



CITY OF  
TEA TREE GULLY  
*Naturally Better*

# 2020 Open Space Asset Management Plan

*Asset management plans (AMPs) are used to guide the planning, construction, maintenance and operation of our infrastructure.*

These plans are key components of our Long-Term Financial Plan and include detailed information about each asset and define which services will be provided, how they will be provided and what funding is required to cost-effectively deliver them over a 10-year period.

For more information call 8397 7444  
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# Introduction

*The City of Tea Tree Gully's open space assets provide valuable services that are part of our community's everyday life. They have been established over a long period of time and must be properly maintained and developed to ensure continued community benefit.*

The primary purpose of our open space assets are to provide fun and engaging leisure and recreational areas as well as vibrant open spaces for the City of Tea Tree Gully community.

This asset management plan is used to guide the planning, construction, maintenance and operation of Council's open space assets and infrastructure.

It details our approach to managing our open space assets, future demand and risk, compliance with regulatory requirements. It also identifies the estimated capital expenditure necessary to provide open space infrastructure and associated services to the community over a 10-year period.

Our goal in managing our open space assets is to meet the required service levels in the most cost-effective manner for present and future customers. This means timing infrastructure renewals before unplanned maintenance costs become excessive, but not too soon that assets are renewed before it is really needed.

Our open space assets include:

- Playgrounds – play equipment, soft fall, outdoor fitness equipment and associated shade sails and structures
- Park furniture – park benches and seats, picnic tables, barbecues, bin infrastructure, bike stands and drinking fountains
- Park shelters and structures – sporting and picnic shelters and miscellaneous structures
- Playing fields and sports courts – football and soccer ovals, tennis, basketball and netball courts, associated sporting goals/nets
- Irrigation – irrigation systems, irrigation controllers, water meter services

- Tree screens – vegetative screens along a roadway that provide an aesthetic appeal, screen the road and provide privacy to the adjoining properties.

The total current replacement cost of these assets is about \$60.3 million.

Community satisfaction is high with open space assets and associated service delivery and has remained consistently high in previous years.

Approximately \$4.03 million is required each year to maintain, operate and renew our open space assets in accordance with our current service levels.

Actual annual expenditure will vary from year to year as we acquire more assets, build new assets and undertake renewal works.

This asset management plan should be read in conjunction with Council's key strategic management, planning and policy documents, including our Asset Management Policy, Long-Term Financial Plan and Annual Business Plan and Budget.

Collectively, these plans support the achievement of our vision for our City – *A thriving community that enjoys a quality lifestyle that values its people and natural environment.*

This plan is reviewed annually, with a full update completed every four years.

We incorporate community feedback into our Asset Management Plans through information provided via our annual community survey, the review of common customer requests, and formal community engagement.

Visit [cttg.sa.gov.au/amp](http://cttg.sa.gov.au/amp) to view all of our asset management plans.



# Open space profile

## Asset quantity

94

Playing fields and courts

122

Playground sites (includes 4 nature play areas and 3 outdoor fitness equipment zones)

226

Irrigated sites

41

Playground shade structures

1,520

Park furniture items

3

Skate parks

80

Park shelters

5

BMX tracks

344

Tree screens



- Tree screens – \$18.2 million
- Playing fields and courts – \$16.0 million
- Irrigation – \$13.7 million
- Playgrounds – \$8.9 million
- Park furniture – \$1.6 million
- Park shelters – \$1.1 million
- Recreational infrastructure – \$0.8 million

# Service levels

The current open space service levels are driven by Council's strategic plan and vision for the City, legislative requirements and community research.

## Service level drivers

### Community insight

Our annual Community Survey along with customer request data allows us to understand resident satisfaction with our asset management program and provides guidance for continuous improvement.

While suggested improvements may not directly relate to the maintenance or renewal of an asset, they can influence the use of an asset, which can impact its serviceable life.

### Strategic and organisational goals

Our vision for a thriving community with a quality lifestyle that values its people and natural environment is the foundation of our strategic and organisational goals.

Council's Strategic Plan 2025<sup>1</sup> articulates the vision and aspirations for our community, and details objectives for these aspirations. The objectives listed below are linked to the Open Space Asset Management Plan.

#### Community

- People feel a sense of belonging, inclusion and connection with places, spaces and the community.
- There are opportunities for people to volunteer, give back and share their skills with others in the community.
- Our services are accessible to all and respond to changing community needs.

### Environment

- Environmentally valuable places and sites that are flourishing and well cared for.
- Our consumption of natural resources is minimised by reducing, reusing and recycling products and materials, and using renewable resources.
- Our tree canopy is increasing.

### Places

- Streets, paths, open spaces and parks are appealing, safe and accessible.
- Opportunities exist to express and experience art and culture.
- Infrastructure and community facilities are fit for purpose, constructed using sustainable practices and well maintained.

### Leadership

- Planning considers current and future community needs.
- Decision making is informed, based on evidence and consistent.
- Major strategic decisions are made after considering the views of our community.

## Legislative requirements

There are many legislative requirements relating to the management of assets. These include:

- *Local Government Act 1999*
- *Disability Discrimination Act 1992*
- *Environment Protection Act 1993*
- *Native Vegetation Act 1991*
- *Aboriginal Heritage Act 1988*
- *Animal and Plant Control Act 1986*

<sup>1</sup> Strategic Plan 2025 - [cttg.sa.gov.au/strategicplan](http://cttg.sa.gov.au/strategicplan)

- *Australian Standards*
  - *AS/NZ Risk Management 4360-2004*
  - *HB 246:2010 Guidelines for managing risk in sports and recreation organisations*
- *State government guides and plans (universal design and inclusive play).*

## Service level performance

The performance of our assets are measured in two ways:

### Customer service levels

How the customer receives or experiences the service. The measures used in this asset management plan are quality, function and safety.

### Technical service levels

What we do to deliver the service.

The current open space asset service levels are driven by Council's Strategic Plan 2025 and vision for the City, legislative requirements, community research and resources available within the current Long-Term Financial Plan.

These service levels will be used to:

- Clarify the level of service customers expect.
- Identify the work required to meet these service levels.
- Identify the costs and benefits of the services offered.
- Enable Council and customers to analyse the quality, function and safety of open space assets based on the existing service levels.
- Determine the impact (primarily financial) of increasing or decreasing the service levels.

## Technical service levels

Supporting the customer service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Operations** – the regular activities to provide services (e.g. tree pruning, irrigation system testing, etc.)
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. patching damaged playground rubber surfacing, replace broken seat slat etc.)
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally (e.g. playground replacement, resurfacing sporting courts surfaces, etc.)
- **Upgrade/New** – the activities to provide a higher level of service (e.g. replace sub-surface irrigation with a sprinkler system) or a new service that did not exist previously (e.g. new picnic setting and shelter).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.

Currently, a review of technical service levels relating to open space is being undertaken, as defined in Council's Open Space Policy, and as such, has not been included into this review of the Open Space Asset Management Plan.

## Customer service levels

### Playground service levels

| Performance measure   | Service level   | Performance measure process   | Current performance   | Performance target   |
|---|---|---|---|--|
| <b>Quality</b><br><i>How good is the service, including its condition and quality</i> | Provide contemporary playgrounds and opportunities for play in accordance with the Council's Playground Guide   | Overall provision of playgrounds and allocation of equipment or play opportunities to be provided in accordance with Council's Playground Guide | Comparison between the findings of the 2019–2020 Playground Gap Analysis data and current provision   | All identified gaps to be addressed or considered by 2024  |
| <b>Function</b><br><i>How suitable is the service for its intended purpose</i>        | Provide appealing, modern and functional playground and opportunities for play which challenge and aid in the development of the user and provide play opportunities for all ages and abilities | Playground to be no greater than 25 years old   | Annual replacement program to consider replacement of playground based on age, remaining useful life, safety, aesthetic appeal and play value                             | Playground to be replaced or considered for replacement prior to reaching 25 years old           |
|   |   | Playgrounds are to be developed in accordance with Council's Playground Guide and based on the associated playground hierarchy                  | Annual improvement plan considers the upgrading or renewing of existing playgrounds to better address and reflect the needs of our community both now and into the future | All playgrounds to meet the development levels of service, based on their classification by 2024 |
| <b>Safety</b><br><i>How safe is the asset for users of the service</i>                | Provide safe playgrounds and play opportunities   | Playgrounds to be managed in accordance with the requirements of Australian Standard 4685 0:2017  | Measured through Customer Request Management system   | All playgrounds to be compliant to all relevant standards with only minor defects allowable      |

## Park furniture, park shelters and structures service levels

| Performance measure   | Service level   | Performance measure process  | Current performance  | Performance target   |
|---|---|--|--|--|
| <b>Quality</b><br><i>How good is the service, including its condition and quality</i> | Provide park furniture and park shelters at an appropriate standard free of major defects   | Overall condition rating scores compiled following open space asset audit  | Measured through Customer Request Management system and assessment against open space asset audit data | Minimum condition 3 (fair condition)<br>Desirable network average 2 (good condition) (on 1 to 5 scale) |
| <b>Function</b><br><i>How suitable is the service for its intended purpose</i>        | Park furniture and park shelters are to be provided in accordance with the development levels of service for open space category and associated quality standard which has been applied | Assessment against existing data and compiled following the open space asset audit                               | Assessment against existing data and compiled following the open space asset audit                     | 80% conformance in the provision of park furniture and park shelters within all parks by 2024          |
| <b>Safety</b><br><i>How safe is the asset for users of the service</i>                | Provide park furniture and park shelters which are safe for use   | Number of customer service requests relating to damaged or risks identified with park furniture or park shelters | Measured through Customer Request Management system and assessment against open space asset audit data | Reduction in customer requests over time. Hard to predict based upon sporadic vandalism events         |

### Playing fields and sports courts service levels

| Performance measure   | Service level   | Performance measure process  | Current performance   | Performance target   |
|---|---|--|---|--|
| <b>Quality</b><br><i>How good is the service, including its condition and quality</i> | Provide playing surfaces, both natural and artificial, to an appropriate standard for their intended use and free of defects                                  | Overall condition rating scores compiled following sporting court audit in June 2019 | Measured through Customer Request Management system and feedback through the recreational services team                 | Minimum condition 3 (fair condition)<br>Desirable network average 2 (good condition) (on 1 to 5 scale) |
| <b>Function</b><br><i>How suitable is the service for its intended purpose</i>        | Meets user requirements for accessibility and functionality   | Number of customer service requests relating to accessibility and usability/function | Measured through Customer Request Management system and feedback through the recreational services team                 | Reduction in customer requests over time and requests from lessee groups                               |
| <b>Safety</b><br><i>How safe is the asset for users of the service</i>                | Maintain quality playing surfaces, both natural and artificial, to an appropriate standard for their intended use and free of defects that could cause injury | Inspect and assess the quality and safety of playing fields and sports courts        | Initial inspection performed in October 2017, with a consultant audit for formal/competition sports courts in June 2019 | Continue to inspect and assess playing fields and sports courts (proposed 2021 timeline)               |

## Irrigation service levels

| Performance measure   | Service level  | Performance measure process  | Current performance   | Performance target   |
|---|--|--|---|--|
| <b>Quality</b><br><i>How good is the service, including its condition and quality</i> | Provide operationally sufficient irrigation to establish and maintain turf and garden beds   | Number of customer requests relating to the quality and amenity of irrigated areas                           | Measured through Customer Request Management system and audit/condition assessment                                | Minimum condition 3 (fair condition)<br>Desirable network average 2 (good condition) (on 1 to 5 scale)                       |
|   | Provide irrigation systems that require minimal maintenance and can be centrally controlled by Council staff   | Number of maintenance items identified through scheduled irrigation system checks                            | Repairing maintenance issues when they arise.<br>Continue to install central controllers to irrigation systems    | Reduce the amount of maintenance required, and determine the optimal time to renew an asset rather than frequently repairing |
| <b>Function</b><br><i>How suitable is the service for its intended purpose</i>        | Meet user requirements (leased sites) and the development levels of service defined by the open space classification and quality standard which has been applied to the site | Auditing against the relevant open space classification and quality standard                                 | % compliance against current classification (e.g. only irrigating reserves that meet the required classification) | >80% compliance with quality standard  |
| <b>Safety</b><br><i>How safe is the asset for users of the service</i>                | Operate and maintain irrigation systems that provide safe and quality sporting surfaces for users  | Monthly independent risk assessment of sports field condition e.g. surface condition, surface water drainage | Measured through outcome of risk assessments  | Reduction in identified risks relating to safety   |

### Tree screens service levels

| Performance measure   | Service level   | Performance measure process  | Current performance   | Performance target   |
|---|---|--|---|--|
| <b>Quality</b><br><i>How good is the service, including its condition and quality</i> | Maintain all tree screens currently established across the City   | Overall condition rating and functionality score   | Measured through Customer Request Management system and audit/condition assessment for tree screens               | Maintain or improve overall condition rating score of all tree screens through operational maintenance and capital works programs respectively |
| <b>Function</b><br><i>How suitable is the service for its intended purpose</i>        | Meets user requirements, maintains the intended purpose of screening properties in accordance with the development levels of service defined by the open space classification and quality standard which has been applied to the site | Auditing against the relevant open space classification and quality standard                                       | % compliance against current classification   | >80% compliance with quality standard  |
| <b>Safety</b><br><i>How safe is the asset for users of the service</i>                | Screens remain in good condition free of protruding branches and vegetation and provide a visual screening to adjoining properties  | Number of Customer Service requests relating to safety<br><br>Three monthly visual assessments of all tree screens | Measured through Customer Request Management system<br><br>Measured through outcome of routine visual inspections | Reduction in customer requests over time<br><br>Reduction in identified risks and reactive maintenance   |



# Future demand

Population growth, social and technology changes can impact community demand for services. This section looks at these trends and examines the strategies required to address them.

## Demand drivers

Drivers affecting demand include:

- Population change
- Demographic change
- Customer preferences and expectations
- Economic factors
- Seasonal factors
- Environmental awareness.

## Demand forecasts

### Demographics

The median age of City of Tea Tree Gully residents is 41 years. The median age has increased from 39 in 2011 and 37 in 2006. In addition to an aging population, we have also seen a slight decrease in couples with children and an increase in couples with no children.

In order to accommodate the needs of people with a range of mobility levels, there is a need to plan and provide for these needs.

This has been addressed through the development of a Disability Access and Inclusion Plan (DAIP) 2020-2024.

The DAIP was developed to support and enhance our ongoing commitment to providing inclusive and equitable access to our services and facilities to people living with disabilities, their families and carers. The key themes of the DAIP are:

1. Inclusive communities for all
2. Leadership and collaboration
3. Accessible communities
4. Learning and employment.

The themes from this plan will be integrated in Council's decision making processes similar to existing strategic and organisational goals.

### Population

The City of Tea Tree Gully's population is forecasted to grow to 101,648 by 2030 (in 2016 – the last census year – the population was 99,153). Long-term, this rise in population may result in increased open space asset usage, which may shorten the useful life of our assets and increase maintenance costs. Examples of this includes an increase in the utilisation of sporting facilities where turf surfaces deteriorate quicker and also expansion in services such as tennis courts being constructed to meet user demand.

### Consumer preferences and expectations

As the City continues to grow and delivers infrastructure and services to achieve our strategic goals, a new standard of service delivery will need to develop over time. From previous developer contributions many tree screens were established in the northern suburbs of the Council region through the 1980s and 1990s and have become a much valued feature of those areas.

These assets are valued by the community and the expectation is that Council will continue to maintain them in a functional and aesthetically pleasing manner.

As Council delivers projects such as streetscape upgrades to reinvigorate areas of the City, consumer demand for these services grows.

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### **Economic factors**

Rate capping, if it were to occur, also has the potential to affect the way City of Tea Tree Gully delivers services to the community. If there is a funding shortfall to manage existing assets to the agreed levels of service, the level of service will likely need to decrease or priorities be re-established. A shortfall could also result in the inability to provide new assets or upgrades desired by the community or required to meet community needs.

### **Environmental awareness**

Increasing the tree canopy area within the City is a key strategic objective and is part of our Strategic Plan 2025 and 2020 vision. Tree canopy coverage was approximately 29% in 2018, and is set to increase with the continuation of street tree planting in the City and retention of trees. Tree retention and canopy increase is managed in accordance with our Tree Management Policy - [cttg.sa.gov.au/tree-management-policy](http://cttg.sa.gov.au/tree-management-policy)

# Demand management plan

*Demand for new services will be met through the management of existing assets, the upgrade and renewal of assets, the provision of new assets and demand management practices.*

| Asset types       | Demand driver          | Demand management plan  |
|-------------------|------------------------|---|
| Open space assets | Population and density | <p>An increasing population will drive demand for more open space and change how open spaces and open space assets are used.</p> <p>A decrease in private green spaces due to housing development will mean increased demand for community open spaces and open space assets. Examples of this can be seen throughout the Modbury Precinct.</p> <p>An increasing average age of population will see variations in asset provision requirements and utilisation of open space assets.</p> <p>Council will need to continually review development and demographic data to ensure any new or upgrade works consider these requirements during the planning and design phase or include provision for future development within the design.</p> |
|                   | Recreation trends      | <p>Currently some open space assets are deteriorating due to over-utilisation and supporting infrastructure is also approaching capacity or is itself above capacity.</p> <p>Council will need to continue to review and refine provisional levels of service across all open space assets – to ensure community needs are being met and appropriate funding is allocated for developing new or upgrading existing sites and assets where current gaps or future needs have been identified.</p>  |
|                   | Infrastructure drivers | <p>Potential loss of open space could affect user experiences. Council will work closely with state and federal government to limit any adverse effects which may be caused by state and federal government led projects.</p>   |

|  |                                 |   |
|--|---------------------------------|---|
|  | Environmental drivers           | <p>There will be competing priorities, such as urban infill, footpath program and an overall increase in paved/hard surfaces. These will combine to see a possible reduction in costs associated with the management of living/green assets. Council will continue to work to offset the environmental impacts of such developments and loss of 'green space'.</p> <p>There will be a reduction in recycled water usage and installation of new or extension of existing recycled water distribution mains, consequently causing an increased demand on mains water.</p> <p>Council will continue to integrate the principles of Water Sensitive Urban Design into all future designs and utilise best practice models and technology to limit mains water usage and increase stormwater reuse, treatment and retention of water sources wherever possible.</p> |
|  | Open space provision            | <p>Open spaces have to be flexible and multi-purpose to cater for a wide range of community needs.</p> <p>Facilities and amenities should be linked, accessible and support inclusive social participation.</p> <p>Council will use open space hierarchy information that prioritises renewal and upgrade activities that align with provision and developmental levels of service.</p>   |
|  | Maintenance and park management | <p>Council will continue to complete routine and reactive maintenance in accordance with existing maintenance service levels based on the open space classification structure.</p> <p>Maintenance service levels will be continually and routinely reviewed to ensure they remain relevant, cost effective and efficient.</p>   |

## Asset programs to meet demand

### Consumer usage

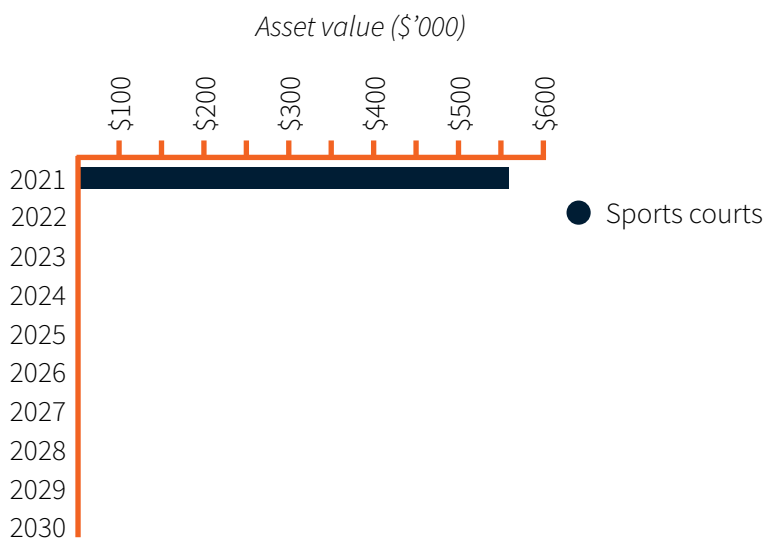
With a growth in recreational participation, primarily children sports, there has been an increase in usage of sporting facilities which has previously led to upgrades of these facilities. Due to greater use on turf surfaces at Modbury Soccer Oval and Richardson Reserve, which led to difficulty in rehabilitating the playing surfaces throughout competition seasons and higher operational costs such as mowing and water consumption, these soccer pitches were recently upgraded to synthetic grass playing surfaces. This playing surface will require less maintenance and reduce operational costs, as well as reducing the risk of injury that poor quality playing surfaces can cause.

### Community expectation

The primary demand that impacts the provision of new open space assets is development of our park areas to provide a higher level of amenity or service. Projects that cannot be forecast such as those which are in response to community feedback will require support of Elected Members. These projects are generally instigated from Elected Members and achieved through both the annual business planning process and the acquisition of grant funding.

Acquiring new assets will commit ongoing operations, maintenance and renewal costs for the life of the asset. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the Long-Term Financial Plan.

### Upgrade and new assets to meet demand





# Lifecycle management

This section outlines asset performance and condition information, and uses asset management principles to develop broad strategies and specific work programs to achieve the agreed service levels.

The assets covered by this plan include:

- Playgrounds
- Park furniture
- Park shelters
- Playing fields and sports courts
- Irrigation (sports fields, parks and garden beds)
- Recreational infrastructure
- Tree screens

**Asset age profile by decade**  
(% based on asset cost)



|           |            |
|-----------|------------|
| 1870 - 0% | 1980 - 21% |
| 1930 - 0% | 1990 - 20% |
| 1960 - 2% | 2000 - 16% |
| 1970 - 3% | 2010 - 38% |

## Asset capacity and performance

Open space assets are spread throughout the City and have been developed and managed over many stages of the City's development. Some assets are very long-lived and may never see full renewal throughout their existence, whereas some assets are short-lived or may have been provided in response to temporary demand from the community.

Open space assets have been provided to the community to provide recreation, leisure, environmental and aesthetic amenity over their lifetime, with some assets still in service since the early 1900s. As the City has developed, some assets are in their second or third generation of renewal, and so we are seeing the need for cyclical renewals. Given the relatively short life cycles of many open space assets and increasing asset network, you can identify peaks and troughs by year acquired from asset information.

Assets are required to meet industry, best practice design, Australian and legislative design standards (where these are available).

As Council's open space assets age, the resulting service level deficiencies will be assessed and actioned through operational inspections. It is also noted that due to the range of assets renewed within the Open Space Asset Management Plan, it will at times be more practical to focus on single asset types to ensure their life cycles are reviewed and analysed as efficiently as possible.

## Asset condition

Council is committed to regular condition data collection in order to mitigate risk and make informed decisions when formulating forward Capital Works Programs. Asset condition is usually determined through field observations of defect parameters.

Asset conditions are measured using a 1-5 rating system where 1 relates to an asset that is 'as new' and 5 relates to an asset that is at the end of its useful life.

### Condition grading

#### 1. Very good

New or like new, only planned maintenance required.

#### 2. Good

Minor maintenance required, plus planned maintenance.

#### 3. Fair

Significant maintenance required.

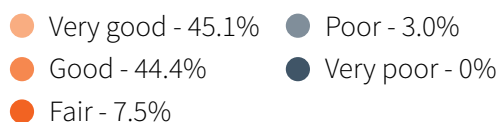
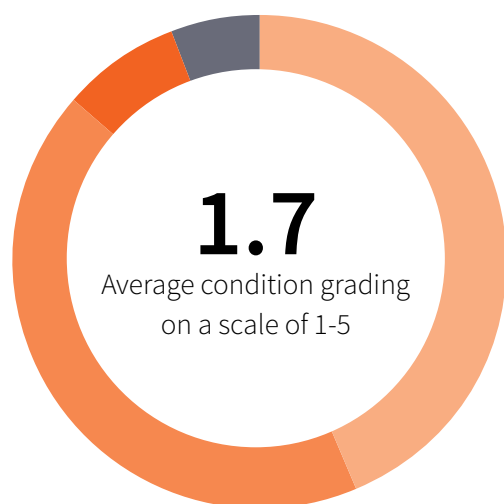
#### 4. Poor

Significant renewal/rehabilitation required.

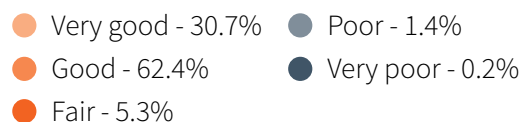
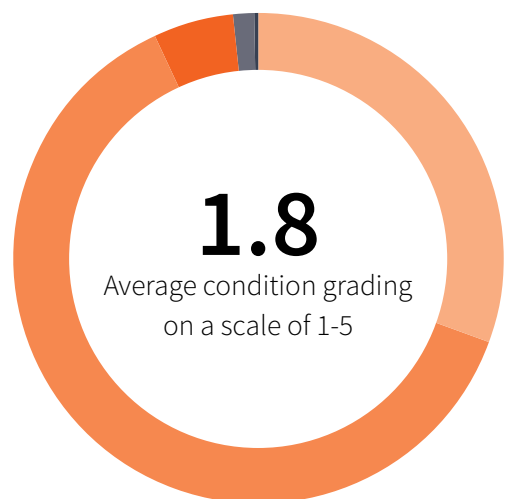
#### 5. Very poor

End of useful life, and/or beyond rehabilitation.

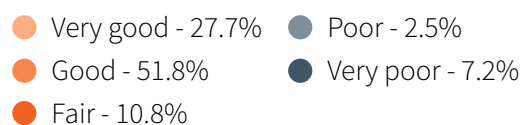
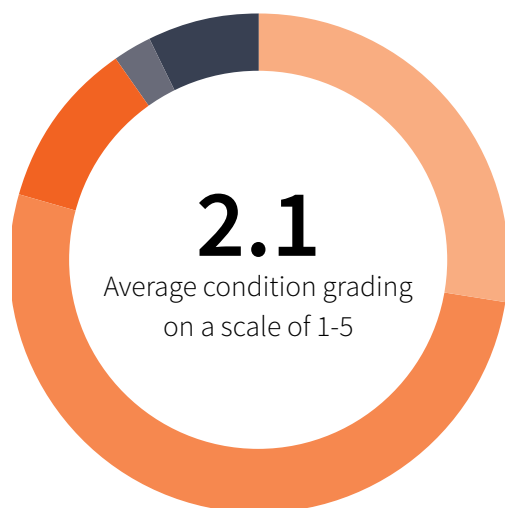
### Playground condition

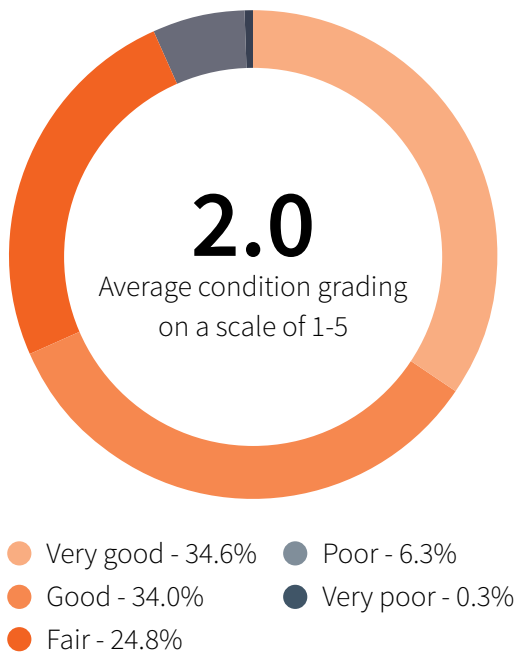
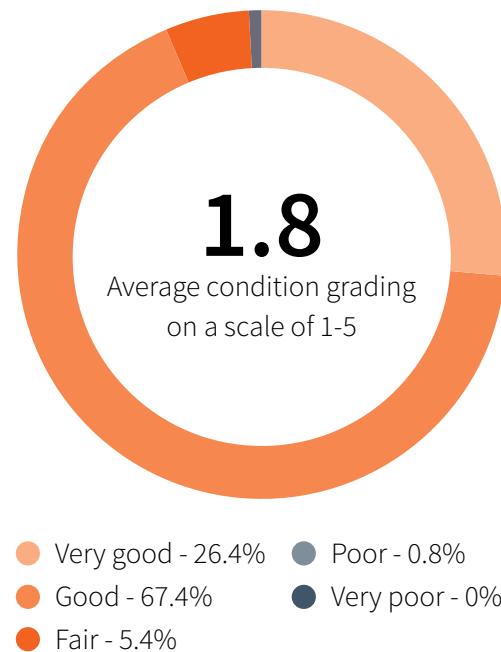
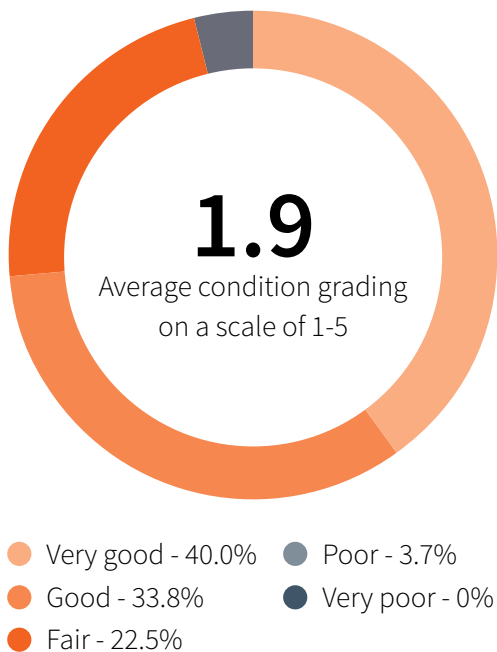


### Park furniture condition



### Sports courts condition



**Tree screen condition****Recreational infrastructure condition****Park shelter condition****Operations and Maintenance Plan**

To improve the usability and amenity of our open space assets, Council regularly undertakes operational activities such as routine inspections and maintenance on playgrounds, park furniture and shelter, grass cutting, edging and fertilising of turf areas, specialised turf management on sports fields, and routine maintenance and inspection of irrigation systems. This work may improve the condition and functionality of the asset and will help prolong its useful life and maintain its operation.

Maintenance works are classified as planned and reactive.

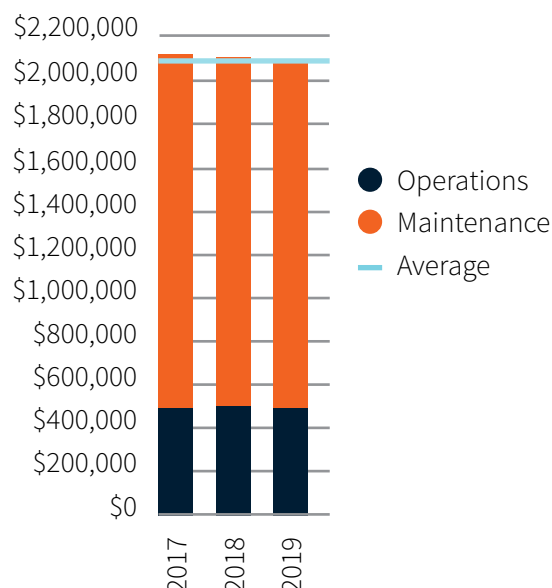
**Reactive maintenance**

Reactive maintenance is undertaken in response to customer requests or when assets fail and need immediate repair.

## Planned maintenance

Planned maintenance relates to repair work that arises from proactive activities such as inspections and condition assessments, where actioning repair work is then prioritised, scheduled and reviewed against previous maintenance history.

### Previous maintenance and operational expenditure



Operations and maintenance expenditure has been moderately consistent as shown above. Future operations and maintenance expenditure is forecast to trend in line with previous years’ spend and budgets, with the blue line showing previous budget average.

## Renewal plan

Renewal is the process of restoring an existing asset to its original service potential. This does not usually increase the functionality or usability of the asset.

Work over and above restoring an asset to original service potential is classified as upgrade/expansion or new works expenditure, incurring additional operations and maintenance costs in the future.

Assets requiring renewal or replacement are identified using the following methods:

- Aged-based approach**  
 Using acquisition year and useful life to determine the renewal year.
- Condition-based approach**  
 Using condition predictive modelling systems.
- Manual-based approach**  
 Using a combination of visual inspections and maintenance history to determine the remaining useful life of the asset.

### Renewal plan methods by asset type

| Type of asset                    | Renewal/Replacement method       |
|----------------------------------|----------------------------------|
| Playgrounds                      | Condition-based and aged-based   |
| Park furniture                   | Condition-based                  |
| Park shelters                    | Condition-based and manual-based |
| Playing fields and sports courts | Condition-based and manual-based |
| Irrigation                       | Manual-based and age-based       |
| Tree screens                     | Condition-based and manual-based |
| Recreational infrastructure      | Condition-based and manual-based |

### Renewal prioritisation drivers

Asset renewal and replacement is typically undertaken in accordance with two major community expectations in mind:

#### Reliability

To ensure the reliability of an existing asset to deliver the service it was constructed to do.

#### Quality

To ensure the asset is of sufficient quality to meet community service levels.

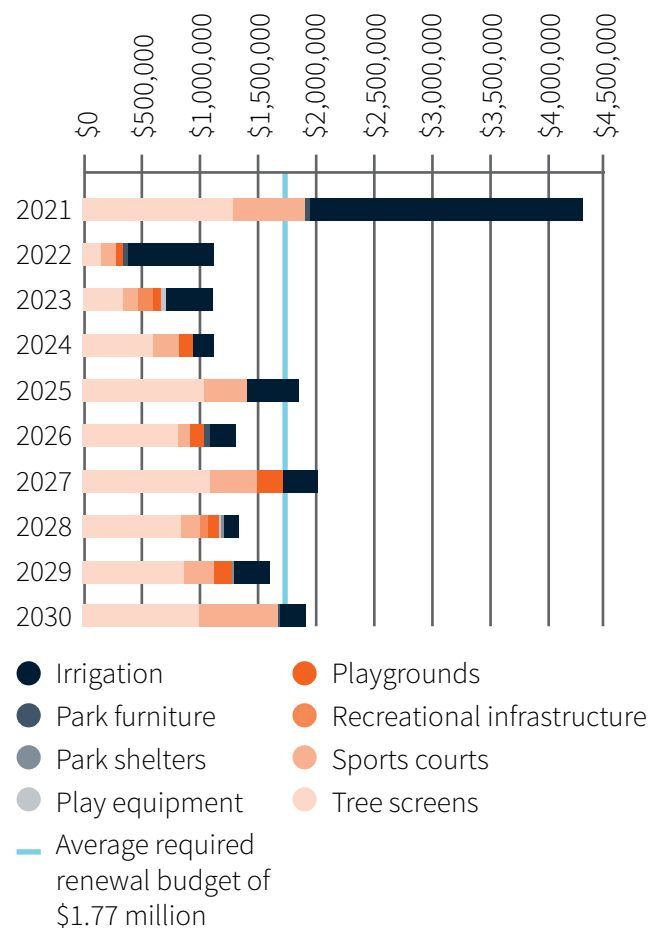
### Renewal prioritisation

- **Risk**  
The consequence of asset failure is high.
- **Consumer usage**  
The asset is highly used and the subsequent impact on users would be greatest.
- **High cost asset**  
Total value represents the greatest net value to the organisation.
- **Age profile**  
The asset is close to the end of its useful life.
- **Maintenance**  
The asset has high operational or maintenance costs.
- **Community expectations**  
Asset renewal would provide better service levels.

### Future renewal and replacement expenditure summary

Projected future renewal and replacement expenditures are shown in the below graph.

#### Projected capital renewal and replacement expenditure



The projected capital renewal expenditure shows a peak in year one that is largely attributed to irrigation, sports courts and tree screen assets, with some of those assets already identified in the 2020–2021 Draft Annual Business Plan. Over the 10-year planning period, the average required renewal budget is \$1.77 million per year.

Below is the projected capital renewal expenditure over the 10-year planning period for each asset type.

#### **Renewal expenditure by asset type**

| <b>Type of asset</b>             | <b>Renewal expenditure</b> |
|----------------------------------|----------------------------|
| Playgrounds                      | \$520,000                  |
| Park furniture                   | \$133,280                  |
| Park shelters                    | \$31,500                   |
| Playing fields and sports courts | \$3,295,240                |
| Irrigation                       | \$5,343,610                |
| Tree screens                     | \$8,332,803                |
| Recreational infrastructure      | \$53,090                   |
| <b>Total</b>                     | <b>\$17,709,523</b>        |

Assets identified for renewal and/or replacement may be deferred in capital works programs if the cost is not able to be funded. This can be the case when there is a backlog of assets to be renewed, higher priority projects are required for other assets classes, or upgrade/new works have been committed based on consumer preferences, e.g. strategic projects.

Deferring the renewal of an asset may not impact its short-term performance. If work is deferred for a prolonged period of time, the cost of renewal may increase as the asset deteriorates.

#### **Creation/Acquisition/Upgrade plan**

New works are those that create a new asset that did not previously exist, or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. These additional assets are considered in the Future Demand section of this asset management plan.

As detailed from the Future Demand section, new assets and upgrade/expansion of existing assets are identified from various sources such as community or Elected Member requests, proposals identified from strategic plans or partnerships with other organisations. Project proposals are investigated to verify the need and to develop a preliminary budget estimate. Project proposals that are approved are ranked by priority and available funds and scheduled in future works programs.

#### **Asset disposal plan**

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. For open space assets, the City of Tea Tree Gully has no proposal to decommission any services.



# Risk management

Effective risk management is integral to all aspects of Council business including how infrastructure assets risks are identified and managed.



The risk assessment process which is aligned to the Risk Management Standard ISO 31000:2018 – Guidelines provides the logical approach for the identification, assessment and management of risks in order to protect Council's assets and to minimise risks to the community.

Once risks have been assessed and rated, for the most significant risks (those rated as high or extreme), treatment options must be considered and implemented. Risks identified as moderate or low are monitored and reviewed to determine if circumstances change.

The following risk management principles have been applied to our open space infrastructure assets:

- Integration of risk management in all decision making and business processes
- Applying a systematic and structured approach to manage risks
- A tailored risk management approach to suit the context

- Applying an evidence-based approach in assessing and mitigating risks
- Determining the Council's risk tolerance
- Applying a transparent and inclusive approach in the management of risks
- Applying risk management practices to continuously improve City of Tea Tree Gully's operations.

## Risk identification

For open space assets, risks can be identified from a number of sources:

- Minor operational routine inspections
- Major condition/defect inspections
- Customer requests
- History of performance
- Stakeholder advice.

### Risk analysis

The City of Tea Tree Gully uses a risk assessment matrix (as pictured below) that is designed to define the level of risk by combining the consequence and the likelihood to arrive at a risk rating.

| Consequence          | Likelihood |          |          |         |                |
|----------------------|------------|----------|----------|---------|----------------|
|                      | Rare       | Unlikely | Possible | Likely  | Almost certain |
| <b>Critical</b>      | High       | High     | Extreme  | Extreme | Extreme        |
| <b>Major</b>         | Medium     | Medium   | High     | High    | Extreme        |
| <b>Moderate</b>      | Medium     | Medium   | Medium   | High    | High           |
| <b>Minor</b>         | Low        | Low      | Medium   | Medium  | Medium         |
| <b>Insignificant</b> | Low        | Low      | Low      | Low     | Low            |

### Risk treatment

All risks that have been assessed as having an 'Extreme' or 'High' risk rating require the implementation of mitigation strategies and/or risk treatment options (controls). The residual risk rating and treatment cost post implementation of treatment/controls is shown in the table on the next page.

## Critical risks and treatment strategies

| Service or asset at risk | What can happen   | Risk rating | Risk treatment strategies/control  | Residual risk * | Treatment costs   |
|--------------------------|---|-------------|--|-----------------|---|
| Playgrounds              | Non-compliance with relevant Australian standards or legislation                                | High        | Review playgrounds through routine inspections. Ensure that changes in standards and legislation are reviewed and implemented as soon as practicable       | Moderate        | Commitment to regular capital and operational expenditure to reach legislative compliance                       |
| Open space (general)     | Asset renewals become unsustainable due to changes in demand                                    | High        | Undertake asset planning processes to inform budgets. Engage with community where required to understand consumer expectation                              | Moderate        | Staff time as part of their defined roles   |
|                          | Natural disaster (e.g. weather, environment) damages open space assets or exposes users to risk | Extreme     | Manage through existing systems and consideration of natural disaster risks. Ensure assets are insured to repair/replace assets due to damaging activities | Moderate        | Staff time as part of their defined roles. Yearly insurance policy renewal with the LGA Mutual Liability Scheme |
|                          | Injury to users of equipment due to asset failure   | Moderate    | Maintenance and condition inspections on assets undertaken through program   | Moderate        | Staff time as part of their defined roles   |

| Service or asset at risk | What can happen   | Risk rating | Risk treatment strategies/control   | Residual risk * | Treatment costs                           |
|--------------------------|---|-------------|---|-----------------|---|
| Open space (general)     | Major injury sustained whilst undertaking assessments or works of asset | High        | Follow safe work procedures, undertaking risk assessments as required                                       | Moderate        | Staff time as part of their defined roles |
|                          | Asset failure prior to expected end of life                             | High        | Undertake regular inspections of assets.<br>Conduct regular maintenance on assets to prevent early failure. | Moderate        | Staff time as part of their defined roles |



# Financial summary

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan.

## Asset valuations

The value of our open space assets as at 30 June 2019 are shown below.

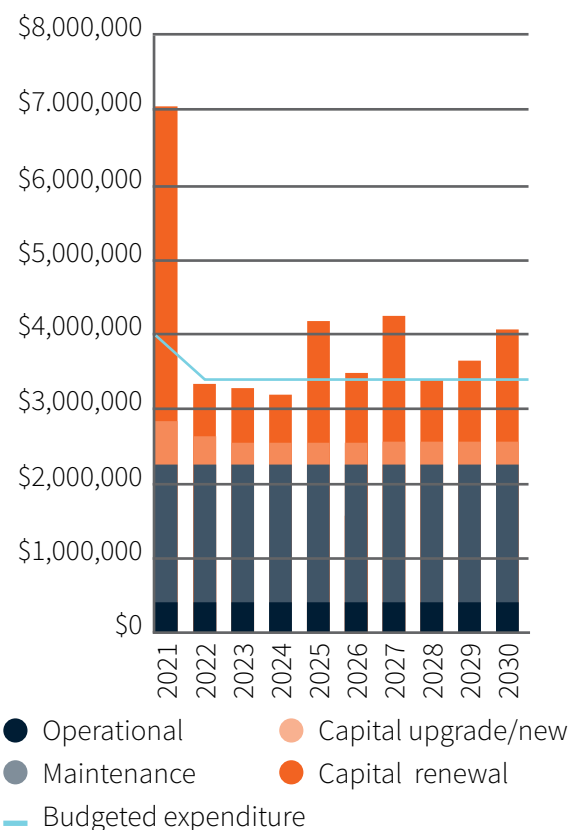
| Asset type                       | Current replacement cost | Depreciated replacement cost | Accumulated depreciation | Depreciation expense |
|----------------------------------|--------------------------|------------------------------|--------------------------|----------------------|
| Playgrounds                      | \$8,939,912              | \$7,096,749                  | \$1,843,163              | \$272,934            |
| Park furniture                   | \$1,591,595              | \$983,997                    | \$607,597                | \$78,670             |
| Park shelters                    | \$1,059,479              | \$936,911                    | \$122,568                | \$10,419             |
| Playing fields and sports courts | \$16,037,732             | \$12,610,522                 | \$3,427,210              | \$405,771            |
| Irrigation                       | \$13,706,707             | \$10,307,122                 | \$3,399,585              | \$399,785            |
| Tree screens                     | \$–                      | \$–                          | \$–                      | \$–                  |
| Recreational infrastructure      | \$786,920                | \$505,368                    | \$281,552                | \$45,565             |

## Financial projections

This plan sets out the projected operations, maintenance and capital renewal expenditure required to provide the agreed service levels to the community over a 10-year period in a sustainable manner and informs our Long-Term Financial Plan.

The projected operations, maintenance and capital renewal expenditure required over the 10-year planning period is \$4.03 million on average per year.

Estimated (budget) operations, maintenance and capital renewal and upgrade/new funding is \$3.47 million on average per year giving a 10-year funding shortfall of \$560,000 per year.



### Asset renewal funding ratio

The asset renewal funding ratio (Long-Term Financial Plan renewal budget/projected capital renewal and replacement expenditure) indicates that over the next 10 years of forecasting, we can expect to have 68.5% of the funds required for the optimal renewal and replacement of assets.

Knowing the extent and timing of any required increase in expenditure and knowing the service level consequences if funding is not available will assist in providing services in a financially sustainable manner.

A key tool in financial forecasting will be modelling the predictive behaviour of assets. Testing and verifying the intervention variables will determine if an increase in funding is required, or whether the serviceability of assets is decreased due to the budget allocation from the Long-Term Financial Plan.

### Key assumptions made in financial forecasts

Key assumptions made in this asset management plan are:

- Asset values are based on valuations data performed by APV Valuers and Asset Management.
- The required renewal expenditure assumes that the community is content with the current levels of service across the entire asset class. Should these levels of service be refined through future community consultation, it could have a significant impact on the intervention levels used and funding required.
- The Long-Term Financial Plan is grouped by asset type, and is based upon the depreciation expense values.
- Replacement works will be valued based on actual costs of work, e.g. predictive modelling of tree screens determines the treatment cost input into the modelling software, and not the current replacement cost.
- The assumed useful lives of assets will be achieved.
- All assets with the same construction/material type will deteriorate at the same rate regardless of locational or environmental considerations.
- It is understood that the Long-Term Financial Plan funding values are subject to change year upon year based upon expenditure in other sections of Council, not just asset management related expenditure.

### Forecast reliability and confidence

The expenditure and valuation projections in this plan are based on best available data. The estimated confidence level of this data is considered to be reliable (level B), using the five level scale below.

#### A. Highly reliable

Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate  $\pm 2\%$ .

#### B. Reliable

Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate  $\pm 10\%$ .

#### C. Uncertain

Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete (up to 50% is extrapolated data) and estimated to be accurate  $\pm 25\%$ .

**D. Very uncertain**

Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy  $\pm 40\%$ .

**E. Unknown**

None or very little data held.

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# Plan improvement & monitoring

The figures within this plan will be reviewed annually as part of our Long-Term Financial Plan review process and will be amended to recognise any changes in service levels, valuations, conditions and/or resources available to provide those services.

## Status of asset management practices

### Accounting and financial systems

We use Civica Authority to manage our financial information. This system is used in conjunction with our asset management information system, Assetic Cloud.

Financial transactions are processed using Assetic Cloud against asset components, which update financial depreciation values as the transactions are performed.

### Accounting standards and regulations

The Australian Accounting Standards provide the benchmark against which we report on asset accounting.

### Asset management systems

We use Assetic Cloud to manage our asset information. This system integrates with our GIS system and our Customer Request Management system.

Assetic Cloud is managed through modules including asset register, accounting, valuations and assessments

Our asset register contains important asset information such as material, construction date, and hierarchy, which is used to develop this asset management plan and to forecast the renewal of our assets.

## Improvement plan

The asset management improvement plan

generated from this asset management plan is shown on the next page.

## Monitoring and review procedures

The Open Space Asset Management Plan is reviewed annually, during the annual business plan and budget process, to ensure it reflects:

- Current service levels
- Actual asset values
- Projected operations, maintenance, capital renewal and replacement
- Capital upgrade/new and asset disposal expenditures
- Projected expenditure values incorporated into the Long-Term Financial Plan
- Any changes to the available resources and the resultant service levels.

The Plan has a life of four years and is due for full revision and updating within two years of each Council election.

## Performance measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditure identified in the asset management plan are incorporated into the Long-Term Financial Plan.
- The degree to which the works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the asset management plan.

- The degree to which the existing and projected service levels and service consequences risks and residual risks are incorporated into the Strategic Plan.

### ***Asset management improvement plan***

|   | <b>Task</b>   | <b>Responsibility</b> | <b>Resources required</b>   | <b>Timeline</b>  |
|---|---|-----------------------|---|--|
| 1 | <p>Establish draft current Service Level Agreements (Provisional, Development and Maintenance) for all open space assets, to reflect the work undertaken with current budgets</p> <p>Categorise assets in accordance with the open space categories contained within Council's Open Space Policy</p>  | Strategic Assets      | Civil Assets, Building Assets and Environment, Civil and Water Operations, Parks Operations           | June 2021  |
| 2 | <p>Review, refine and collect additional asset information to assist in establishing quantifiable Technical Levels of Service for all open space assets</p> <p>Open space assets are to be grouped in accordance with open space categories as defined in Council's Open Space Policy</p> <p>Priority to be given to Parks and Tree Screens open space categories</p> | Civil Assets          | Community Engagement, Strategic Assets, Buildings, Assets and Environment, Civil and Water Operations | <p>Draft documents for Parks and Tree Screens to be completed by June 2021 and tested over the following 12 months</p> <p>All other open space categories are to be completed in the following 24 month period</p> |
| 3 | <p>Complete condition assessment and asset data capture for all open space assets covered in this plan</p> <p>Collect asset data at an increased component level to establish greater confidence in renewal needs and costs</p>   | Strategic Assets      | Civil Assets, Buildings, Assets and Environment, Civil and Water Operations                           | <p>Condition assessments based on a three- year cycle.</p> <p>Asset data capture when required</p>   |

|   |  |                  |   |  |
|---|--|------------------|---|--|
| 4 | Regularly review condition data in order to ensure the data used to forecast renewals is current and useful<br><br>Data should include both condition rating and remaining useful life | Strategic Assets | Civil Assets, Buildings, Assets and Environment, Civil and Water Operations                 | Annually<br><br>Irrigation, playgrounds and fencing to be completed by June 2021 |
| 5 | Review critical risks and treatment strategies   | Civil Assets     | Strategic Assets, Buildings, Assets and Environment, Civil and Water Operations, Governance | June 2022 or every two years following endorsement                               |
| 6 | Update Open Space Asset Management Plan yearly when data changes or assessments realise a change in the renewal forecast   | Strategic Assets | Civil Assets, Buildings, Assets and Environment, Civil and Water Operations                 | Ongoing  |
| 7 | Investigate the establishment of a register of trees within the Council region to better forecast the replacement of existing trees and locations for new tree plantings               | Parks Operations | Strategic Assets  | Ongoing  |

# References

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- IPWEA, 2012 LTFP Practice Note 6 PN Long Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney
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