have the highest proportion in poor condition, but it is improving.
- Buildings and park infrastructure condition remains relatively unchanged.
- Stormwater asset condition is improving.
- Water & wastewater asset condition is declining.
- Airport & aerodrome asset condition is declining.

On aggregate, responding councils report the proportion of infrastructure assets in a poor state of repair has remained between nine and twelve percentage points since 2013.

Figure 37 shows the trend of local government infrastructure asset replacement cost in good, fair, poor condition by ACLG groupings since 2013.

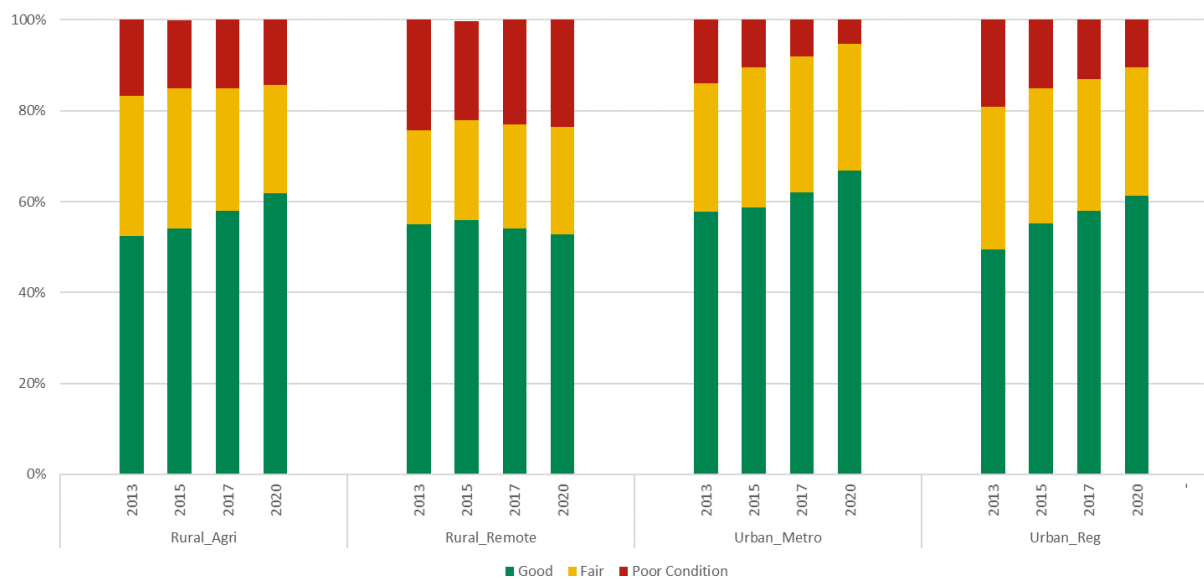


Figure 37 Condition Trend by ACLG

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 asset replacement cost in poor condition.

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

Figure 38 shows the trend of local government infrastructure asset replacement cost in good, fair, poor condition by State and Territory since 2013.

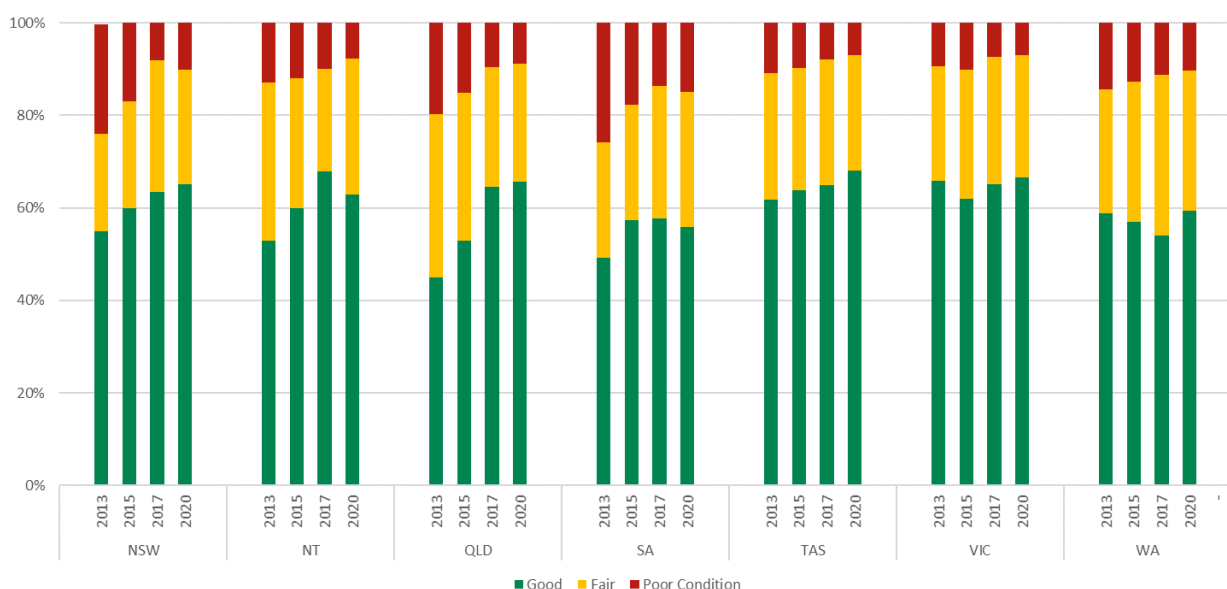


Figure 38 Condition Trend by State & Territory

The proportion of asset replacement cost reported in poor condition has reduced in every State and Territory since 2013.

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

The desired, actual, and forecast trend indicating the condition of existing infrastructure assets is reported in Table 23.

Table 23 Asset Condition - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	Forecast Trend	Comment
Condition				10% (\$51bn) of infrastructure assets are in a poor state of repair. We do not know how much of the \$51bn in poor condition is high risk. The proportion of infrastructure assets in a poor state of repair has remained between nine and twelve percentage points since 2013. Unsealed roads, timber bridges, and water & wastewater assets have the highest proportion in poor condition. Councils in rural areas are reporting little change in the quality of their infrastructure overall. Councils in rural remote areas have more than 20% of their asset replacement cost in poor condition. Overall, the forecast condition existing infrastructure assets is expected to remain the same.

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 upgrading 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.

For NSoA reporting, indicators based on function are considered in the context of state and national networks.

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 or 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.

As mentioned earlier in this report, data confidence presents an additional challenge. Less than 10% of responding councils say they base their function performance data on high quality evidence, such as reliable and up to date records, procedures, and/or the application of high quality investigative and analytic skills.

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 2020. The aggregated function result for each asset class from responding councils is shown below.

Table 24 Function by Asset Class, June 2020

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	74%	18%	7%	339	63%
Unsealed Roads	55%	35%	10%	282	53%
Concrete Bridges	76%	17%	7%	267	50%
Timber Bridges	54%	29%	17%	175	33%
Building & Facilities	63%	27%	9%	247	46%
Parks & Recreation	64%	29%	7%	222	41%
Stormwater	61%	27%	12%	234	44%
Water & Wastewater	71%	22%	8%	101	19%
Airports & Aerodromes	77%	19%	4%	79	15%

When we consider the estimated replacement cost of local government infrastructure assets with poor function in 2020, responding councils report:

- 7% (\$13.2bn) of sealed roads have poor function;
- 10% (\$ 2.7bn) of unsealed roads have poor function;
- 7% (\$ 1.6bn) of concrete bridges have poor function;
- 17% (\$ 297M) of timber bridges have poor function;
- 9% (\$ 8.5bn) of building & facilities have poor function;
- 7% (\$ 1.1bn) of parks & recreation assets have poor function;
- 12% (\$11.0bn) of stormwater assets have poor function;
- 8% (\$ 7.7bn) of water & wastewater assets have poor function; and
- 4% (\$ 133M) of airports & aerodromes have poor function.

The combined estimated replacement cost of local government infrastructure reported with poor function is \$46 billion.

Figure 39 shows the trend of local government infrastructure asset replacement cost in good, fair, poor function by asset class since 2013.

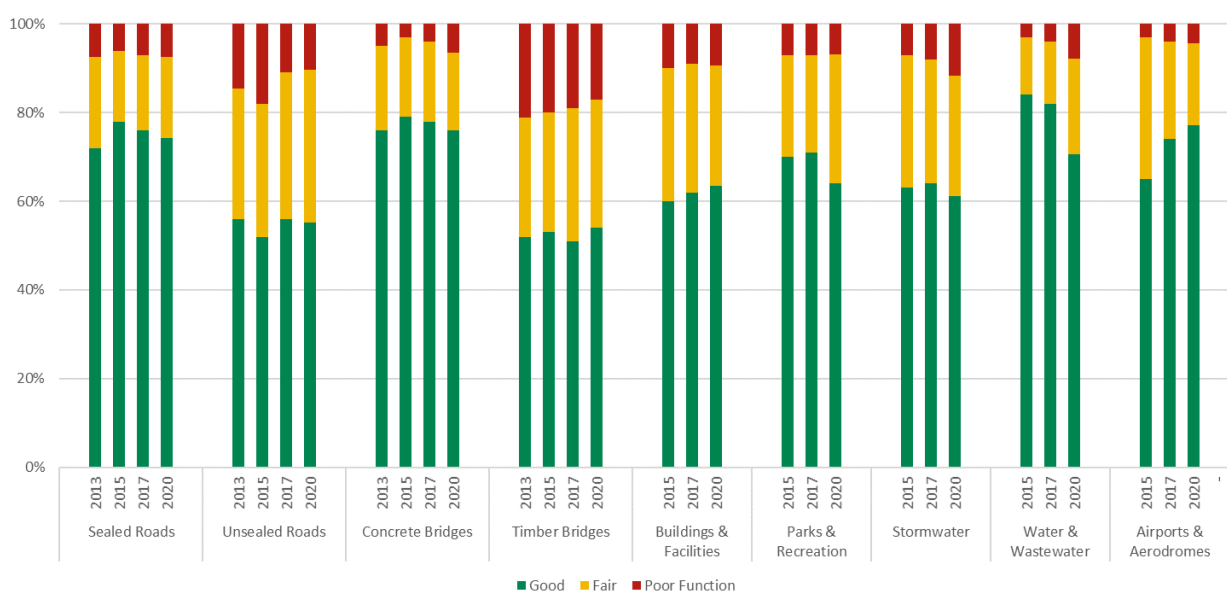


Figure 39 Function Trend by Asset Class

The infrastructure function demands vary across each asset class. While timber bridges have the highest proportion in poor function, responding councils are reporting a slight improvement. This is possibly due to increased investment (i.e., maintenance, rehabilitation, and upgrades) to ensure they remain operational and fit for purpose.

Stormwater assets indicate a slight increase in poor function and water and wastewater assets have an increasing amount of assets in poor to fair function.

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

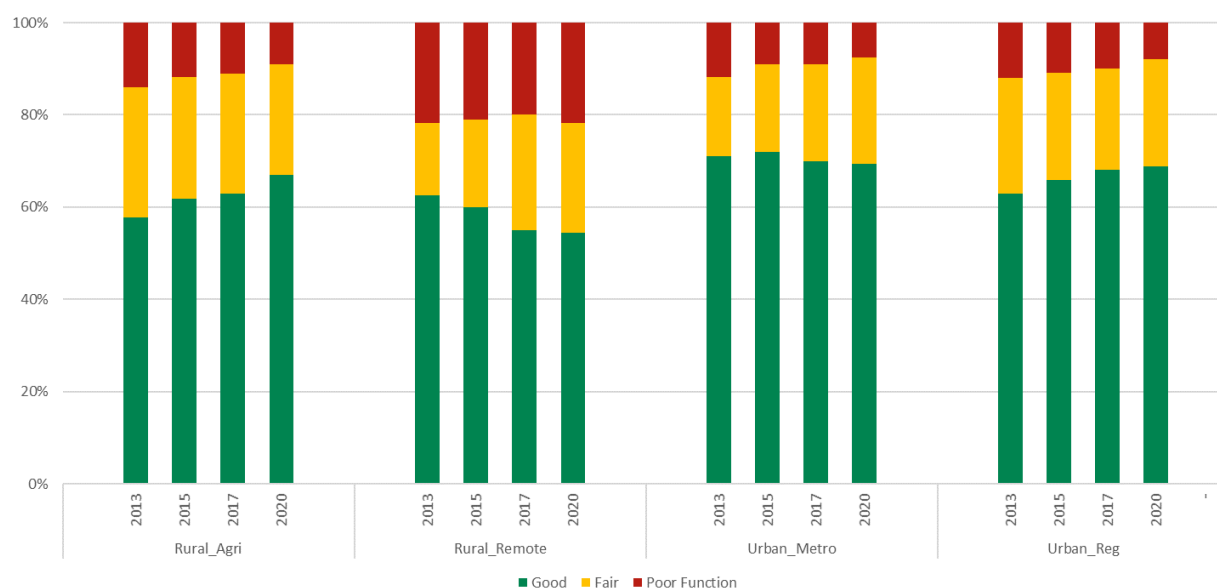


Figure 40 Function Trend by ACLG

The proportion of asset replacement cost reported in poor function has improved slightly in rural agricultural, urban metro and urban regional areas.

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 more than 20% of their asset replacement cost in poor function.

Figure 41 shows the trend of local government infrastructure asset replacement cost in good, fair, poor function by State and Territory since 2013.

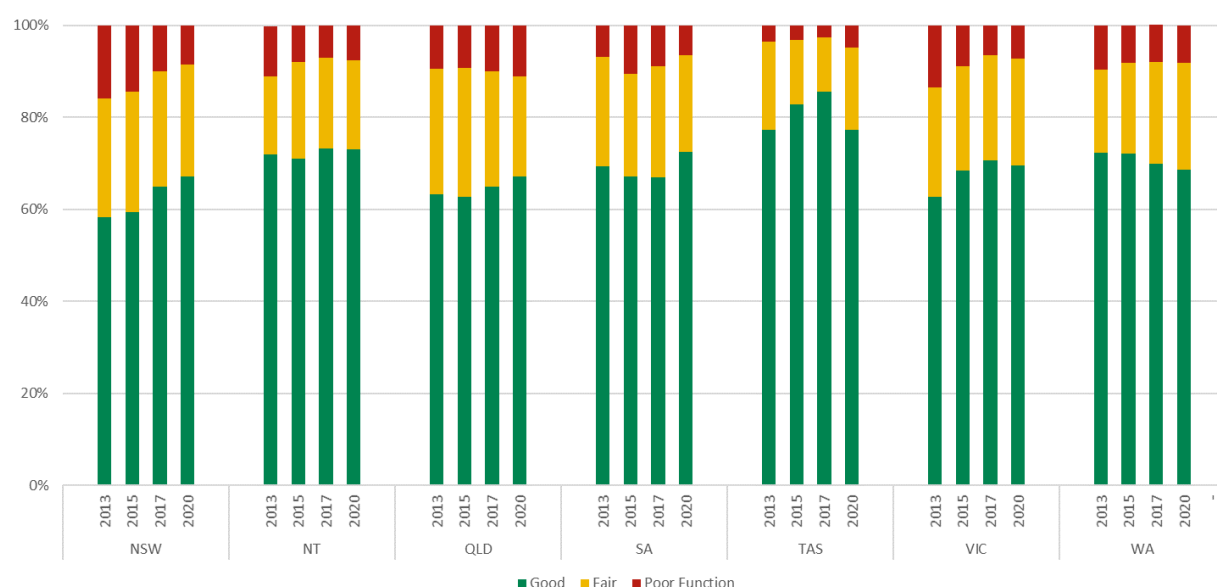


Figure 41 Function Trend by State & Territory

The proportion of asset replacement cost reported in poor function has improved in NSW and Victoria, the other States and Territory remain the same.

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

The desired, actual, and forecast trend indicating if councils have the right assets to meet community expectations is reported in Table 25.

Table 25 Asset Function - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	Forecast Trend	Comment
Function				9% (\$46bn) 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 \$46bn in poor function is high risk. Councils in rural remote areas have more than 20% of their asset replacement cost in poor function. Overall, the forecast demands on existing assets to meet community expectations and changing circumstances is expected to increase.

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 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 the capacity profile of their infrastructure assets as a proportion of replacement cost for each asset class as of 30th June 2020. The aggregated capacity result for each asset class from responding councils is shown below.

Table 26 Capacity by Asset Class, June 2020

Asset Class	Good	Fair	Poor	Sample Size	
				N°	%
Sealed Roads	75%	18%	7%	335	62%
Unsealed Roads	65%	27%	9%	276	51%
Concrete Bridges	73%	20%	7%	267	50%
Timber Bridges	57%	25%	18%	173	32%
Building & Facilities	64%	25%	11%	243	45%
Parks & Recreation	61%	31%	9%	221	41%
Stormwater	59%	28%	13%	233	43%
Water & Wastewater	73%	18%	8%	99	18%
Airports & Aerodromes	79%	17%	5%	79	15%

When we consider the estimated replacement cost of local government infrastructure assets with poor capacity in 2020, responding councils report:

- 7% (\$12.1bn) of sealed roads have poor capacity;
- 9% (\$ 2.2bn) of unsealed roads have poor capacity;
- 7% (\$ 1.6bn) of concrete bridges have poor capacity;
- 18% (\$ 307M) of timber bridges have poor capacity;
- 11% (\$ 9.6bn) of building & facilities have poor capacity;
- 9% (\$ 1.4bn) of parks & recreation assets have poor capacity;
- 13% (\$12.1bn) of stormwater assets have poor capacity;
- 8% (\$ 8.3bn) of water & wastewater assets have poor capacity; and
- 5% (\$ 142M) of airports & aerodromes have poor capacity.

The combined estimated replacement cost of local government infrastructure reported with poor capacity is \$48 billion.

Figure 42 shows the trend of local government infrastructure asset replacement cost in good, fair, poor capacity by asset class since 2013.

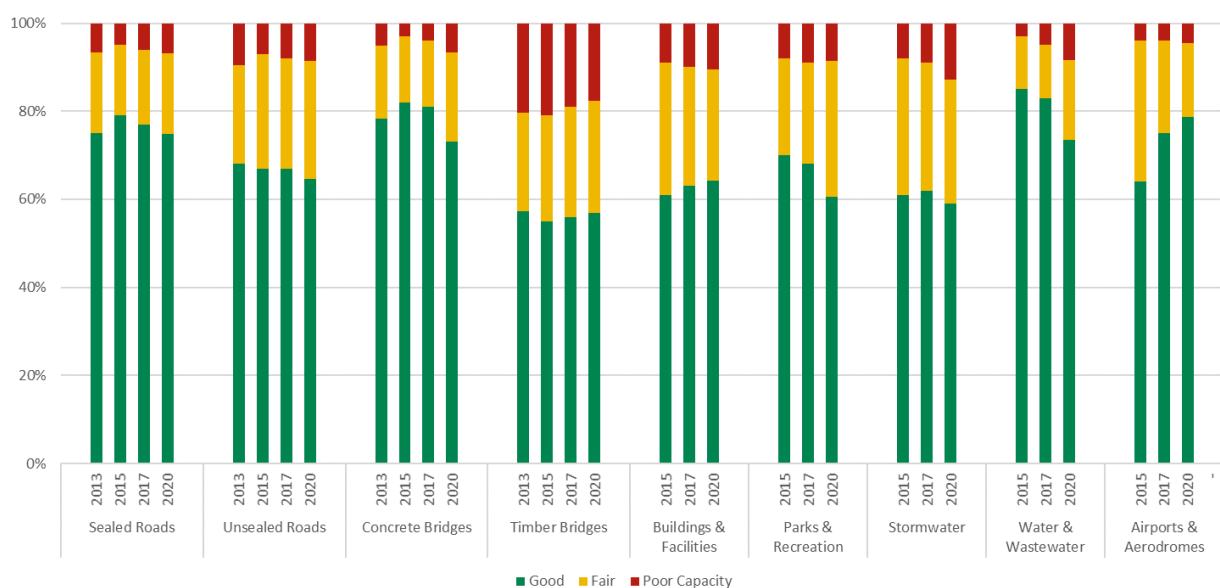


Figure 42 Capacity Trend by Asset Class

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 remained steady.

Responding councils report stormwater assets and water and wastewater assets have increased the proportion of asset replacement cost in poor capacity.

Figure 43 shows the trend of local government infrastructure asset replacement cost in good, fair, poor capacity by ACLG since 2013.

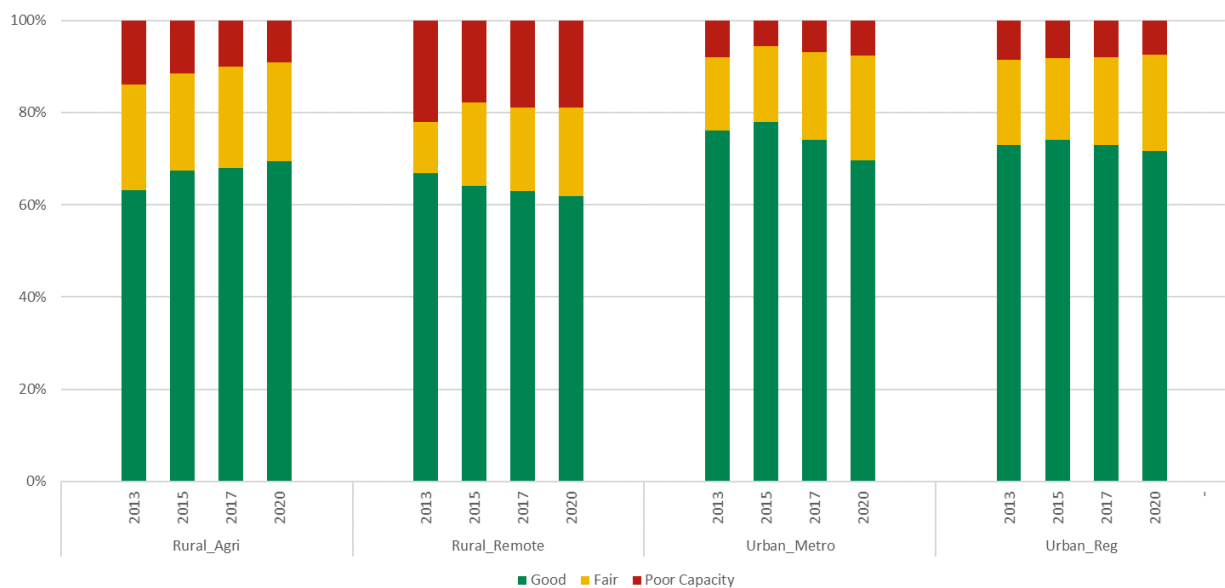


Figure 43 Capacity Trend by ACLG

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 asset replacement cost in poor capacity.

Figure 44 shows the trend of local government infrastructure asset replacement cost in good, fair, poor capacity by State and Territory since 2013.

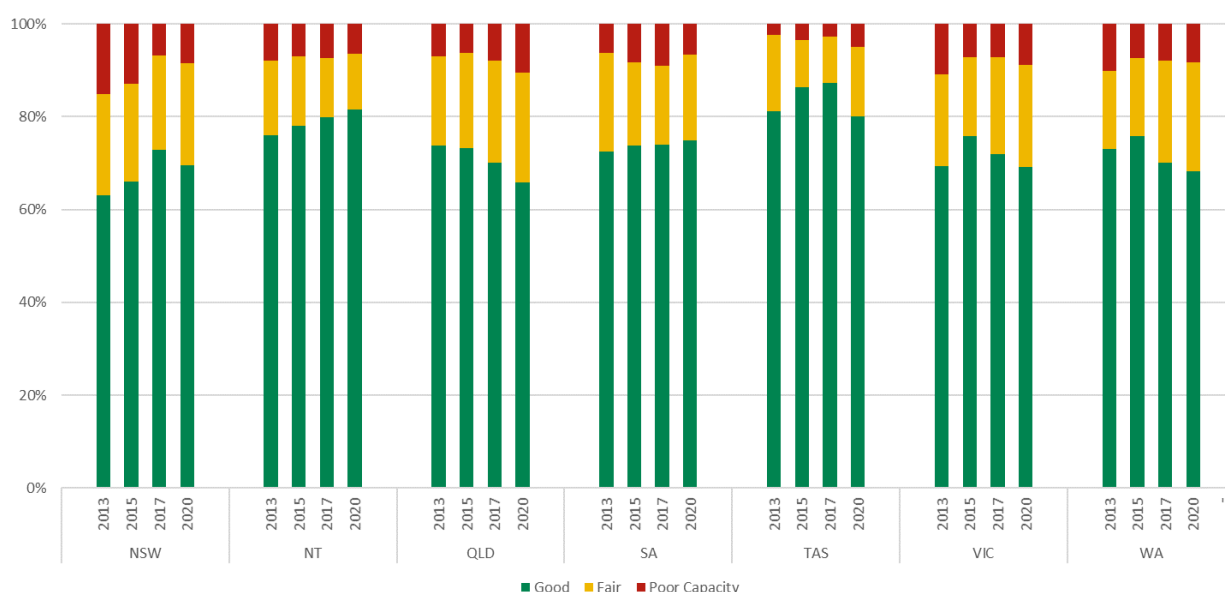


Figure 44 Capacity Trend by State & Territory

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.

The desired, actual, and forecast trend indicating the proportion of existing assets that are under or over utilised is reported in Table 27.

Table 27 Asset Capacity - Trends

Measure	Desired Trend	Actual Trend 2013 - 2020	Forecast Trend	Comment
Capacity				9% (\$48bn) of infrastructure assets have poor capacity and/or utilisation requiring augmentation to support demand and growth pressures. We do not know how much of the \$48bn in poor capacity is high risk. Councils in rural remote areas have close to 20% of their asset replacement cost in poor capacity. Overall, the forecast demands on the capacity thresholds of existing assets is expected to increase.

Findings

Local Government Infrastructure

Local government in Australia reported control of financial and non-financial assets valued at \$523bn in the financial year ending 2019-20. 65% of this asset value was attributed to public works infrastructure.

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

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

Roads account for 39% of the local government infrastructure asset portfolio nationally. In rural remote areas, roads can be more than 60% of the total infrastructure assets controlled by councils.

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 6.4% per annum** on average from \$209bn in 2011 to \$342bn in 2020.

At the end of June 2020, **the estimated replacement cost of local government infrastructure was \$533bn.**

This represents an investment of approximately \$21,000 for each of the 25.3 million people in Australia.

These **assets are being consumed at an estimated rate of 1.6% or \$7.7 billion per year**, equivalent to \$304 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 2020. 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 2020, suggesting on average, assets are expected to last more than 60-years.

It is worth noting however, **councils in the rural 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 aligned to the LTFP).

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 recent trends indicate planning capability not only varies across the sector but overall is in decline. There is a clear need to sustain and support capability levels, particularly for the small rural, regional, and remote councils.

Key findings include:

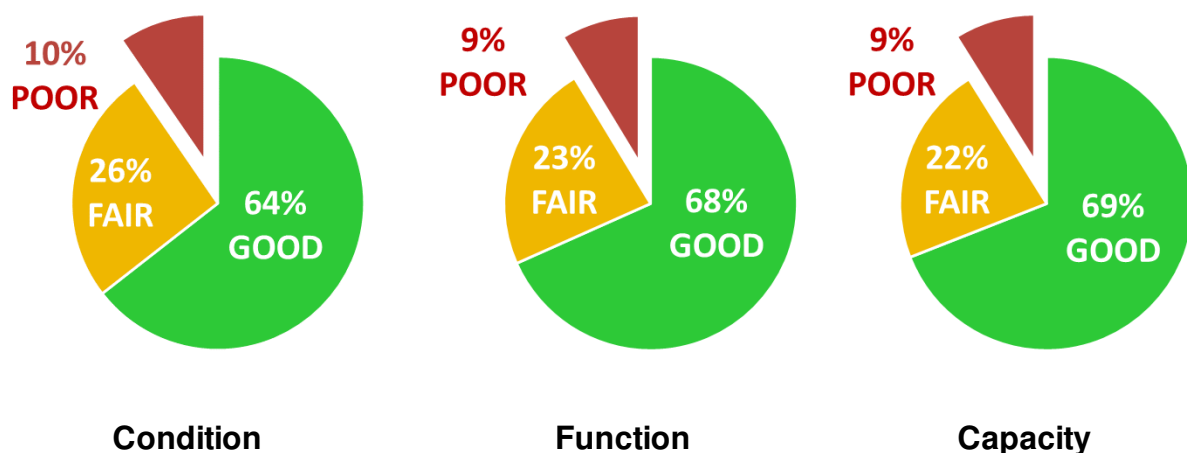
- The average proportion of responding councils who said they had asset management plans adopted had declined from 80% in 2015 to 67% in 2020. In other words, **one third of councils do not have an asset management plan adopted for their major assets**, or if they do, they are out of date.
- **86% of responding councils say they had adopted a long-term financial plan**, an increase from 72% in 2013.
- Of the 67% of councils who said they had asset management plans in place, only **two thirds of councils (66%) included the financial projections in the LTFP**.
- **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 the rural areas report a lower level of compliance**.

These findings indicate improvements are 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 declining trends are likely to exacerbate in the 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 at the start of the second decade of the 21st century. However, 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 rural areas of Australia.

Local Government Infrastructure Performance



Collectively, local government reports:

- 10% or \$51bn of community infrastructure assets are in poor condition.
- The forecast condition existing infrastructure assets is expected to remain the same.
- 9% or \$46bn of community infrastructure assets have poor function requiring upgrade in response to meet current or emerging local, regional, and state targets for safety, compliance, social, environmental, and economic performance.
- The forecast demands on existing assets to meet community expectations and changing circumstances is expected to increase.
- 9% or \$48bn 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 39% or \$204bn of the total infrastructure replacement cost. \$17.8bn are in poor condition, \$16.0bn have poor function and \$14.3bn have poor capacity.
- **Bridges** represent 4% or \$26bn of the total infrastructure replacement cost. \$1.6bn are in poor condition, \$1.8bn have poor function and \$1.9bn have poor capacity.
- **Buildings** represent 16% or \$91bn of the total infrastructure replacement cost. \$9.2bn are in poor condition, \$8.5bn have poor function and \$9.6bn have poor capacity.
- **Park & Recreation** assets represent 3% or \$16bn of the total infrastructure replacement cost. \$1.3bn are in poor condition, \$1.1bn have poor function and \$1.4bn have poor capacity.
- **Stormwater** assets represent 19% or \$94bn of the total infrastructure replacement cost. \$5.3bn are in poor condition, \$11.0bn have poor function and \$12.1bn have poor capacity. Stormwater assets are twice as likely to have function and capacity constraints than condition.

- **Water & Wastewater** assets represent 18% or \$99bn of the total infrastructure replacement cost. \$15.5bn are in poor condition, \$7.8bn have poor function and \$8.3bn have poor capacity.
- **Airport & Aerodromes** assets represent less than 1% or \$3bn of the total infrastructure replacement cost. \$414M are in poor condition, \$133M have poor function and \$142M have poor capacity.

Performance by ACLG

- Urban metro and urban regional area council's report the condition, function, and capacity of their infrastructure assets has improved.
- Councils in rural areas are reporting little change in the condition of their infrastructure overall.
- Councils in rural remote areas report around 20% of their asset replacement cost is in poor condition, function, and capacity.

Performance by State and Territory

- The proportion of asset replacement cost reported in poor condition has reduced in every State and Territory since 2013.
- The proportion of asset replacement cost reported in poor function and 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 condition, function, and capacity.

Data confidence

Less than 20% of councils say they base their infrastructure performance data on high quality evidence, such as reliable and up to date records, procedures, and/or the application of high quality investigative and analytic skills.

This suggests most councils continue to be base their data inputs on low to medium quality evidence, procedures, investigations, and analysis which is incomplete, unsupported, or extrapolated from a limited sample.

These are worrying observations as NSoA data, in theory, is sourced from the same systems that inform the integrated planning and reporting requirements including audited financial statements and annual reports. It raises questions on the effectiveness of the investment decisions being made when around 50% of councils state data is based on judgement or low-quality evidence and 30% say supporting data is based on moderate quality evidence, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample.

It is acknowledged the confidence in reporting community infrastructure condition ranked higher than the knowledge of, and confidence in, reporting the function and capacity metrics. Overall, it is fair to draw the conclusion that:

- The reliability of data inputs is unacceptably low.

This indicates that there continues to be lower levels of knowledge and confidence in:

- Planning for infrastructure that meets needs now and in the future; and
- Understanding whether local government is accommodating asset renewal and replacement needs in an optimal and cost-effective way from a timing perspective relative to the risks it is prepared to accept, and the service levels it wishes to maintain.

Local councils that have high level asset management reporting capability have high confidence regarding the integrity of the underlying data used by their asset management system. They can rely upon it to make informed decisions, highlight opportunities, identify, and manage risks.

Infrastructure Risk Management

While assets in poor condition, function, and capacity equate to tens of billions of dollars, what we do not know is how much of this cost is high risk. Understanding the value of assets outside acceptable risk tolerances is a crucial consideration when determining budget allocations.

For example, some assets in poor condition have a high consequence of failure (consider a bridge collapse), while other assets may have a much lower risk outcome if they failed (consider a low traffic volume road in poor condition or a failed piece of kerbing). If we are to communicate and advocate for safe and equitable outcomes, it is critical we understand the risk profile of affordable service levels for our communities. This is an important consideration and requirement in preparing an asset management plan.

A simple assessment of risks associated with an affordable service level scenario will identify those risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences deemed important. This is an area of asset management that cannot be ignored.

Financial sustainability remains a challenge

Connected but separate to the data analysis contained in this report, regular findings from the audit functions across several jurisdictions have consistently highlighted a notable regard to councils' compliance with asset management requirements prescribed by legislation.

For example,

1. A 2020 NSW Audit Office report on local government identified 21 high-risk matters relating to asset management and said the most common findings related to '*...deficiencies in asset revaluation processes, maintenance of information in asset management systems...*'.
2. A 2020 Queensland Audit Office Report found that financial sustainability continues to deteriorate with "*...25 councils are at a high risk of not being financially sustainable.*"
3. A 2019 inquiry into South Australian Local Government costs and efficiency by the South Australian Productivity Commission observed that the quality of the long-term financial and asset management plans across the sector was variable and that in some cases, up to date plans were not available on council websites.
4. A 2021 Victorian Auditor-General's Report concluded "*Councils cannot determine whether they are achieving value for money when maintaining their road network.*"
5. A 2021 Western Australian Office of the Auditor General report identified 19 councils did not report the Asset Renewal Funding Ratio, mostly for the 3 years, 2020, 2019 and 2018, in their annual financial report as required by the regulations.

Clearly, financial sustainability remains a challenge for the local government sector. Coupled with poor integration of long-term infrastructure and financial planning practices (and on the decline), there is cause for clear and proportionate action to be taken.

Concluding Remarks

The first decade of the 21st century saw an overwhelming pre-occupation with local government's financial health, especially the precarious position of small rural and remote councils, but also broader weaknesses in asset and financial management.

Since the implementation of nationally consistent asset management and financial planning and reporting frameworks in 2009, every State and Territory government has mandated the adoption of long-term asset management and financial plans.

Since this time, the value of the local government infrastructure assets has grown at a steady rate of 6.4% per annum on average from \$209bn in 2011 to \$342bn in 2020.

This investment has extended the life of ageing assets and replaced existing assets when deemed necessary in many instances. At the same time, local government has increased investment by acquiring new assets resulting in an improvement in the remaining service potential being reported.

Despite these trends, it is concerning that improvements in infrastructure planning have been lacking. Evidence suggests:

- **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.
- **The average proportion of asset management plans adopted across the nation is in decline**, suggesting many councils have further work to do to ensure their systems, processes and practices meet legislative requirements.
- **Improvements in linking AM Plans with strategic objectives and corporate budgets in the financial plan is needed**. Doing so will provide an understanding of the future funding requirements and enable the development of strategies to engage effectively with stakeholders and the community.

We know from experience, poor planning results in less than effective outcomes. Local government faces increasing risk exposure should incorporation of projected service level cost projections included in the long-term financial planning process remain at unacceptable levels especially if they continue to decline in line with the current trend.

It is therefore critical that asset management and long-term financial plans are updated annually. An annual update incorporated into budget deliberations ensures organisational resilience to deal with emerging and unplanned expenditure during times of disruption and changing circumstances is managed effectively.

It is clear, an ongoing process of continuous improvement for the local government sector is needed.

A simple ongoing program that audits asset and financial plans to understand their currency, update frequency and maturity would help ensure alignment with legislation and the National Framework.⁴⁰ 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.

Mayors, Councillors, and their Executives have a crucial leadership role in ensuring service delivery needs are sustainable and must be held accountable for doing so.

⁴⁰ In 2007, all levels of government agreed on three Frameworks to improve local government's financial sustainability and management of assets. Refer to the Local Government and Planning Ministers' Council (LGPMC) Frameworks.

This means ensuring appropriate and effective policies, strategies and plans are in place that demonstrate their communities are receiving value for money for the services they utilise.

It also means councils need to:

- **Establish service standards and cost options to be delivered from infrastructure assets during the planning phase; and**
- **Regularly review and determine the cost and risk impact of service level reductions (or increases) in consultation with the community.**

The establishment of agreed levels of service for the services supported by local government infrastructure is at the core of councils providing financially sustainable affordable services at an acceptable level of cost and risk to the community.

While progress has been made in legislating asset management and financial planning and reporting, improvements in understanding the integration of trade-off decisions on performance, cost and risk in the asset management and long-term financial plans is clearly needed.

Continued capacity building in each of the core competencies supporting the development and integration of long-term strategic planning processes is one way to achieve this outcome. This could include an emphasis on councils' role in understanding and accepting the cumulative consequences of decisions.

An emphasis on continual improvement on asset management and financial planning and reporting functions must therefore remain a focus, as this will underpin councils' ability to demonstrate resilient and sustainable services into the future.

Based on the findings, it is critical that appropriate and effective intervention is considered to strengthen councils':

- Strategic asset management planning capacity and capability.
- Infrastructure asset management plans that:
 - Present credible and reliable lifecycle forecasts; and
 - Report trade-offs on performance, cost, and risk
- Community engagement on affordable levels of service.

Aligning service level expenditure requirements and risk tolerances in the Asset Management Plan with what is afforded in the Long-term Financial Plan is an important indicator and key consideration.

This aligns with the many national and state inquiries into the status and prospects of local government in Australia undertaken in the first decade of the 21st century.

Experience has shown that with an effective legislative framework, a directive for good asset management practice, supportive clear and consistent guidance and regular monitoring and reporting, significant improvement in the financially sustainable performance and management of local government infrastructure assets is possible. Additional investment may not, in all instances, be required.

The following commentary offers some suggestions on areas for improvement.

Provide support to where it is needed most

Most councils have the financial capacity to at least reasonably adequately address future scenarios provided they have a sensible and informed conversation with their communities on costs and risks.

For councils' dependent on discretionary grants, planning and engaging effectively with stakeholders and community will be a critical factor for success. Councils need to manage community expectations regarding the delivery of services within the bounds of the revenue sources they have available.

Without supportive guidance there is likely to be an increasing inability to meet the future needs demanded by their communities. It is essential that confidence in lifecycle costing and customer engagement strategies improve thereby ensuring that affordable finance is allocated at the most appropriate time to mitigate risks to future service delivery.

- Provide targeted support to those councils that have demonstrated asset management and financial sustainability challenges.

This could be delivered by a government sponsored mentoring service utilising asset management planning and financial tools, templates, and specialist training that already exist in the industry.

We need skilled infrastructure asset managers

Resourcing the asset management system involves having skilled people capable of reporting the capacity of the organisation to meet its strategic and asset management objectives. The skill requirements of the asset manager have changed significantly in recent times, requiring not just technical expertise but strategic and financial planning insight, and stakeholder engagement knowledge and much more.

Post pandemic challenges and a record investment in infrastructure projects aside, the shortage of skilled asset managers is a real issue for local government. It is necessary to consider:

- Developing ongoing asset management capacity building programs that assist councils in meeting and maintaining at least core level asset management maturity.
- Raising awareness of the importance of sustainable asset management amongst elected representatives and senior management within the sector.
- Enhancing collaboration within the sector to develop specialised infrastructure management training programs for local government practitioners.
- Investigating innovative solutions to address the skills shortage within the asset management discipline that promotes sector wide collaboration.

Shared resources may be appropriate where gaps exist for those councils who face financial, physical and location constraints. Success is dependent on having an effective governance structure in place.

Reliability of data inputs need to improve

Fragmented systems combined with low data confidence doesn't bode well for ensuring an affordable and sustainable future is possible. If we are to manage and provide services from infrastructure in a financially sustainable way, we need to take a consistent approach nationally.

An obvious step would be to reinvigorate the scalable and nationally consistent framework that all the State and Territory local government planning ministers all agreed to in 2007.

Need for audit and follow up

Aspects of asset management should be subjected to audit. Appropriate audit parameters ensure a level of assurance that asset management and financial planning information is reliable and compliant with legislated requirements.

A simple ongoing program that reports the asset and financial plans currency, update frequency and alignment would help ensure councils are meeting the legislative requirements. This need not be costly or complex or require additional auditing analytical skills and could easily be undertaken by each council's appointed external auditor adopting a simple and pragmatic approach.

- Develop an ongoing audit program that tests the existence, currency and alignment of the asset management and financial plans.
- Test if the:
 - Asset Management and Financial Plans are adopted within 12-months of each general election;
 - Forecast expenditure needs identified in the adopted Asset Management Plan are included in the Long-term Financial Plan.

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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



All Facilities

Welcome to the NSoA Community Infrastructure Report data portal for 2020

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 and
- Airports & Aerodromes

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.

Your assistance in updating your organisation's data is greatly appreciated. Click here for answers to some [Frequently Asked Questions](#).

Or, should you have any questions or require assistance accessing your organisation's data contact admin@ipwea.org.

[Continue..](#)

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



All Facilities

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

A Sample Council

Complete each area and update the Status to show In Progress, Completed or Signed Off /No Assets in this Category.

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](#).

National State of the Assets Status Report

Click on the download doc button below to download a report of the National State of the Assets values entered for your organisation. The report can be run at any time.





NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card

Assets

A Sample Council	Area (square km):	1,500	Population:	250,000
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Asset Knowledge & Capability

Status of Asset Management Plan development

Are asset management plans in place for:

Roads

Buildings & Facilities

Parks & Recreation

Stormwater

Water & Wastewater

Airport & Aerodromes

Out of Date

No

Out of Date

No

Not Applicable

Not Applicable

Status of Long Term Financial Plan development

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

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

Roads

Buildings & Facilities

Parks & Recreation

Stormwater

Water & Wastewater

Airport & Aerodromes

Yes

No

No

No

No

Not Applicable

Not Applicable

Back

Status

Completed

Save

NATIONAL STATE OF THE ASSETS

A Local Government Infrastructure Report Card



All Fields

A Sample Council	Area (square km):	1,500	Population:	250,000
			Replacement Cost per capita:	\$ 712

Sealed Roads

Replacement Cost	178,192,000	Functional hierarchy in place.
Depreciable Amount	146,555,000	
Depreciated Replacement Cost	117,925,000	
Annual Depreciation	2,446,000	

Condition

% In Condition 1 & 2 Good

% In Condition 3 Fair

% In Condition 4 & 5 Poor

Confidence

High

% TOTAL

Function

% In Function 1 & 2 Good

% In Function 3 Fair

% In Function 4 & 5 Poor

Confidence

Low

% TOTAL

Capacity/Utilisation

% In Capacity 1 & 2 Good

% In Capacity 3 Fair

% In Capacity 4 & 5 Poor

Confidence

Low

% TOTAL

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 asset?
- **Function** Fit for purpose ...Is it the right asset providing the service?
- **Capacity** Utilisation ...Do we need more or less of these assets?

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

 Good to Very Good  Fair  Poor to Very Poor

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 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 IIMM, IPWEA 2015, 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-Hastings Council	NSW	URL	✓
Junee Shire Council	NSW	RAL	✓	Port Stephens Council	NSW	URM	✓
Kempsey Shire Council	NSW	URS	✓	Queanbeyan-Palerang Regional Council	NSW	URM	✓
Kiama Municipal Council	NSW	URS	✓	Randwick City Council	NSW	UDV	✓
Ku-ring-gai Council	NSW	UDL	✓	Richmond Valley Council	NSW	URS	✓
Kyogle Council	NSW	RAL	✓	Shellharbour City Council	NSW	URM	✓
Lachlan Shire Council	NSW	RAL	✓	Shoalhaven City Council	NSW	URL	✓
Lake Macquarie City Council	NSW	URV	✓	Singleton Council	NSW	URS	✓
Lane Cove Municipal Council	NSW	UDM	✓	Snowy Monaro Regional Council	NSW	URS	✓
Leeton Shire Council	NSW	RAV	✓	Snowy Valleys Council	NSW	RAL	✓
Lismore City Council	NSW	URM	✓	Strathfield Municipal Council	NSW	UDM	✓
Liverpool City Council	NSW	UFV	✓	Sutherland Shire Council	NSW	UDV	✓
Liverpool Plains Shire Council	NSW	RAL	✓	Tamworth Regional Council	NSW	URM	✓
Lockhart Shire Council	NSW	RAM	✓	Temora Shire Council	NSW	RAL	✓
Maitland City Council	NSW	URM	✓	Tenterfield Shire Council	NSW	RAL	✓
Mid Western Regional Council	NSW	URS	✓	The Hills Shire Council	NSW	UFV	✓
MidCoast Council	NSW	URL	✓	Tweed Shire Council	NSW	URL	✓
Moree Plains Shire Council	NSW	RAV	✓	Upper Hunter Shire Council	NSW	RAV	✓
Mosman Municipal Council	NSW	UDS	✓	Upper Lachlan Shire Council	NSW	RAL	✓
Murray River Council	NSW	RAL	✓	Uralla Shire Council	NSW	RAL	✓
Murrumbidgee Council	NSW	RAM	✓	Wagga Wagga City Council	NSW	URM	✓
Muswellbrook Shire Council	NSW	RAV	✓	Walcha Council	NSW	RAM	✓
Nambucca Shire Council	NSW	RAV	✓	Walgett Shire Council	NSW	RAL	✓
Narrabri Shire Council	NSW	RAV	✓	Warren Shire Council	NSW	RAM	✓
Narrandera Shire Council	NSW	RAL	✓	Warrumbungle Shire Council	NSW	RAV	✓
Narromine Shire Council	NSW	RAL	✓	Waverley Council	NSW	UDM	✓
North Sydney Council	NSW	UDM	✓	Weddin Shire Council	NSW	RAM	✓
Northern Beaches Council	NSW	UDV	✓				
Oberon Council	NSW	RAL	✓				
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 Government Council	NT	RTM	✓	Central Highlands Regional Council	QLD	URM	✓
Darwin City Council	NT	UCC	✓	Charters Towers Regional Council	QLD	RAV	✓
East Arnhem Shire Council	NT	RTL	✓	Cherbourg Aboriginal Shire Council	QLD	RTM	✓
Katherine Town Council	NT	URS	✓	City of Gold Coast	QLD	URV	✓
Litchfield Shire Council	NT	UFS	✓	Cloncurry Shire Council	QLD	RTL	
Macdonnell Regional Council	NT	RTL		Cook Shire Council	QLD	RTL	✓
Roper Gulf Regional Council	NT	RTL	✓	Croydon Shire Council	QLD	RTX	✓
Tiwi Islands Shire Council	NT	RTM		Diamantina Shire Council	QLD	RTX	✓
Victoria Daly Regional Council	NT	RTL		Doomadgee Aboriginal Shire Council	QLD	RTM	
Wagait Shire Council	NT	RTS	✓	Douglas Shire Council	QLD	RAV	✓
West Arnhem Regional Council	NT	RTL	✓	Etheridge Shire Council	QLD	RTS	✓
West Daly Regional Council	NT	RTL	✓	Flinders Shire Council	QLD	RAS	✓
Aurukun Shire Council	QLD	RTM		Fraser Coast Regional Council	QLD	URL	✓
Balonne Shire Council	QLD	RAM	✓	Gladstone Regional Council	QLD	URM	✓
Banana Shire Council	QLD	RAV	✓	Goondiwindi Regional 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 Regionals 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	SA	RAL	
City of Victor Harbor	SA	URS	✓	Lucindale Council	SA		
City of West Torrens	SA	UDM	✓	Northern Areas Council	SA	RAM	
Clare and Gilbert Valleys Council	SA	RAL		Port Augusta City Council	SA	URS	✓
Coorong District Council	SA	RAL		Port Pirie Regional Council	SA	RAV	✓
District Council of Barunga West	SA	RAM		Regional Council of Goyder	SA	RAM	
District Council of Ceduna	SA	RAM	✓	Renmark Paringa Council	SA	RAL	✓
District Council of Cleve	SA	RAS	✓	Roxby Downs Council	SA	URS	✓
District Council of Coober Pedy	SA	URS		Rural City of Murray Bridge	SA	URS	✓
District Council of Copper Coast	SA	RAV	✓	Southern Mallee District Council	SA	RAM	✓
District Council of Elliston	SA	RAS	✓	Tatiara District Council	SA	RAL	✓
District Council of Franklin Harbour	SA	RAS	✓	The Barossa Council	SA	UFS	✓
District Council of Grant	SA	RAL	✓	Town of Gawler	SA	UFS	✓
District Council of Karoonda East Murray	SA	RAS	✓	Town of Walkerville	SA	UDS	✓
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-Balingup	WA	RAL	
City of Melville	WA	UDL	✓	Shire of Dowerin	WA	RAS	✓
City of Nedlands	WA	UDS	✓	Shire of Dumbleyung	WA	RAS	
City of Perth	WA	UCC	✓	Shire of Dundas	WA	RTM	✓
City of Rockingham	WA	UFL	✓	Shire of East Pilbara	WA	RTL	
City of South Perth	WA	UDM	✓	Shire of Esperance	WA	RAV	✓
City of Stirling	WA	UDV	✓	Shire of Exmouth	WA	RTM	✓
City of Subiaco	WA	UDS	✓	Shire of Gingin	WA	RAM	✓
City of Swan	WA	UFL	✓	Shire of	WA	RAS	✓
City of Vincent	WA	UDM	✓	Gnowangerup	WA	RAS	✓
City of Wanneroo	WA	UFV	✓	Shire of Goomalling	WA	RAS	✓
Shire of Ashburton	WA	RTL	✓	Shire of Halls Creek	WA	RTL	✓
Shire of Augusta-Margaret River	WA	RAL	✓	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	WA	RAS	
Shire of Bridgetown-Greenbushes	WA	RAM	✓	Shire of Katanning	WA	RAM	
Shire of Brookton	WA	RAS		Shire of Kellerberrin	WA	RAS	✓
Shire of Broome	WA	RTL	✓	Shire of Kent	WA	RAS	
Shire of Broomehill - Tambellup	WA	RAS	✓	Shire of Kojonup	WA	RAM	
Shire of Bruce Rock	WA	RAS	✓	Shire of Kondinin	WA	RAS	✓
Shire of Capel	WA	RSG	✓	Shire of Koorda	WA	RAS	
Shire of Carnamah	WA	RAS		Shire of Kulin	WA	RAS	✓
Shire of Carnarvon	WA	RAL		Shire of Lake Grace	WA	RAS	✓
Shire of Chapman Valley	WA	RAS		Shire of Laverton	WA	RTS	✓
Shire of Chittering	WA	RAM		Shire of Leonora	WA	RTM	
Shire of Christmas Island	WA	RTM		Shire of Manjimup	WA	RAL	✓
Shire of Cocos (Keeling) Islands	WA	RTS	✓	Shire of Meekatharra	WA	RTM	
Shire of Collie	WA	RAL	✓	Shire of Menzies	WA	RTX	✓
Shire of Coolgardie	WA	RTL	✓	Shire of Merredin	WA	RAM	
Shire of Coorow	WA	RAS	✓	Shire of Mingenew	WA	RAS	
Shire of Corrigin	WA	RAS	✓	Shire of Moora	WA	RAM	
Shire of Cranbrook	WA	RAS	✓	Shire of Morawa	WA	RAS	
Shire of Cuballing	WA	RAS	✓	Shire of Mount Magnet	WA	RTM	✓
Shire of Cue	WA	RTX	✓	Shire of Mt Marshall	WA	RAS	✓
Shire of Cunderdin	WA	RAS		Shire of Mukinbudin	WA	RAS	✓
Shire of Dalwallinu	WA	RAS	✓	Shire of Mundaring	WA	UFM	✓
Shire of Dandaragan	WA	RAM		Shire of Murchison	WA	RTX	✓
Shire of Dardanup	WA	RSG	✓	Shire of Murray	WA	RSG	✓
Shire of Denmark	WA	RAL	✓	Shire of Nannup	WA	RAS	✓
Shire of Derby/West Kimberley	WA	RTL		Shire of Narembreen	WA	RAS	
				Shire of Narrogin	WA	RAS	✓
				Shire of	WA	RTM	✓
				Ngaanyatjarraku	WA	RAM	✓
				Shire of Northam	WA	RAM	✓
				Shire of	WA	RAM	
				Northampton	WA	RAM	

Council	State Territory	ACLG	NSoA	Council	State Territory	ACLG	NSoA
Shire of Nungarin	WA	RAS		Shire of Wickepin	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					