# INNER SUBURBAN UNLEY IS THE CANARY IN THE MINE

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City of Unley, South Australia

## Abstract

The City of Unley had 574 hectares (ha) of tree canopy cover in 2000 after having lost 8 ha per year on average in the ten years to 2018. Canopy cover dropped from 34% to 26.6%. The 2018-22 Elected Members responded by accelerating tree planting on Council land to achieve 2 ha per year. National prize-winning IT work enabled Unley to involve and inform citizens and property owners of the tree canopy cover on their property. Along with traditional giveaways, educational programs and financial help to owners of very large trees, the annual loss of trees on private property has been reduced by another 2 ha. Today Council has just 400 ha remaining. The information derived from Council's LiDAR data has pinpointed the problem and solutions. The 2022-26 Council working with the Government of South Australia's Minister for Planning has the information required to enable Unley to achieve the State Government's 31% target. This will enable Unley to remain liveable in a time of rising temperatures. Without action, the 50°C temperatures experienced in Western Sydney suburbs with less than 10% tree canopy cover will be ours.

## Introduction

The City of Unley is seeking to trial an initiative to preserve trees on private property. The trial requires the approval of the South Australian Government. Whilst preserving and providing incentives to grow trees, the initiative does so without restricting development within Unley. Council has sought the Minister for Planning's approval to engage in public consultation with citizens and property owners in Unley about introducing a scheme that would ensure new developments either retain and preserve a minimum of 15% tree canopy or contribute to a land offset fund to support Council's purchase of land to plant trees. Our search to determine whether others have already introduced a similar scheme, to provide evidence that it will deliver the outcome we expect, found no one using this approach. Our proposal appears to be a world-first to ensure the growth of tree canopy cover in inner city urban areas. The aim of this trial is to enable Unley to be able to reach its long-term goal of 31% tree canopy across the City. The trial requires only discretionary ministerial approval and requires no legislative amendments. Should the trial be successful, it would provide a model that similar inner urban areas around the world could implement.

## The Problem for the Canary

The City of Unley is located adjacent to the central square mile of Adelaide, South Australia's capital city. It is an inner-city urban area with expensive land values, and it has the lowest *per capita* open space provision in greater Adelaide at 3% or <8m² per person (City of Unley 2015). The council area with the next lowest open space provision is Prospect City Council, in inner northern Adelaide, with 11m² per person. In 2016 the Government of South Australia set a 31.2% tree canopy target for the City of Unley in its 30-Year Plan for Greater Adelaide. By 2017 Unley's canopy cover had decreased to 26.6%, down from 34% twenty years prior (Figure1). In the first decade the rate of the loss of trees accelerated to 1.3% per year and during 2007-17 the City was losing an average of 2% of its canopy cover each year. The greatest loss was on private property, dropping from 31% to 21%. In this short time Unley had lost a third of its tree cover on private property.

The environmental impacts of tree loss were highlighted when in 2018 the Eastern and Northern Adelaide Collaborative Heat Mapping Project (Seed Consulting Services *et al.* 2018) demonstrated the contrast between two adjacent streets with a 10°C temperature differential (Figure 2). Such a dramatic temperature difference on hot summer days is reported across whole suburbs in Western Sydney (Amin 2019) where tree loss is substantial due to subdivisions and development. Indeed "in some areas the difference was more than 10 degrees." Parts of Western Sydney are predicted to have more regular 50°C days and become unliveable at times, except underground. If nothing is changed, Unley will continue down the trajectory of a low tree canopy and the next generations will share the problem of those in Western Sydney living in Daking Street, where "Daking Street's 10 per cent coverage means it is left baking in the sun."

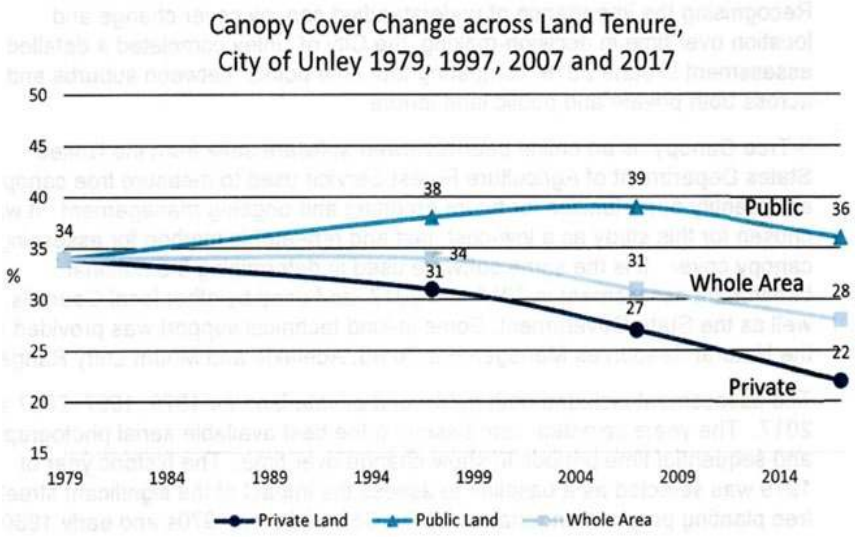


**Figure 1. Canopy cover change in the City of Unley between 1979 and 2017**

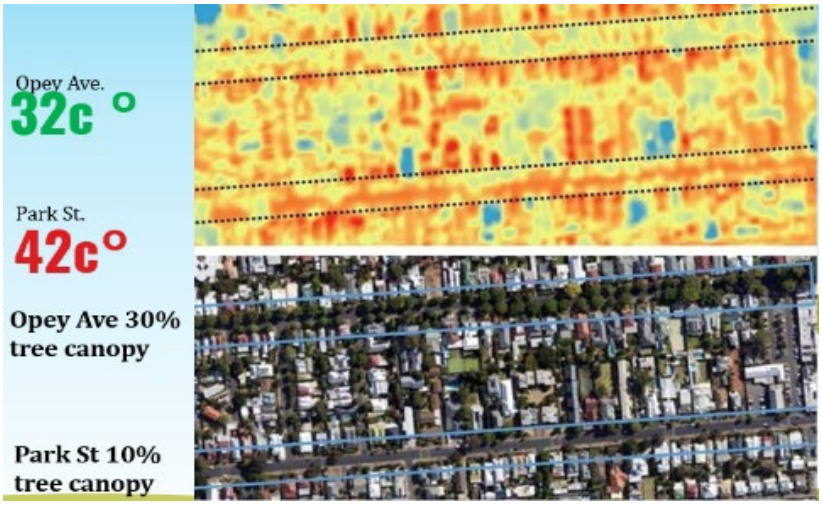


**Figure 2. Street tree canopy cover of 30% reduced the temperature by 10°C compared with canopy cover of 10%.**

## Council Initiatives

In 2018 a new Council was elected to the City of Unley and I was elected as their new Mayor. Campaigning specifically on the need for more trees in Unley, and without any hard data, I had claimed that a major contributor to the loss of trees was new development that increased the built form on the land and private property. I proposed that all new developments should either include trees or contribute to a tree land offset

fund to enable Council to plant trees. At the time it was not a feasible policy because Council had no means of policing the policy to ensure compliance. Local Government has the responsibility to set rates, so financial incentives via rate rebates were considered. In 2021 the Conservation Council of SA published "A call To Action, Protecting Adelaide's Tree Canopy" (Ballantyne *et al.* 2021) and proposed that a financial mechanism, including the use of Council rates be used to share the cost burden of tree ownership between the property owner and the community. These and similar measures are part of targeted tree incentive schemes operating in Unley and other Councils. We provide a taxpayer funded 50% subsidy to maintain large trees which are categorised as significant or regulated trees (Govt. of South Australia 2022). We conducted a Tree Voucher Giveaway, where winners were able to redeem an $80 voucher at local garden centres toward the purchase of a native, ornamental or fruit tree which would grow to at least 3m tall at maturity. A Conservation Grant is also available to assist property owners to preserve significant trees (City of Unley 2021). Our verge soil replacement program also contributes to the greening of urban streets.

To obtain a birds-eye view of tree canopy change across Unley, a program to capture this data was developed in partnership with geospatial technology company Aerometrex. LiDAR aerial surveys were used to compare changes over a period of three years. Unley then undertook a study to determine whether the LiDAR data could be utilised to enable every property in the City to have its tree canopy cover percentage included on their quarterly rates notice, which as far as we know is a world-first. In addition, the 'My Canopy' app (City of Unley 2022) was developed as an educational tool by which residents can view their property's 2018 tree canopy cover and then compare it to the cover in 2021 (Figure 3). This is part of our work to help maintain the leafy amenity of Unley for future generations through our Tree Strategy (City of Unley 2020). Thanks to the innovative work of Unley staff, this project won the City of Unley the 2022 National iTnews Benchmark Awards (iTNews 2022). The project was warmly received across Unley and residents enjoyed accessing the data on the app. We set a benchmark height for tree canopy as 3m, however the LiDAR data captures the height of every tree across the City of Unley which can be viewed via the app.


**Figure 3. Tree canopy cover loss between 2018 and 2021 at a private property**

## How can LiDAR Data be used to drive solutions?

The usefulness of the LiDAR data in monitoring canopy cover and height of canopy in Unley continued to prove worthy. Council staff endeavoured to filter all property development applications across the three-year period to identify new developments which would increase the built form. These properties could then be checked using the LiDAR data, and for the first time the change in canopy cover could be captured with an accuracy as small as 10 cm². The data showed that each year 50% of the loss was due to just 212 new developments that

increased the built form. However, 220 similar new developments *increased* the tree canopy by 13.45%, which shows how vital it is to have access to accurate data (Figure 4).

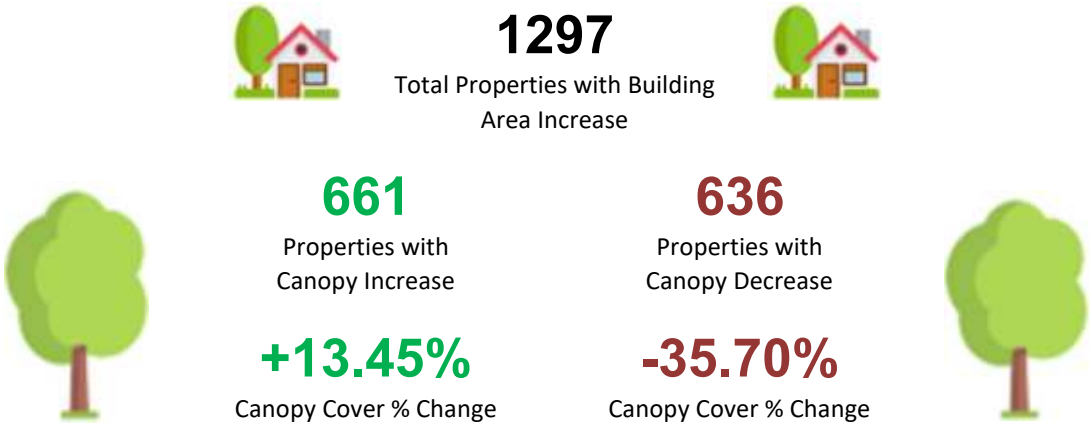


**Figure 4. Average positive and negative canopy change due to development between 2018-2021**

## Bronze medal and fool's gold prize

During a period where there was tree loss generally across metropolitan Adelaide, we could claim that Unley was on track to wonderful success, heading towards our 31% target, and could break out the celebration! The City of Unley has increased its tree canopy on Council's land by 5.19% reversing the downtrend of past decades. A dramatic U-turn indeed, from 6% down in three years to 5.19% up. Our overall city-wide coverage went up from 26.63% to 28% (Figure 5), only 3% more to go. However, through the data we were able to see **every** tree planted and removed and what it showed was that two trees were being removed for every tree planted. The data also showed that most of the planting was on public land. Therefore, to maintain the current uptick, we would be relying on existing trees staying alive forever and continuing to grow, but we will run out of land in five years. Our Council contribution is limited to 6.4% of the 31% target. For the long term, we are losing 1% of our canopy on private property each year. I will describe in very simple terms how the long-term trend working as is, will turn Unley into a large version of Western Sydney's Daking Street, with 50°C temperatures that could instead be 40°C if canopy cover can be increased to 30%.

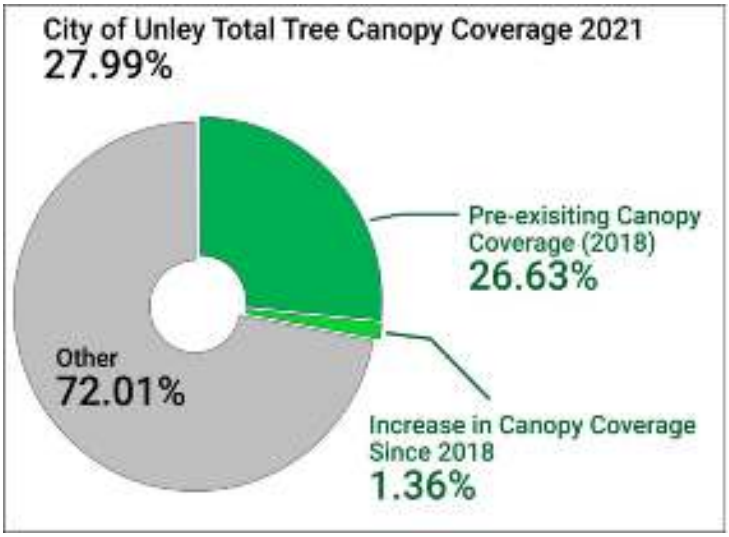


**Figure 5. Unley's total canopy cover increase (public and private land) between 2018 -2021**

## Unley's submission to the Minister for Planning

The City of Unley's submission to the Minister for Planning seeks approval to conduct public consultation on the following approach to sustaining tree canopy cover:

- When a development application is lodged, an assessment of tree canopy cover on the property would be made against a target canopy cover of 15%. This target aligns with the State's new planning code which makes provision for sufficient 'soft soil' to enable all new developments to be able to grow 15% tree canopy cover should they choose to do so.
- If the 15% target is not met when the development is completed, the property owner would be charged an additional 10% of their rates, until such time as 15% canopy cover is achieved on the property. If the 15% target is met at the time of development, the additional charge would not be imposed.
- The additional income received by Council would go into a tree land fund to purchase additional land on which to plant trees to achieve the desired canopy cover.
- Legal advice indicates that for the concept to be implemented it would require amendments to Section 154 of the Local Government Act to enable Council to impose a separate rate directly connected to this purpose, or the Minister for Planning could approve the creation of an offset fund in accordance with Section 197 of the *Development and Infrastructure Act 2016* (SA).

As we wished to go to public consulation about trialling a tree land offset fund and just ministerial approval was needed, we requested the following:

- The Minister for Planning approves the creation of an offset fund in accordance with Section 197 of the Planning, Development and Infrastructure Act 2016.
- The sole purpose of the offset fund is to enable Council to purchase land to plant trees on.
- Council bears the costs of planting and maintaining from recurrent revenue.

## Importance of the Planning Code

The new South Australian Planning Code includes rules that are essential for our offset fund to be fair for all. Incentives need to work hand-in-hand with planning rules. Together the proposed trial will enable the rules to achieve actual outcomes the state government will otherwise fail to deliver. Our proposal will encourage developers to consider retaining existing trees to avoid contributing to the offset fund. However, some new developments will be on land stripped of its trees and sold to a new owner. Whilst the vendor has to declare the annual rate to the buyer, if the tree canopy cover is less than 15% the rate will include the 10% contribution to the offset fund. The new Planning Code enables and incentivises the new owner to achieve the 15% tree canopy cover, but our proposal builds on that.

Our proposal relies on the parameters within the Planning Code that ensure that the developers and/or the future owners are able to plant trees to achieve the minimum 15% canopy cover. However, the Minister queried the need for initiatives beyond the Code to achieve the target cover:

> *"The Code introduced new criteria in March 2021 to require the planting/retention of at least one tree per dwelling for new infill housing, and a minimum 10 per cent to 25 per cent of the site for soft landscaping (which is a defined term). I query reasons why the soft landscaping criteria might be considered insufficient to achieve the Council's intended outcomes and suggest that the operation of the soft landscaping and tree planting policy be similar outcomes."*

Before I outline shortcomings in the Code, I seek to explain how these are overcome by our proposal in a symbiotic way. These new regulations concurrently highlight why the new Planning Code is vital to Unley's proposal, and why the Code on its own will fail to deliver the tree canopy hoped for. As it stands, there are no incentives to ensure plantings occur, and *if* trees are planted that they are retained and encouraged to grow. Council will monitor the effect of the new criteria for twelve months, but we are sceptical that it will make a difference. When cycling around Unley I observe what is happening on the ground. In new, medium density

developments I see that the required soft soil is there and the tree is planted. Six months later most of the trees have died or been removed.

However, the Code does enable the proposed offset scheme to apply to developers and subsequent owners alike. It means future owners who wish to plant a tree or two, can achieve the 15% minimum canopy cover which the City needs to remain liveable within seven years. Subsequent owners will no longer incur the 10% additional rates as they have over 15% tree canopy. The code makes our proposed offset scheme a real financial incentive for both current and future owners to plant and retain trees. All the money raised by the offset fund will be used to buy land on which trees can be planted at Council's expense. The offset fund would provide an immediate source of money to gradually buy land. Whilst it would take 200 years to buy sufficient, the proposal is essentially an incentive scheme to encourage the developer or a future owner to plant trees. Councils can think long term. Council debated whether the offset contribution should be higher, up to 20%. The trial would produce the answer to this question. If 10% achieves the change of behaviour, why go higher?

One problem with the Planning Code is that there is limited means of enforcement and the provisions if enforced would fail to deliver mature trees. Council does not have the resources to check-up year after year the accumulating number of developments since the code. Another problem is, unfortunately, the Code seeks to be a 'one size fits all' approach across the entirety of South Australia which comprises a diverse array of landscapes and council areas, including those with a higher capacity for achieving a vast tree canopy than their inner-city urban counterparts such as Unley.

> *"The introduction of the Code sought to realise consistency in the planning rules between different council areas, while maintaining distinct policy in similar contexts (such as character areas, activity centres, employment lands, etc.). Consideration should be given as to why the Council warrants this unique financial measure as different from other councils. It is recommended that you engage with other councils and the Local Government Association of South Australia to determine interest in whether or not such a scheme might be applied more broadly."*

## It is easy to blame someone else for a dead canary

Following the formation of the new State Government in March 2022, the City of Unley formally approached the newly appointed Minister for Planning, the Hon Nick Champion MP, to allow us to go to public consultation on our proposal. The Minister was receptive but requested that Unley also seek the support of the opposition to ensure a bipartisan approach. The new Opposition provided their support for Unley's proposal, albeit in a press release calling on the new Labor Government to 'follow suit' (Speirs 2022).

## Communication is key

Politics has been said to be "the art of the possible". With the LiDAR data being so accurate and detailed I was confident that the implications were self-evident. However, I concede as the Mayor of Unley, my communication on the issue caused eyes to glaze over. The fact that the tree canopy in Unley is 3,999,771m² is meaningless. I have since changed to try to deliver information in a clear and concise manner. I now use the example of Unley Oval being 2 hectares (the amount of canopy currently lost each year) to provide a real example of what a hectare looks like (Table 1). To keep it simple:

> "Inner city suburbs across Adelaide are losing tree canopy cover. The City of Unley has just 3% open space. Council land, open space, buildings and roads amount to just 16% of the total land area. To be cool and green, Unley has a target of 31% canopy cover. Council is planting out the remaining Council land. When we have fully planted all of our land this will achieve only 6.4% across the City as a whole with no land to plant any more. The solution is to plant trees on private property."

**Table 1. City of Unley's land area, canopy area, and annual canopy loss in 2021:**

| | |
|---|---|
| Total area of the City of Unley | 1,429 ha |
| Total tree canopy | 400 ha (28%) |
| Previous decade annual loss | 8 ha |
| Current annual loss | 4 ha |
| Annual loss from new developments (200) | 2 ha (50% of all current loss) |

## Empowering our Community: planting on private property is a must

*Shaping Unley* is a model of engaging our community to actually propose and design policy. Currently public consultation occurs when policy is presented for public feedback. In Shaping Unley, we are on the first step for the public to develop a policy for Council to consider. In some European cities such as Trikala, Greece, the public are able to vote to choose policies they wish to be implemented.

Unley Council is taking a step towards the European Smart City methodology to design a City-wide strategy. This method is new to Unley. A long-standing problem being worked on is to develop a city-wide parking policy. A Shaping Unley process involves our community from the beginning - stepping through the problems, opportunities and possible solutions in a collaborative way (Figure 6).


**Figure 6. Shaping Unley is a model which supports community generation of new policy**

Using the Shaping Unley strategy may be a good way for our community to understand why a declining tree canopy on private land is everyone's problem. Solutions considered will benefit from a wider pool of ideas being considered and from community support for their introduction. Potentially, it may prove to be a way of kicking the can of continued canopy loss down the road so that nothing workable is actually achieved. However, it is very clear to an increasing number of people in Unley that many new developments will result in a permanent loss of trees resulting in a hotter city.

To engage with our community, to work through alternative ideas for financial and other incentives for our tree strategy, Shaping Unley is both important and valid. Whilst we need State Government support to solve 50% of our ongoing loss, Council considered a wide range of incentive schemes to address the other 50% we have the power to act on.

The good news is that in 2007-17 we were losing 8 ha of our tree canopy each year. The previous Council started planting two trees for every one removed and was offering the usual mix of incentives. From 2018 with the educative power of LiDAR data, our accelerated planting of an extra 450 trees on the remaining Council land, and creative incentives and help choosing a tree, we have helped slow the rate of loss.

## Financial Incentives

I believe a financial incentive for property owners to retain or plant trees is the lowest cost way for residents who cannot grow their own trees to live in a suburb with 31% tree cover. My calculations suggest that an annual $100.00 of rates to buy land and plant trees on would achieve less for those who cannot plant trees than $1.00 of rates used to private financial incentives. Why?

Council spends over 6% of our total budget on trees ($2.27M 10 in 2019 of about $38m). Over a third of Unley's residents are tenants of rental properties who do not have the same freedom to plant and maintain trees as an owner-occupier. We need to be mindful of long-term renters who contribute to rates through their rent. Some renters and owner-occupiers live in multi-story treeless units. These residents pay 6% of their rates for Council to maintain and plant trees on Council land. This means their money provides just 6.4% of the tree cover across the whole City.

Ideas for a small rate rebate paid to owners of properties with tree canopy cover above the average for their suburb, could deliver more trees at a fraction of the cost of paying Council to buy land and planting trees on it. I live in the suburb of Unley with just 19.1% canopy cover, Unley Park has 33.2% cover. I believe a financial incentive for property owners to retain or plant trees is the lowest cost way for residents who cannot grow their own to live in a suburb with 31% tree cover. My calculations suggest that an annual $100 of rates to buy land to plant trees on would achieve a lower outcome for those who cannot plant trees than $1 of rates used for financial incentives to plant trees on private property. Financial incentives via rates for rural landowners to plant trees have worked in Australia in a council with 3% urban and 97% rural area (Scenic Rim Regional Council 2021). The blame game is politically easy… with our LiDAR data we know that Council can trial new incentives that work to reduce the annual loss from 4 ha to 2 ha. The final 2 hectares we cannot. This is dependent on the support of the Minister for Planning.

## Conclusion

Education and incentives have reduced but not stopped the loss of tree canopy in Unley. Without the support of the Minister for Planning, the City of Unley will continue to lose over 2 hectares of tree canopy year after year resulting in ever hotter scorching summer days. The trial of an offset land fund providing an incentive for developers to retain and plant trees could enable a worldwide solution for inner suburbs to increase their tree canopy with a resulting reduction of $CO_2$ emissions.

Note: Appendices follow references.
Appendix A: Submission to SA Government
Appendix B: Will Unley see our tree canopy cover drop to 13%

## References

Amin, M. 2019. These two Western Sydney streets are completely different temperatures – here's why. Australian Broadcasting Commission (ABC) News posted Thursday 21 November 2019. https://www.abc.net.au/news/2019-11-21/western-sydney-heatwave-alleviated-by-tree-cover/11721698?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web viewed August 2022

Ballantyne, M., Montero, L., Sutcliffe, K., Croft, P., Morrison, T., Wells, J., Doolette, A., Peacock, D., and C. Wilkins. 2021. *A Call To Action, Protecting Adelaide's Tree Canopy*. Conservation Council of SA, Adelaide, South Australia, Australia. https://drive.google.com/file/d/1j7zt3nZ5BYWtSMBj-6h5oUbXOkCjxJ9-/view

City of Unley, 2015. The Living City, Open Space Strategy. Endorsed by Council December 2015. https://www.unley.sa.gov.au/files/assets/public/council/about-the-council/city-of-unley-the-living-city-open-space-strategy.pdf viewed August 2022

City of Unley. 2020. Keeping Unley Leafy for Future Generations: Tree Strategy. https://www.unley.sa.gov.au/files/assets/public/council/about-the-council/city-of-unley-tree-strategy-2020.pdf viewed August 2022

City of Unley. 2021. Conservation Grants Policy. https://www.unley.sa.gov.au/files/assets/public/community-services/grants-amp-sponsorships/conservation-grant-policy-august-2021_1.pdf viewed August 2022

City of Unley. 2022. My Canopy: Canopy cover at your property. https://mycanopy.unley.sa.gov.au/#home viewed August 2022

Govt. of South Australia. 2022a. *Significant and regulated trees.* https://plan.sa.gov.au/our_planning_system/programs_and_initiatives/significant_and_regulated_trees viewed August 2022

iTNews. 2022. City of Unley wins local gov award for digital twin. Posted 16 June 2022. https://www.itnews.com.au/news/city-of-unley-wins-local-gov-award-for-digital-twin-581369#:~:text=City%20of%20Unley%20has%20taken,Adelaide%20council's%20area%20over%20time viewed August 2022

Scenic Rim Regional Council. 2021. Working in partnership to preserve our environment. https://www.scenicrim.qld.gov.au/news/article/536/working-in-partnership-to-preserve-our-environment viewed August 2022

Seed Consulting Services, EnDev Geographic and Monash University. 2018. Collaborative Heat Mapping for Eastern and Northern Adelaide Report. Prepared for the City of Unley on behalf of the Eastern Region Alliance of Councils and the City of Salisbury. https://static1.squarespace.com/static/5c4d88b5aa49a11b1eae4b9f/t/5c56e5024785d36b2305c36c/1549199054081/Heat+Map+Report

Speirs, D. 2022. Liberals support greener suburban streets. https://davidspeirs.com.au/news/liberals-support-greener-suburban-streets viewed August 2022

APPENDIX A – SUBMISSION TO GOVT OF SOUTH AUSTRALIA

# New developments that increase the built form are crucial for Unley Council to achieve a long-term tree canopy of 31% canopy cover across the city.

## 1. Tree Canopy

- The City of Unley loses approximately 1,000 trees on private property per annum.
- Council currently has a street tree planting program that partly offsets this loss but will run out of public land to plant trees on within 5 years. Council is planting 500 extra trees per year. The maximum canopy cover across the whole city when Council Land is fully planted is only 6.4% of the 31% target.
- Analysis indicates that if Council is to meet its long-term canopy target of 31% by 2045, an additional 14,000 trees need to be planted within the next 25 years (in addition to those being replaced).
- Most of these tree plantings will need to be on private land to increase the tree canopy to approximately 27% from the current 22%.
- Council will need support from the State Government to buy additional land as land is expensive in the City of Unley.
- Council has explored several concepts in relation to financial measures and favours one that applies to new developments only, rather than one for all properties.
- Development approvals that would result in an increase to the built footprint on the property (e.g. two or more dwellings on one allotment; alterations and additions such as in-ground swimming pools, verandas, and garages) would trigger the preferred concept.

## 2. Private Property 2018-2021 LiDAR data

- The average tree canopy on private property across Unley has increased from 21.26% to 22.34%.
- However, this is a temporary outcome likely due to the growth of surviving existing trees. Each year more than twice as many trees are removed than new trees being planted.
- Development Applications (involving Building Footprint Increase) for the period June 2018 – June 2021 show a decrease of tree canopy cover overall of over 22%.


- 636 of DA's have a loss of 35.70%; and 661 an increase of 13.45%.
- Many of the developments with tree loss are a permanent loss, as new trees can not be planted.
- The LiDAR data for the City of Unley clearly shows approximately 20,000M² of canopy loss on an annual basis.
- This ongoing loss over years will mean that our target will not be reached and our city will decline to an overall conopy cover of below 20%.


## 3. Proposed Approach

- When a development application is lodged, an assessment of tree canopy cover on the property would be made against a target canopy cover of 15%. This target ties in with the new planning code which makes provision for sufficient "soft soil" to enable all new developments to be able to grow 15% tree canopy cover should they choose to do so.
- If the target is not met, the property owner would be charged an additional 10% of their rates, until such time as 15% canopy cover is achieved on the property. If on the other hand, the 15% target was met at the time of development, the additional charge would not be imposed.
- The additional income received by Council from the increased charges would go into a tree land fund so that Council can purchase additional land on which to plant trees to achieve the desired canopy cover.
- Legal advice indicates that for the concept to be implemented,
    - it would require amendments to Section 154 of the Local Government Act to enable Council to impose a separate rate directly connected to this purpose, should this approach be used. OR ……

## 4. Request from the City of Unley

- For the Minister for Planning to approve an offset fund provided for in Section197 of the Development and Infrastructure Act 2016 to provide a financial incentive for new developments to have 15% tree canopy cover.
- Section 197 (5) "An approval of the Minister that relates to a scheme to be established by a joint planning board or a council may be given on conditions specified by the Minister."
- The fund be held and managed by the Unley Council
- The sole purpose is to buy nearby offset land for council to plant trees on.
- Council bears the costs of planting and maintaining from recurrent revenue.
- Suggested it be a trial of at least three years to measure outcomes. An offset fund requires updating each 10 years by the Minister.

APPENDIX B – WILL UNLEY SEE OUR TREE CANOPY COVER DROP TO 13%

## Will Unley's children see our canopy cover drop to 13%?

| **Using the 2018-2021 LiDAR Data** [1] | Over three years M² | each year M² |
|---|---|---|
| Area Unley Council 14,290,000m² | | 14,290,000 |
| Tree planting[1] | 62,109 | 20,703 |
| Tree removal[1] | 127,244 | 42,415 |
| Target is 31% by 2045 i.e., 3%*14,290,000=428,700m² | | 21,435 |
| Tree loss from new developments increasing built form[1] | 61,089 | 20,363 |

| M² of Tree canopy | Annual M² | 50 years M² | % whole of Unley |
|---|---|---|---|
| Unley Council has a 27.99% 2021 canopy cover | 3,999,771 | | 28% |
| We need to save 40,748 m² each year (p/a) | -42,415 | | |
| We need to plant 21,435m² p/a to increase to 31% | -21,435 | | |
| State Offset Scheme support will save 20363 m² | 20,363 | | |
| Free giveaways, education, street trees plant | 20,703 | | |
| **SHORTFALL** | **-22,784** | **-1,139,183** | **-8.0%** |
| Without the offset scheme | -43,487 | -2,157,333 | -15.1% |
| Canopy across Unley in two generations (31-15.1%) | | | **12.9%** |
| Canopy cover in 2045 will be 20.4% | | -1,078,667 | -7.5% |
| | | | **20.4%** |