



Tree Strategy 2022–2027

Creating a greener, cooler and more liveable City to enhance Community Well-being.



City of
Norwood
Payneham
& St Peters

Kaurna Acknowledgement

The City of Norwood Payneham & St Peters acknowledges that this land is the traditional land of the Kaurna people and that we respect their spiritual connection with their country.

We also acknowledge the Kaurna people as the custodians of the greater Adelaide region and that their cultural and heritage beliefs are still important to the living Kaurna people today.



Aerial view of a variety of trees around the Norwood Town Hall.



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Mayor's Message



Trees have always been an important living asset for our City. Our streets, parks and homes are blessed with trees of all shapes, sizes and species, helping to create beautiful gardens, streetscapes, and backdrops.

Trees significantly contribute towards making the City of Norwood Payneham & St Peters one of the most desirable places to live, work and visit. In addition to our own trees, we are also blessed with one of the States most treasured green assets, the River Torrens Linear Park, the green backdrop of the Adelaide Hills to the east and the Adelaide Park Lands to the west, framing vistas into and out of the City.

Trees are the lungs of our City, bringing cooler temperatures in summer as well as providing habitat for birds and animals to sustain biodiversity in our City.

The Council recognises that as a result of climate change trees will become an even more important asset to protect and manage. With this in mind, the Council has committed to developing a City-wide Tree Strategy, which provides a framework to improve the management of our trees. The Strategy brings together a number of existing processes to help guide the Council in its future planting and maintenance programs.

Through this Strategy, there is an opportunity to take a more strategic and long-term approach with our street tree planting program, by prioritising areas with low street tree canopies that would benefit from their cooling effect and streetscape appeal. We are also introducing a tree species selection framework to provide clarity and consistency around tree species selections to make sure we have the right trees in the right place. Finally, through the introduction of this Strategy, the Council plans to encourage the community to participate in the watering of street trees in their local area.

The Council's Tree Strategy is a comprehensive policy and action plan all in the one document, with indicative resourcing requirements to grow and manage our urban forest. It also highlights the need for Operational Guidelines, which will be one of the first actions following the implementation of the Tree Strategy.

Thank you for reading the Tree Strategy and helping Council to create a cooler, greener and more liveable City.

Robert Bria
Mayor

Executive Summary

The purpose of the Tree Strategy is to set out a roadmap and actions which are required to strategically increase the tree canopy cover in the City of Norwood Payneham & St Peters. While its primary focus is on street trees, the Strategy also identifies opportunities to influence the retention and growth of trees on both public and private land.

The overarching vision of the Strategy is to create a greener, cooler and more liveable City to enhance Community Well-being.

The Strategy has been developed in the context of other strategic documents and targets set by both the Council and the State Government, which have been summarised into three strategic objectives:

1. Adapting to climate change and mitigating against urban heat (Cooling);
2. Ensuring species diversity to support sustainability and biodiversity (Sustainability); and
3. Delivering clean, safe and beautiful streets and footpaths to support active lifestyles and Community Well-being (Liveability).

The Strategy is arranged under five strategic themes, which are designed to summarise the key components required to responsibly and holistically manage trees. Each theme contains a strategic outcome summarising the Council's aspirations.

1 Identify and Manage
A City where trees are managed as valuable living community assets.

2 Protect and Value
A City where the existing tree population is valued and retained.

3 Plan for Growth and Renewal
A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.

4 Maintain
A beautiful, clean and safe City with healthy and well maintained trees.

5 Inspire and Influence
A City that recognises the power of collaboration to achieve an increase in the number of trees on private land and public land to meet the City's tree canopy targets.

Complementing the Strategy and ensuring its implementation is a five year action plan, which identifies priority actions and the investment required to deliver the outcomes. The progress of the implementation will be monitored on a regular basis to ensure that the principles and guidelines are embedded across the Council.

The ultimate test of the success of the Tree Strategy will be a noticeable increase in the extent of canopy cover, on the way to reaching an increase of 20% by 2045, tracked through aerial photography on a regular basis.

A review of the Tree Strategy will occur in 2027 to determine its ongoing relevance in light of progress made at that time and to reflect any new data and targets available at that time.



Our Vision

A *greener, cooler* and *more liveable* City to enhance Community Well-being.

Strategic Objectives

Cooling, Sustainability, Liveability

Strategic Outcomes

1 Identify and Manage

A City where trees are managed as valuable living community assets.

2 Protect and Value

A City where the existing tree population is valued and retained.

3 Plan for Growth and Renewal

A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.

4 Maintain

A beautiful, clean and safe City with healthy and well maintained trees.

5 Inspire and Influence

A City that recognises the power of collaboration to achieve an increase in the number of trees on private and public land to meet the City’s tree canopy targets.

5 Year Action Plan

1 Identify and Manage

- 1.1 Street Tree Inventory
- 1.2 Implementation and Monitoring
- 1.2 Tree Strategy Review

2 Protect and Value

- 2.1 Council Owned Tree Retention

3 Plan for Growth and Renewal

- 3.1 Tree Targets and Priority Areas
- 3.2 Tree Species Selection Framework
- 3.3 Strategic Tree Replacement

4 Maintain

- 4.1 Tree Planting and Maintenance
- 4.2 Tree Nuisance Management

5 Inspire and Influence

- 5.1 Community Education and Incentives
- 5.2 Partnerships and Advocacy

Measurement

Regular aerial photography and analysis of the tree canopy.

Purpose

The purpose of the Tree Strategy is to provide a comprehensive strategic and operational framework for the management of trees in the City of Norwood Payneham & St Peters. This includes identification, asset management, tree removal, planting, maintenance, succession planning, community involvement and advocacy.

The overarching vision of the Strategy is to create a greener, cooler and more liveable City to enhance Community Well-being.

The Tree Strategy sets out the long-term vision for the management of trees in the City. To ensure that the Tree Strategy remains current, a five year implementation period has been established to enable time for the actions to be implemented and monitored before a review is undertaken.

Key elements of the Strategy include:

- implementing a digital tree inventory;
- formalising Council owned tree removal criteria;
- investigating loss of amenity options;
- introducing strategic criteria for tree planting priority areas;
- developing a forward tree planting plan;
- introducing a tree species selection framework;
- developing comprehensive tree planting and maintenance operational guidelines;
- developing a long term replacement plan for ageing trees;
- formalising a risk management framework;
- developing a community engagement plan for street tree planting; and
- improving data collection for evidence based advocacy.

Indicative costings of the above elements have been included to enable effective forward planning and budgeting.

A Shared Responsibility

The City of Norwood Payneham & St Peters has a land area of 15 square kilometres and is located on the traditional land of the Kaurna people, who occupied the area for over 40,000 years prior to European settlement in the 1830s.

The City is now home to almost 37,000 people. It has 17,400 dwellings, 72 parks and reserves, 29 playgrounds, 180ha of open space, 3 Libraries, 16 Schools, 2 Swimming Centres and 7000 local businesses.

Trees form part of all of these land uses, whether public or private land, and make a significant contribution to the liveability of the City. It is important that trees are managed to the highest standards to minimise conflicts and maximise the benefits.

COUNCIL
LAND



2 Swimming Centres

PRIVATE
LAND



17,400 dwellings

COUNCIL
LAND



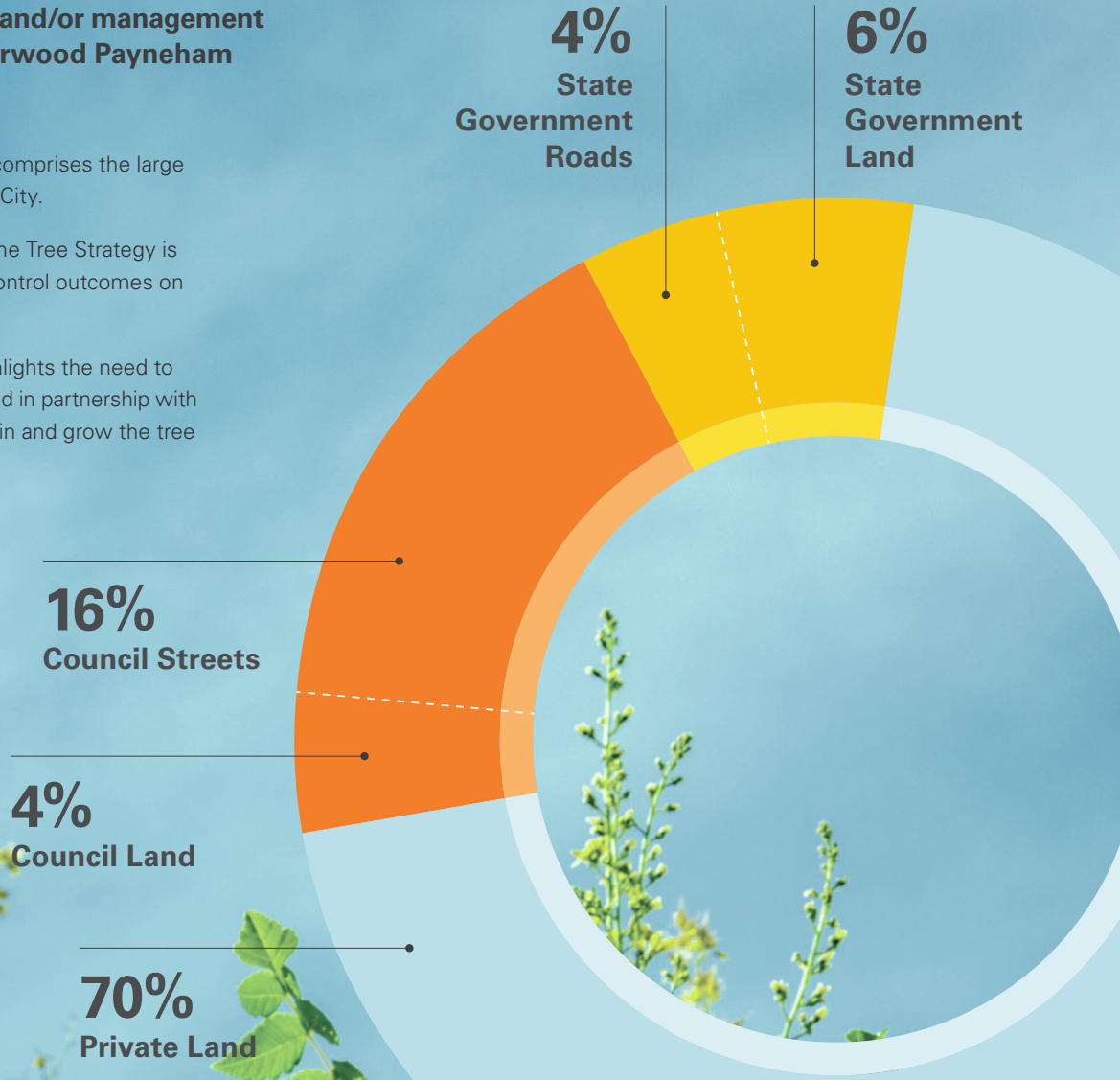
72 parks and reserves

Land ownership and/or management in the City of Norwood Payneham & St Peters*

Privately owned land comprises the large majority of land in the City.

A major challenge of the Tree Strategy is Council's inability to control outcomes on privately owned land.

The Tree Strategy highlights the need to work collaboratively and in partnership with all stakeholders to retain and grow the tree population in the City.



7000+ trees in parks and reserves

20,000+ street trees



16 schools

STATE GOVERNMENT & PRIVATE LAND



29 playgrounds

COUNCIL LAND



171kms of roads and 341kms of footpaths

COUNCIL & STATE GOVERNMENT LAND

The City's Evolving Landscape

A City of Four Creeks

The River Torrens creates the northern border of the City and forms part of the River Torrens Linear Park stretching from the Mount Lofty Ranges to the ocean. The River Torrens is a significant natural area lined with large, mature trees (mostly eucalypts), providing a natural habitat corridor for fauna and flora.

Prior to European settlement, there were four open creeks that traversed the City from East to West (First Creek, Second Creek, Third Creek and Fourth Creek), flowing from various points in the Mt Lofty Ranges and discharging at different sites along the River Torrens.

First Creek is the western most creek within the Torrens Catchment, flowing from Crafers and discharging into the Torrens near Frome Road (outside our City). The majority of First Creek is underground however, a few sections are evident in above ground drainage reserves in the southern part of Norwood and in a more natural setting in Hutchinson Park, Norwood. The alignment of the Creek is clearly identifiable in aerial photography, with large, mostly gum trees, growing along its route on both private and public land.

Second Creek flows from the east of Cleland Conservation Park and discharges into the Torrens River near the St Peters Billabong. Second Creek first becomes evident in Kensington, running along the southern edge of Borthwick Park before passing underneath the Norwood Swimming Centre and through most of Norwood. It re-emerges above ground in Linde Reserve, Stepney where it has been re-naturalised to become a significant landscape feature, before passing under St Peters Street, St Peters through to the Torrens.

The upgrade of St Peters Street has been informed by its relationship to Second Creek and the River Torrens through the inclusion of native tree species to enhance the natural habitat and biodiversity of the area.

Third Creek flows from near Horsnell Gully Conservation Park and discharges into the Torrens at Drage Reserve via the western side of Patterson Sportsground in Felixstow. The section adjacent the Sportsground is currently a concrete drainage easement (known as Third Creek Drainage Reserve No 4). The Council has future plans to re-naturalise this section of the creek to improve natural habitat and biodiversity. The suburbs of Firle and Payneham have a number of above ground drainage reserves channelling its flow through the area.

Fourth Creek flows from Norton Summit via the Morialta Conservation Park and discharges into the Torrens at Felixstow Reserve, Felixstow. The final section of Fourth Creek, between Lower North East Road and the River Torrens, is within the City of Campbelltown prior to re-entering the City of Norwood Payneham & St Peters at Felixstow Reserve.

Felixstow Reserve underwent a significant upgrade in 2019 comprising wetlands, recreational facilities, additional tree plantings and a Kauria Interpretive Trail incorporating a culturally significant Canoe Scar tree.

The remnant vegetation associated with the creeks provide natural wildlife corridors for native birds and animals in the City that connect with the nearby River Torrens Linear Park, Mt Lofty Ranges and adjacent Adelaide Park Lands.

The City's Changing Tree Population

Prior to colonisation, the Adelaide Plains were populated with open forest, woodland and grasslands. At that time, the City primarily contained *Eucalyptus leucoxylon* (SA blue gum) and *Eucalyptus camaldulensis* (River red gum).

In the early years of settlement, the City was mainly used for farming, market gardens, flour mills, dairies, orchards, nurseries and potteries. In the late 1880s a development boom occurred, which saw the subdivision and loss of many market gardens.

With the growth of residential development, the natural landscape of the City has changed significantly with the introduction of a large variety of exotic, evergreen and deciduous trees on both public and private land. As a result, the City now has a mixed landscape character, with the introduced species of Queensland Box and London Planes being the two most dominant species.

Trees that thrive are generally those that are hardy and can tolerate the warm temperate climate and low levels of annual rainfall of the Adelaide Plains. Some are more resilient to external impacts than others (eg, extreme weather, low rainfall, soil condition and root disturbance). Some trees are also more inclined to produce more debris than others, eg, seeds, nuts, flowers, bark, leaves and pollen.

Tree species vary significantly in height, but will grow and expand in response to the available space and conditions. Street trees are planted in the harshest environments, surrounded by hard surfaces and forced to compete with above and below ground infrastructure. In comparison, trees in reserves have optimal growing conditions, surrounded by grass or other natural surfaces with room to grow and expand with minimal interruptions.

Trees species are constantly evolving as new cultivars are developed to create more variety and resilience to pests and disease.

Top ranking street trees in the City by prevalence.

| | |
|--|-------|
| <i>Lophostemon confertus</i> (Queensland Box) | 4,004 |
| <i>Platanus x hispanica</i> (London Plane) | 1,711 |
| <i>Pyrus calleryana</i> 'Bradford' & 'Capital' (Ornamental Pear) | 1,448 |
| <i>Jacaranda mimosifolia</i> (Jacaranda) | 1,362 |
| <i>Koelreuteria paniculata</i> (Golden Rain) | 1,205 |
| <i>Callistemon viminalis</i> (Weeping Bottlebrush) | 1,137 |
| <i>Celtis occidentalis</i> (Hackberry) | 991 |
| <i>Fraxinus oxycarpa</i> (Desert Ash) | 610 |
| <i>Eucalyptus leucoxylon</i> (SA Blue Gum) | 563 |
| <i>Eucalyptus sideroxylon</i> (Red Iron Bark) | 423 |
| <i>Fraxinus raywoodii</i> (Claret Ash) | 416 |
| <i>Callistemon 'Harkness'</i> (Gawler Hybrid Bottlebrush) | 380 |
| <i>Melia azedarach</i> (White Cedar) | 350 |
| <i>Lagerstroemia indica</i> (Crepe Myrtle) | 273 |
| <i>Celtis australis</i> (European Nettle) | 241 |
| <i>Fraxinus griffithii</i> (Evergreen Ash) | 238 |
| <i>Ulmus parvifolia</i> (Chinese Elm) | 236 |
| <i>Hymenosporum flavum</i> (Native Frangipani) | 234 |
| <i>Agonis flexuosa</i> (Willow Myrtle) | 224 |
| <i>Quercus robur</i> (English Oak) | 223 |

Source: City of Norwood Payneham & St Peters Tree Inventory 2008

The City's Tree Gains and Losses

Over time, the City has seen an increase in canopy cover on Council owned land. However, over the same time, there have been significant losses on private land, largely as a result of development. The evidence to support this has been sourced from *Quantifying Tree Canopy Cover Change within the City of Norwood Payneham & St Peters, i-Tree Canopy Analysis*, January 2018, Adelaide and Mt Lofty Ranges Natural Resources Management Board.

Council land

The Council is responsible for street trees and trees in parks and reserves. Over a twenty year period between 1997 and 2017, the Council has increased its proportion of tree canopy cover from 30% to 34% through both street tree plantings

and plantings in reserves. Some of this is evident in Queen Street, Norwood (see *Figure 1*), St Peters Billabong (see *Figure 2*) and Drage Reserve, Felixstow (see *Figure 3*).

Figure 1.

Street tree growth, Queen Street, Norwood



Figure 2.
Tree canopy growth, St Peters Billabong



Figure 3.
Tree canopy growth, Drage Reserve, Felixstow



Private land

The Council has very little control over development and tree planting on private land, despite this comprising the largest proportion of land in the City.

The State Government is responsible for planning policy affecting private land including allotment size, land division, tree planting and tree retention. With a State Government agenda to increase urban infill, allotment sizes for new development have decreased over time resulting in the loss

of gardens and trees and an increase in hard surfaces. This, together with a trend to increase dwelling sizes through large extensions, has resulted in tree loss on private land.

Over a 20 year timeframe, between 1997 and 2017, the City has seen a decrease in tree canopy cover on private land from 22% to 21%.

Tree canopy cover loss and urban infill between this period are evident in Norwood, Kent Town, St Morris (see *Figure 4*) and Felixstow (see *Figure 5*).

Figure 4.

Tree loss, St Morris



Figure 5.

Urban infill, Felixstow



Over a ten year period, a total of 271 regulated trees have been approved for removal from private land across the City (see *Chart 1*). Regulated tree legislation was relaxed in 2011, which resulted in a spike in tree removal applications and approvals around that time. Unregulated trees do not need approval for their removal, so there is no formal data on the number of additional trees removed during this period.

State Government land

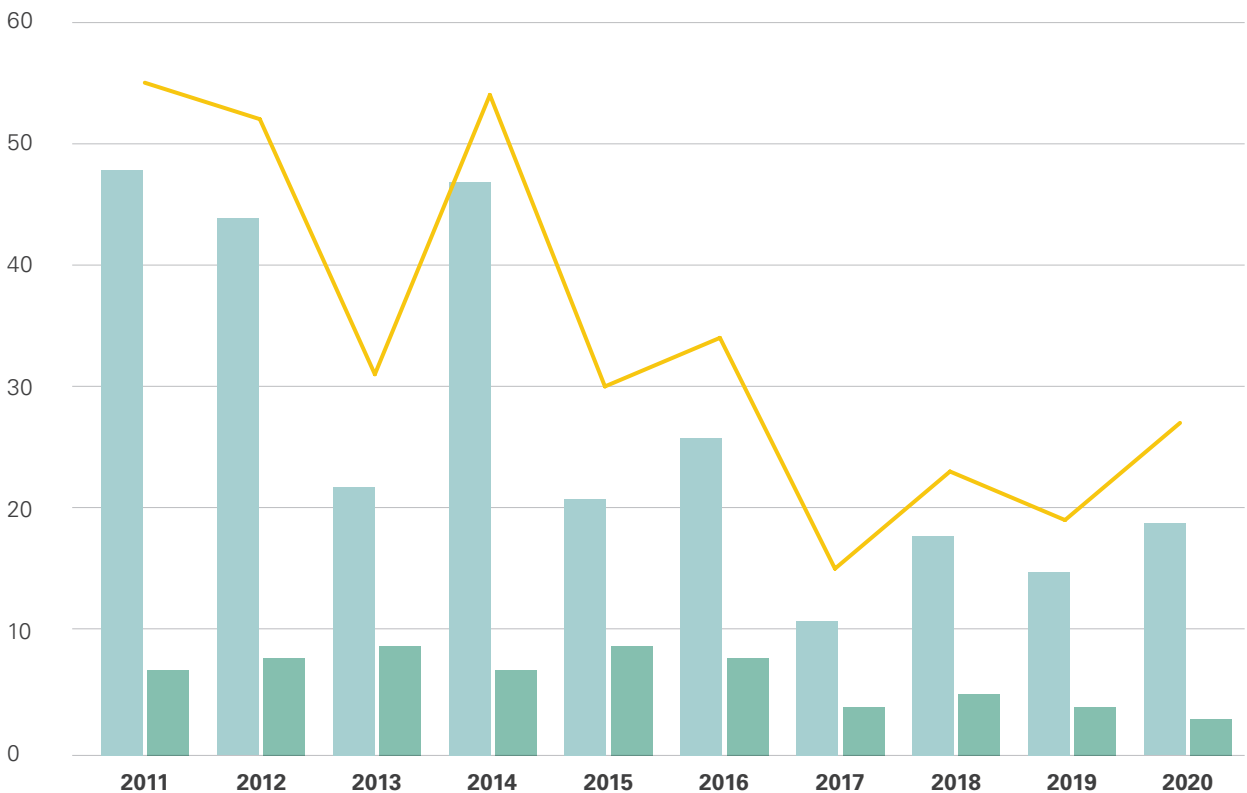
The Council can seek to influence tree planting on State Government land. While trees on the verges and medians of main roads are permitted, approval processes are in place to ensure road safety is prioritised and maintained. The Council must apply to the Department for Infrastructure and Transport (DIT) to obtain permission to plant. Tree species, kerb off-sets and tree height clearances are all regulated through State Government legislation and guidelines.

There is opportunity to increase tree planting on the verges and medians on the many main roads in the City, however the scope and impact will be limited due to these external factors outside the Council's control.

Chart 1.

Regulated tree application data 2011–2020

— Total number of applications
■ Tree removal approvals
■ Tree removal refusals



The City's Tree Canopy Cover

A National Benchmarking Survey identified Adelaide as having the lowest tree canopy cover of all the Australian Capital cities. Under this survey, the City of Norwood Payneham & St Peters was measured as having 19.9% tree canopy cover (above 2 metres in height).

Since this time, the technology and methodology for measuring tree canopy cover has advanced and the City has now been assessed using Light Detection and Ranging (LiDAR) technology as having approximately 24% (rounded up from 23.97%) above 3 metres in height (See *Chart 2*).

To reach the State Government's target of a 20% increase, a tree canopy cover of 29% (rounded up from 28.97%) would be required by 2045.

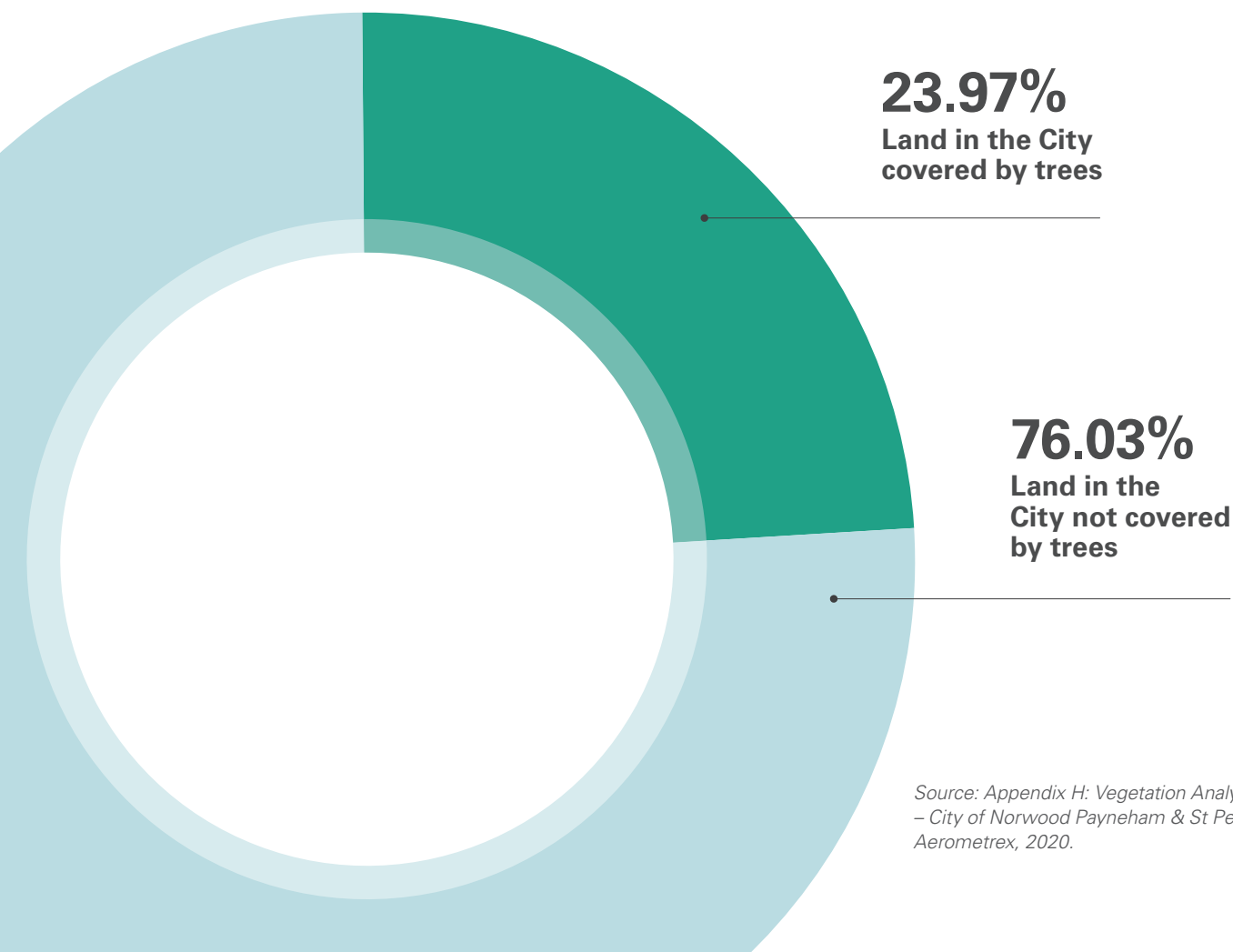
While the exact number of trees on both public and private land is unknown, together their canopies make up 24% of the City's total land area.

There is a wide variation in tree canopy cover from suburb to suburb, ranging from as low as 12.35% in Glynde to 35.21% in College Park (See *Figure 6*). This inequitable distribution of tree coverage across the Council is instructive for identifying priority areas for future tree plantings and streetscape upgrade projects.

The Council has already focused its street tree planting efforts over the past few years in a number of the suburbs with very low levels of canopy cover, however the impact on canopy cover will not be noticeable for 10 to 15 years, when the trees reach maturity.

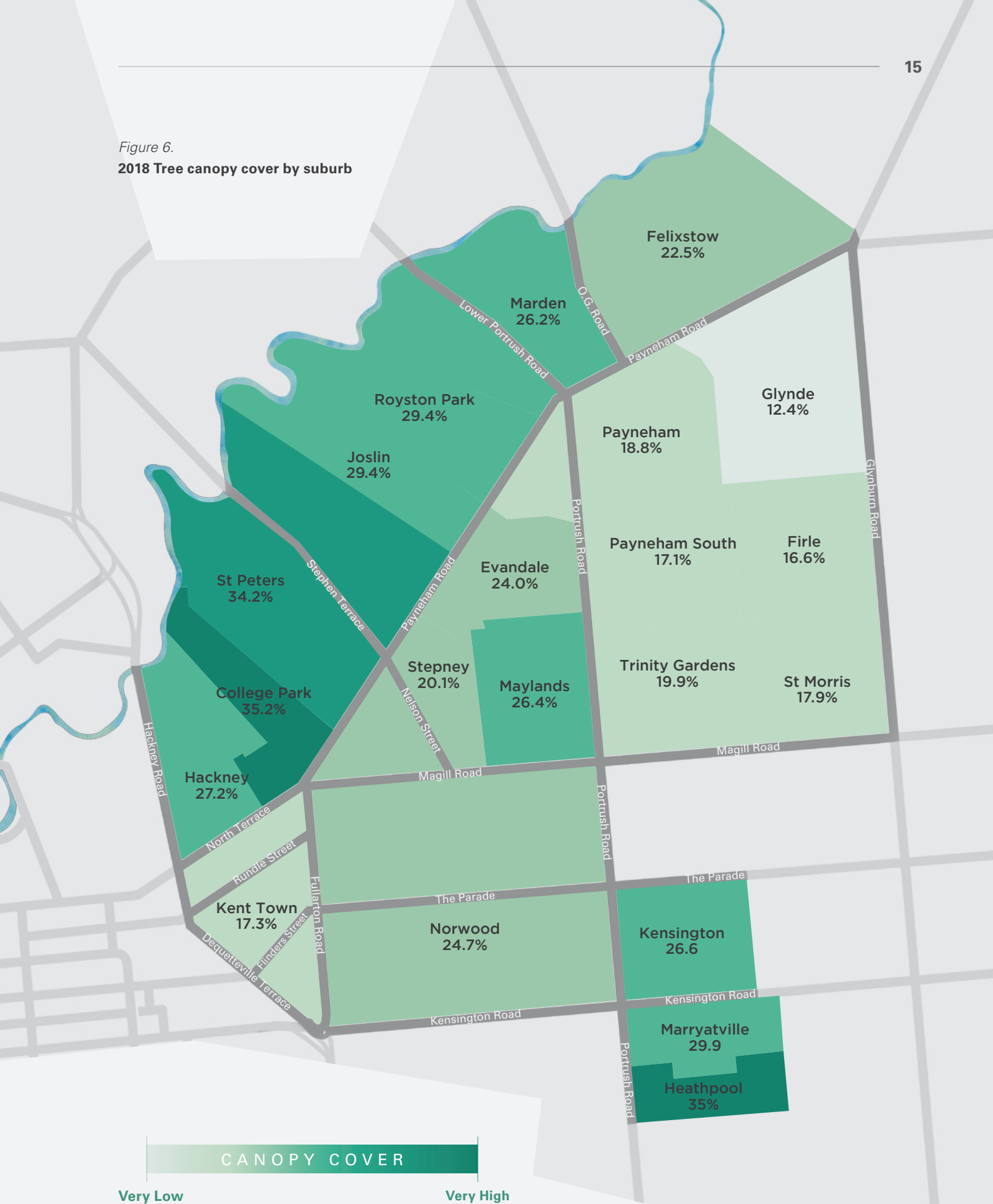
Chart 2.

Canopy cover in the City of Norwood Payneham & St Peters



Source: Appendix H: Vegetation Analysis
– City of Norwood Payneham & St Peters,
Aerometrex, 2020.

Figure 6.
2018 Tree canopy cover by suburb



Note: This map provides additional analysis from the data captured through aerial photography in 2018–2019 and contained in Appendix H: Vegetation Analysis – City of Norwood Payneham & St Peters, Aerometrex, 2020. Percentages are based on the area of tree canopy, greater than 3m tall, compared to the area of land in each suburb.

The City's Urban Heat

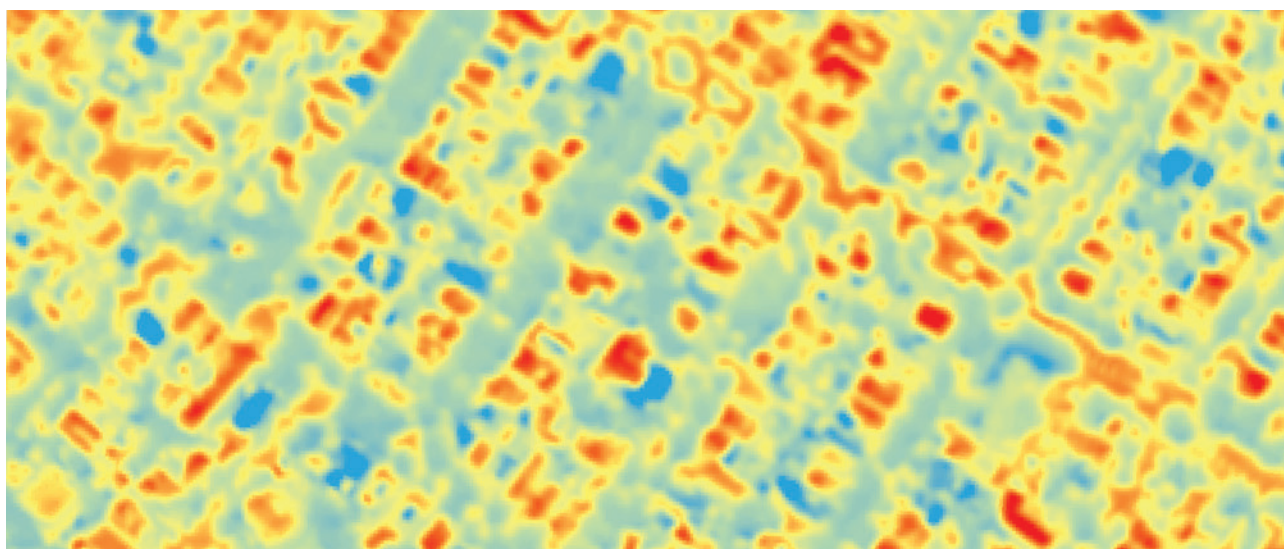
Temperatures above 35 degrees are uncomfortable for our thermal regulation. The more days we experience this heat, the greater risk it has on our health, particularly for vulnerable members of the community such as the elderly, young people and people less able to afford air-conditioning. Extreme heat also impacts our pets and wildlife and puts stress on other plants and vegetation in our gardens.

Urban heat mapping has identified that bitumen is one of the hottest surfaces in the urban environment. This includes all roads and some footpaths, comprising a fifth of all land in the Council area. Taking into account streets and roads that already have canopy cover, there is still approximately two thirds without any canopy cover.

Large open carparks adjacent to shopping centres have also been identified as areas of extreme heat built up.

Figure 7.

The cooling effect of avenues in St Peters is evidenced through daytime heat mapping



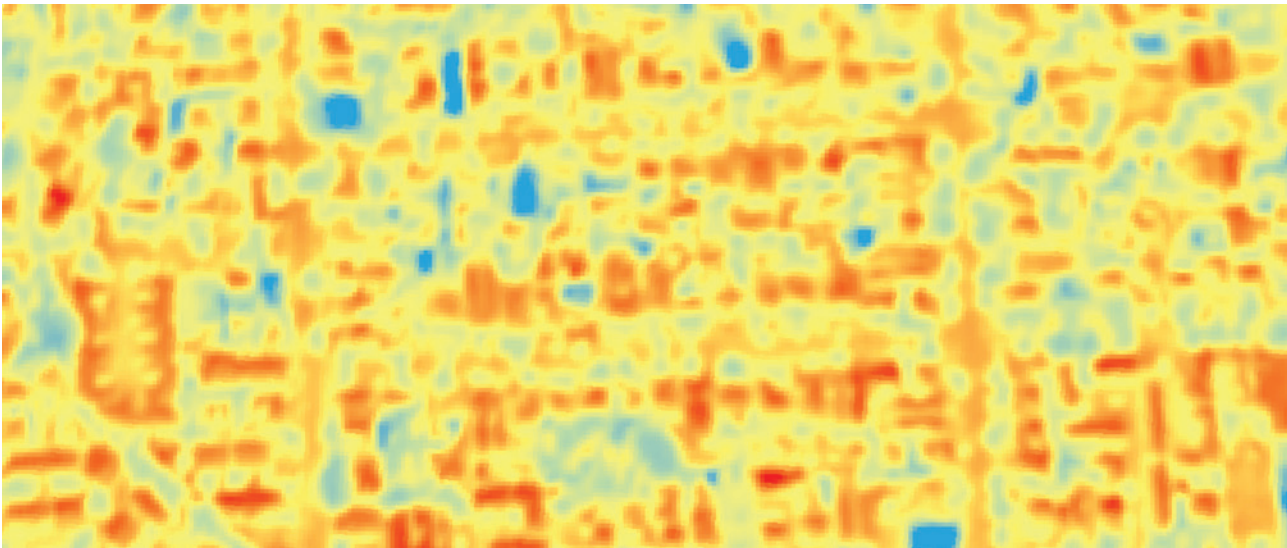
Given the predictions associated with climate change including the doubling of the number of days over 40 degrees and average temperature increases between 1.5 and 2 degrees by 2050, there is a need to plan for cooler environments in our streets to maintain liveability and amenity.

Street trees with large canopies are one of the best cooling techniques

for our City streets. Tree lined streets have a lower than average daytime temperature in warmer months than those without. Streets with large street trees, particularly where the canopy is closed such as in the avenues in St Peters, can be up to 9.5 degrees cooler than streets with few trees. The blue areas in *Figure 7* show the cooling effect of trees along these avenues during the day.

Conversely, streets with fewer trees have increased heat build-up during the day. The yellow and orange areas in *Figure 8* illustrate this heat build up, resulting in a much warmer daytime environment.

Figure 8.
Lower levels of canopy cover in Payneham and the corresponding heat build-up



Wide main roads with few street trees on the verge and medians are also urban heat islands with high temperatures during the day. Payneham Road (see *Figure 9*) is an example where low levels of tree cover creates a hot urban environment during the day.

The heat mapping of the whole City shows that some areas, such as those in the north-eastern part of the City have a higher proportion of heat build-up areas, depicted as orange and red in *Figure 10*. This generally corresponds to areas with lower levels of tree canopy cover.

Figure 9.

Main roads without trees are urban heat islands, Payneham

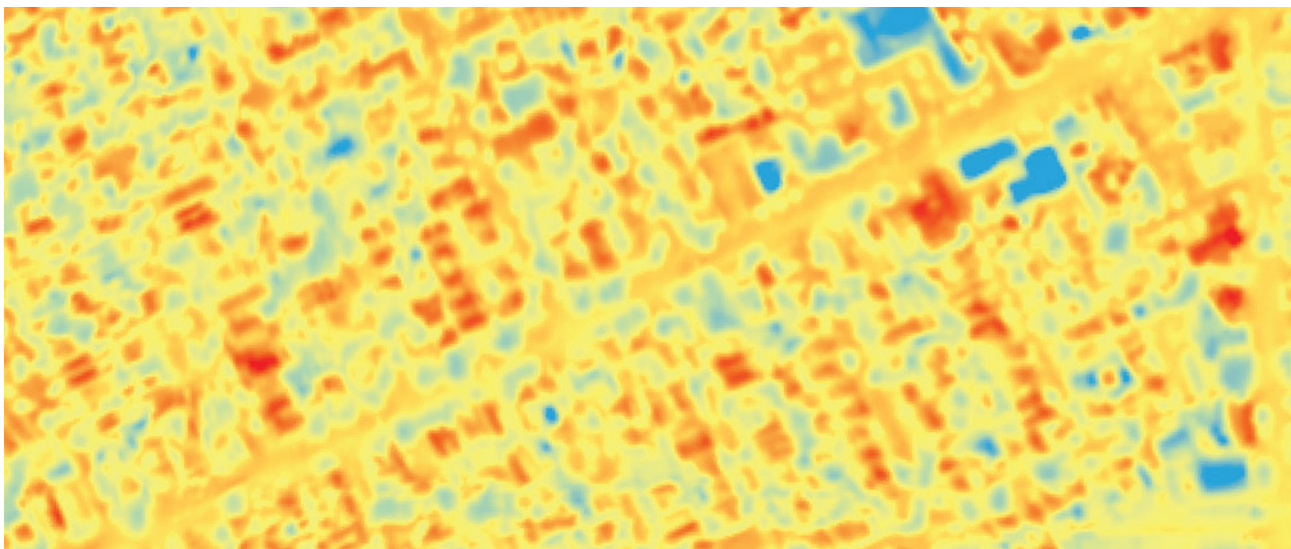
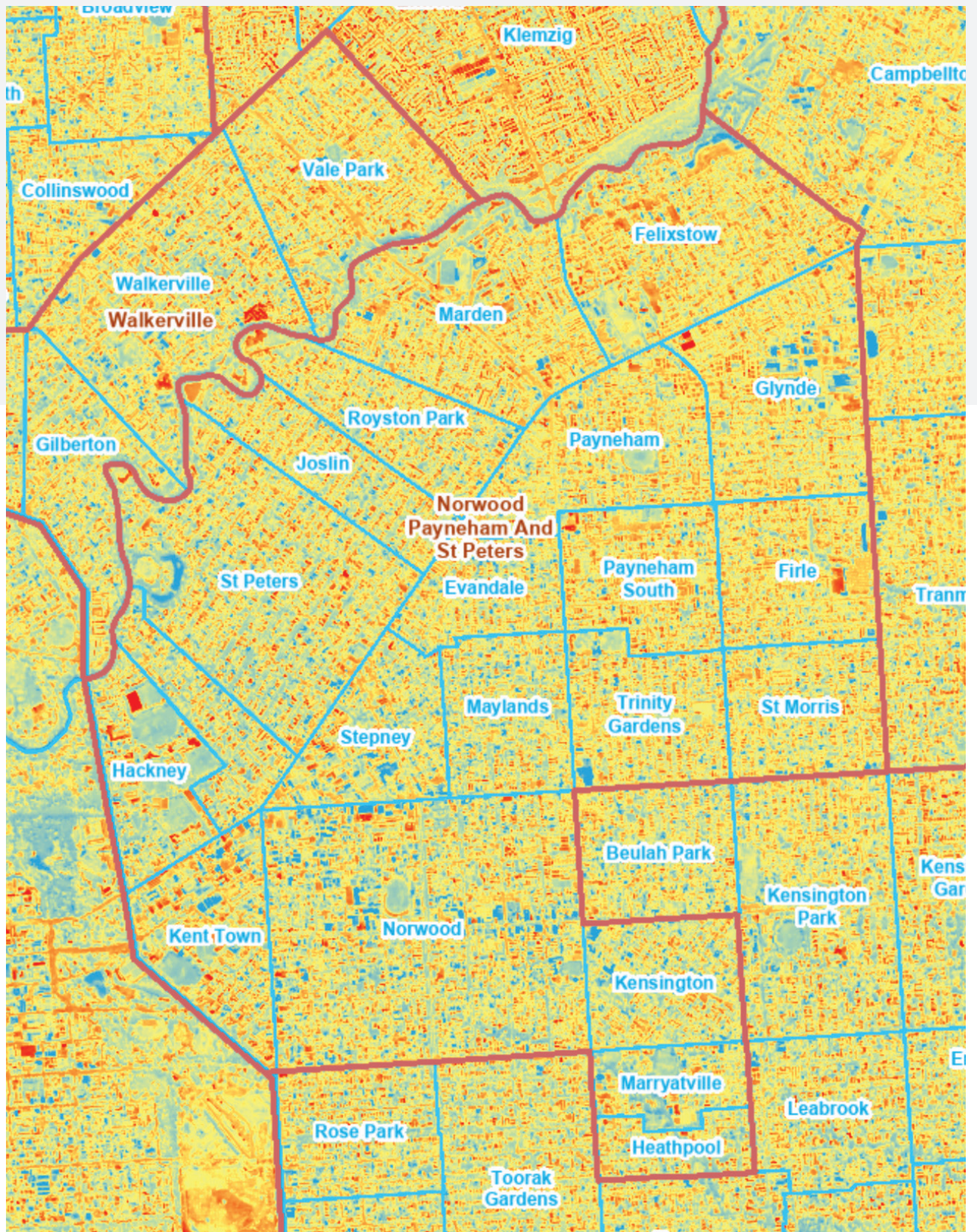


Figure 10.
Day time heat map of the City of Norwood Payneham & St Peters



Benefits of Trees

Trees provide exceptional service to our environment, whether that be through health, lifestyle or budget. Their benefits have been well documented in a variety of ways. Some of the benefits include:



Increase property values

Leafy streets can increase property values by up to 30%.



Shading and cooling

Trees provide shade and can cool our streets and homes by up to ten degrees lessening our need for air-conditioning.



Reduce pollution

Leaves filter the air we breathe by removing dust and pollution.



Reduce stormwater runoff

Tree roots absorb water and reduce stormwater runoff.



Improve liveability

Leafy green streets encourage us to get outside and walk more.



Improve wellbeing

Living with trees lowers our stress levels and improves our mood.



Connection to the past

Some trees have cultural or historical significance providing important connections to our past.



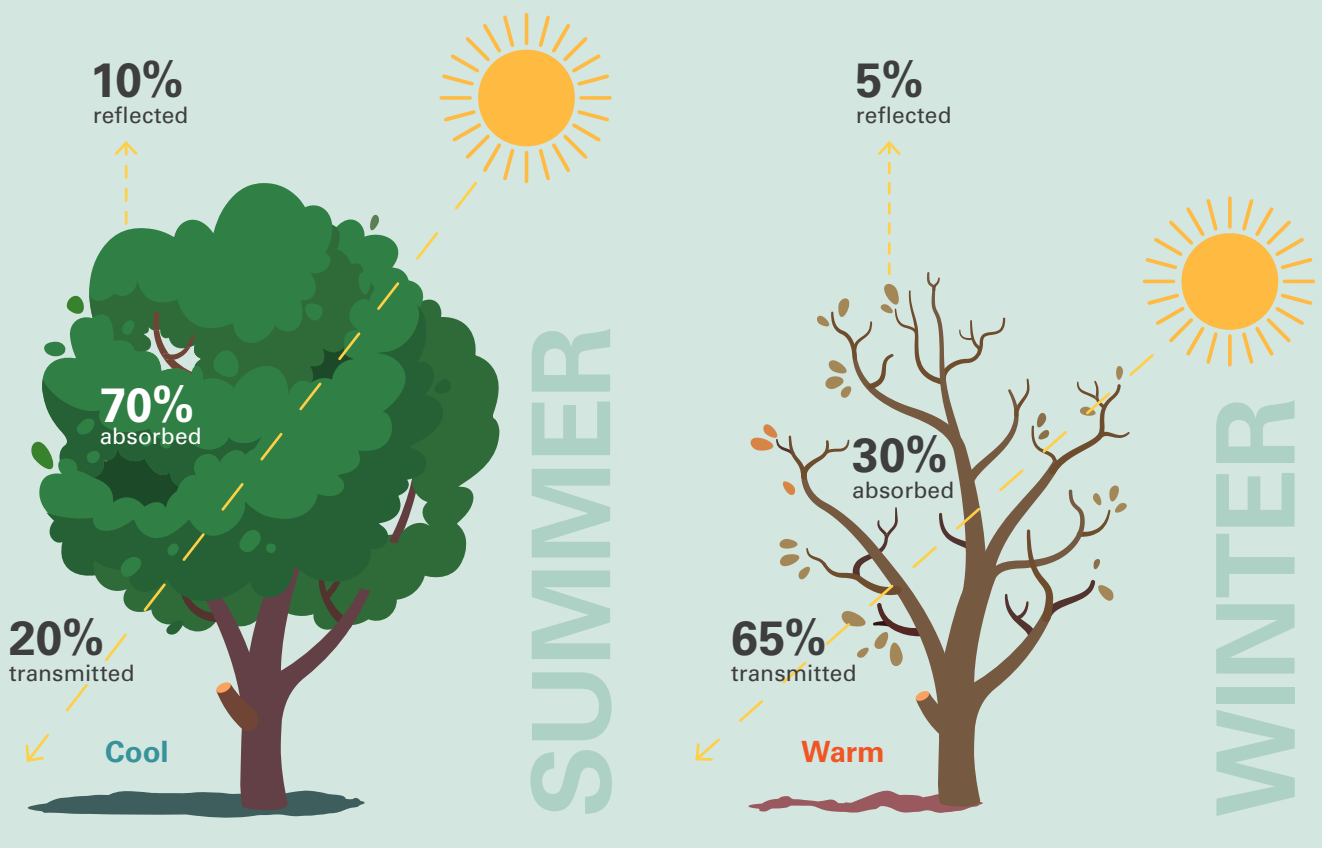
Habitat for animals

Trees also provide home, shelter and food for birds and other animals.

Trees not only cool the City's streets, but can cool our homes if located nearby. This results in lowering the need for air-conditioning, lowering energy costs and reducing our environmental footprint. Similarly, deciduous trees can provide sun access into our homes during winter creating warmth and less need for heating (see *Figure 11*).

Figure 11.

The cooling and warming effects of deciduous trees



Note: This image is based on an illustration contained in *Guide to Urban Cooling Strategies*, Low Carbon Living CRC, 2017.

Managing Tree Risks

There are risks associated with trees, in particular the risk of personal injury and property damage associated with tree roots, debris and falling limbs.

As trees are living entities, constantly changing and impacted by external factors in the environment, it is impossible to eliminate risk entirely. However, trees can be proactively managed to reduce the risks.

Across South Australia, the incidence of tree and limb failure (on both public and private land) is forecast to increase over the next two to three decades due to the following key factors:

- Tree senescence – large groups of street trees will come to the end of their useful life expectancy.
- Urban consolidation – as densities and utility infrastructure needs increase (above and below ground), there will be increased competition for space by both tree roots and tree canopies contributing to tree and limb failure.
- Drought and climate change – increased temperatures and reduced rainfall can reduce the health of trees and their capacity to withstand the stresses that trigger tree and limb failure.

The *Local Government Act 1999* and the *Civil Liability Act 1936*, provides the Council with a limited immunity from liability for property damage and/or injury caused by trees associated with roads, such as street trees. However, the Council may be liable for damages for personal injury under the common law of negligence. Where an incident occurs, the reasonableness of the Council's behaviour in all circumstances is generally the determining factor.

For example, in the case of a street tree, the Council's liability will depend on whether the owner of the private land adjacent to the road has made the Council aware of the potential risk in advance.

Under Section 245 of the *Local Government Act 1999*, if an owner or occupier of adjacent land makes a written request to the Council to take reasonable action to avert a risk of damage to property of the owner/occupier from the tree and the Council fails to take reasonable action in response to the request, then the Council may be liable. Whether or not the Council is liable will then depend on a range of considerations according to the principles of negligence law, including whether the risk was foreseeable, the degree of risk, and what a reasonable Council would have done in the circumstances.

Where a written request has not been made in relation to a street tree, the *Local Government Act 1999* provides the Council with immunity from liability for damage to property which results from a street tree. This is on the basis that it is unreasonable to expect that Local Government can be aware of potential problems of all Council owned trees at all times.

In the past, the Council has typically taken a reactive approach to tree risk management. This involves responding to reports of unsafe trees from the public, incidental observations made by staff and through clean-up operations after storm events.

The Council has a Customer Request Management (CRM) system that enables all tree related enquiries and requests from the community to be prioritised, categorised and actioned. The CRMs are prioritised according to the level of risk to public safety, and whether the City Arborist needs to be involved.

The majority of requests from the community relate to tree pruning (either upper canopy or lower branches), followed by fallen branches and health inspections. In respect to damage to private property, the majority of requests relate to tree roots causing damage to boundary walls, fences and foundations (see *Chart 3*).

This predominantly reactive approach to tree risk management is a common approach within Local Government. However, some Councils interstate that have adopted proactive management approaches, have reported a long term reduction in costs, as the clean-up after storms, risk-management pruning, community complaints and damage caused by failures, are reduced.

The primary objective of proactive risk management is to increase tree health and integrity. This approach has the benefits of reducing failure risks as well as increasing tree longevity, improving tree structure, tree amenity and biodiversity values.

Proactive tree risk management comprises the following elements:

- establishing a register of priority trees which may include trees of high value, high failure potential, high exposure or high public concern;
- assessing tree failure risk;
- identifying actions to manage risk;
- establishing and following a program to implement actions; and
- ongoing tree surveillance and maintenance of the tree.

It is essential that any proactive risk assessment and management procedures adopted by the Council, are carried out as planned. The Council will be exposed to claims of negligence if risks are not identified or managed according to adopted procedures.

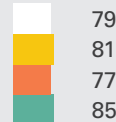
Through this Tree Strategy, the Council commits to improving the management of all Council owned trees through the implementation of a digital tree inventory, linked to a Geographic Information System (GIS) that will capture tree attributes such as health, structural condition and useful life expectancy. This will assist the Council in a proactive visual assessment program, establishment of a register of priority trees and a tree pruning and maintenance program. Through this process, tree risk should be kept to a minimum. It should also assist the Council to demonstrate that it is acting reasonably in its approach to managing trees.

Chart 3.

Customer requests relating to trees 2018–2021

2021 2020 2019 2018

Tree planting



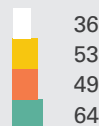
Tree removal



Tree pruning (Canopy or Visual Clearance)



Tree maintenance



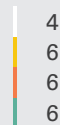
Tree health inspection



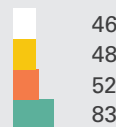
Fallen branch



Damage to public property



Damage to private property



A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.



Aerial view of Norwood showing tree canopy cover.

Strategic Alignment

The Tree Strategy 2022–2027 sits within the Council’s decision making framework and has been developed to align with and complement other key strategic and policy documents which impact or influence the City’s tree stock. The Tree Strategy will operate alongside other local, regional and state strategic documents and plans. The key strategic documents that have been used to inform this Strategy are summarised below.

30-Year Plan for Greater Adelaide

In 2010, the South Australian Government released its strategic plan to guide the long term growth and development of Greater Adelaide to ensure it remains liveable, competitive and sustainable over the next 30 years. It was updated in 2017 to reflect progress and to respond to new opportunities and challenges.

The 30-Year Plan has six high level target areas to guide development and measure progress against a series of baselines:

1. Containing our urban footprint and protecting resources
2. More ways to get around
3. Getting active
4. Walkable neighbourhoods
5. A green liveable City
6. Greater housing choice

Target 5, *A green liveable city*, is underpinned by the following policy objectives:

- maintenance of habitat for native fauna;
- reduction of the urban heat island effect;
- air quality improvements;
- stormwater management improvements;
- community health and social wellbeing;
- increased neighbourhood safety;
- positive visual amenity; and
- productive trees and food security.

Target 5 includes a goal aiming for a 20% increase in urban green canopy cover in metropolitan Adelaide by 2045.

How is this relevant to the Council's Tree Strategy?

The Tree Strategy will provide the strategic and operational framework to increase the tree canopy in the City. The policy objectives outlined under Target 5 assist in providing the strategic framework for tree planting in the City, where relevant

Council’s Strategic and Policy Framework

CityPlan 2030: Shaping Our Future



CityPlan 2030 sets out the strategic direction for the City over a 20 year period, with the overall aim of achieving Community Well-being.

The Plan includes a two part vision: A City which values its heritage, cultural diversity, sense of place and natural environment. A progressive City which is prosperous, sustainable and socially cohesive with a strong community spirit.

The Vision is underpinned by four outcome areas, each with its own individual aspiration and strategies. All four have a relationship to trees either directly or indirectly (see Figure 12).

Social Equity – An inclusive, connected, and accessible and friendly community.

- A people-friendly, integrated and sustainable transport network (1.2); and
- A strong healthy, resilient and inclusive community (1.4).

Cultural Vitality – A culturally rich and diverse city, with a strong identity, history and sense of place.

- Pleasant, well designed, and sustainable urban environments (2.4).

Economic Prosperity – A dynamic and thriving centre for business and services.

Environmental Sustainability – A leader in environmental sustainability.

- Sustainable and efficient management of resources (4.1);
- Sustainable streets and open spaces (4.2);
- Thriving habitats for native flora and fauna (4.3); and
- Mitigating and adapting to the impacts of climate change (4.4).

The Environmental Sustainability Outcome seeks to increase the amount of green cover on both public and private land through a target of planting a minimum of 500 new trees per year in streets and/or in public spaces. An interim target of increasing canopy cover by 8% by 2030 is also included, aligning with the 30-Year Plan.

Figure 12.

Quadruple bottom line framework



How is this relevant to the Council's Tree Strategy?

The Tree Strategy will provide the strategic and operational framework to increase the tree canopy in the City. The Strategies assist in providing the strategic framework and objectives behind the approach to tree planting in the City.

City-Wide Cycling Plan

The aim of the Plan is to increase overall cycling rates within the City, leading to health, environmental, economic and social benefits for the community. It also aims to develop liveable neighbourhoods with a connected network of cycling streets and develop a culture that will foster long-term behavioural change.

Two areas of the City are identified as requiring traffic investigations and improvements to provide safer environments for all road users but in particular cyclists (See Figure 13). This provides an opportunity to look at those areas strategically and identify opportunities for tree planting.

How is this relevant to the Council's Tree Strategy?

Trees can provide shade and cooling along the streets that form part of the pedestrian and cycling network, making the experience more pleasant and comfortable. This is particularly important in the summer months as bitumen is one of the hottest surfaces in the City.

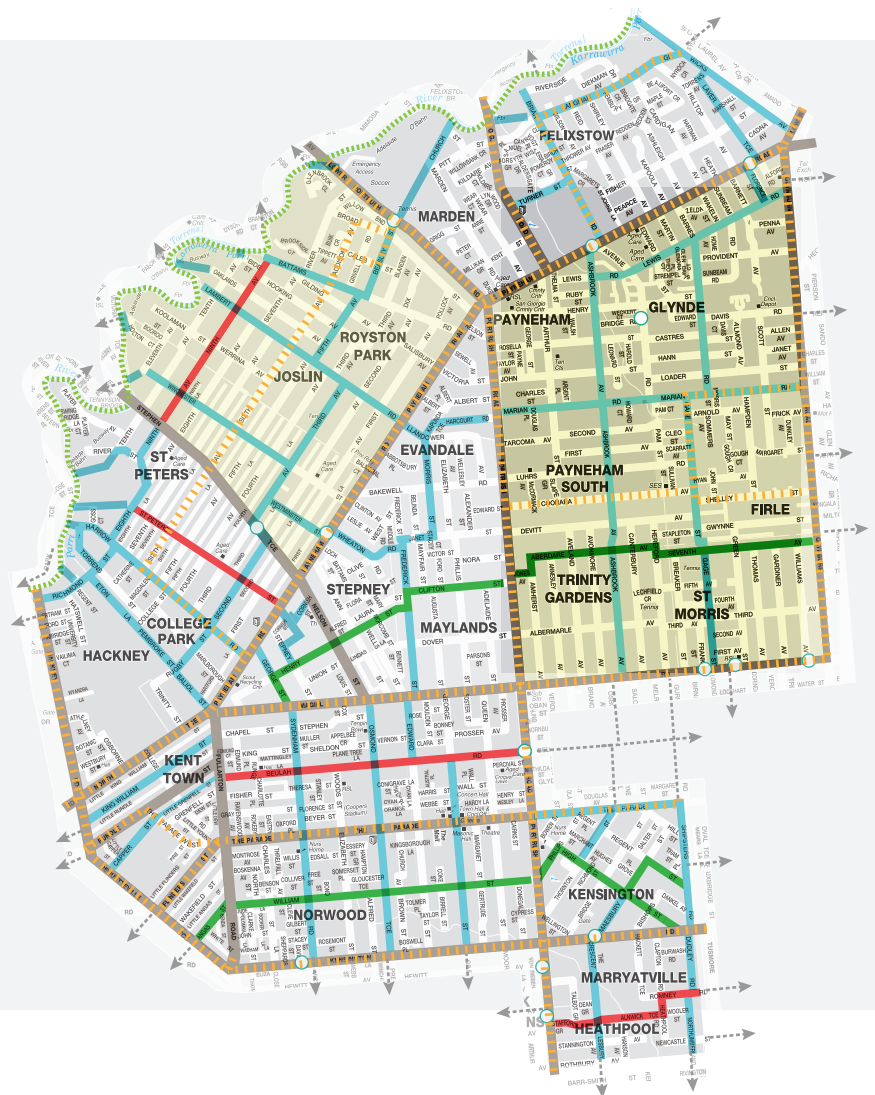
Trees that drop excessive amounts of seeds, nuts, pods and other hard material can create uneven surfaces and potential slip hazards.

As part of the traffic management study plans, opportunities could be investigated to incorporate street trees into future traffic calming devices, if relevant.

Figure 13.

Cycling network and traffic management study area

- Bikeway - Completed Or Near Completion
- Bikeway - Design In Progress
- Citywide Bicycle Network
- Adelaide Metro Bus Route
- Road Maintained by the Department for Infrastructure & Transport
- Traffic Management Study Area 2021–2022



Access and Inclusion Strategy: A City for all Citizens



It is estimated that more than 10,000 residents living in the City have specific access and inclusion needs, including:

- residents who live with a range of disabilities restricting some activity;
- families and children aged 0 to 4 years who are more likely to use strollers and prams; and
- people over 65 years who would benefit from improved access including well-maintained and wider footpaths to accommodate mobility scooters and wheelchairs.

The Strategy sets out the Council's approach to planning and service delivery for an accessible and inclusive City.

How is this relevant to the Council's Tree Strategy?

Footpaths and streets that are clean and clear of street tree debris and leaf litter will assist in delivering safe, walkable and accessible environments for residents of all abilities.

Tree roots lifting footpaths can also create uneven footpaths making access difficult.

Asset Management Plan – Civil Infrastructure

The Council's Asset Management Plans (AMPs) covering civil infrastructure, drainage, building infrastructure, stormwater infrastructure and recreation and open space infrastructure, are aimed at ensuring the Council considers the management and development of its infrastructure and major assets at a strategic level. The assets identified in these Asset Management Plans are either depreciated or appreciated and linked to long term funding for renewal or capital upgrade.

While Council owned trees are recognised as assets, they are not the subject of an asset plan. The Civil Infrastructure

AMP identifies the Complete Streets to be constructed over the next 10 years. These streets have been identified based on a number of strategic factors including their importance as key corridors within the City, cycling routes identified in the City-Wide Cycling Plan or areas used by a high number of pedestrians.

How is this relevant to the Council's Tree Strategy?

Streets that form part of the cycling network but not identified as Complete Streets could be prioritised for street tree planting, subject to satisfying other considerations and criteria.

Community Land Management Plans



Most land owned by the Council, except roads, is classified as Community Land under Section 193 of the *Local Government Act 1999*. The Plans outline the Council's objectives and performance targets for the management of all parcels of community land.

The Council owns and maintains 72 parks and reserves, 10 sporting facilities, 11 civic and community facilities and 26 parcels of operational and other land, spread across the City. Over 7,000 trees are located on this Council owned land.

The Plans include a common objective stating that trees at Council reserves, facilities and public places are healthy, structurally sound and well-maintained.

This is to be achieved through a range of common strategies relating to a tree management program, inspection and monitoring program, development of a comprehensive register for all trees in the City and through actioning requests from the community.

How is this relevant to the Council's Tree Strategy?

A consistent approach will be incorporated into the Tree Strategy as part of the overall management of trees across the City.

Economic Development Strategy

The primary purpose of the Strategy is to guide economic development within the City, identify priority areas and articulate the Council’s role in supporting business and economic development.

The City contains six major activity precincts and two commercial strips, which attract a diverse mix and a higher concentration of people.

The Parade is the largest activity precinct and attracts thousands of people each day. A key contributor to the success or failure of a precinct is the degree of visitation (see Figure 14).

How is this relevant to the Council's Tree Strategy?

Trees can significantly increase the visual appeal and physical amenity of an area. The Parade, with its long avenue of Red Ironbark trees on the central median, is a prime example of how this can be successfully achieved.

Identifying the activity areas within the City can help to prioritise locations for tree planting to strengthen the beauty and personal comfort of the area. They can also be used to prioritise tree inspections and pruning programs, in order to manage public risk.

Figure 14.

Activity precincts in the City



Kent Town Urban Design Framework and Public Realm Manual

The Kent Town Urban Design Framework and Public Realm Manual set out a comprehensive plan for upgrading Kent Town to create an attractive, vibrant and integrated public realm. They include a tree palette of nine trees to create diversity and visual interest. The trees are selected according to the street hierarchy—main roads, streets and laneways.

How is this relevant to the Council's Tree Strategy?

This approach could be adopted for Complete Street upgrades or other masterplanned or strategic projects.

Open Space Strategy

The Open Space Strategy provides a framework for the Council to effectively manage, maintain, enhance and develop its open space network for the benefit of a variety of stakeholders. The Strategy identifies key areas of open space, including parks, reserves, playgrounds and sporting facilities, as well as creek corridors, large areas of privately owned or institutional open space (such as school ovals), civic spaces and vacant public land.

The Open Space Strategy outlines the role of open space as extending beyond recreation and sport to include:

- Conservation and biodiversity;
- Amenity;
- Utility;
- Transport and access; and
- Tourism.

How is this relevant to the Council's Tree Strategy?

Tree lined streets complement the City's open space network and provide linkages to key areas of open space. Trees can also contribute to biodiversity by extending wildlife corridors in certain situations such as close to creeks and within parks and reserves. The Community Land Management Plans explore this in greater detail.

Verge Landscaping and Maintenance Policy & Guidelines

The Council's Verge Policy sets out the requirements for property owners and residents who are seeking to use the Council verge space for planting and landscaping.

The Council's standard treatment of verges is dolomite (or quartzite in St Peters, Evandale, Hackney, College Park, Joslin, Stepney and Maylands), or in certain circumstances such as main roads, full width paving from front boundary to kerb.

The two key objectives of the Policy are to:

- set clear guidelines for verge landscaping applications, to ensure that landscaping works do not interfere with or compromise existing Council infrastructure including street trees; and
- increase vegetation cover across the City (by removing hard compacted surfaces) to provide a cooling effect during hot summer weather and increase rainwater infiltration to support soil moisture and street tree health.

The Policy states that the Council 'reserves the right to plant tree(s) in a verge or footpath at any time at its discretion'.

The Guidelines for Landscaping of Council verges also states that trees are not allowed to be planted by Authorisation Holders and that street trees are the responsibility of the Council. If the verge being landscaped does not have a tree, the resident can contact the Council to request one.

The Guidelines also outline appropriate planting practices particularly in the vicinity of trees and the structural root zone. Any approved landscaping in the Council Verges must allow permeable and/or unplanted area around the tree of at least 1.5 square metres, or around the structural root zone.

How is this relevant to the Council's Tree Strategy?

Community expectations will require consideration and management in relation to the interface between the Annual Tree Planting Program and Verge Gardens.

Regional Climate Change Adaptation Plan

The Regional Climate Change Adaptation Plan, prepared jointly by Resilient East and the State Government, summarises climate change projections for the Eastern Region as:

- More frequent, long-running and intense heatwaves with the number of days over 40 degrees projected to double by 2050.
- Less rainfall overall with an estimated 7% decrease by 2050, with the greatest decline in spring, but more intense storms and flooding events.
- More frequent and extreme fire risk days, with an estimated 200% increase by 2090.
- Average temperatures projected to increase across all seasons by between 1.5 degrees and 2.0 degrees by 2050.

The Intergovernmental Panel on Climate Change (IPCC) released the latest climate projections data in 2021, which indicates that there is no immediate slowing of this trajectory and it is happening faster than projected.

In Australia, average temperature increases of 1.4 degrees have already been reached. Between 2010–2019 there was an average of more than 7 days a year over 40 degrees in Adelaide, indicating that the rate of increase of very hot days is greater than projected.*

The State Government is currently analysing the latest IPCC data and preparing new projections to determine regional specific impacts. Following this, the Regional Climate Change Adaptation Plan will be updated accordingly.

Resilient East is a regional climate partnership between eight Councils in the eastern region of metropolitan Adelaide and the State Government. Its purpose is to ensure the eastern region of Metropolitan Adelaide remains a vibrant, desirable and productive place to live, work and visit, and that the businesses, communities and environments located within the Eastern Region can respond positively to the challenges and opportunities presented by a changing climate.

How is this relevant to the Council's Tree Strategy?

The Regional Climate Change Adaptation Plan includes a broad range of priority adaptation options for the Eastern Region, two of which relate specifically to trees:

- improve stormwater management to maximise amenity and water reuse; and
- increase planting across urban areas.

Resilient East has also developed a range of initiatives and reports in collaboration with partnering Councils which have been instructive for developing the evidence base for the Tree Strategy. These include:

- Collaborative Heat Mapping for Eastern and Northern Adelaide Report (2018);
- Resilient East Street Tree Species Guideline (2011);
- Metropolitan Canopy Report 2020 (LiDAR); and
- Creating More Space for Trees Report (2021).

*State of the Climate, CSIRO and Bureau of Meteorology, 2020 and Guide to climate projections for risk assessment and planning in South Australia, Department for Environment and Water, November 2020.

Relevant Legislation

Local Government Act 1999

The *Local Government Act 1999* sets out the Council's responsibility in relation to any alterations to a public road.

Pursuant to Section 221(1), a person cannot alter a public road, without the authorisation from the Council to do so. This includes constructing a driveway, planting a street tree or removing a street tree.

Pursuant to Section 232(b), when assessing an application to plant trees and vegetation, the Council must consider environmental and aesthetic issues, the use and construction of the road including conflicts with infrastructure, road safety and any other matters considered relevant.

Under Section 232(b), the Council must also consult nearby residents, businesses or advertisers in the area, in accordance with its public consultation policy, if the trees are considered to have a significant impact.

The Council's Community Consultation Policy 2021, provides guidance regarding the purpose and approach of engaging with the community.

Planning Development and Infrastructure Act 2016 and Regulations

Definition of Regulated and Significant Trees

The *Planning, Development and Infrastructure Act 2016* and regulations sets out criteria for identifying regulated and significant trees.

A **regulated tree** is defined as any tree with a trunk circumference of greater than 2 metres measured at 1 metre above ground level. However, if there are multiple trunks, the trunks must have a total circumference of greater than 2 metres and an average of 625mm or more.

A **significant tree** is where the trunk circumference is greater than 3 metres when measured at 1 metre above ground level (with the same multiple trunk criteria). Or, any tree identified individually in Part 10 of the Planning and Design Code.

The Council does not have a list of individually identified significant trees.

The legislation excludes twenty-two trees from the regulated tree controls, either through their location or species. The full list of exempt trees is contained in Section 3F (4)(b) of the Planning Development and Infrastructure (General) Regulations 2017 and is summarised as follows:

- exotic species;
- considered to have a medium-high or high risk for limb failure and infrastructure damage; and
- commonly planted in urban areas.

Definition of Tree Damaging Activity

Tree damaging activity includes the removal, killing or destruction, branch or limb lopping, ringbarking or topping, or any other substantial damage, including to its root system, other than maintenance pruning which is separately defined.

The *Planning, Development and Infrastructure Act 2016* provides that any activity that damages a regulated or significant tree is 'development' and as such requires development approval from the Council.

The provisions apply equally to private land and public land (eg street trees and trees in parks and reserves).

Development approval however, is not required if the tree is:

- dead;
- located within 10m of an existing dwelling or in-ground swimming pool (excluding Willow Myrtle or Eucalyptus); or
- a declared pest or part of a woodlot, orchard or plantation.

Planning and Design Code 2021

Assessment of Tree Damaging Activity

The assessment of a development application for 'tree damaging activity' is performed by the Council against the relevant provisions contained in the Planning & Design Code – Regulated and Significant Tree Overlay. The Desired Outcome is stated as:

Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.

The provisions are divided into two categories:

- tree damaging activity not in connection with other development (Performance Outcome 1.3); and
- tree damaging activity in connection with other development (Performance Outcome 1.4).

Where the tree damaging activity is not in connection with other development, the assessment is focused on tree health and life expectancy, risk to public or private safety and damage to buildings of value, as follows:

Regulated and Significant Tree Overlay - Performance Outcome 1.3

A tree damaging activity not in connection with other development satisfies (a) and (b):

- (a) tree damaging activity is only undertaken to:
 - (i) remove a diseased tree where its life expectancy is short
 - (ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like
 - (iii) rectify or prevent extensive damage to a building of value as comprising any of the following:
 - a Local Heritage Place
 - a State Heritage Place
 - a substantial building of value
 and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity
 - (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire

(v) treat disease or otherwise in the general interests of the health of the tree and / or

(vi) maintain the aesthetic appearance and structural integrity of the tree

- (b) in relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.

Where the tree damaging activity is in connection with other development, the assessment is focused on the consideration of all reasonable development options and design solutions that would otherwise prevent the tree damaging activity from occurring, as follows:

Regulated and Significant Tree Overlay – Performance Outcome 1.4

A tree-damaging activity in connection with other development satisfies all the following:

- (a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible
- (b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.

If a development application proposes to remove a regulated or significant tree, the Council may either approve the application subject to conditions, or refuse it. If approved, a condition will be applied requiring that replacement trees are planted as follows:

- Regulated tree removal
 - 2 replacement trees
- Significant tree removal
 - 3 replacement trees*

Replacement trees cannot be trees on the exempt list, or planted within 10m of an existing dwelling or in-ground swimming pool. If an applicant chooses not to plant replacement trees, the option is available for money to be paid into the Council's Urban Tree Fund at \$153 per tree not planted.#

#Government Gazette Notice 3 June 2021 - Part 5 - Other Fees (29)

*Planning Development and Infrastructure Act (General) Regulations, 2017, 59(1) - Regulated and Significant trees

Assessment of unregulated street trees

Impacts on unregulated street trees (trees that do not meet the regulated or significant tree criteria), must still be considered as part of the assessment process of development on private land that involves the creation of vehicle access (a driveway crossover). Performance Outcome 23.4 in the General Development Policies of the Planning & Design Code (Design in Urban Areas—Car parking, access and manoeuvrability), it states that vehicle access should not interfere with street trees:

Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees (Performance Outcome 23.4).

In some situations, vehicle access is ‘Deemed to Satisfy’, however this does not apply to the removal of a street tree.

Urban Tree Canopy Overlay

The Planning & Design Code introduced an Urban Tree Canopy Overlay together with new requirements and processes for the management of trees in metropolitan residential areas in relation to new dwellings.

The stated outcome of the Overlay is that residential development preserves and enhances the urban tree canopy through the planting of new trees and retaining existing mature trees where practicable. The Overlay introduces the requirement to plant and/or retain trees where new dwellings are proposed to contribute to an urban tree canopy.

The number of new trees is determined according to the land size of the proposed dwelling:

| Site size per dwelling (m ²) | Tree size and number required per dwelling |
|--|---|
| <450 | 1 small tree |
| 450–800 | 1 medium tree or 2 small trees |
| >800 | 1 large tree or 2 medium trees or 4 small trees |

Tree sizes are defined under the Planning & Design Code. In addition, tree discounts can be applied where existing trees are to be retained on the site of the proposed new dwelling, provided they comply with the specified requirements.

Urban Tree Canopy Offset Scheme and Fund

The Planning & Design Code also introduced an Urban Canopy Offset Scheme to allow an applicant to make a payment in lieu of planting and/or retaining the required trees on-site as part of a development approval for a new dwelling.

The Scheme and Fund have been established to recognise that tree planting on some residential sites is less feasible due to allotment size, building setback requirements and/or soil types. Money collected is intended for distribution to Councils for tree planting and greening of public parks and reserves, subject to direction or approval from the Treasurer.

The Urban Canopy Offset Scheme only applies to land within the Urban Tree Canopy Overlay:

- Housing Diversity Neighbourhood Zone, Urban Renewal Neighbourhood Zone or City Living Zone; or
- On land with a designated soil type (H1-D, H2-D or E-D) being highly or extremely reactive.

The Housing Diversity Neighbourhood Zone is the only relevant zone in the City.

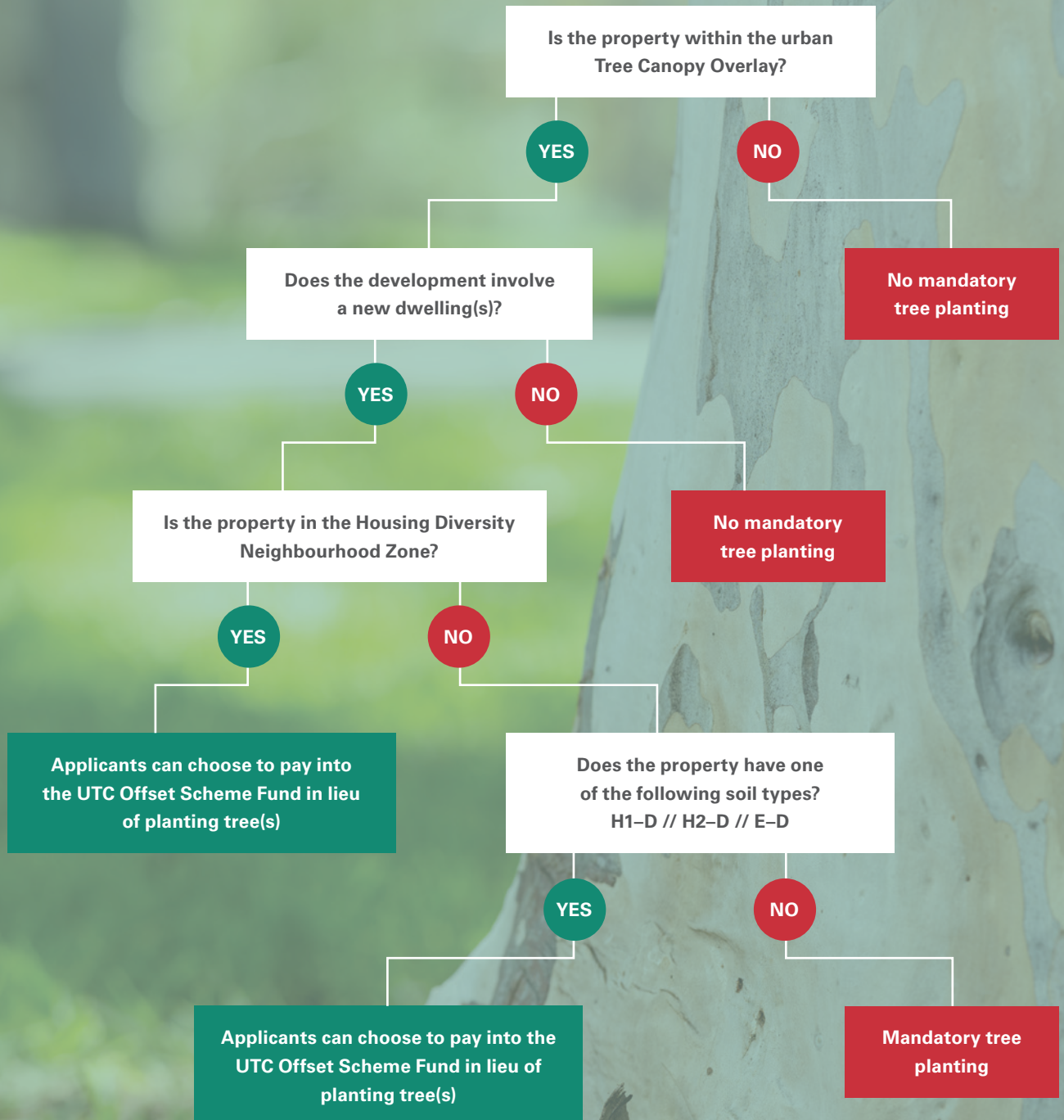
If this pathway is elected by the applicant, the payment into the Fund is imposed as a condition of consent on the development approval and the amount specified (see *Figure 15*).

The State Government has set the following amounts according to the size of tree that would otherwise be required in accordance with the Urban Tree Canopy Overlay:

| Tree size | Rate (per tree) |
|-----------|-----------------|
| Small | \$300 |
| Medium | \$600 |
| Large | \$1,200 |

Figure 15.

Urban Tree Canopy Overlay and Offset Scheme Flowchart



Tree Strategy Framework

Creating a *greener, cooler* and *more liveable* City to enhance Community Well-being.





The strategic context provides guidance for the rationale behind, and importance of, preparing a Tree Strategy and has informed the creation of three summarised strategic objectives:

- Adapting to climate change and mitigating against urban heat (Cooling).
- Ensuring species diversity to support sustainability and biodiversity (Sustainability).
- Delivering clean, safe and beautiful streets and footpaths to support active lifestyles and community well-being (Liveability).

These objectives assist in providing the framework, purpose and justification for the outcomes, strategies and actions contained within the Tree Strategy. In particular the Tree Performance Criteria and Street Tree Palette.

The Tree Strategy has been arranged into five themes:

- 1 Identify and Manage**
- 2 Protect and Value**
- 3 Plan for Growth and Renewal**
- 4 Maintain**
- 5 Inspire and Influence**

Each theme contains an Outcome statement, policy position and a range of strategies and actions designed to achieve the outcome.

1

Identify and Manage

A City where trees are managed as valuable living community assets.



Tree asset management

To manage any asset responsibly and effectively, up-to-date and accurate knowledge of the asset is necessary.

While the Council does not propose to manage trees in the same way that it manages its buildings, footpaths and roads through Asset Management Plans, it believes that the establishment of a detailed tree inventory is critical to the development of a proactive tree management framework.

The tree inventory will collect unique attributes such as location, age, species, height, health, condition and life expectancy as a minimum. This data will be used to assist in managing tree health, such as watering deficiencies and pruning requirements. The data will also assist in the development of a plan for identifying high value trees and ageing trees to support risk management and replacement plans.

The key to the success of the tree inventory is to keep it up-to-date and accurate. As trees are dynamic, living entities that are constantly changing, the inventory will require updating

on a regular basis. Due to the large number of Council owned trees in the City, approximately 20,000 street trees and 7,000 park and reserve trees, a five year timeframe to establish the inventory is an achievable goal, followed by a five yearly rolling program to continue to update it.

The Council will collect the data using software that is spatially linked to a GIS system to enable maximum flexibility and on the ground functionality. It will also be linked to the Council's CRM system to log and action issues raised by the community.

Actions

Identify and Manage

A City where trees are managed as valuable living community assets.

Policy position

The Council will keep an up to date inventory of its tree assets to inform management decisions.

Strategy 1.1 – Street tree inventory

Build and manage a comprehensive and accurate street tree inventory.

| Actions | | Timeframe |
|---------|---|-----------|
| 1.1.1 | Procure and implement tree identification and management software. | Year 1 |
| 1.1.2 | Establish a comprehensive tree inventory identifying and assessing the location, species, age, health and life expectancy of all Council owned trees (streets, parks and reserves), prioritising high risk areas. | Years 2–5 |

Strategy 1.2 – Implementation and monitoring

Monitor the implementation of the Tree Strategy.

| Actions | | Timeframe |
|---------|---|-----------|
| 1.2.1 | Establish a Staff Steering Group to ensure successful delivery of the action plan, including the integration across the Council, to monitor and track progress and report to the Council. | Ongoing |

Strategy 1.3 – Tree strategy review

Keep up to date with best practice approaches to tree management and maintenance.

| Actions | | Timeframe |
|---------|--|-----------|
| 1.3.1 | Review the Tree Strategy every five years to provide a strong strategic framework for the retention, protection and growth of the Council's tree assets. | Year 5 |



Protect and Value

A City where the existing tree population is valued and retained.



Retaining existing trees

Trees are a valuable and vibrant part of the City, which provide an array of environmental, social and economic benefits to those that live, work and play in the City. The Council's primary objective is therefore to retain as many existing trees as possible.

Some mature trees, particularly remnant vegetation can be many hundreds of years old. For example, a River Red Gum in Borthwick Park, Kensington has been dated as between 250–450 years old.

Mature trees provide a high degree of visual amenity to an area, with canopies at their maximum volume, providing shade and cooling and a home to birds and animals. They also store a higher degree of carbon than young trees and provide high levels of environmental service.

The eastern suburbs are characterised and well known for their leafy green streets and are highly sought after by the community.

It is therefore very important that in addition to planting new trees, existing trees are protected and retained, wherever possible.

Removal of Council owned trees

While the Council and the community place a high value on the City's trees, the Council also recognises that occasionally, there will be a need to consider the removal of Council owned trees. For example, where the tree has died or is showing irreversible decline, is structurally compromised, posing a risk, or preventing reasonable development that accords with the relevant provisions of the Planning & Design Code, from being approved.

In these instances, the removal of the tree may provide the best long term solution for the community.

Requests for the removal of a Council owned street tree falls into three broad categories:

- Not associated with other development.
- Associated with other development.
- Streetscape Upgrades and Major Projects.

Not associated with other development

The most common proposals for requesting the removal of a street tree not associated with other development are summarised as follows:

- the tree is believed to be dead or dying;
- the tree is believed to be causing damage to private property;
- the tree is considered to be creating an unreasonable degree of risk; and
- the tree is considered to be a nuisance.

To provide clarity, certainty and to assist in managing community expectations, the Council has established a list of reasons considered to be invalid for tree removal requests (See *Table 1*). In establishing this list, the Council acknowledges that all trees present with some level of nuisance at certain times of the year. However, it is the Council's view that in the majority of cases, the benefits of trees and particularly tree lined streets, far outweigh the level of nuisance.

Table 1.

Invalid reasons for removal of Council owned trees

The Council considers the following to be invalid justifications for the removal of a Council owned tree:

- property owner preference for no street tree or for a different species;
- complaints about appearance and/or smell;
- complaints about allergens (unless under exceptional circumstances and written advice is provided from a medical specialist);
- interruption of views;
- complaints about leaf litter, seed pods and other debris;
- complaints about tree roots proven not to be causing damage to private property;
- complaints about animals and associated nuisance and mess; or
- complaints about the overshadowing of solar panels.

If the request to remove a street tree is considered to have merit (ie is not considered to be an invalid reason), it will be assessed by the Council against the Council owned tree removal criteria (see *Table 2*).

Table 2.

Council owned tree removal criteria

| The Council will consider the removal of a Council owned tree, only if the tree is: |
|--|
| a. dead; |
| b. diseased, damaged, disfigured and/or failing to thrive and beyond reasonable rehabilitation; |
| c. structurally unsafe or poses a level of risk that is considered to be unacceptable or intolerant; |
| d. assessed as having a short life expectancy; |
| e. causing damage to Council infrastructure or private property; |
| f. preventing safe and convenient use of footpaths, which cannot be alleviated by a mitigation strategy; |
| g. presenting a significant road safety risk eg traffic visibility, which cannot be alleviated by pruning or other mitigation strategy; |
| h. preventing the development of land (eg by impeding access) and reasonable alternative development design options that would obviate the need to remove the tree have been considered; |
| i. subject to a specific Council policy, eg: Queensland Box that is unhealthy or poorly shaped. |
| j. subject to a strategic streetscape upgrade or major project where: <ul style="list-style-type: none"> - Retaining the tree is incompatible with the objectives of the project; - The tree is a species that, at maturity, will provide a low level of canopy cover in the context of the available space; or - will deliver a net gain in the: <ul style="list-style-type: none"> - number of trees; and/or - long term canopy cover. |
| Other considerations may include: |
| k. the amenity value of the tree. |

To assist with the assessment for removal of Council owned trees, the Council will prepare Council owned tree removal guidelines to accompany the criteria, including thresholds for unhealthy or poorly shaped trees that are damaged, failing to thrive and beyond reasonable rehabilitation.

If removal of the street tree is determined to satisfy the Council owned tree removal criteria, and the tree is unregulated, the tree removal will generally be supported and the Council will remove the tree.

If removal of the street tree is supported but the tree is determined to be either regulated or significant, the Council as land owner is legally obliged to lodge a Development Application. The proposal will then be further assessed under the relevant provisions of the Planning and Design Code – Regulated and Significant Tree Overlay.

If the request to remove the street tree satisfies all the relevant criteria, the Development Application will be approved and the street tree will be removed by the Council.

Associated with other development

The most common reason for a property owner to request the removal of a street tree that is associated with other development, is due to the creation of new allotments (land division) and/or dwellings, requiring additional driveway crossovers.

In this scenario, a Development Application will be lodged with the Council and an assessment will be undertaken in accordance with the relevant provisions of the Planning & Design Code. An assessment under the Planning and Design Code is required irrespective of whether or not the street tree is regulated or significant.

If a Development Approval is granted for the land division and/or new dwelling(s) which relies on the removal of a street tree(s) for access, a separate authorisation under Section 221(2)(e) of the *Local Government Act 1999* is still required for the construction of the driveway. However, approval of that permit application can be reasonably anticipated in most instances.

As a general principle, if the tree is healthy, structurally sound and provides a positive contribution to the streetscape, approval will only be granted if the street tree is preventing the reasonable development of land and all alternative development options and design solutions have first been considered.

To assist with assessing Development Applications that propose the removal of a street tree to create a new driveway, the Council will develop driveway crossover guidelines demonstrating best practice design options for the positioning of driveways in relation to frontage widths, upright kerbing and street trees.

Streetscape upgrade and major projects

When the Council is undertaking streetscape upgrades, a Complete Street upgrade or major project, the removal of a small number of trees may be considered appropriate as part of the overall plan for the area. In these instances, the Council considers additional strategic and operational factors to determine whether or not a Council owned tree should be removed.

Any tree removals associated with a Masterplan are determined through a Council decision and the recommendations associated with these removals will form part of the Masterplan.

To also assist in understanding the variety of assessment and approval pathways, the Council will update existing forms and prepare a series of Flow Charts to clarify the processes.

Who removes the trees

The Council is responsible for all street tree removals (cutting and stump grinding) and the planting of a replacement tree, if determined to be appropriate.

A replacement tree will generally be planted within the following 12 month period, where practicable. This timeframe allows for the purchasing of an appropriate replacement tree and planting at the best time of year.

When a street tree is approved for removal in association with a development application or driveway crossover application, the Council undertakes the removal and invoices the applicant for the costs of the tree cutting and stump grinding.

Loss of amenity charges

There is the opportunity to charge additional costs where the street tree removal is for development benefit, based on an evaluation of the amenity of the tree. Commonly used methodology to determine the value of a tree incorporates the following five factors:

- base tree value (the cost of buying a new tree);
- tree species attributes (lifespan and growth rate);
- tree aesthetics (visual contribution to the landscape);
- tree location (street, park, garden, boulevard); and
- tree condition (tree health, condition and structural form).

These factors are rated and scored to provide a monetary amenity value of a tree. The value may range from a few hundred dollars to many thousands.

The Council will investigate the 'loss of amenity' methodology further to determine if this approach, or something similar, would be appropriate.

Queensland Box trees

Issues associated with Queensland Box trees have divided the community for many years. While the Queensland Box trees are a robust, evergreen and hardy street tree, they also have the habit of producing an excessive number of seed pods. These seed pods have caused a large number of concerns for some people due to the potential slip hazard they can create on footpaths, in addition to the visual mess.

The Council has debated how best to manage Queensland Box trees with options ranging from doing nothing to the complete removal of over 4,000 trees over a twenty five year period.

Acknowledging that neither of these options are reasonable, the Council has adopted a middle ground approach whereby Queensland Box trees that are healthy and in good structural condition will be retained and the seed drop will be managed through increased footpath and street sweeping. The Council's Street Sweeping Program has been overhauled to accommodate this approach and has been operating in its new form for three years.

The Council has also committed to remove and replace Queensland Box trees (with a more appropriate species) where they have been identified as unhealthy or poorly shaped as part of a long-term management strategy (refer to *Table 2* Council owned tree removal criteria). The implementation of the street tree inventory will assist with delivering this outcome.

A photograph of a tree-lined street. The trees are lush green and their branches form a canopy over the road. In the foreground, a blue car and a silver car are blurred, indicating motion. A cyclist is also blurred on the right side of the road. The overall scene is bright and green, suggesting a well-maintained urban environment.

**A City where
the existing
tree population
is valued and
retained.**

Tree removals on private land

The Council assesses proposals to remove regulated and significant trees on private land in accordance with the relevant provisions of the *Planning Development and Infrastructure Act 2016* and Regulations and the Planning & Design Code.

If a tree does not satisfy the requirements of being either regulated or significant, the tree can be removed without the need for approval.

In March 2021, the Planning & Design Code introduced an infill tree policy, requiring the retention of existing trees and

the planting of new trees on private property, in association with new dwellings in the City's Housing Diversity Neighbourhood Zone. It also allows for the payment into the newly established Urban Tree Canopy Offset Fund in certain circumstances, in lieu of planting trees.

It is too early to determine the success or otherwise of the new provisions and offset fund. The Council will however continue to collect data on tree plantings and removals associated with private development, where possible, to monitor the impacts on Councils tree canopy targets.

Actions

Protect and Value

A City where the existing tree population is valued and retained.

Policy position

The Council will endeavour to protect the existing tree stock which contributes to its well-recognised and valued character and retain as many trees as possible, except where there is a valid reason for its removal.

Strategy 2.1 – Council owned tree retention

Council owned trees are retained wherever possible and requests to remove Council owned trees are only considered where they satisfy the Council's tree removal criteria and processes.

| Actions | Timeframe | |
|---------|--|---------|
| 2.1.1 | Continue to prioritise the retention of all street trees. | Ongoing |
| 2.1.2 | Continue to rigorously apply the Council owned tree removal criteria. | Ongoing |
| 2.1.3 | Prepare illustrated Council owned tree removal guidelines and an approval process flowchart to accompany the Council owned tree removal criteria, including thresholds for unhealthy or poorly shaped Queensland Box trees and trees that are damaged, failing to thrive and beyond reasonable rehabilitation. | Year 1 |
| 2.1.4 | Develop illustrated driveway crossover guidelines demonstrating best practice outcomes in relation to street trees, frontage widths and upright kerbing. | Year 1 |
| 2.1.5 | Update Council's application forms and prepare a series of flowcharts to clarify legislative requirements, assessment and approval pathways. | Year 1 |
| 2.1.6 | Ensure street trees removed are replaced within 12 months, where practicable. | Ongoing |
| 2.1.7 | Investigate the introduction of 'loss of amenity' charges for street tree removals associated with development, to reflect the true value of the tree loss. | Year 1 |
| 2.1.8 | Continue to collect data on tree plantings and losses associated with private development. | Ongoing |

3

Plan for Growth and Renewal

A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.



Trees are living entities

The Council has committed to planting a minimum of 500 new trees per year over the next four years, in streets and public places, as a target towards achieving the State Government's goal of increasing canopy cover by 20% by 2045. With an existing canopy cover of 24% City-wide, the target is to reach 29%.

However, as trees are living entities that age, deteriorate and eventually die, action needs to be taken to plan for their renewal in the future. This is particularly important for trees of advanced age, that have a high value and may form part of a significant avenue.

Decisions associated with the removal of large and sometimes iconic street trees is not always popular and many people will have differing views on how it should be approached. However, with a strategic approach, appropriate levels of community consultation and technical arboriculture advice, it will reap rewards in the long run.

Where will all the trees go?

It is important to take a strategic approach to the additional street tree plantings to ensure all residents across the City receive the benefits that street trees provide. Currently the number of street trees, and associated canopy cover, varies significantly across the City from as low as 12.4% in Glynde to 35.2% in College Park.

Established residential suburbs such as College Park, St Peters, Heathpool, Royston Park and Joslin, are characterised by large homes on large allotments with generous front and rear gardens. These suburbs have had less infill development over time.

Conversely, Glynde has a high concentration of commercial and light industrial land uses with warehousing and car parking covering large proportions of the area. The streets have few footpaths to enable tree planting. Increasing canopy cover in this area will be difficult without major modifications to the road design.

Other suburbs with lower levels of canopy cover, such as Kent Town and Stepney, typically have smaller allotments and higher density housing. Others such as Firle, Payneham and St Morris have been the subject of significant infill development over the past 20 years. This has resulted in a higher percentage of hard surfaces, an increase in tree removals and less space to plant new trees.

It is the Council's goal to increase canopy cover across the City, while also providing a more equitable approach to the greening and cooling of the City.

This will be achieved through prioritising tree planting in suburbs with low levels of canopy cover by filling in the gaps along each street where possible (see *Table 3*).

Table 3.

Priority suburbs for tree planting

| Suburb | Canopy cover (%) | Priority for tree planting |
|-----------------|------------------|----------------------------|
| Glynde | 12.4 | Very High |
| Firle | 16.6 | Very High |
| Payneham South | 17.1 | Very High |
| Kent Town | 17.3 | Very High |
| St Morris | 17.9 | Very High |
| Payneham | 18.8 | Very High |
| Trinity Gardens | 19.9 | Very High |
| Stepney | 20.1 | High |
| Felixstow | 22.5 | High |
| Evandale | 24.0 | High |
| Norwood | 24.7 | High |
| Marden | 26.2 | Medium |
| Maylands | 26.4 | Medium |
| Kensington | 26.6 | Medium |
| Hackney | 27.2 | Medium |
| Joslin | 29.4 | Medium |
| Royston Park | 29.4 | Medium |
| Marryatville | 29.9 | Medium |
| St Peters | 34.2 | Low |
| Heathpool | 35.0 | Low |
| College Park | 35.2 | Low |

Other important considerations include streets and areas that have higher than average pedestrian use and people movement, including bus routes, shopping centres, business and activity precincts, schools and child care centres together with bikeways. Trees will provide these areas with a high level of visual amenity, comfort, shade and cooling in warmer months.

Streets and roads are one of the hottest surfaces in the City but are significantly cooler if covered in shade from trees. The Council will identify opportunities for increasing tree plantings on main roads, in consultation with the Department for Infrastructure and Transport, to plant large trees in existing medians and roundabouts, subject to road clearance and safety requirements being satisfied.

The Council will therefore prioritise areas for new street tree planting in accordance with the Street Tree Planting Priority Criteria (see *Table 4*).

Table 4.

Street tree planting priority criteria

| The Street Tree Planting Program is prioritised in accordance with the following: | |
|--|--|
| a. suburbs with less than 25% tree canopy cover identified in <i>Table 3</i> : Priority suburbs for tree planting. | |
| b. streets that form part of the cycling and bus network and/or within the traffic management study areas (<i>Figure 13</i> : Cycling network and traffic management study areas). | |
| c. areas and streets identified as Key activity precincts in the Economic Development Strategy (<i>Figure 14</i> : Activity precincts in the City). | |
| d. streets adjacent to schools and child care centres. | |
| e. hot spots as identified on the Urban Heat and Tree Mapping Viewer including: <ul style="list-style-type: none"> - roundabouts (subject to satisfying road clearance and safety requirements); and - medians (subject to satisfying road clearance and safety requirements). | |
| Other considerations may include: | |
| f. areas with known gaps such as redundant crossovers, unoccupied tree wells (where appropriate). | |
| g. watering efficiencies. | |
| h. community requests. | |
| i. areas associated with upcoming Capital Works. | |
| j. equity across the City. | |

Planning ahead

To allow for suburbs to be prioritised in a strategic and equitable manner and to enable community input into the tree species to be planted in their street, a 10 Year Forward Street Tree Planting Program will be developed based on the factors outlined in the street tree planting priority criteria (see *Table 4*). Forward planning will also allow for pre-ordering of tree stock with nurseries to ensure the trees are available at the time of planting.

As part of this forward planning, the Council will undertake at least one major streetscape upgrade or Complete Street

project per year, whereby a whole section of a street, is upgraded (footpath, kerb and gutter, paving, road surface etc). This approach allows for the integration of new street trees as part of the design and also the introduction of water sensitive urban design techniques, to assist with tree health. An analysis of any existing underperforming street trees may need to be undertaken in some situations. Replacements will be planned for in a strategic manner together with best practice planting and maintenance techniques to guarantee performance.

Opportunities to integrate the street tree planting program with open space and reserve upgrades to deliver multiple outcomes, including the establishment of green corridors and connectors will continue to be explored. External funding opportunities will also be pursued to increase the number of trees planted as part of each project where appropriate.

What kind of trees will be planted?

Almost everyone will have a different view on the type of tree they would like to see planted in the City. There is no perfect street tree that will please everyone. For this reason, the Council will select street trees (and other Council owned trees) based on performance. This will eliminate personal preferences and ensure the Tree Strategy’s strategic objectives regarding cooling sustainability and liveability are achieved. Sound tree selection, based on rigour, can also prevent problems from occurring further down the track.

The Council has therefore developed tree performance criteria to provide guidance for tree species selection based on their performance (see *Table 5*). The tree performance criteria have been ranked according to the generic location: residential streets, parks and reserves and main roads and medians. It can be applied to both new and replacement trees.

Providing food and habitat for native fauna is an important function of trees, particularly a wide variety of trees that supply flowers, leaves, nectar and pollens during different seasons. However, this function of trees has not been rated as a high priority for street trees (residential streets). This function, together with forming part of a wildlife corridor, is considered to be more suited to trees in parks and reserves. Street trees will therefore not be prioritised for their ability to provide habitat but equally will not be completely excluded for this reason.

In relation to allergies from trees, this has not been included as part of the performance criteria. This is an intentional omission based on a number of considerations. While the impact of pollen and other environmental

pollutants can have significant impacts on people who are sensitive to allergens, the variables are considered too complex to necessitate the exclusion of specific trees from the City as a whole.

According to Asthma Australia, grass pollens are considered to be the major outdoor allergy trigger and as such the Adelaide Pollen Count reports only on grass pollen. While some research suggests wind pollinated deciduous trees create more problems for asthma sufferers, there is no official guidance or direction from Government requesting that Local Government eliminates the use of these trees in the public realm. Instead, Asthma Australia provides advice to asthma sufferers on preventative medicines and avoidance strategies.

The priority rating outlined in *Table 5* has been established to provide a guide to the importance of various tree

characteristics relative to each other and according to their location in the public realm.

Based on the tree performance criteria, the Council has developed a street tree palette (see *Table 6*), which includes forty five tree species that generally satisfy the criteria. This palette will be adopted for new and replacement tree selections over the next five years, at which time it will be reviewed and amended if necessary.

It is not intended to be rigid, but provides clarity and consistency of approach. New cultivars of a listed species will not be exempt, provided they satisfy the over-arching tree performance criteria.

The status of the tree in relation to use under powerlines and proximity to SA Water infrastructure has also been identified for convenience.

Table 5.

Tree performance criteria

| Tree performance criteria | Residential streets | Parks & reserves | Main roads & medians |
|--|---------------------|------------------|----------------------|
| Objective 1 - Adapting to climate change and mitigating against urban heat | | | |
| Large canopy (where appropriate) | Med/High | Medium | High |
| Tolerance to extreme weather events (structurally strong) | High | Medium | High |
| Tolerance to drought, low water needs | High | Medium | High |
| Low maintenance needs | High | Medium | High |
| Proven success as street tree in similar climates | High | Low | High |
| Objective 2 – Species diversity to support sustainability and biodiversity | | | |
| Habitat for native fauna/wildlife corridor | Medium | High | Low |
| Species diversity (Family/Genus/Species) | Medium | Medium | Medium |
| Resilience to pest and disease attack | High | High | High |
| Objective 3 – Clean, safe and beautiful streets to support active lifestyles and community well-being | | | |
| Low level seed/fruit/nut/bark drop | High | Low | High |
| Non-invasive roots | High | Low | High |
| Beauty and seasonal variation | Medium | Medium | Medium |
| Ability to become a landmark tree | Low | High | Low |
| Ability to become part of a significant avenue | High | Low | Medium |
| Straight, upright trunk (to facilitate access and movement) | High | Low | High |

Table 6.

Street tree palette

| Genus species <i>Common Name</i> | Family | Characteristics | Residential streets | Main roads & medians | Utility status | |
|---|---------------|--|---------------------|----------------------|---------------------------|----------------------|
| | | | | | Approved under powerlines | Approved by SA Water |
| 1 <i>Acer buergerianum</i> Trident Maple | Aceraceae | Exotic, Deciduous 5–10m high, 5–10m wide Oval/round form | ✓ | | x | ^ |
| 2 <i>Acer campestre</i> <i>(incl. cultivars)</i> Field Maple | Sapindaceae | Exotic, Deciduous 5–10m high, 5–10m wide Oval/round form | ✓ | | ✓ | ^ |
| 3 <i>Acer x freemanii</i> Freemans Maple | Aceraceae | Exotic, Deciduous 5–10m high, 5–10m wide Oval/round form | ✓ | | x | ^ |
| 4 <i>Angophora costata</i> Smooth-barked Apple | Myrtaceae | Native, Evergreen 15–20m high, 15–20m wide Spreading form | | ✓ | x | Sch 2 |
| 5 <i>Angophora hispida</i> Dwarf Apple | Myrtaceae | Native, Evergreen 8m high, 6m wide Round form | | ✓ | ✓ | ^ |
| 6 <i>Arbutus unedo</i> <i>(incl. hybrids)</i> Strawberry Tree | Ericaceae | Exotic, Evergreen 5–10m high, 5–10m wide Spreading form | ✓ | | ✓ | Sch 2 |
| 7 <i>Brachychiton acerifolius</i> Flame Bottletree | Sterculiaceae | Native, Semi-deciduous 10–15m high, 5–10m wide Oval/round form | | ✓ | x | Sch 2 |
| 8 <i>Brachychiton hybrids</i> 'Bella Donna' 'Griffith Pink' 'Jerilderie Red' | Sterculiaceae | Native, Semi-deciduous 10–15m high, 5–10m wide Oval/round form | ✓ | ✓ | ✓ | Sch 2 |
| 9 <i>Brachychiton populneus</i> Kurrajong | Sterculiaceae | Native, Semi-deciduous 10–15m high, 5–10m wide Oval/round form | | ✓ | x | Sch 2 |
| 10 <i>Brachychiton rupestris</i> Narrow-leaved Bottletree | Sterculiaceae | Native, Evergreen 15m high, 15m wide Broad-domed form | | ✓ | x | ^ |
| 11 <i>Callistemon species</i> <i>(incl. cultivars)</i> Bottlebrush | Myrtaceae | Native, Evergreen 5–10m high, 5–10m wide Oval/round form | | ✓ | ✓ | Sch 1 |

Sch 1 Schedule 1 - Trees may be planted in streets but no closer than two metres (2m) to any sewer or connection without written approval from SA Water.

Sch 2 Schedule 2 - Trees may be planted in any street or road in any drainage area not closer than 3.5 metres to any sewer main or connection.

| | Genus species Common Name | Family | Characteristics | Residential streets | Main roads & medians | Utility Status | |
|----|---|-------------|--|------------------------|----------------------------|---------------------------------|----------------------------|
| | | | | | | Approved under powerlines | Approved by SA Water |
| 12 | <i>Celtis australis</i> European Nettle | Cannabaceae | Exotic, Deciduous 10–15m high, 10–15m wide Spreading form | ✓ | ✓ | x | Sch 2 |
| 13 | <i>Corymbia citriodora</i> 'Scentuous' Dwarf Lemon Scented Gum | Myrtaceae | Native, Evergreen 7m high, 3m wide Oval form | | ✓ | ✓ | ^ |
| 14 | <i>Corymbia eximia</i> 'Nana' Dwarf Yellow Bloodwood | Myrtaceae | Native, Evergreen 6–8m high, 4–6m wide Round form | | ✓ | ✓ | ^ |
| 15 | <i>Corymbia ficifolia</i> Red flowering gum | Myrtaceae | Native, Evergreen 5–10m high, 10–15m wide Spreading form | | ✓ | x | ^ |
| 16 | <i>Corymbia maculata</i> Spotted gum | Myrtaceae | Native, Evergreen >20m high, 15–20m wide Oval/Round form | | ✓ | x | ^ |
| 17 | <i>Cupaniopsis anacardioides</i> Tuckeroo | Sapindaceae | Native, Evergreen 5–10m high, 5–10m wide Oval/round form | ✓ | ✓ | ✓ | ^ |
| 18 | <i>Eucalyptus leucoxyton</i> (incl. cultivars) SA Blue Gum | Myrtaceae | Native, Evergreen Indigenous, Evergreen 15–20m high, 15–20m wide Oval/Round form | | ✓ | x | Sch 2 |
| 19 | <i>Eucalyptus leucoxyton</i> 'Euky Dwarf' Dwarf SA Blue Gum | Myrtaceae | Native, Evergreen Indigenous, Evergreen 5–6m high, 3–7m wide Spreading form | ✓ | | ✓ | ^ |
| 20 | <i>Eucalyptus sideroxyton</i> Red Ironbark | Myrtaceae | Native/Evergreen 10–15m high, 10–15m wide Oval/Round form | | ✓ | x | Sch 2 |
| 21 | <i>Eucalyptus torquata</i> Coral Gum | Myrtaceae | Native, Evergreen 5–10m high, 5–10m wide Oval/Round form | | ✓ | x | Sch 2 |
| 22 | <i>Fraxinus griffithi</i> Evergreen Ash | Oleaceae | Exotic, Deciduous 6–8m high, 4m wide Oval form | ✓ | | ✓ | ^ |

Sch 2 (P) Schedule 2 - Provisionally Classified - These trees are comparable to those listed in Schedule 2 but require written SA Water approval prior to planting in streets or roads.

^ Trees not officially approved, however liaison with SA Water is encouraged to determine if an appropriate clearance and/or planting technique can be approved on a case by case basis.

Table 6.

Street tree palette continued

| Genus species <i>Common Name</i> | Family | Characteristics | Residential streets | Main roads & medians | Utility status | |
|---|----------------|---|---------------------|----------------------|---------------------------|----------------------|
| | | | | | Approved under powerlines | Approved by SA Water |
| 23 <i>Fraxinus oxycarpa</i> 'Raywoodii' Claret Ash | Oleaceae | Exotic, Deciduous 10–15m high, 15–20m wide Spreading form | ✓ | ✓ | x | ^ |
| 24 <i>Geijera parvifolia</i> Wilga | Rutaceae | Native, Evergreen 5–10m high, 5–10m wide Spreading form | ✓ | ✓ | ✓ | Sch 1 |
| 25 <i>Ginkgo biloba</i> (<i>male sterile form</i>) Maidenhair | Ginkgoaceae | Exotic, Deciduous 10–15m high, 5–10m wide Oval/round form | ✓ | | x | Sch 2 (P) |
| 26 <i>Gleditsia triacanthos</i> (<i>incl. cultivars</i>) Honey Locust | Fabaceae | Exotic, Deciduous 10–15m high, 10–15m wide Weeping form | ✓ | ✓ | ✓ | Sch 2 (P) |
| 27 <i>Hymenosporum flavum</i> Native Frangipani | Pittosporaceae | Native, Evergreen 10–15m high, 5–10m wide Pyramidal form | | ✓ | x | Sch 2 |
| 28 <i>Jacaranda mimosifolia</i> Jacaranda | Bignoniaceae | Exotic, Semi-Deciduous 10–15m high, 10–15m wide Spreading form | ✓ | ✓ | x | Sch 2 |
| 29 <i>Koelreuteria bipinnata</i> Chinese Flame Tree | Sapinadaceae | Exotic, Deciduous 5–10m high, 10–15m wide Spreading form | ✓ | ✓ | ✓ | ^ |
| 30 <i>Koelreuteria paniculata</i> Golden Rain Tree | Sapinadaceae | Exotic, Deciduous 5–10m high, 10–15m wide Spreading form | ✓ | ✓ | Under Review | ^ |
| 31 <i>Lagerstroemia indica</i> (<i>incl. cultivars</i>) Crepe Myrtle | Lythaceae | Exotic, Semi-Deciduous 5–10m high, 5–10m wide Oval/round form | ✓ | | ✓ | Sch 1 |
| 32 <i>Melia azedarach</i> 'Elite' Non-fruiting White Cedar | Meliaceae | Native, Deciduous 10–15m high, 15–20m wide Spreading form | ✓ | ✓ | x | Sch 2 |
| 33 <i>Pistacia chinensis</i> Chinese Pistachio | Anacardiaceae | Exotic, Deciduous 5–10m high, 5–10m wide Oval/round form | ✓ | | Under Review | Sch 2 |

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Sch 2 Schedule 2 - Trees may be planted in any street or road in any drainage area not closer than 3.5 metres to any sewer main or connection.

| Genus species Common Name | Family | Characteristics | Residential streets | Main roads & medians | Utility status | |
|--|---------------|--|---------------------|----------------------|---------------------------|----------------------|
| | | | | | Approved under powerlines | Approved by SA Water |
| 34 <i>Platanus x acerifolia</i> (syn. <i>Platanus x hispanica</i>) London Plane | Platanaceae | Exotic, Deciduous >20m high, >20m wide Oval/round form | ✓ | ✓ | x | ^ |
| 35 <i>Platanus occidentalis</i> Oriental Plane | Platanaceae | Exotic, Deciduous 15–20m high, 15–20m wide Oval/round form | ✓ | ✓ | x | ^ |
| 36 <i>Pyrus cerasifera</i> 'Nigra' Purple-leaved Cherry Plum | Rosaceae | Exotic, Deciduous <5m high, <5m wide Oval/round form | ✓ | | ✓ | Sch 2 (P) |
| 37 <i>Pyrus ussuriensis</i> Manchurian Pear | Rosaceae | Exotic, Deciduous 5–10m high, 5–10m wide Spreading form | ✓ | | x | Sch 2 (P) |
| 38 <i>Pyrus calleryana</i> (incl. cultivars) Ornamental Pear | Rosaceae | Exotic, Deciduous 5–10m high, 5–10m wide Various forms | ✓ | | ✓ | Sch 2 (P) |
| 39 <i>Quercus cerris</i> Turkey Oak | Fagaceae | Exotic, Deciduous 15–20m high, 10–15m wide Oval/round form | ✓ | ✓ | x | ^ |
| 40 <i>Quercus robur</i> English Oak | Fagaceae | Exotic, Deciduous 15–20m high, >20m wide Spreading form | ✓ | ✓ | x | ^ |
| 41 <i>Sapium sebiferum</i> (syn. <i>Triadica sebifera</i>) Chinese Tallow Tree | Euphorbiaceae | Exotic, Deciduous 5–10m high, 5–10m wide Spreading form | ✓ | | x | Sch 2 (P) |
| 42 <i>Sophora japonica</i> Japanese Pagoda Tree | Fabaceae | Exotic, Deciduous 10–15m high, 10–15m wide Spreading form | ✓ | ✓ | ✓ | Sch 2 |
| 43 <i>Tristaniaopsis laurina</i> Kanooka Gum | Myrtaceae | Native, Evergreen 5–10m high, 5–10m wide Oval/Round form | ✓ | | ✓ | Sch 2 (P) |
| 44 <i>Ulmus parvifolia</i> Chinese Elm | Ulmaceae | Exotic, Deciduous 5–10m high, 10–15m wide Spreading form | ✓ | ✓ | x | Sch 2 (P) |
| 45 <i>Zelkova serrata</i> Japanese Zelkova | Ulmaceae | Exotic, Deciduous 10–15m high, 10–15m wide Oval/Round form | ✓ | ✓ | x | ^ |

Sch 2 (P) Schedule 2 - Provisionally Classified - These trees are comparable to those listed in Schedule 2 but require written SA Water approval prior to planting in streets or roads.

^ Trees not officially approved, however liaison with SA Water is encouraged to determine if an appropriate clearance and/or planting technique can be approved on a case by case basis.

Species diversity

The use of mass plantings of a single species (mono-cultures) can be aesthetically pleasing, creating beautiful avenues and grand boulevards. However, if they are attacked and die as a result of pests or disease, the result can be devastating to a local area, and take a decade or more to re-establish with new trees. Exotic, introduced species are more at risk of this than local indigenous species such as Eucalypts that have survived as monocultures for thousands of years prior to European settlement.

The main goal behind species diversity is to reduce the risk of catastrophic tree loss, often due to pests. This has occurred in a number of areas both in Australia and internationally. A popular approach is the ‘10-20-30’ rule, whereby an urban tree population should include no more than 10% of any species, 20% of any genus or 30% of any family. However, this approach is not rigid as pest varieties change, adapt and are unaware of arbitrary Council boundaries and designated areas.

The most important consideration for the Council is to maintain a reasonable degree of diversity with the exotic, introduced species. For this reason, species diversity has been considered in the Street Tree Palette to ensure future plantings are selected from a cross section of families, genus and species.

The palette contains 31 species suitable for residential streets and 31 suitable for main roads, with a number of species suitable for both environments.

The palette contains a wide variety of species, with representation from 20 Families and 27 Genera. The palette also has a good balance between native (20) and exotic (25) species. An assessment of species diversity will be undertaken after the tree inventory is more fully populated with accurate data.

There are two street tree species that are no longer considered appropriate based on their poor performance in the past (see *Table 7*). These trees should be replaced over time with suitable alternatives selected from the street tree palette and with reference to the site specific conditions. A non-fruiting variety of White Cedar, (White Cedar Elite) has been included in the street tree palette (see *Table 6*) as a suitable replacement for the existing variety that has excessive fruit drop.

Table 7.

Inappropriate street trees

| Species | Rationale |
|--|--|
| <i>Lophostemon confertus</i> Queensland Box | Excessive seed pod drop causing slip/trip hazard |
| <i>Melia azedarach White</i> Cedar | Excessive fruit drop causing slip/trip hazard |

The right tree in the right place

The Council is committed to planting the right tree in the right place.

The local conditions of an area, street and property, will influence the type of tree that will be selected from the street tree palette (see *Table 6*).

Some suburbs have developed their own character over time and are sometimes well known for the type of street tree they have. For example, St Peters, College Park and Norwood are well known for avenues of London Plane trees.

Where this character is valued by the community, the Council will endeavour to reinforce this character with new and replacement trees. The dominant character of the area will be considered as part of the street tree selection criteria.

The Council has previously planted one tree per property, but in order to significantly increase canopy cover, properties that have sufficient frontage and width, will be eligible for more than one street tree. A case by case approach will be taken factoring in the mature height and width of the new tree, the property frontage, footpath width, verge width and street width, above and below ground infrastructure among other considerations outlined in the street tree selection criteria (see *Table 8*). Although this is desirable, it is recognised that this may not be achievable in all situations.

SA Power Networks, SA Water and the Department for Infrastructure and Transport, all have species lists containing trees which they recommend as appropriate to plant within the vicinity of their infrastructure. The Council seeks to comply with all relevant requirements and processes and therefore a number of the trees have been included in the street tree palette.

The Council will also continue to collaborate with service providers to ensure competing strategic objectives can be satisfied.

To assist with the interpretation of this criteria and to provide practical guidance to the community and staff, the Council will develop illustrated Street Tree Selection Guidelines.

Table 8.

Street tree selection criteria

New and/or replacement trees in residential streets will be selected based on the following site specific considerations:

Character

The tree will match the dominant species of the street (from corner to corner), unless there is no dominant species, in which case a species will be selected from the tree palette taking into consideration other site specific criteria.

In instances where the dominant species has been deemed inappropriate, the tree will be selected from the Street Tree Palette taking into consideration other site specific criteria.

Spatial context

The tree size and form (at maturity) will complement the:

- width of the footpath and verge (if present);
- width of the road reserve (from property boundary to property boundary);
- width of the property frontage, with the view to planting multiple trees per property if space allows; and
- existing vegetation in the immediate vicinity (verge plantings and plantings on the adjacent property, if applicable).

Dwelling orientation

Whether the adjacent dwelling would benefit from a tree that provides shade in summer and sun in winter, where appropriate. Dwellings facing north and west benefit the most from deciduous trees.

Road safety

The tree will be positioned to comply with road safety guidelines regarding sightlines at intersections and roundabouts.

Succession planning

Possibly one of the most difficult aspects of managing street trees is planning for their replacement as they mature, age and begin to decline. Trees are at their most beautiful and offer the most benefits when they are in full maturity. It is difficult to accept they will not live forever.

The Council recognises that street trees grow in one of the harshest environments, which ultimately can affect their lifespan, depending on conditions. There are many factors that influence the life expectancy of a tree including its age, health, structure and environment.

As custodians of trees, the Council has a duty to manage ageing trees in such a way that future generations can also enjoy their beauty and reap the environmental and other benefits they bring.

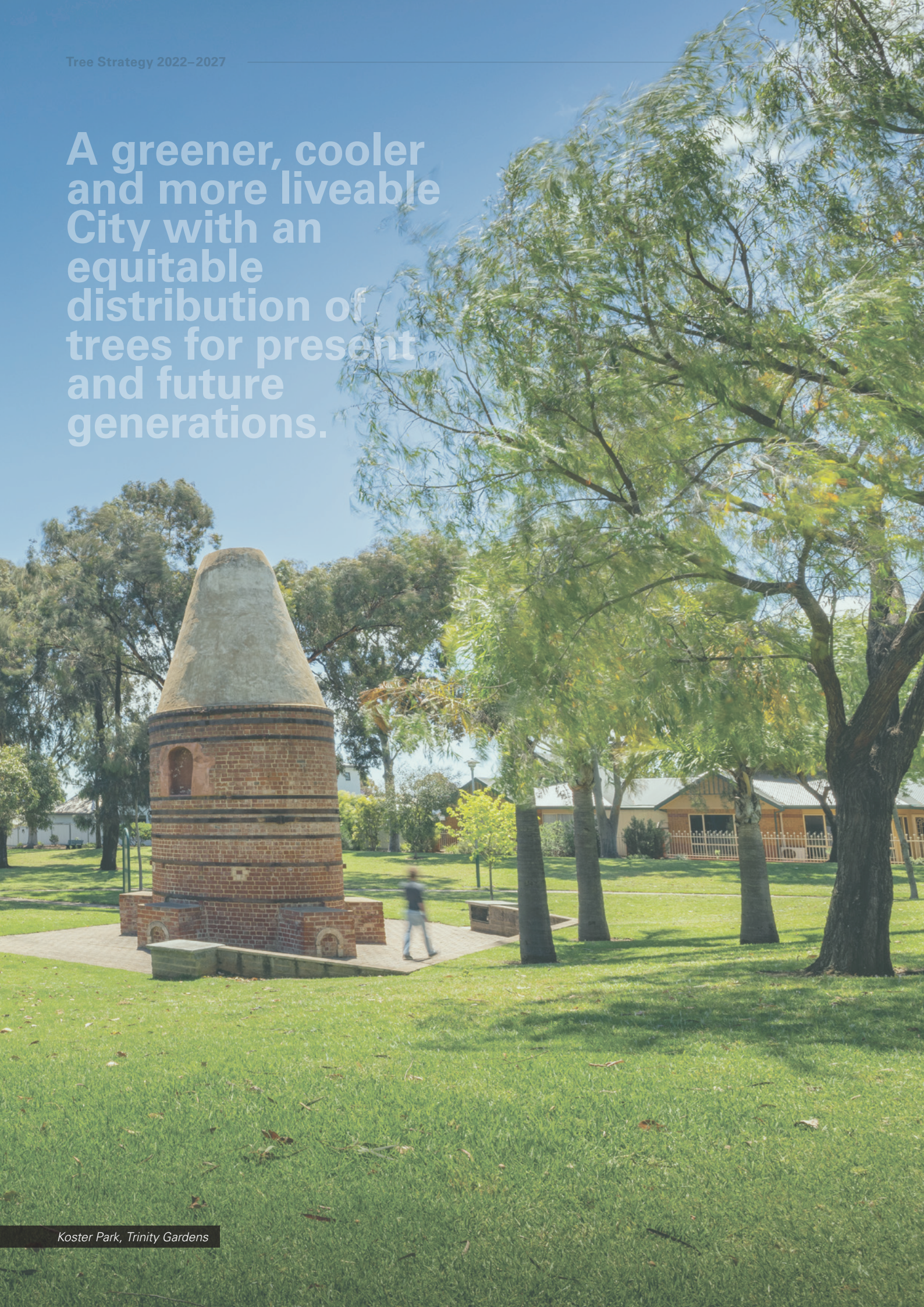
The City has a number of significant mature avenues of trees of approximately the same age. The Parade and Osmond Terrace in Norwood are two highly visible examples.

Recognising the Useful Life Expectancy of a tree is an important indicator, as it provides an opportunity for the Council to manage tree loss with a succession plan. Identifying the Useful Life Expectancy as part of the tree inventory process, will enable the Council to measure how long a specific tree will remain functional before it will need to be actively managed for removal and replacement.

Given the complexity around how to best approach the replacement process, including managing community expectations, the Council will develop a Long Term Replacement Plan for Ageing Trees, to assist with its implementation.

Planning ahead also allows for adequate funding, resourcing and the ordering of tree replacement stock well ahead of time to ensure availability of advanced tree stock, where appropriate.

A greener, cooler
and more liveable
City with an
equitable
distribution of
trees for present
and future
generations.



Actions**Plan for Growth and Renewal**

A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.

Policy position

The Council will plant new street trees in priority locations and replace ageing, inappropriate, dead or diseased trees in accordance with the street tree planting framework taking into consideration tree performance criteria, street tree palette, site selection criteria and the Long Term Replacement Plan for Ageing Trees, as outlined in the Tree Strategy.

Strategy 3.1 – Tree targets and priority areas

Increase the City's canopy cover by 20% by 2045 in a strategic and equitable manner.

| Actions | Timeframe |
|---|------------------|
| 3.1.1 Develop a 10 Year Forward Street Tree Planting Program, including the planting of a minimum of 500 new trees per year maximising the number of trees per property, as space allows. | Year 1 |
| 3.1.2 Continue to seek external funding where possible to boost the tree planting program. | Ongoing |
| 3.1.3 Deliver at least one Streetscape Upgrade or Complete Street project per year. | Ongoing |
| 3.1.4 Integrate the Street Tree Planting Program with open space and reserve upgrades to deliver multiple outcomes, including the establishment of green corridors and connectors. | Ongoing |
| 3.1.5 Integrate water sensitive urban design (WSUD) with street tree planting in streetscape upgrades, where possible. | Year 1 |

Strategy 3.2 – Tree species selection framework

Plant the right tree in the right place.

| Actions | Timeframe |
|--|------------------|
| 3.2.1 Select new Council owned trees in accordance with the with the Tree Performance Criteria. | Ongoing |
| 3.2.2 Select and plant street trees in accordance with the Street Tree Planting Priority Criteria, Street Tree Palette and Street Tree Selection Criteria. | Ongoing |
| 3.2.3 Develop illustrated Street Tree Selection Guidelines to complement the Street Tree Selection Criteria, demonstrating appropriate tree selections according to the street character, spatial context, adjacent dwelling orientation and road safety issues. | Year 1 |
| 3.2.4 Investigate the need to develop a Species Diversity Quota, upon the establishment of an accurate and comprehensive tree inventory. | Year 5 |
| 3.2.5 Continue to collaborate with essential service providers such as SA Power Networks, to influence the tree species appropriate for planting near utilities. | Ongoing |

Strategy 3.3 – Strategic tree replacement

Develop a long term strategy for the replacement of ageing trees that form part of a significant avenue or stand.

| Actions | Timeframe |
|--|------------------|
| 3.3.1 Develop a Long Term Replacement Plan for Ageing Trees identifying important avenues and stands of street trees (defined by SA Power Networks) and develop prioritised long term tree replacement strategies, in consultation with the community. | Year 5 |

4

Maintain

A beautiful, clean and safe City with healthy and well maintained trees.



Maintaining trees

Healthy well maintained trees have longer life spans and are less prone to pest and disease attack and structural failure. Good health and maintenance of trees begins from the time of purchasing the tree. Good quality tree stock with good structure is an important initial consideration.

Appropriate planting practices specific to each site are also necessary, including careful site preparation. Verges typically have poor quality soil which is highly compacted making it hard for trees to grow to their full potential. The presence of underground infrastructure such as gas, water and sewerage also influence the approach in many situations.

The Council has recently implemented a new planting practice to increase the size of the planting pit to maximise the area of soil and mulch around new trees, where possible.

Young street trees have a three year establishment phase and maintenance during this period is fundamental to their future success. This involves the installation of tree wells to capture water, staking to assist with stability, formative pruning to develop good shape and weekly watering during hot and dry periods. A new, well maintained street tree will take approximately 15 years to reach its mature state. If the tree does not receive this initial care and water, it may not grow and thrive.

Once trees are established, they require less maintenance and generally survive from rainwater. Additional supplementary watering will always be beneficial, particularly during summer. The Council will actively seek collaboration with the community to assist with the watering of new and mature trees adjacent to their property.

While the Council has informal protocols in place to guide tree planting and maintenance practices, the Council will develop Council Owned Tree Planting and Maintenance Operational Guidelines to accompany the Tree Strategy, to ensure all staff are up to date with current practices, protocols and legislative requirements. Regular staff education and training will form part of this process.

Treenet inlets

Treenet inlets are a water sensitive urban design (WSUD) product that are designed to redirect stormwater from gutters into underground storage pits providing supplementary watering of adjacent trees. Each inlet holds up to 500 litres of water per rainfall event, which gradually filters out through a leaky well design, watering the adjacent trees. Debris and silt are filtered out in the gutter and removed by the street sweeping trucks. They also assist with stormwater pooling issues in gutters that some streets can experience after heavy rain.

The Council has installed over sixty treenet inlets in the past year and has committed to continuing the rollout of installations each year over the next five years based on the Treenet Inlet Criteria (see *Table 9*).

Table 9.

Treenet inlet criteria

Treenet inlets will be prioritised for installation in locations that are:

- near new or young trees;
- near trees of poor health;
- upstream from existing stormwater infrastructure;
- low grade (to maximise infiltration);
- in an urban hot spot as identified on the State Government's Urban Heat and Tree Mapping Viewer.
- in a high pedestrian use footpath or bikeway;
- in an industrial area; or
- associated with upcoming Capital Works.

Monitoring tree health

A number of large, mature street trees are inspected and managed by the Council on a routine as-needs basis. In some instances, this may be annually and in others three yearly. The tree inspections are carried out by a qualified Arborist. Tree pruning, or other mitigations occur following the outcome of the inspections according to the level of risk.

The tree inspection and monitoring process is based on Tree Safety Inspection Criteria (see *Table 10*) whereby the land use (people and property) upon which the tree could fail is considered first and foremost. This includes areas of high pedestrian use and foot traffic and sensitive land uses frequented by children and the elderly.

This is followed by an assessment of the value of the tree and the likelihood of tree or limb failure based on its age, health and condition. This informs the actions required to appropriately manage the tree based on its identified risk rating (for example, broadly acceptable, tolerable or unacceptable).

The Council will continue to take a proactive approach to tree safety management through identifying additional trees for regular inspection, based on the Tree Safety Inspection Criteria. A Tree Risk Rating and Management Framework will be formalised and included in the Tree Planting and Maintenance Operational Guidelines.

Table 10.

Tree safety inspection criteria

| Trees that satisfy all of the following categories will be prioritised for routine inspection and management: | |
|---|--|
| <p>Land use</p> <p>Trees located within:</p> <ul style="list-style-type: none"> high pedestrian usage areas including a bus route, school route, major pedestrian route associated with major shopping precincts; and/or the vicinity of sensitive land uses including child care centres, aged care facilities, retirement villages, swimming centres, community centres. | |
| <p>Tree Value</p> <p>Trees assessed as high value based on their visual contribution to the locality or historic, cultural, environmental, ecological or biodiversity significance.</p> | |
| <p>Tree Health</p> <p>Trees assessed as having a higher likelihood of failure based on their age, health, structure and useful life expectancy.</p> | |

Trees and their debris

Many people love trees but some people find it difficult to live with the debris which trees can create at different times of the year.

Trees are living entities and as such, they need to constantly change to survive. This involves producing flowers and seeds to pollinate, shedding leaves for renewal and sometimes shedding bark or limbs according to the weather and availability of water. All trees create mess to varying degrees.

The Council acknowledges that trees creating mess can be an annoyance for some people. However, as part of living with trees, the Council manages the debris through a comprehensive and regular street sweeping and footpath blowing program that varies according to the seasons and locations. In residential areas with high leaf litter and seed pod loads, street sweeping can be as regular as weekly.

The Council will avoid planting new trees which have these characteristics, such as Queensland Box, and will replace ageing trees with a more appropriate species.

The Council will also continue to respond in a timely manner and take reasonable action to requests from the community about any problem regarding street trees.

Actions**Maintain**

A beautiful, clean and safe City with healthy and well maintained trees.

Policy position

The Council will maintain all Council owned trees in accordance with best practice protocols outlined in the Tree Strategy and associated Operational Guidelines to ensure longevity of these living assets through good tree health and to minimise risk.

Strategy 4.1 – Tree planting & maintenance

Deliver best practice tree planting and maintenance processes to ensure existing and new trees thrive and potential damage caused to people and property by trees is minimised.

| Actions | Timeframe |
|--|------------------|
| 4.1.1 Develop and implement Council Owned Tree Planting and Maintenance Operational Guidelines, which includes best practice protocols for planting, watering, pruning and the like. | Year 1 |
| 4.1.2 Continue the rollout of Treenet inlets in accordance with the Treenet Inlet Criteria. | Ongoing |
| 4.1.3 Continue to undertake routine inspections of trees based on the Council's Tree Safety Inspection Criteria and take action as appropriate, according to the identified risk rating. | Ongoing |
| 4.1.4 Formalise a Tree Risk Rating and Management Framework to be included in the Council Owned Tree Planting and Maintenance Operational Guidelines. | Year 1 |
| 4.1.5 Continue to deliver staff Education and Training to ensure best practice tree maintenance practices are employed on an ongoing basis. | Ongoing |

Strategy 4.2 – Tree nuisance management

Manage tree litter and debris in accordance with community expectation, to keep the City beautiful, clean and safe.

| Actions | Timeframe |
|--|------------------|
| 4.2.1 Continue to deliver high levels of service through the street sweeping and footpath blowing program to minimise nuisance caused by street tree leaf litter and debris. | Ongoing |
| 4.2.2 Continue to respond in a timely manner to customer requests (CRMs) relating to all Council owned trees and take reasonable action, as deemed appropriate. | Ongoing |

5

Inspire and Influence

A City that recognises the power of collaboration to achieve an increase in the number of trees on private and public land to meet the City's tree canopy targets.



Community education and incentive programs

One of the Council's biggest challenges in reaching the tree canopy targets which have been set by the State Government, is the limited amount of public land available for tree planting.

In addition, land in private ownership comprises 70% of all land in the City of Norwood Payneham & St Peters, however it has the lowest proportion of canopy cover relative to total land area.

The State Government's agenda to increase the amount of urban infill development, to maximise existing physical and social infrastructure and to maintain the urban growth boundary to retain agricultural land, has come at a cost to urban trees and continues to create tension between development and the environment. Development being approved in accordance with State Government planning policies has meant that trees, despite the State Government setting tree canopy targets, are being removed to make way for development.

However, despite these challenges, the Council will continue to educate the community about the importance of trees. It will also encourage and incentivise the retention of existing trees and planting of new trees on private property as much as possible.

The Council already has a strong Urban Greening Program including:

- tree vouchers;
- Verge Planting Guidelines;
- Sustainable Garden Awards (including workshops, webinars and tours);
- free native tree giveaways; and
- Adopt a Tree.

The tree voucher program and the native tree giveaways have the combined potential to increase the number of trees planted on private land by nearly 7,000 by 2045, making a significant positive impact on the tree canopy cover on private land.

All programs will be evaluated and those that are successful will be continued and new programs introduced, as appropriate.

The Council will also seek to engage the community more proactively on the tree selections in their street as part of the long term tree planting program. This will be investigated through the preparation of a Community Engagement Plan tied into the 10 Year Forward Planning Program to explore options for this to occur. This process will complement community education regarding the benefits of trees, watering of new trees and other programs.

What does our Community say?

The Council undertakes a bi-annual survey to ask the community about their levels of satisfaction with Council services. It also asks community members (residents and businesses) what issues influence their levels of satisfaction.

Having clean and well-presented streets is one of the most important issues for residents. This includes the maintenance of footpaths and roads and the clearing of pathways and gutters from debris. The management of street trees and enhancing the natural environment is another.

The appropriate management of street trees, including the sweeping up of leaves and tree debris and fixing footpaths damaged by tree roots, relate directly to these issues.

The Tree Strategy factors these comments into its overall approach and reinforces the need for comprehensive street cleaning and footpath maintenance programs.

The Council will continue to seek the views of the community in relation to trees and tree management in future surveys.



Verde Living Apartments on King William Street, Kent Town

Partnerships and advocacy

The Council has developed strong partnerships with Resilient East, Treenet and Green Adelaide to advance tree canopy and heat mapping investigations, measurement tools and street tree trials. These partnerships are invaluable in working collaboratively to achieve common goals in a cost effective and efficient manner.

Partnerships also enable consistency in the approach to data collection, baselines and benchmarking, enabling accurate comparative analysis and measurement across the whole metropolitan area.

A significant achievement through collaboration has been the Heat Mapping and Vegetation Analysis across metropolitan area.

The Council will continue to support these groups, and others where appropriate.

Public private partnerships

In some situations, there is opportunity to develop public private partnerships to co-fund public realm projects that directly benefit new development areas. This has occurred in Kent Town where the rezoning of land has resulted in the construction of a number of medium to high density residential developments in areas formerly occupied by light industry. The Council, together with the State Government and private developers have jointly funded the streetscape upgrade of land adjacent to the East Park Apartments and Verde Living Apartments on King William Street. Works included new paving, street trees, verge landscaping, lighting, public art and seating.

The Council will continue to investigate partnership opportunities, particularly where additional street tree planting can be achieved.

Actions**Inspire and Influence**

A City that recognises the power of collaboration to achieve an increase in the number of trees on private and public land to meet the City's tree canopy targets.

Policy position

The Council will engage with the community, public and private sectors in relation to the benefits of tree planting and other tree related activities to establish joint partnerships to deliver a greener environment and reach the tree canopy cover targets.

Strategy 5.1 – Inspire the Community

Educate and incentivise the community to retain existing trees and plant new trees on private property.

| Actions | | Timeframe |
|----------------|--|------------------|
| 5.1.1 | Continue to deliver a range of Urban Greening (education and incentive) Programs. | Annually |
| 5.1.2 | Promote Council's Urban Greening Program and other tree related information and activities on the Council's website and other platforms. | Ongoing |
| 5.1.3 | Develop a Community Engagement Plan to investigate options to involve the community in street tree selections in their area. | Year 2 |
| 5.1.4 | Continue to seek the views of the community on trees through the bi-annual Community Survey and respond to issues as appropriate. | Bi-annually |

Strategy 5.2 - Influence through Partnerships

Collaborate with others to share data, learnings and resources to strengthen impact and effect change.

| Actions | | Timeframe |
|----------------|--|------------------|
| 5.2.1 | Continue active partnerships and advocacy activities, where appropriate, with Resilient East, Treenet and Green Adelaide, including the funding of regular Heat Mapping and Vegetation Analysis. | Ongoing |
| 5.2.2 | Continue to collaborate with the public and private sectors to co-fund streetscape enhancement projects, including new tree planting and verge landscaping. | Ongoing |
| 5.2.3 | Continue to collaborate with the State Government to inform strategic directions that support the delivery of an increased tree canopy. | Ongoing |

Action Plan 2022–2027

| | | 22/23 (Y1) '000 | 23/24 (Y2) '000 | 24/25 (Y3) '000 | 25/26 (Y4) '000 | 26/27 (Y5) '000 |
|--|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Identify and Manage | | | | | | |
| <i>A City where trees are managed as valuable living community assets.</i> | | | | | | |
| Strategy 1.1 – Build and manage a comprehensive and accurate street inventory. | | | | | | |
| 1.1.1 | Tree Management Software Licence | \$10 | \$10 | \$10 | \$10 | \$10 |
| 1.1.2 | Develop a Council owned Tree Inventory (prioritise high risk areas) | - | \$30 | \$30 | \$30 | \$30 |
| Strategy 1.2 – Monitor the implementation of the Tree Strategy. | | | | | | |
| 1.2.1 | Establish a Steering Group to monitor and track progress. | ✓ | ✓ | ✓ | ✓ | ✓ |
| Strategy 1.3 – Keep up to date with best practice approaches to tree management and maintenance. | | | | | | |
| 1.3.1 | Review the Tree Strategy every five years | - | - | - | - | \$10 |
| Protect and Value | | | | | | |
| <i>A City where the existing tree population is valued and retained.</i> | | | | | | |
| Strategy 2.1 – Council owned trees are retained wherever possible and requests to remove Council owned trees are only considered where they satisfy the Council's criteria and processes. | | | | | | |
| 2.1.1 | Continue to prioritise tree retention | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2.1.2 | Continue to apply tree removal criteria | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2.1.3 | Develop Council Owned Tree Removal Guidelines | \$10 | - | - | - | - |
| 2.1.4 | Develop Driveway Crossover Guidelines | \$10 | - | - | - | - |
| 2.1.5 | Update Council's forms, processes and approval pathways | ✓ | - | - | - | - |
| 2.1.6 | Investigate Loss of Amenity options | ✓ | - | - | - | - |
| 2.1.7 | Replace street trees within 12 months of removal | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2.1.8 | Continue data collection on tree plantings and losses associated with private development | ✓ | ✓ | ✓ | ✓ | ✓ |

Note – Costings are indicative only and subject to change.

| | | 22/23 (Y1) '000 | 23/24 (Y2) '000 | 24/25 (Y3) '000 | 25/26 (Y4) '000 | 26/27 (Y5) '000 |
|---|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Plan for Growth and Renewal | | | | | | |
| <i>A greener, cooler and more liveable City with an equitable distribution of trees for present and future generations.</i> | | | | | | |
| Strategy 3.1 – Increase the City’s canopy cover by 20% by 2045 in a strategic and equitable manner. | | | | | | |
| 3.1.1 | Develop a 10 Year Forward Tree Planting Program | ✓ | - | - | - | - |
| 3.1.2 | Continue seeking external funding to boost the Tree Planting Program | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3.1.3 | Continue to deliver at least one Streetscape upgrade or 'Complete Street' per year | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3.1.4 | Integrate planting program with open space and reserve upgrades | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3.1.5 | Integrate WSUD in streetscape upgrades | ✓ | ✓ | ✓ | ✓ | ✓ |
| Strategy 3.2 – Plant the right tree in the right place. | | | | | | |
| 3.2.1 | Apply the Tree Performance Criteria | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3.2.2 | Apply the Street Tree Planting Priority Criteria, Street Tree Palette & Street Tree Selection Criteria | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3.2.3 | Develop Street Tree Selection Guidelines | \$5 | - | - | - | - |
| 3.2.4 | Investigate introducing Species Diversity Quota | - | - | - | - | ✓ |
| 3.2.5 | Continue to collaborate with essential service providers | ✓ | ✓ | ✓ | ✓ | ✓ |
| Strategy 3.3 – Develop a long term strategy for the replacement of ageing trees that form part of a significant avenue or stand. | | | | | | |
| 3.3.1 | Develop a Long Term Replacement Plan for ageing trees | - | - | - | - | \$20 |
| Maintain | | | | | | |
| <i>A beautiful, clean and safe City with healthy and well maintained trees.</i> | | | | | | |
| Strategy 4.1 – Deliver best practice tree planting and maintenance processes to ensure existing and new trees thrive and potential damage caused to people and property by trees is minimised. | | | | | | |
| 4.1.1 | Develop Council Owned Tree Planting & Maintenance Operational Guidelines | \$25 | - | - | - | - |
| 4.1.2 | Continue the rollout of treenet inlets | \$20 | \$20 | \$20 | \$20 | \$20 |
| 4.1.3 | Continue routine tree inspections using the Tree Safety Inspection Criteria | ✓ | ✓ | ✓ | ✓ | ✓ |

Note – Costings are indicative only and subject to change.

| 22/23 | 23/24 | 24/25 | 25/26 | 26/27 |
|-------|-------|-------|-------|-------|
| (Y1) | (Y2) | (Y3) | (Y4) | (Y5) |
| '000 | '000 | '000 | '000 | '000 |

Maintain (continued)

A beautiful, clean and safe City with healthy and well maintained trees.

Strategy 4.1 – Deliver best practice tree planting and maintenance processes to ensure existing and new trees thrive and potential damage caused to people and property by trees is minimised.

| | | | | | | |
|-------|---|---|---|---|---|---|
| 4.1.4 | Formalise a tree risk rating and management framework | ✓ | - | - | - | - |
| 4.1.5 | Continue staff education & training programs | ✓ | ✓ | ✓ | ✓ | ✓ |

Strategy 4.2 – Manage tree litter and debris in accordance with community expectation, to keep the City beautiful, clean and safe.

| | | | | | | |
|-------|--|---|---|---|---|---|
| 4.2.1 | Continue to deliver the street sweeping & footpath blowing program | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4.2.2 | Continue to respond to CRM's in a timely manner | ✓ | ✓ | ✓ | ✓ | ✓ |

Inspire and Influence

A City that recognises the power of collaboration to achieve an increase in the number of trees on private and public land to meet the City's tree canopy targets.

Strategy 5.1 – Educate and incentivise the community to retain existing trees and plant new trees on private property.

| | | | | | | |
|-------|--|------|------|------|------|------|
| 5.1.1 | Continue delivering Urban Greening Programs (Education & Incentives) | \$25 | \$25 | \$25 | \$25 | \$25 |
| 5.1.2 | Promote Urban Greening Programs | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5.1.3 | Develop a Community Engagement Plan for street tree plantings | - | \$5 | - | - | - |
| 5.1.4 | Continue to seek community views on trees via the Community Survey | - | ✓ | - | ✓ | - |

Strategy 5.2 – Collaborate with others to share data, learnings and resources to strengthen impact and effect change.

| | | | | | | |
|-------|---|---|---|---|---|---|
| 5.2.1 | Continue active partnerships and advocacy activities | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5.2.2 | Continue to collaborate with the public and private sectors to co-fund streetscape projects | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5.2.3 | Continue to collaborate with the State Government to inform strategic directions | ✓ | ✓ | ✓ | ✓ | ✓ |

Targets and Indicative Costing

To achieve the Council's commitment to reach a 20% increase in canopy cover by 2045, the following annual tree planting targets are required, as a minimum.

These are net figures, acknowledging that a small number of trees will be removed and/or replaced each year as young trees fail to thrive and older trees reach the end of their useful life.

This results in approximately 830 net new trees per year on both public and private land, totalling over 19,000 new trees over the 23 year period to 2045.

In order to achieve this, the Council has committed to investing in additional resources to manage the additional trees on public land through the annual operating budget ensuring that new trees receive the necessary water and maintenance for the first three years during the critical establishment phase.

Incentives such as tree vouchers and giveaways to residents, encouraging the planting of new trees on private land have been well received and will continue to be rolled out, subject to ongoing success. Incentives such as these

are a cost effective approach to realising tree growth on private land, with the potential to result in nearly 7,000 additional trees over the 23 year period.

Indicative number of new trees by 2045

| New Trees Planted (Net) | Indicative trees pa | 2045 (23 yrs) |
|---|---------------------|---------------|
| Annual street planting program (filling in gaps) | 500 | 11,500 |
| Streetscape upgrades/ complete streets/major projects | 20 | 460 |
| Park & reserve upgrades | 10 | 230 |
| Tree vouchers/giveaways for residents (private land) | 300 | 6,900 |
| Total | 830 | 19,090 |

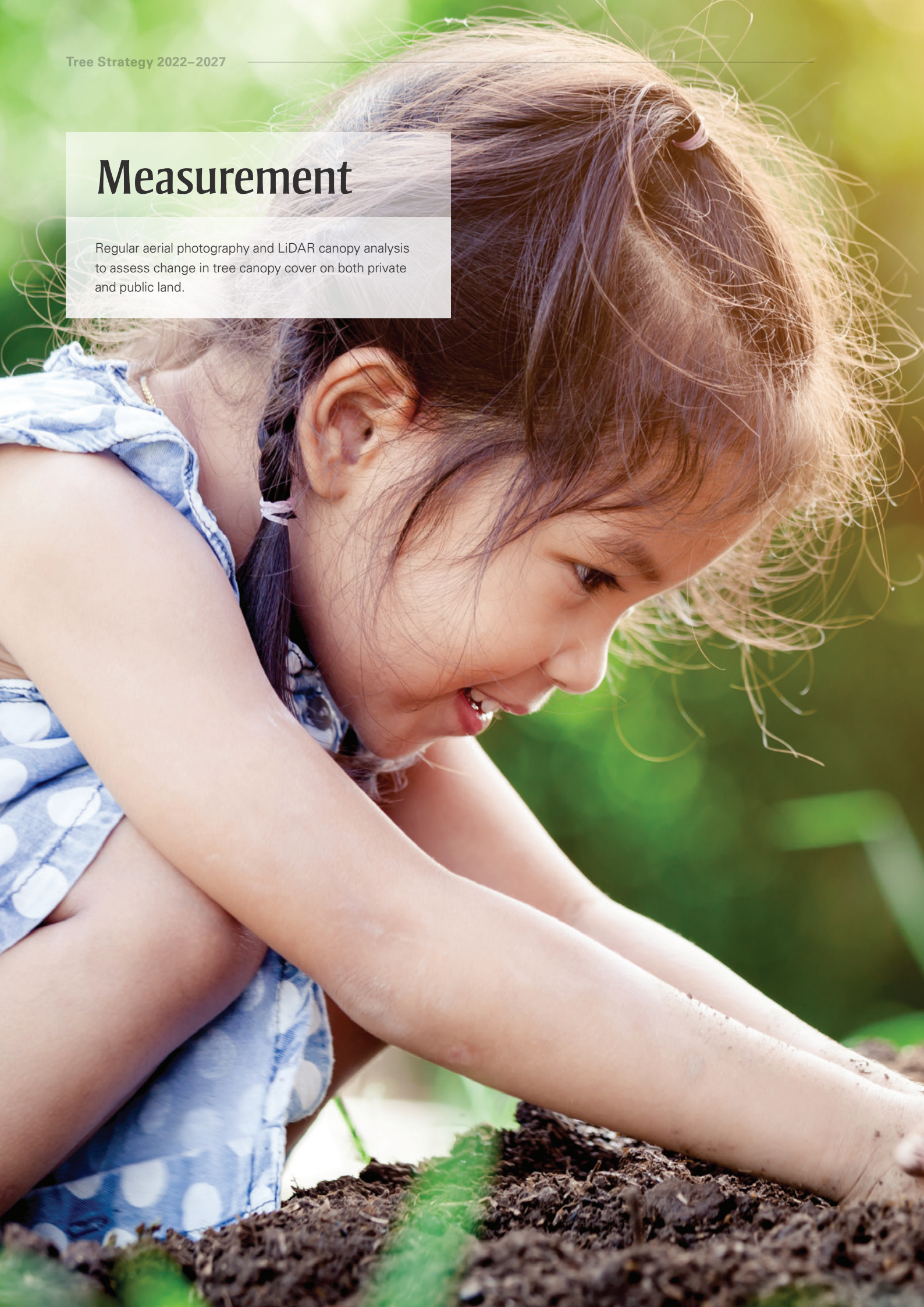
Indicative costing of initiatives

| Initiatives | 22/23 (Y1) | 23/24 (Y2) | 24/25 (Y3) | 25/26 (Y4) | 26/27 (Y5) | Investment over 5 years |
|-----------------------------------|--------------|-------------|-------------|-------------|--------------|-------------------------|
| | '000 | '000 | '000 | '000 | '000 | '000 |
| Tree Management Software Licence | \$10 | \$10 | \$10 | \$10 | \$10 | \$50 |
| Tree Inventory | - | \$30 | \$30 | \$30 | \$30 | \$120 |
| Tree Strategy Review | - | - | - | - | \$10 | \$10 |
| Tree Removal Guidelines | \$10 | - | - | - | - | \$10 |
| Driveway Crossover Guidelines | \$10 | - | - | - | - | \$10 |
| Street Tree Selection Guidelines | \$5 | - | - | - | - | \$5 |
| Replacement Plan for Ageing Trees | - | - | - | - | \$20 | \$20 |
| Operational Guidelines | \$25 | - | - | - | - | \$25 |
| Treenet Inlets | \$20 | \$20 | \$20 | \$20 | \$20 | \$100 |
| Urban Greening Program | \$25 | \$25 | \$25 | \$25 | \$25 | \$125 |
| Community Engagement Plan | - | \$5 | - | - | - | \$5 |
| Total | \$105 | \$90 | \$85 | \$85 | \$115 | \$480 |

Note – Costings are indicative only and subject to change.

Measurement

Regular aerial photography and LiDAR canopy analysis to assess change in tree canopy cover on both private and public land.





Further information

For information on the Council's Tree Strategy 2022–2027, please visit www.npsp.sa.gov.au or phone 8366 4555.

You can also visit the Council's Customer Service Centre at the Norwood Town Hall, 175 The Parade, Norwood.

Additional copies

The Tree Strategy 2022–2027 can be viewed online at www.npsp.sa.gov.au

Copies may also be obtained by:

- visiting Norwood Town Hall
- visiting any of the Council's Libraries
- emailing townhall@npsp.sa.gov.au
- contacting the Council on 8366 4555
- writing to the Council at PO Box 204, Kent Town SA 5074



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Thinking of the environment

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City of
**Norwood
Payneham
& St Peters**