

Infrastructure and Sustainability Committee Agenda

Notice is hereby given pursuant to the provisions of the Local Government Act, 1999, that a meeting of the Infrastructure and Sustainability Committee will be held in the Council Chambers, 181 Unley Road Unley on

Tuesday, 9 August 2016 at 6.30pm

for the purpose of considering the items included on the Agenda.



Peter Tsokas Chief Executive Officer

INFRASTRUCTURE AND SUSTAINABILITY COMMITTEE

MEMBERS:

Councillor Michael Hewitson – Presiding Member Mayor Lachlan Clyne – ex officio Councillor Peter Hughes Councillor Rob Sangster Councillor Bob Schnell Rod Hook Peter Croft Gavin Brennan

ACKNOWLEDGMENT:

We would like to acknowledge this land that we meet on today is the traditional lands for the Kaurna people and that we respect their spiritual relationship with their country.

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

APOLOGIES:

CONFIRMATION OF MINUTES:

MOVED: SECONDED:

That the minutes of the meeting of the Infrastructure and Sustainability Committee held on Tuesday, 7 June 2016 as printed and circulated, be taken as read and signed as a correct record.

DEPUTATIONS

PRESENTATION:

Rod Hook to present on SkyWay.

WRITTEN REPORTS FROM REPRESENTATIVES

Nil.

OFFICER'S REPORTS

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NEXT MEETING

Tuesday, 11 October 2016 at 6.30pm

CONFLICT OF INTEREST

TITLE:	CONFLICT OF INTEREST
ITEM NUMBER:	28
DATE OF MEETING:	9 AUGUST 2016
ATTACHMENT:	1. CONFLICT OF INTEREST DISCLOSURE FORM

Members to advise if they have any material, actual or perceived conflict of interest in any Items in this Agenda.



CONFLICT OF INTEREST DISCLOSURE FORM

have received a

[insert name]

copy of the agenda for the (Ordinary / Special) **Council / Committee / Board** [delete that which is not applicable]

meeting to be held on

[insert date]

I consider that I have a ***material** conflict of interest pursuant to section 73 / ***actual** or ***perceived** conflict of interest pursuant to section 74 [*delete that which is not applicable] of the Local Government Act 1999 ("the LG Act") in relation to the following agenda item:

[insert details]

which is to be discussed by the ***Council / *Committee / *Board** at that meeting. [delete that which is not applicable]

The nature of my **material** conflict of interest is as follows [ensure sufficient detail is recorded, including the reasons why you (or a person prescribed in section 73(1) of the LG Act) stands to obtain a benefit or suffer a loss depending on the outcome of the consideration of the matter at the meeting of the Council in relation to the agenda item described above].

OR

The nature of my **actual** conflict of interest is as follows [ensure sufficient detail is recorded, including the reasons why the conflict between your interests and the public interest might lead to a decision that is contrary to the public interest in relation to the agenda item described above].

I intend to deal with my **actual** conflict of interest in the follow transparent and accountable way [ensure sufficient detail is recorded as to the manner in which you intend to deal with the actual conflict of interest in a transparent and accountable way]



The nature of my **perceived** conflict of interest is as follows [ensure sufficient detail is recorded, including the reasons why you consider that an impartial fair-minded person could reasonably consider that you have a perceived conflict of interest in the matter]

I intend to deal with the **perceived** conflict of interest in the following transparent and accountable way [ensure sufficient detail is recorded as to the manner in which you intend to deal with the perceived conflict of interest in a transparent and accountable way]

Signature

Date

INFORMATION REPORT

REPORT TITLE:	INFRASTRUCTURE AND SUSTAINABILITY COMMITTEE ACTION RECORDS
ITEM NUMBER:	29
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	KELLEY JAENSCH
JOB TITLE:	EXECUTIVE ASSISTANT ECONOMIC DEVELOPMENT AND PLANNING

EXECUTIVE SUMMARY

To provide an update to Members on information and actions arising from previous resolutions of the Infrastructure and Sustainability Committee.

RECOMMENDATION

MOVED: SECONDED:

The Committee recommends to Council that:

1. The report and updated actions be noted.

I&S – Outstanding Items

Date	Item and report title	Resolution	Update
3/11/15	Item 8 Deferred Item 4 – 8 September 2015 – Second Tier Greening (October 2016 Committee meeting)	 2. The Second Tier Greening initiative be strongly supported and its continuation as part of the Footpath Replacement Program be supported. 3. A further report be prepared, taking into consideration the comments made by the Committee. 	Report and strategy being prepared for October Committee meeting.
3/11/15	Item 10** Motion on Notice – Open and Green Spaces	 To help achieve our strategic aims of maintaining the current level of tree shade and permeability across the City that Council ask staff to prepare a report on exploring the costs, benefits and mechanisms to encourage developments that achieve significant areas of green space. This will include the following: The use of price mechanisms such as special rates open to Council. The merits of a Green Fund or other means by which funds collected can be used to maintain the overall extent of green cover, particularly in relation to the new Planning, Development and Infrastructure Bill. The impacts of any mechanism on low-income members of the community. New developments impacted would include two for ones, extensions covering more than 50% of the site and removal of trees, as well as multi- storey developments. 	At the current time it is not clear when Administration (policy planning area) will have the in house capacity to produce such a report. If the committee requires the report to be produced in the near future, then it is suggested that funding be sought from Council to engage an external consultant for that purpose. It is suggested that a sum of \$20 000 be used for budgeting purposes.
8/12/15	Item 11 City of Unley Walking and Cycling Plan 2015-2020 – draft for consultation (Item 21 in April 2016 agenda)	 2. The Draft City of Unley Walking and Cycling Plan (WCP) 2015-2020 as amended be supported for community engagement. 3. A report outlining the outcomes of the community 	Update provided in this agenda.

		engagement be provided to Council in early 2016.	
9/2/16	Item 17 Motion without notice Environmental planning options – development strategy and policy committee (Items 2 and 5 – follow up)	 Industry and the provided to occurrent in outly 2010. The matter be referred to the Development Strategy and Policy Committee with our suggestion that the Council should write to the Minister for Planning; To draw his attention to the attached report, namely the Residential Apartments Sustainability Plan for the City of Sydney, asking him to refer the report to his department for review and to determine policies relevant for the development plan across Local Government areas throughout Adelaide. The Minister also be advised that the City of Unley is cooperating with the Government and other Councils to implement the Minister's development plan policies. We have a vision in Unley for development to be sustainable but we understand our Council cannot proceed independently on this matter. However, we believe there are measures in this report that are relevant for Adelaide and should be applied across our City. 	Draft letter to be tabled at the next DSP meeting (17 October 2016).
12/4/16	Item 17 Motion without notice Environmental Planning Options – Development Strategy and Policy committee	 The matter be referred to the Development Strategy and Policy Committee with our suggestion that the Council should write to the Minister for Planning; To draw his attention to the attached report, namely the Residential Apartments Sustainability Plan for the City of Sydney, asking him to refer the report to his department for review and to determine policies relevant for the development plan across Local Government areas throughout Adelaide. The Minister also be advised that the City of 	Next DSP meeting – 17 October 2016.

Unley is cooperating with the Government and other Councils to implement the Minister's development plan policies. We have a vision in Unley for development to be sustainable but we understand our Council cannot proceed independently on this matter. However, we believe there are measures in this report that are relevant for Adelaide and should be applied	
across our City.	

DECISION REPORT	
REPORT TITLE:	ENVIRONMENTAL SUSTAINABILITY STRATEGY 2016-2020
ITEM NUMBER:	30
DATE OF MEETING:	9 AUGUST 2016
AUTHOR & JOB TITLE:	KAT RYAN, COORDINATOR ENVIRONMENTAL PROJECTS & STRATEGY

1. EXECUTIVE SUMMARY

The Environmental Sustainability Strategy is the lead document to guide the Council's initiatives to achieve the Greening goals identified in the *Community Plan 2033*.

The draft was reviewed by the Infrastructure and Sustainability Committee at its meeting on 12 April 2016 and released for community engagement by Council on 26 April 2016. Community Consultation closed on 8 July 2016.

There were 228 individual visitors to the Your Say Unley page and 30 formal responses were received, including 5 by hard copy. Overall, the feedback for the draft Environmental Sustainability Strategy has been positive and no major changes are recommended. A common element of a number of submissions related to setting higher or more ambitious targets.

Feedback from the community consultation has been considered and some minor amendments incorporated into the revised Strategy. The final version of the Environmental Sustainability Strategy 2016-2020 is now placed back before the committee for consideration and recommendation for Council's endorsement.

2. <u>RECOMMENDATION</u>

MOVED: SECONDED:

The Committee recommends to Council that:

- 1. The report be received.
- 2. Council endorse the Environmental Sustainability Strategy 2016-2020 (Attachment 1 to Item 30/16).
- 3. During the Long Term Financial Plan review process in late 2016, that new programs be established to cover the 5 themes and targets of the Environmental Sustainability Strategy and appropriate funding allocated.

3. <u>RELEVANT CORE STRATEGIES/POLICIES</u>

The Council's *Four Year Plan 2013-2016* includes the development of an Environment and Sustainability Strategy to reduce Council's environmental impact. This is the lead strategy to guide the Council's activities to achieving the Greening goals identified in the *Community Plan 2033*.

- Renowned for its lifestyle and environmental balance
- Leaders in waste reduction
- Functional open green space throughout the city of Unley

The Environmental Sustainability Strategy aligns and directly supports other key strategies and programs including;

- Tree Strategy (draft pending endorsement)
- Waste Strategy
- Open Space Strategy, The Living City
- Resilient East Climate Adaptation Plan
- Living Well: Regional Plan for Health and Wellbeing
- Active Aging Strategy

4. DISCUSSION

The Environmental Sustainability Strategy (Attachment 1 to Item 30/16) is divided into five specific themes that guide our direction and inform our priorities for environmental projects. For each theme, one Council target and one community target has been defined. This reflects Council's direct influence and its key role in supporting and enabling improved community outcomes for a shared responsibility. Refer Table 1 for Summary of themes, objectives and targets.

Attachment 1

The accountability for implementing this strategy is assigned across the City of Unley's resources. The primary responsibility sits with the Assets and Environment division through Council's Annual Business Plan and Budget over the next four years. Collaborative partnering projects with other sections of Council, relevant organisations and community groups will be actively sourced. While the life of this document is four years, it is intended that it be part of an ongoing framework that provides for a consistent approach to match the commitment required to deliver the 20 Year Community Plan.

The Strategy's targets have been set based on the assumption that current funding levels will be maintained across the life of the Strategy.

	OBJECTIVE	COUNCIL TARGET	COMMUNITY TARGET
GREEN UNLEY	Improving and maintaining Unley's Urban Forest	Maintain minimum canopy cover of 26 per cent	Minimum 400 verges converted from dolomite to loam and plants
		4	
\wedge	Efficient, effective	Minimum 40 streets with	Inform and educate
MATERIALIOF	and sustainable water management	stormwater improvements	residents on water saving measures in conjunction
WATERWISE	management		with relevant authorities
NIZ	Increasing resilience for	Maintain and increase our	Minimum 2 information
-9-	changes in climate	open space by creating a	sessions on positive
RESILIENT		minimum 3 new spaces	actions residents can take
UNLEY			to improve resilience to climate change
0	Excellence in waste	Divert from landfill 75	Divert from landfill 70 per
C.	management, through	 per cent of material from 	cent of residential material
RESOURCEFUL	diversion, avoidance	Council facilities and events	presented at kerbside
UNLEY	and re-use		
			*
\wedge	Increasing the energy	Reduce net total of grid	Provide information on
.[0].	efficiency of the City	based energy use by 5 per cent	energy efficiency to encourage increase of
ENERGYWISE		Cent	residential buildings with
UNLEY			solar panels to 35 per cent.

Table 1: Summary of Objectives and Targets

COMMUNITY ENGAGEMENT

Community consultation on the draft Environmental Sustainability Strategy was open through 8 May - 8 July 2016 in accordance with Council's Community Engagement Policy and Toolkit.

The engagement invited comments under several key questions and included the following approaches:

- Feedback from the Infrastructure & Sustainability Committee at its meeting on 12 April 2015.
- A notice in the Eastern Courier Messenger promoting the consultation
- An online survey through the Your Say Unley website.
- Hard copies and feedback forms placed at the Civic Centre, community centres and libraries.
- Information Table at Unley Town Hall as part of World Environment Day on Sunday 5 June.
- Emails and meetings with Elected Members, Council staff, relevant community groups and environmental organisations seeking feedback.

There were 228 individual visitors to the Your Say Unley page to access information about the Environmental Sustainability Strategy and/or provide feedback. 30 formal responses were received, including 5 by hard copy. Feedback provided as part of the engagement process has now been considered as outlined in Attachment 2 (to Item 30/16)

Attachment 2

Overall, the feedback for the draft Environmental Sustainability Strategy has been positive and no major changes are recommended. A summary of the general comments are below and the recurrent improvement suggestions with recommended response are provided in Table 2.

General Comments

- Majority of respondents felt the document was clear and easy to understand.
- The shared approach with community and council targets was applauded.
- Green and Waterwise were considered the highest priority themes on average, followed by Energy, Resilience and Resourceful although many respondents remarked it was difficult to prioritise across the themes.
- Majority strongly agreed that verges are preferable planted rather than dolomite. The two objections were concerned with attracting dog waste, street parking access and tree roots impacting property foundation.
- Majority strongly agreed that residents have a role to play in helping achieve community environmental targets.
- Importance for ensuring community education is provided was raised by 7 respondents.

Suggestion	Response / Amended Revision
Question was raised regarding	Clarification added to Strategic Context
where transport was covered by	section noting transport sits in a separate
three respondents.	lead strategy.
Some respondents thought targets	Noted. As strategy has been written to be
should be higher	achievable within current budget
_	provisions no change recommended.
Additional attention on promoting	Example of native biodiversity corridor
native species was suggested by	added to Achievements to better highlight
four respondents.	Councils on-going work in this area.
Some confusion on what	Added definition of Urban Forest
maintaining an Urban Forest means	(management of trees, shrubs and other
and basis for 26% canopy cover	vegetation in urban areas) and reference
target metric.	to canopy cover target source.
Community targets for Waterwise	Agree - however no easily captured and
and Resilient themes could be	council wide relevant metric is currently
improved as they are input	available. Until improved solution is found
measures rather than indicators.	current targets are recommended.
Include comment on water quality	Included.
improvement in Waterwise section.	
Minor formatting and grammar edits	Included.

Table 2: Recurrent Improvement Suggestions

were identified.	

5. ANALYSIS OF OPTIONS

 Option 1 – The Infrastructure and Sustainability Committee recommends to Council that the Environmental Sustainability Strategy (Attachment 1 to Item 30/16) be received and endorsed. During the Long Term Financial Plan review process in late 2016, that new programs be established to cover the 5 themes and targets of the Environmental Sustainability Strategy and appropriate funding allocated.

The final version of the Environmental Sustainability Strategy 2016-2020 will be endorsed. This includes considerations from the findings of the community consultation outlined in Attachment 2 to Item 30/16

Option 2 – The Infrastructure and Sustainability Committee recommends to Council that the Environmental Sustainability Strategy, as amended (Attachment 1 to Item 30/16) be received and endorsed. Option 3 – The Infrastructure and Sustainability Committee considers the Environmental Sustainability Strategy (Attachment 1 to Item 30/16) and provides feedback to enable a final Environmental Sustainability Strategy to be prepared.

The Infrastructure and Sustainability Committee recommend Council endorse the Environmental Sustainability Strategy 2016-2020, pending adoption of minor amendments. These minor changes can be incorporated into the version provided to Council for endorsement without the need to come back to Committee for further consideration.

6. <u>RECOMMENDED OPTION</u>

Option 1 is recommended option.

7. POLICY IMPLICATIONS

The Environmental Sustainability Strategy is a key initiative from the City of Unley 4 Year Plan 2013-16 A Community of Possibilities

The accountability for implementing this strategy is assigned across the City of Unley's resources. The primary responsibility sits with the Assets and Environment division through Council's Annual Business Plan and Budget over the next four years. Collaborative partnering projects with other sections of Council, relevant organisations and community groups will be actively sourced. While the life of this document is four years, it is intended that it be part of an ongoing framework that provides for a consistent approach to match the commitment required to deliver the 20 Year Community Plan.

FINANCIAL IMPLICATIONS

The adoption of this Strategy will not have any adverse impact on the current budget as 2016/17 programs already funded will assist with achieving the targets.

The Environmental Sustainability Strategy is built on current funding levels being maintained over the life of the document (4 years).

8. <u>REPORT INTERNAL CONSULTATION</u>

Detailed consultation has been undertaken with key internal stakeholders during the development of this strategy and a two month community consultation period.

9. ATTACHMENTS

- Environmental Sustainability Strategy
- Summary of Community Consultation Responses

10 <u>REPORT AUTHORISERS</u>

Name	Title
John Devine	General Manager Assets and
	Environment

Environmental Sustainability Strategy

ENING

GRE

TIMI

Pursuing, supporting & creating a sustainable environment for the Unley community

THE CITY of Unley



Greening Unley: Environmental Sustainability Strategy 2016-2020 The City of Unley

August 2016

Design: Flux Visual Communication

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Introduction

Council is committed to pursuing, supporting and creating an environment that will sustain both current and future generations. This goal is shared by our community and is a primary objective of most governments across the world. We are committed to using fewer of our precious resources and looking for smarter ways to achieve this objective.

Our City is a great place for families, with quiet suburban streets and a supportive community – but this must be balanced against the need for more housing choices, increased density of living and commercial growth on our main streets.

Conservation, pollution remediation and environmental sustainability are growing concerns for both the residential and business sectors, particularly in the areas of open spaces, parks and reserves; watercourses and underground water; soil; air; noise; waste management and recycling.

The Environmental Sustainability Strategy 2016-2020 is the lead strategy to guide the Council's efforts implementing the Greening goals identified in the Community Plan 2033. The strategy is divided into five key themes that guide our direction and inform our priorities for environmental projects;

GREEN UNLEY

Improving and maintaining Unley's Urban Forest



WATERWISE UNLEY

Efficient, effective and sustainable water management

RESILIENT UNLEY

Increasing resilience for changes in climate

RESOURCEFUL UNLEY

Excellence in waste management, through diversion, avoidance and re-use



ENERGYWISE UNLEY

Increasing the energy efficiency of the City

For each theme, one Council target and one community target has been defined. This reflects Council's direct influence and its key role in supporting and enabling improved community outcomes for a shared responsibility.

City of Unley staff developed this strategy, with input from the Infrastructure and Sustainability Committee, external stakeholders and our community.

This document outlines the key objectives and targets for each of the five environmental themes and includes some of the specific initiatives which have already been identified.





Summary of Achievements

While planning for continuous improvement, it is important to reflect and acknowledge past achievements and established initiatives.

This document builds on the significant works already undertaken and underway within the City of Unley including:

GREEN

115 artificial habitat boxes installed since 2009 for birds, possums and micro bats.

Development of native biodiversity corridor plantings including Windsor Street and Charles Walk.

Since 2011, the planting of community fruit tree orchards in Morrie Harrell, Fullarton, Soutar and Henry Codd Reserves

WATERWISE

The installation in 2015 of rain gardens in Randolph Ave to improve the quality of stormwater before it travels to our local creeks and the sea.

The capturing of water in verges and street kerbs with TreeNet Inlet system, to help supply water to both the street trees and understory plants.

Since 2009 recycled water options have been provided to most of the parks and reserves through the Glenelg to Adelaide Parklands Recycled Water Project (GAP) and Managed Aquifer Recharge (MAR) schemes. This includes a MAR built in Heywood Park to harvest up to 60 megalitres.



RESOURCEFUL

The installation in 2015 of dual recycling bins in key parks and reserves including Unley Oval.

Since 2013 Council offices and community centres improved to three bin recycling system using colour coded Ecobins.

Information and education campaigns for residents to use recycling options to full potential including "all food scraps are good to go" and "take the pledge".

RESILIENT

The construction in 2015 of Ridge Park Dam as a key aspect for flood mitigation for Brown Hill Keswick Creek. The dam has the dual role of stormwater detention during large storm events and winter harvesting for irrigation purposes on Council reserves in summer.



ENERGYWISE

Energy consumption reduction by 26 per cent in 2011, the equivalent to 158 tonnes greenhouse gas savings, at the Unley Civic Centre and Town Hall through a Building Management System upgrade

In 2015, 10kW solar panels were installed at the Unley Swimming Centre to increase our use of renewable energy sources.

Shared Responsibility

Creating a more environmentally sustainable City of Unley is achievable through the whole City's involvement.

The Council is taking direct action to create change through initiatives such as installing solar panels on Council owned property and incorporating Water Sensitive Urban Design (WSUD) into infrastructure development. Many opportunities for environmental improvement rely on Council/community partnerships where Council can provide a service enabling the community. For example, Council provides a range of recycling services (bins, collection and education) and the community participates by using the service to its full potential.

Council can also seek to encourage community behaviour change through providing information, guidance and financial incentives.

To reflect this shared responsibility, each key objective in the strategy has one Council target and one community target (see Figure 1).

COUNCIL TARGET

Council projects & actions

COMMON Objective

COMMUNITY TARGET

Council support & enable community actions

FIGURE 1

Dual community & Council targets working to a common objective

TCHEN GARDE

ALL PRODUCE ORGAN HERE SED TO CREATE FASTER IS FOR OUR DAILY THE ALL SERVICE

Unley Community Centre Kitchen Garden

Strategic Context

The City of Unley Community Plan 2033 provided an opportunity to identify, reflect and envision the priorities for our City over the next 20 years.

The "A Community of Possibilities" initiative asked our community to think about smart and creative ideas that the City of Unley could potentially incorporate into the Plan.

Over six weeks in June and July 2012, 1,200 people provide their ideas to "A Community of Possibilities". This was the Council's largest ever community engagement initiative to date. Four main themes emerged about inspirational and innovative differences we could bring to our City:

EMERGING

new activities and technologies that would support our business and residential communities

LIVING

reflecting issues of culture, diversity and lifestyle

MOVING

concerning accessibility and transport, and

GREENING

covering concerns about environmental initiatives and sustainability.

This Environmental Sustainability Strategy is focussed on implementing the Greening goal of the 2033 Plan. Figure 2 (page 11) illustrates how the Strategy is envisaged in a strategic context. While not intending to be a complete representation of all existing and planned lead strategies, supporting strategies, programs and projects, the diagram shows how this lead Strategy seeks to provide direction to these other relevant initiatives. It is also acknowledged that there are numerous cross-connections and integration across the range of initiatives that are undertaken by Council, for example Open Space within the Living goal, and Transport which sits with the Moving goal.

The City of Unley will continue to seek opportunities to work collaboratively with relevant organisations on joint projects where possible.





FIGURE 2 Strategic Context

11 _

Vision & Pathways to an Environmentally Sustainable City

The development of this document follows the strategic direction set by the Community Plan 2033 with a particular focus on achieving Goal 4: Greening Our Path to a Sustainable City.

The Greening goal aims for the City of Unley to be renowned for its lifestyle and environmental balance, leaders in waste management and functional open green space throughout.

Five key themes have been identified for achieving the Greening goal:

We acknowledge that environmental systems are intrinsically linked and there is overlap between the themes, however these themes classify the work into manageable sections to focus our efforts. For example, a project capturing stormwater to water street trees would fall under the Waterwise theme, but would also be contributing to aims within Green, Resilient, Resourceful and indeed broader community liveability and economic factors.

GRFFN UNIFY



RESILIENT UNLEY

RESOURCEFUL UNLEY

ENERGYWISE UNLEY

Implementation

The accountability for implementing this strategy is assigned across the City of Unley's resources. The primary responsibility sits with the Assets and Environment division through Council's Annual Business Plan and Budget over the next four years. Collaborative partnering projects with other sections of Council, relevant organisations and community groups will be actively sourced.

The strategic directions will be progressed through Council's Annual Business Plan and Budget over the next four years. While the life of this document is four years, it is intended that it be part of an ongoing framework that provides for a consistent approach to match the ongoing commitment required to deliver our 20 Year Community Plan.

Measuring Progress

The City of Unley is committed to an evidence based approach to environmental management and has developed a number of indicators and targets to measure success over time within each of the five themes. Each theme considers both a Council and community target as outlined in the Shared Responsibility section on page 8. These will provide a good indication of progress against the key objectives. Progress will be assessed annually in September and reported through the City of Unley's Infrastructure and Sustainability Committee.

As new initiatives are developed, the City of Unley can refine and improve these indicators, particularly for the community targets that are more challenging to measure at a Council-wide scale.





P Green Unley

OBJECTIVE

Improving and maintaining Unley's Urban Forest¹

COUNCIL TARGET

Maintain the City's tree canopy cover at 26 per cent²

COMMUNITY TARGET

Minimum 400 street verges converted from dolomite to loam and planted

The City of Unley is an urban environment noted for its tree-lined streets, parks and private gardens. The protection of Unley's trees and street trees is particularly important to mitigating the impacts of climate, the urban heat island effect and a range of other benefits. This work is guided in detail by the City of Unley Tree Strategy.

There is also an excellent opportunity to encourage more of the verges to be planted. Most are currently dolomite which is not water permeable. If these are replaced with loam and low plantings or with lawn maintained by the residents, it will help improve soil moisture, reflected heat and add to the cool, green feel of the City.

While the key targets for the next four years focuses on trees and improving the greening of our streetscapes, ongoing work in parks, reserves, residential gardens and the encouragement of local food production is still very significant and ongoing. Key initiatives that fall under this theme include;

- Trees
- Habitat boxes
- Verge gardening by residents
- Biodiversity native plantings
- Maintenance of parks and open space
- Encouragement of private plantings
- Food security including encouraging local food production

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Community gardens

1. An Urban Forest is defined as the management of trees, shrubs and other vegetation in urban areas (Tree Strategy, Unley).

2: 26% Based on Unley Canopy Cover from Page 17, Institute for Sustainable Futures (2014) Benchmarking Australia's Urban Tree Canopy: An i-tree Assessment.



٥ Waterwise Unley

OBJECTIVE

Efficient, effective and sustainable water management

COUNCIL TARGET

Minimum 40 streets with stormwater improvements

COMMUNITY TARGET

Inform and educate residents on water saving measures in conjunction with relevant authorities

The City of Unley is committed to have water sensitive urban design as a feature and reducing its dependency on River Murray water, while also maintaining its parks, reserves and street trees.

Rain gardens and other Water Sensitive Urban Design measures are important to both conserve water and improve water quality by reducing stormwater pollution.

There has been excellent progress in recent years to waterproof the City, by providing recycled water options to most of its parks and reserves through the Glenelg to Adelaide Parklands Recycled Water Project (GAP) and Managed Aquifer Recharge schemes (MAR). While efforts will continue on water efficiency to parks and reserves, the focus for improvement for the next four years will be on the streetscapes through stormwater capture and reuse. There are also a range of Waterwise actions that residents can take such as installing rainwater tanks, selecting water wise plants, mulch and wicking beds, and the time of day gardens are watered.

Key initiatives that fall under this theme include;

- Water Sensitive Urban Design (for example, diversions for watering street trees, bio swales, rain gardens, permeable paving)
- Continue expansion of MAR and GAP networks and the use of their recycled water
- Information for residents reducing water use, planting water wise plants, capture and reuse of water
- Council water capture and use
- Waterproofing parks and gardens

Ridge Park Stormwater Detention Dam



Resilient Unley

OBJECTIVE

Increasing resilience to changes in climate

COUNCIL TARGET

Maintain and increase our open space. Create a minimum of three new spaces, which can include vertical and rooftop gardens

COMMUNITY TARGET

Minimum 2 information sessions on positive actions residents can take to improve resilience to climate change

The City of Unley has partnered with the other Eastern Region Alliance (ERA) Councils and Adelaide City Council to develop a Climate Change Adaptation Plan for the eastern region called Resilient East. The plan outlines key vulnerabilities to climate change across the eastern region and a range of adaptation decision making and planning options at a regional and individual Council level. For The City of Unley key vulnerabilities are anticipated from increased heatwave frequency and duration and more intense periods of rainfall.

Resilient East provides a number of preferred options for the eastern region to increase our resilience to climate change. The implementation of aspects relevant to Unley include;

- Improve stormwater management to maximise amenity and water reuse
- Increase community education and awareness regarding climate hazards
- Increase planting across urban areas
- Increase the area of open space in strategic locations

However many of the proposed actions already align with other theme objectives in this strategy (eg Green and Waterwise). City of Unley already incorporates environmental considerations and opportunities into all of its capital renewal planning.

Initially the targets for this theme have been set around increasing vegetation (or green infrastructure) to help lower the overall temperature of our City. These can include vertical and rooftop gardens. See Figure 3 (page 22) which shows how new spaces can be found while also increasing housing density.

Key initiatives that fall under this theme include;

- Implement Resilient East
- Innovate/new ideas
- Heatwave management
- Mitigating the urban heat island effect
- Green infrastructure
- Flood management (Brown Hill Keswick Creek)

19

Building strategies



VEGETATION

1

2

3

4

VĖG

Vegetation and biomass before any residential building development



Traditional residential development of single dwelling gives 25-30% of original vegetation



Tilt up backyard into living wall retains same amount of vegetation and bio-mass but reduced area



Use vacant space for extra dwellings with green roofs resulting in more vegetation than original and higher number of dwellings

FIGURE 3

Increase Open Space while Increasing Housing Density, (Graeme Hopkins, Living Architecture Presentation, Sept 2015).




2

Resourceful Unley

OBJECTIVE

Excellence in waste management, through diversion, avoidance and re-use

COUNCIL TARGET

Divert from landfill 75 per cent of material from Council facilities and events

COMMUNITY TARGET

Divert from landfill 70 per cent of residential material presented at kerbside

The City of Unley is committed to reducing waste, from both its own operations and the community, and to the management of waste in a sustainable manner. Council offers several options for recycling and waste disposal including kerbside collections, hard rubbish collections and a range of other services and education programs to support our community. In 2015, 54 per cent of residential material presented at kerbside was diverted from landfill.

This work is guided by the Waste Management Strategy 2013-2017 which includes activities to provide innovative and responsive waste management practices that promote recycling and reduce waste. It incorporates best management practices to manage the waste collected by Council. Efficient use and management of our other resources like water and energy are also important but come under other themes.

The waste management sector is continuing to improve and innovate, so it is important that the City of Unley works closely with industry to adopt current thinking and technology, and that we educate our community on new options as they arise. Key initiatives that fall under this theme include;

- Domestic Waste education, re-use, organics, hard rubbish
- Commercial Waste organics, recycle construction
- Council leader in waste management alternate recycling, operations, our usage



Energywise Unley

OBJECTIVE

Increasing the energy efficiency of the City

COUNCIL TARGET Reduce net total of grid based energy use by 5 per cent

COMMUNITY TARGET

Provide information on energy efficiency to encourage improvements including increase of residential buildings with solar panels to 35 per cent

Our modern Australian lifestyle is very energy intensive. We have become high electricity users. Our homes, which are now larger, commonly contain air-conditioning and many electrical appliances which rely heavily on fossil fuels that contribute to greenhouse gas emissions. Electricity prices have increased over the last few years, resulting in increased operation expenses.

There are ranges of old fashioned and improved technology steps we can take to reduce our energy usage. Renewable energy technologies such as solar and wind are clean sources of energy that have a much lower environmental impact than conventional energy technologies and their costs have been declining.

By combining reduction of energy usage with uptake of renewable sources, we can make a big difference in reducing electricity consumption, reduce carbon footprint, contribute to climate change mitigation and reduce risk against future electricity price rises. Key initiatives that fall under this theme include;

- Renewable energy (solar, wind, battery storage)
- LED lighting
- Improving energy efficiency of buildings (eg insulation, management systems, heating/cooling upgrades)

Summary of Objectives & Targets

	OBJECTIVE	COUNCIL TARGET BY 2020	COMMUNITY TARGET BY 2020
GREEN UNLEY	Improving and maintaining Unley's Urban Forest	Maintain minimum canopy cover of 26 per cent	Minimum 400 verges converted from dolomite to loam and plants
WATERWISE UNLEY	Efficient, effective and sustainable water management	Minimum 40 streets with stormwater improvements	Inform and educate residents on water saving measures in conjunction with relevant authorities
->	Increasing resilience for changes in climate	Maintain and increase our open space by creating a minimum 3 new spaces	Minimum 2 information sessions on positive actions residents can take to improve resilience to climate change
RESOURCEFUL UNLEY	Excellence in waste management, through diversion, avoidance and re-use	Divert from landfill 75 per cent of material from Council facilities and events	Divert from landfill 70 per cent of residential material presented at kerbside
ENERGYWISE UNLEY	Increasing the energy efficiency of the City	Reduce net total of grid based energy use by 5 per cent	Provide information on energy efficiency to encourage increase of residential buildings with solar panels to 35 per cent.

Further Reading

Active Aging Strategy. City of Unley (2015). unley.sa.gov.au

Blueprint 2013 - Stormwater Management in a Water Sensitive City.

Cooperative Research Centre (CRC) for Water Sensitive Cities (2013). ISBN 978-1-921912-02-3. watersensitivecities.org.au

Community Plan 2033 – A Community of Possibilities. City of Unley (2013). unley.sa.gov.au

Resilient East – Regional Climate Change Adaptation Plan. URPS for the Eastern Region in association with the Government of South Australia and the Australian Government (2015)

The 30-Year Plan for Greater Adelaide. Government of South Australia (2010). ISBN 978-0-7590-0114-5. plan4adelaide.sa.gov.au

> *Tree Strategy.* City of Unley (2015). unley.sa.gov.au

Urban Heat Island Report: Decision principles for the selection and placement of Green Infrastructure. Victorian Centre for Climate Change Adaptation Research (2013). vcccar.org.au

> *Waste Management Strategy.* City of Unley (2013). unley.sa.gov.au

Living Well: Regional Plan for Health and Wellbeing for Cities of Unley and Mitcham. Healthy Environs (2014). unley.sa.gov.au

Adelaide and Mount Lofty Ranges Natural Resources Management (NRM) Plan. Government of South Australia (2013). naturalresources.sa.gov.au/adelaidemtloftyranges

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Synthesis of Electronic and Hardcopy Responses to Survey Regarding Draft Environmental Sustainability Strategy 2016-2020

Project Highlights	
Total Visits	228
Photo Views	3
Document Downloads	41
Maximum Single Day Visitors	35

What do you like most about the draft Environmental Sustainability Strategy?
Very clear and easy to read.
Recognition of the importance of all the aspects of the city environment to to quality of life for residents and visitors
It integrates a number clearly focussed initiatives to address sustainability broadly.
Most objectives are realistic, some don't go far enough
I am very supportive of the planting of vegetables and fruit trees for use by the community - I did not actually know that there were already community orchards in Unley. Pleased to see also support for increased maintenance of verges. And the more than can be done to reduce landfill the better, so it is good to see this included. The campaign to increase use of the green organics bin seems to be very effective.
The actual document is brilliant! I mean, the content is terrific too, but this has to be the most engaging strategic plan I've ever read (and I've read quite a few)! Clear, concise and focussed, and so visually appealing.
I think the plan has good objectives
Clear strategies and good targets
The five priorities are sound
improving stormwater system improving the urban forest
'greening' up the council area
It gives me confidence that Unley Council are actively and intelligently pursuing a better lifestyle, through provision of a healthier environment, for all residents. Credit is due to the team who produced this well-considered document. We all too often hear residents complaining to Council. I feel too many are too selfishly concerned about their own lot, rather than having a Community-based attitude.So well done Unley Council! The targets are reasonable and achievable
Good to plan and have targets
It is clearly linked to the Community Plan and contains targets for both Council and residents. This shared approach is important.
Waterwise strategy and energywise strategy
Involving the community so "grass roots" approach (apologies for pun), rather than a remote top-down style. Also pleased to see both targets and measurements are included.
Slowing and discouraging non residents from cutting through the side streets by installing roundabouts and reducing speed limits
The emphasis on revegetating, solar, and water management

I like catchment of water and lots of loam verges. I'd love to see holes drilled in our gutters too

deals clearly with future issues we face

I agrees with all of the objectives. I like the concise presentation of the strategy, simple language and good graphics

Focus applauds Council for identifying 4 areas of focus for council and the people of Unley to develop strategies and daily practices whereby we can all live more sustainably

Community consultation

Love everything about it - the content, the directions, the strategic thinking, the English, the look. The photos, the colours. Definitely want to see how we can work in with this. Well done well done!!!!

A good, easy read, well done!

Are the objectives and targets clearly stated and easily understood?

Comments - Yes (22)

Targets need timelines and identification of who will be responsible for reporting and who will bke judgement

There is no justification for the "figures " in the objectives. Why simply maintain the present the present tree cover, surely we should be improving it.

I think the targets are not stretched enough, in particular resilient unley. This could be a one year operational plan rather than a strategy. There need to be some more blue sky thinking about the targets

Two targets would be worth revisiting: the Community targets for Waterwise and Resilient Unley. They are less precise than the other targets which have a clear sense of measurability.

Sure the document is full of modern jingoistic phrases, the usual motherhood statements and 'environment speak'; however, it works nonetheless. I note the use of ecofriendly recycled paper as a background. You wouldn't have seen this, say, 10 years ago; but I get it. The document was easy to follow and set out logically.

2 Lily Street has a huge amount of rooftop space for solar energy and solar hot water. Can you send someone to inspect and discuss?

They are reasonably easily understood but sometimes the context or scale is not evident. For example the target number of verges for greening or the number of streets for water sensitive treatments would have more meaning if shown as a percentage of all properties / streets and as part of a planned long-term trend.

Details of implementation plans need to be consulted as Strategies are very broad

refer attached letter. The most critical issue is climate change and climate variability

education to greater % of population for systems to function efficiently

Some of the targets are unlcear eg P21 2 information sesions - per year or over 4 years? My preference is 2 sessions per year

Comments – No (3)

The targets are not consistent in content and the 'level' that they target. They move from high level to very narrow (e.g. Green Unley Council target is appropriate but the community target seems to specific and narrow). The Waterwise community target is not a target it is an objective or action. The Waterwise Council target should mention WSUD as 'stormwater improvements' could equate to more traditional (e.g. more pipes), and not water sensitive, improvements. Wording of the Energywise Council target might confuse some people as to the exact meaning.

If you are expecting the public to comment, the document should be succinct with stated aims, perhaps some visuals and certainly what has already been achieved..... I really did not think it worth while to read through 35 pages of what seemed to be pretty ambiguous material - as much as I care about the environment!

The initial strategy in regards to whole streets seems too many trees being culled too fast. I want to see "no street cleared of trees" Look at how tall the trees are. Leave trees in the ground please.



Comments

A council can do little about climate change -no coal fired power stations, no coal mines, in Unley very little pollution. It will happen.

Energy efficiency - the council should concentrate on its own assets'

I found this difficult to rate as I think that these are all very high-priority themes.

The energy target should be much more ambitious and should incorporate a target on reducing carbon emissions both for Council and the community. Also, some context around these numbers should be provided to give an idea of how ambitious or otherwise this is, with detail about how the Council is reducing its corporate emissions into the future. The community target lacks ambition and more support in terms of incentives, transport, regulation etc. should be included to support and encourage action in the community.

The importance of maintaining the Council area's Urban Forest areas cannot be overstated. To this end, it appals me to see vegetation removed by developers where other options are available.

Energy wise is priority

They are all inter-related and probably all equally important. There are are none that are not a priority.

Very difficult to split these; they are all important and each initiative supports the success of other initiatives.

Resilience us the key. All the others lend a hand in developing resilience to climate change. If we get most of the strategies right and educate about green strategies then waste management should become increasingly less of an issue (in an ideal world)

What does resilience mean?

All themes are important!

All important

All are very important

I prefer verges (the land between footpath and road) be planted rather than landscaped with dolomite. Comment

Strongly Agree (18)

The more greenery, the more bio diversity, the cooler the area, the better everything is.

Appropriate trees add greatly to the urban environment. Allowing stormwater to reach the roots rather than just run past out to sea is vital. Contact Trent or Mitcham Council for details.

It would be good also if newly planted trees could either be native (which seems to commonly be the case) or fruiting trees from which residents can pick fruit in season lemons and pomegranates are two trees which spring to mind as relatively low maintenance

Important to encourage verge plantings of edibles and native plants

Dirty, rocky verges detract from the green look that we should be promoting

Prefer turf/lawn as plants make it difficult for passengers (especially the old or frail) to exit a vehicle.

Agree (6)

I took the easy maintenance option with dolomite originally but now will have the verge in front of my house planted.

I asked for this to be done at my property when footpath was upgraded It was ignored

Planted verges are an excellent initiative, so long as they are adequately maintained.

Greening the verges is good but it needs to be done in a planned way. Streets still have to be practical to allow for people in vehicles to park and for passengers to get out of their cars. The disadvantages are the the water needed to maintain plantings especially at times of drought and the maintenance required, which often lapses in people's busy lives.

A priority should be given to roads with a higher % of vehicular use, in order to reduce the impact of pollutants on nearby residents. Help improve the amenity of ALL residents by reducing effects of emissions, dust and noise.

Not just focus on streets that are already ok. Eg. Halmon Ave cp with Leah St/east Ave/leader St

But there needs to be several things in place to support. Plantings need to be controlled by council or local group. At the moment it is bitsy. Aesthetic value of plantings is lost if it is not consistent for a street. It must be easily maintainable, not use too much water, not impede use of footpaths, not be dangerous. See too many planting how to disrepair.

Strongly Disagree (2)

Previously we have lawn and irresponsible dog owners DO NOT PICK UP AFTER THEIR DOGS. Neighbours with green strips are still having altercations with them. Pedestrians throw rubbish onto paths. Overgrown weeds on neglected paths blowing their seeds into backyards. Green paths also needs watering in summer at owners' expenses! NO WAY!

With the dolomite, it is much easier for 'oldies' like us to sweep those wretched gum nuts from the Queensland Box trees.

Majority of the houses in Unley Council are old buildings with no solid foundation. If you are going to plant trees on the land between the footpath and road, you must consider planting those where roots are not invasive and will not lift the walls of the houses causing extensive and stressful damanages to the owners.

I believe residents have a role to play in helping achieve community environmental targets.

Strongly Agree (18)

It is in resident's interest to care for the environment in all cases.

Residents should be responsible for minimising use of the blue bins, and maximising use of the organics and recycling bins. Solar energy and increased verge care are two other good community goals

Residents who just expect their Council to provide all services, including street verge and tree maintenance, are being selfish. At the very least residents can provide advice to the Council as to where a repair or some maintenance is needed. I am continually frustrated by residents who obviously believe it's a Council responsibility to trim the resident's trees overhanging a footpath adjacent to their property. I suggest that residents are more frequently reminded of their responsibilities in this area. Perhaps a letterbox drop would be effective. I have had numerous near misses with foliage coming very close to contacting my eyes, whilst walking Council streets.

A strength of the plan is its inclusion of targets for residents. But Council, on behalf of residents, has a major role to play in supporting residents in working towards environmental sustainability, by setting a good example as well as resourcing schemes that facilitate and encourage community action and participation. I would like to see some quantitative data in the strategy demonstrating what we know: that environmental sustainability makes economic good sense.

But education, support and sense of community important if this is to succeed.

Agree (6)

Must agree to residents adding solar, putting in tanks, greening the verges, keeping drains clean in their area and maximising the separation of different wastes, keeping to a minimum the Blue bin waste.

By making their own property environmentally sustainable.

Weakening the tree legislation was a big mistake. Huge gum trees have been raised in this area on private property, street trees have been cut down by Council and not replaced. Selling agents advise owners to remove large trees before sale.

Neutral (2) - no comments provided

Please suggest any further ideas or actions for the draft Strategy.

Urban wetland in the parklands would be great.

Aquifer replenishment also

How does the Unley Council decide on what streets/parks are targeted for improvements? Can residents have a say in which streets are targeted in actions via numerical show of interest? It would be useful in the Strategy for residents/business operators to be clearly informed of what process is involved in prioritising actions or challenging decisions.

Education on why trees are important, publish figures on accidents from "limb dropping" they are minuscule. Do not start removing trees near schools on the basis they are "dangerous" (I have heard this proposed)

To have another look at the targets with a view to increase the thinking about where Unley want to be in 120 years. The current targets could be easily completed in less that 12 months

It is difficult to encapsulate everything in a strategic plan: too many actions or targets dilutes the plan. I think that the current draft has struck a reasonable balance

Acknowledging that this is a strategy, I think it lacks detail on the delivery of actions to achieve the targets. Many of the targets lack ambition and seem to reflect limited commitment in terms of Council's investment and prioritization of the sustainability principles espoused in the strategy.

With some of the targets it is difficult to assess their potential impact as there is not enough context in terms of the investment or current status.

A tree canopy target is an appropriate target, however, maintaining the existing coverage seems insufficient given the impacts of climate change. Also, this should be expanded to ensure that it considers areas that are currently deficient and should be prioritized above other areas.

Nothing to add to what is a fairly comprehensive greening statement

Consult residents about possibilities

It would be good to see some more specific actions where Council is demonstrating its commitment to sustainability. For example, specific aims for reduction of greenhouse gases on the vehicle fleet (use of hybrid and gas-powered vehicles should be mandatory). Also, under achievements, the fantastic extensive native plantings established as part of the Million Trees program should be celebrated eg the Glen Osmond creek linear park. Links to transport options in Unley could also be mentioned such as the good work of Council in encouraging and making provision for cycling and use of public transport.

Remove all Queensland Box Trees as it is a hazard slipping on gum nuts on footpaths. The roots get into the foundations of my home. They drop big leaves all year round blocking gutters and storm water drains.

Please consider undergrounding of cables as this would improve the streetscapes immensely. For residents to pay for this, perhaps enable costs to be taken out at sale of property - this does mean the Council would have to bear the cost in the interim. However, older or cash strapped residents would not want to partake if they had to stump up now.

Businesses that operate in the area should provide off street parking for all their employees.

Purchase more land for pocket parks. Explore use of more remnant plantings. Improving amenity of those on more frequently used road and tramways by creating more lineal parks along verges. Review street trees to ensue they are suitable and not causing issues for pedestrians and residents.

Take odd trees out as they are needed. A jacaranda if looking sick maybe pruned back heavily and in 12-18 months will regrow vigorously

The idea of valuing trees by signage as was done at Ridge Park appeared to me as a way of "telling a story" of their worth to humans. A Eucalypt of good size sequestrates 100 tons carbon in a year. They as a species top the mark in this regard. Verge plantings are an excellent way to improve micro climates, visual appreciations on a way to connect electronic eyes to their surroundings

Refer detailed letter attached about trees near houses.

P17 - Include more fruit and nut trees in the city's tree canopy along strees and in parks P25. As well as a reduction in the precent of material going to landfill I would like to see a reduction in the volumn going to landfills (more reuse of containers, extend life of goods etc, less consumerism) P27 council Target add ensure all of councils grid power inports come from renewable resources

Permeable footpaths. Renewing "adopt a tree" provide more practical information and engagement to each householder. Articles in Quartlery Unley life that feature relevant suggestions for season. A demonstration garden that shows examples of native trees and fauna that are sustainable to grow in Unley. Publish results regularly. Work with schools

Heywood ave has side entry pits directly to Brownhill Creek. Residents employees every week blow all leaves off their footpaths into the gutters. Council does good job removing leaves. Thankyou

Traffic issues missing from ESS. Increase city wide pocket park numbers and pulling back the road. Caution when clearing screening trees from parks for community fruit tree orchards.

Only mention of biodiversity was in one line. A little uncertain what maintaining Unley's Urban forest actually means in practice. It would be good to see greater emphasis on maintenance of our native vegetation? This would include defining what we have, especially the remnant red gum woodlands associated with creek lines and adjacent areas.

Community target for waterwise & resilient - they are both input measures rather than measuring effectiveness. Energywise is written a good example of how the information sessions will be measured from an effectiveness perspective.

Please provide any other comments you may have on the draft Strategy.

Perhaps a higher target for the street trees would be achievable.

A well prepared document. The 26% canopy coverage target I presume to be the current level otherwise I would like more information in the strategy justifying the target.

Action is more important now that there is a strategy.

One comment: In "Energywise Unley" it says: "Key initiatives that may fall under this theme include".

Why "may"? Sounds wishy washy & is unnecessary. Other sections don't have it, so it sticks out

The waterwise section does not provide commentary on water quality improvement and pollution reduction, which is a major reason for implementing WSUD. A key initiative listed in Resilient Unley is UHI effect. This is not an initiative presumably.

Overall, I think the Unley Council should be considering the level of investment in sustainability and integration of sustainability principles and whether it is sufficient in meeting the challenges posed by the environmental issues we face, particularly in relation to climate change mitigation and adaptation.

The strategy is well-presented, easily understood and has specific targets. I hope there will be a chance to review it in two or three years to assess progress and hopefully include further targets and actions as it seems to take a fairly minimalist approach at this stage. What is proposed should easily be able to be achieved - that is good - but as time goes by we need some more substantial outcomes.

Waste Management Strategy is Council's aim is to use this to reduce the frequency of rubbish collection to cut costs.

Am concerned that the emphasis on establishing vertical gardens seems to suggest that there will be more urban infill. The council should take the opportunity to create more open space, not see this as an opportunity to get more building per sq metre.

The Council needs to make sure they don't take on planting new trees that they don't have people or resources to water and nurture. I actually like (love) what we've got. Relying on locals to adopt a tree is great IF people will do it

It would appear that policies may be developed locally, but over-ridden by state bodies as in the very recent ease of a eucalypt in Malvern. Ongoing matters of concern!

I feel there needs to be much more community awareness about the need for us to reduce our ecological footprint. A target could be X number of workshops/information sessions about this issue. Council transport strategy has a big bearing on environmental issues. I would like to see this highlighted in the ESS

The green focus with more permeable verges, with plantings, habitat boxes and more tree planting etc are all immediately achievable. The waterwise focus with encouraging rainwater tanks, planting etc use of recycled water on council property can be achieved immediately. The resourceful target can be immediate. Council could give more impetus by demonstrating its lower energy bills at the end of each fin year. The plan risks becoming a range of motherhood statement unless council takes the lead and provides more money for habitat boxes, plants more native trees and revises its own practices of approving an increasing number of sig and regulated trees for removal. Focus has concern that rooftop gardens do not add to open space as they are usually only available to residents in building.

Hard copies should be available to the public. I was prepared to pay costs but this was not available. Work with supermarkets to provide more shade trees in their car parks

The aim for further open space is commendable but I would like to see the use of indigenous species in plantations getting greater recognition

DECISION REPORT

REPORT TITLE:	TREE STRATEGY
ITEM NUMBER:	31
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	TREVOR STEIN
JOB TITLE:	SUSTAINABLE LANDSCAPE SPECIALIST

1. EXECUTIVE SUMMARY

A draft copy of the Tree Strategy was endorsed for community consultation at November 2015 Council Meeting (Item 301).

Community feedback on the strategy was sought between December 2015 and April 2016.

The community feedback has been considered and where necessary the Tree Strategy has been modified to reflect the input from the engagement process.

The finalised Tree Strategy is now placed back before the Infrastructure and Sustainability Committee seeking it to be recommended for Council endorsement.

2. <u>RECOMMENDATION</u>

That the Committee recommends to Council, that:

- 1. The report be received.
- 2. The Council endorse the Tree Strategy and Long Term Financial Plan implications.

3. <u>RELEVANT CORE STRATEGIES/POLICIES</u>

The Tree Strategy (Attachment 1 to Item 31/16) is a supporting initiative from the City of Unley 4 Year Plan 2013-2016 A Community of Possibilities. Under the Greening Goal the relevant aim was to:

1.1 Consolidate and optimise existing strategies relating to the City's tree and vegetation stocks, including the planting of indigenous species. Attachment 1

4. DISCUSSION

As reported in the 2015 report to Council the purpose of the Tree Strategy is to provide a framework that will facilitate the regeneration of the Urban Forest in the City of Unley and to provide sustainability for the City moving forward. Furthermore, the purpose is to align a strategy with the overall objectives of the Unley Strategic Plan as described in a series of tiered strategies, in particular the Environmental Sustainable Strategy.

The Tree Strategy is not a static document, and will require regular review to ensure it remains current.

It is proposed that the strategy will provide a framework for making structured, consistent and environmentally sound management decisions for all Councilowned or managed street and open space trees.

Council faces a range of challenges in the strategic management of its tree asset into the future. Specific issues and challenges identified within the strategy include:

- Ageing tree population
- Water and soil moisture
- Climate change
- Urban heat island and extreme heat
- Population increase and urban infill
- Community expectations and resistance to change
- Tree succession planning and programming
- Age friendly city.

In developing the tree strategy, current strategies and policies have been reviewed, and a clear direction sought within an endorsed Tree Strategy framework.

The Tree Strategy targets have been set to achieve a sustainable tree population across Unley and assumes a continuation of the current level of funding.

Detailed consultation has been undertaken with key internal stakeholders during the development of this strategy. The Infrastructure and Sustainability Committee has previously been provided with a Draft of the strategy and given the opportunity to provide feedback.

Following Council endorsement of the Draft Tree Strategy for community consultation by Council in November 2015, the Administration has undertaken an extensive consultation of the document.

Utilising the Have Your Say community consultation model the strategy was placed on Council's Website in late December 2015 and an opportunity was provided for the community to submit feedback until 31 March 2016. A Frequently Asked Questions (FAQs) fact sheet was developed and made available on the Website (Attachment 1 to Item 31/16).

The feedback framework provided the community the opportunity to comment on 5 key questions:

- What do you like most about the Tree Strategy?
- What are the top three priorities for Council in delivering this Tree Strategy?
- Indicators and targets are listed for each Pathway within the Draft Tree Strategy. Do you have any feedback regarding these indicators and targets?
- Do you think there is anything missing from the Strategy?
- Please provide any further comment.

Further to the website, the Tree Strategy was 'picked up' by the local media with stories running in The Advertiser, Eastern Courier Messenger and Mitcham and Hills Messenger (Attachment 2 to Item 31/16). Unley Council also utilised The Unley Life section of the Wednesday March 16, 2016 Eastern Courier Messenger to promote the strategy for feedback (Attachment 2 to Item 31/16). *Attachment 2*

In total 55 feedback submissions were received either in the format provided by the Unley Council Have Your Say template or by direct mail to Council in letter, email or other means.

The feedback was generally positive albeit Council having to counter media stories that healthy trees were to be removed as an outcome of the Strategy. This led to the creation of the FAQs and regular feedback to media to clarify the intent and outcomes of the strategy.

A summary of the feedback under the 5 Have Your Say headings is provided in Attachment 3 (to Item 31/16).

Attachment 3

In the analysis of the feedback, the Administration while acknowledging selected comments with respect to 'anything missing from the Strategy' is of the view that no structural changes are required to the final document. While some minor changes and grammatical adjustments have been made, the strategy retains the same detail and projected outcomes. The finalised Tree Strategy (Attachment 4 to Item 31/16) is now placed before the Infrastructure and Sustainability Committee and ultimately Council for endorsement.

Attachment 4

5. ANALYSIS OF OPTIONS

<u>Option 1 – The Council endorse the draft Tree Strategy (Attachment 1 to Item 31/16) and Long Term Financial Plan implications.</u>

A draft of the Tree Strategy has been previously reviewed by the Infrastructure and Sustainability Committee (September 2015 meeting). Feedback comments from this meeting were considered and where necessary modifications were made to the strategy. The strategy was placed back before Committee in November 2015 and subsequently endorsed for community consultation by Council.

Following a three month community consultation, the strategy is now before the Infrastructure and Sustainability Committee for endorsement.

Option 2 – The draft Tree Strategy is endorsed with amendments.

Members of the Infrastructure and Sustainability Committee may suggest minor amendments to the Strategy which could be included prior to the document being placed before Council for endorsement.

Option 3 – The draft Tree Strategy is not endorsed.

Further modifications be undertaken to the strategy with a further report to be presented to the Infrastructure and Sustainability Committee incorporating the changes.

The Infrastructure and Sustainability Committee seek further amendments to the strategy. The strategy is to be amended and returned to committee for endorsement.

6. <u>RECOMMENDED OPTION</u>

Option 1 is the recommended option.

7. POLICY IMPLICATIONS

The Tree Strategy is a supporting initiative from the City of Unley 4 Year Plan 2013-2016 A Community of Possibilities.

Financial Implications – the Tree Strategy is reliant on the continuation of current budget funding levels for delivery of the outcomes and targets identified.

8. <u>REPORT CONSULTATION</u>

The Tree Strategy has been consulted extensively. The detailed results of this consultation are provided in the Discussion section of this report.

9. <u>ATTACHMENTS</u>

- Tree Strategy Frequently Asked Questions
- Consultation Summary & Selected Samples Media Responses
- Summary of Tree Strategy Feedback
- Finalised Tree Strategy

10. <u>REPORT AUTHORISERS</u>

Name	Title
John Devine	General Manager Assets and
	Environment

Tree Strategy – Frequently Asked Questions (FAQs)

Why did Council draft a tree strategy?

The strategy aims to provide direction around the management and protection of our much loved trees.

Where else is this type of tree management being undertaken?

Most councils across Australia have some form of strategic document or policy to guide the future direction of their trees.

Cities around the world now regard trees as critical urban infrastructure – just as important as roads or public transport. Furthermore, trees are seen as particularly vital to the health and wellbeing of communities. The benefits of urban forests span environmental, economic, cultural and political domains. These benefits are interrelated, with each cumulatively feeding into the creation of resilient sustainable urban landscapes.

What are the key issues proposed in the strategy?

The strategy provides a framework that will facilitate the regeneration of the Urban Forest in the City of Unley and provide sustainability for the City moving forward.

A range of initiatives, indicators and targets have been developed to ensure the long-term viability of our street trees, parks trees and private trees.

Through tree succession planning, the City of Unley will work towards a long-term goal to increase the species and age diversity of trees across the City, ensuring a healthier, environmentally sustainable, resilient tree population.

Why was diversifying the tree species flagged as an issue?

The Jacaranda and Queensland Box constitute over 42 per cent of Council's street tree species. A reliance on a dominant species leaves the City vulnerable to pest and disease, and potential loss of the street tree asset.

Existing streets of Jacaranda will not be impacted. It is Council's intention to maintain this species where it is the dominant species of a street.

Is there really any risk to our trees from pests?

A recent outbreak of the Elm Leaf Beetle is currently causing concern through Unley and Adelaide. The Elm Leaf Beetle is a relatively new pest occurrence within South Australia (first noted in Malvern, in 2011). The beetle can cause major defoliation of the tree, and although the infestation will not initially cause tree death, prolonged attacks will inevitably reduce health and vigour and could result in expensive treatment. There are currently no known threats to the Jacaranda and Queensland Box, but it would be irresponsible to not mitigate against potential future threats.

Does the plan propose to remove healthy Jacaranda trees?

The draft strategy does not propose to remove any healthy Jacaranda trees. Should a Jacaranda tree be removed due to poor condition or other necessary reason, it may be replaced with a different species. In streets where Jacarandas are the dominant species, Jacarandas will continue to be planted as replacements are required.

Can changes still be made to limit diversifying the species?

All feedback received during the consultation period will be considered before drafting the final strategy for Council's consideration and endorsement.

How do you decide which trees will be removed and replaced?

Trees have a finite life and strategically managing the asset is about knowing when intervention is required. There are many reasons why trees are removed, such as:

- The tree is in severe decline
- The tree is structurally compromised
- The tree presents in poor health and condition with low vigour
- The tree has a notable history of failure
- The tree poses an unacceptable risk to people and property
- The tree is on an unacceptable lean over road carriageway or footpath
- Foliage density and distribution are drastically below normal levels
- The tree species is no longer suitable for the Unley streetscape

How many street trees will be removed?

An independent audit of the City's street tree asset has identified that around 1,600 street trees have a useful life expectancy of less than five years. This figure does not include yearly unexpected tree losses by unexplained deaths, storm damage etc.

With this in mind, we've set a five year target to replace 2,000 street trees. In the initial stages Council is targeting trees that are in poor condition or are structurally compromised.

Will all removed trees be replaced?

With a goal to maintain a healthy, environmentally sustainable, resilient tree population the Council intension is to replace all removed trees.

What types of trees will be used as replacements? Will they be natives, deciduous or evergreen?

Over the life of the Tree Strategy Council will aim to create a palette of trees suitable for replacement in the streets. This palette will include native, deciduous and evergreen.

Council is fully aware that many of the streets within the City of Unley have consistent avenues of same species trees. Existing avenues will be maintained and only changed after full consultation with residents and property owners within the street.

Will you let me know if trees in my street are being replaced?

Yes. Council is legislatively required to notify affected residents and property owners when nearby trees are removed.

Could Council meet its composition ratios by planting new trees between existing trees (rather than removing existing trees)?

Interplanting is rarely a viable solution as the new tree will often compete with the retained tree for moisture and sunlight. In the long term this can mean the new tree will be stunted or die. It is more sustainable if the tree is removed and replaced, allowing the new tree to establish.

Is there budget for this?

Council provides recurrent yearly funding for the maintenance of Council's street tree asset. This funding includes provision for succession tree removal and replacement.

When will the strategy come into effect?

Following community consultation the feedback will be collated. Where deemed necessary the strategy will be amended. The strategy will ultimately be referred back to Council for endorsement. It is anticipated that the strategy will be endorsed during the second half of the 2016 calendar year.



Unley eyes tree change

UNLEY Council would spend as much as \$3 million in the next three years to replace about 2000 trees in a new plan.

The council's unfunded strategy to accelerate its replacement program also earmarks a further 2000 trees for replacement by 2024.

The council estimates it would need to spend \$250 per planting and \$400 per axed tree.

The plan is up for community consultation until March 31 and a final strategy will be presented to the council in the coming months.

Adelaide Advertiser - 15 February 2016



Millions needed to replace our trees

From Page 1

UNLEY

Continued Page 6

complete the work for \$1.3

nillion.

Mr Lawry said removing a

tree

a new

get

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"Over about three years, you're looking at a total cost

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But the council says it can

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cheap.

David Lawry, the director of Treenet, a national street tree research group based at

2000 trees by 2024.

marks replacing a further

UNLEY Council is facing a bill of up to \$3 million to raze and replace 2000 dying trees

The council's own costings are more conservative, estimating it would need to spend \$250 per planting and \$400 per axed tree.

The council is considering digging shafts in gutters to irrigate trees with storm-water.

"Diverting stormwater from the gutter that is just flowing out to sea would go a long way," Mr Lawry said.

"The trees wouldn't need watering from trucks, and would live far longer without damaging the kerbs and footpaths.

"Most trees in the city have a life span of about 50 years. In a natural setting they could last for centuries."

The plan would also focus on increasing species diversity.

Jacarandas and Queensland box make up 42.5 per cent of trees in the area, but that could be scaled back to 40.5 per cent to safeguard against pest or disease wiping the population out.

Friends of the City of Unley member Warren Jones said tree diversity was crucial for the area.

"As beautiful as the jacarandas are, if we are stuck with one type they will all



Jacarandas in Unley Park.

die at once," Mr Jones said. Unley chief executive Peter Tsokas said "a specific palette of trees would be selected that are suitable for street planting". The council is yet to decide on species.

The plan is out for community consultation until March 31 and a final strategy will be presented to the council for endorsement in the coming months.

The council says the program will be funded from general revenue.

Unley has 26,000 public trees – about 22,000 in its streets and 4000 in its parks.

Eastern Courier - Wednesday February 17, 2016

Tree spending branches out

James Hetherington

UNLEY Council would spend as much as \$3 million in the next three years to raze and replace about 2000 trees under a new plan.

The council's unfunded strategy to accelerate its replacement program also earmarks a further 2000 trees for replacement by 2024.

David Lawry, the director of Treenet, a national street tree research group based at Adelaide University's Waite Arboretum, welcomed Unley's proposal but warned it would not be cheap.

"Over about three years you're looking at a total cost of \$500 to get a new tree going," Mr Lawry said,

"But removing the trees is far more expensive.

"You have to factor in powerlines, traffic control, cutting the stump, just to name a few,"

The council's own costings are more conservative, estimating it would need to spend \$250 per planting and \$400 per axed tree.

Under the plan, the council is considering digging shafts in gutters to irrigate trees with stormwater, "Diverting stormwater

"Diverting stormwater

from the gutter that is just flowing out to sea would go a long way," Mr Lawry said

"The trees wouldn't need watering from trucks, and would live far longer without damaging the kerbs and footpaths.

"Most trees in the city have a life span of about 50 years.

"In a natural setting they could last for centuries."

The plan would also focus on increasing species diversity, which Friends of the City of Unley member Warren Jones said was crucial for the area.

"As beautiful as the jacarandas are, if we are stuck with one type they will all die at once," Mr Jones said.

"This would not be ideal for the area's tree population."

Unley chief executive Peter Tsokas said "a specific palette of trees would be selected that are suitable for street planting".

The plan is out for community consultation until March 31 and a final strategy will be presented to the council for endorsement in the coming months.

Unley has 26,000 public trees – about 22,000 in its streets and 4000 in its parks.

Mitcham & Hills Messenger – Wednesday February 17, 2016

UNLEY

Council is barking up the wrong tree

James Hetherington

AN UNLEY Council plan to spend millions ensuring the long-term future of the area's trees has been criticised by the local MP.

Unley state Liberal MP David Pisoni said people would be "horrified" at the idea of seeing old jacarandas replaced.

"I'm surprised by the council's move on this," Mr Pisoni said.

"I don't see many dead trees in Unley.

"There's nothing wrong with having a plan, but we don't want the plan to decimate what has developed in Unley over the past 150 years.'

The council's tree strategy



- which is open for public comment until March 31 proposes axing 2000 trees by 2019.

The number of jacarandas and Queensland box - the area's most common trees – would be reduced to safeguard against any potential pest or disease wiping out the population.

But Mr Pisoni said he had Parliamentary research that showed no disease had

wiped out an entire species of tree anywhere in Australia in the past 20 years.

"It's a bit like they've fabricated a problem and solved it," Mr Pisoni said. "The problem

wasn't there in the first place."

Unley Council chief executive Peter Tsokas said the plan was not yet final and the council welcomed any feedback on the strategy.

He said, despite there being no current threat to jacarandas and Queensland box, the council needed to be prepared for tree diseases or pests.

"It would be irresponsible to not mitigate against potential future threats," Mr Tsokas said.

Eastern Courier - Wednesday March 02, 2016

08 NEWS

UNLEY

Call to pulp tree protection push

Dan Jervis-Bardy

AN UNLEY Council plan to

AN UNLEY Council plan to protect its street trees might have the opposite effect, a university academic fears. UniSA biological science associate professor Craig Williams said the plan to di-versify the range of trees in the district was "highly overengineered" and might lead to the unprocessary felllead to the unnecessary fell-ing of healthy jacarandas. "They are looking to re-move what are healthy trees

simply to meet arbitrary tarsition," Mr Williams, an Unley resident, said. "Jacarandas, in particu-lar, are resilient to disease,

they do not suffer from limb drop ... so to remove them seems needless." Under the council's plan.

the number of jacarandas and Queensland box trees which make up 42 per cent of

They are looking to remove what are healthy trees simply to meet arbitrary targets. - Craig Willia

trees in the area - would be reduced to protect a large number of trees across the district being wiped out by pests and disease. Mr Williams suggested the council instead plant new trees to reach targets for enceles diversity

for species diversity.

for species diversity. Unley MP David Pisoni last week said people would be "horrified" at the idea of seeing old jacarandas chopped down. Unley chief executive Peter Tsokas said healthy jacarandas would not be axed as part of the plan. "In streets where iacaran.

"In streets where jacarandas are the dominant species

... they will continue to be planted," Mr Tsokas said. He suggested Mr Willi-ams' proposal to plant new trees was not viable. "Interplanting is rarely vi-ble. or the new twe will

"Interplanting is rarely vi-able ... as the new tree will often compete with the re-tained tree for moisture and sunlight," he said. Arborist and Clarence Park resident Michael Pala-mountain - who has worked as a consultant for the coun-cil in the past - has lodged a submission on the tree plan. He backed the plan to re-duce iacarandas in the dis-

He backed the plan to re-duce jacarandas in the dis-trict. "Species diversity and aged diversity are essential to ensuring the long-term sustainability of an urban forest." Mr Palamountain said.

Consultation on the plan is open until March 31 at

yoursay.unley.sa.gov.au

Eastern Courier – Wednesday March 09, 2016



DRAFT TREE STRATEGY

We would like to hear your thoughts on our draft Tree Strategy. Comment online at yoursay.unley.sa.gov.au, email pobox1@unley.sa.gov.au or a write to PO Box 1, Unley SA 5061. The strategy is available on our website or phone 8372 5111 to obtain a copy. Consultation ends 5pm, Thursday 31 March.

THE CITY of

Customer Service Centre 181 Unley Road, Unley Phone 8372 5111 Email POBox1@unley.sa.gov.au unley.sa.gov.au

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EASTERN COURIER MESSENGER, Wednesday, March 16, 2016

Eastern Courier Messenger – Wednesday March 16, 2016

No threat here

I AM flabbergasted by the quote from Unley Chief Executive Peter Tsokas in relation to removing established jacaranda and Queensland box trees from the Unley area: "It would be irresponsible to not mitigate against potential future threats."

What would be irresponsible, Mr Tsokas, is for the council to spend millions of dollars of ratepayers' money removing perfectly healthy trees in case of future disease. If your approach is valid, Mr Tsokas, then shouldn't all trees be removed Australia-wide?

SONYA HENDERSON, Wayville

Eastern Courier - Wednesday March 16, 2016

Summary of Tree Strategy Feedback

What do you like most about the Tree Strategy?

- Comprehensive and strategic
- Emphasis on the values of a well-planned and kept urban forest
- Comprehensive, logical and easy to understand
- The fact that it exists the recognition of community protest and the need to keep people informed with accurate information
- Council is to be applauded for drafting a strategy just for trees
- I applaud the actions of the City of Unley
- Well considered, well researched, well written, realistic
- There are positive and progressive actions around understanding council-owned biodiversity, and a recognition that food trees may be useful in the community
- In principle appears to be an innovative and forward looking proposal
- Acknowledgement of the importance of trees in the urban environment
- Consideration of future climate watering harvesting ideas
- Comprehensive about public trees
- The fact the Council is considering a strategy
- The plan to remove over-mature trees
- The draft tree strategy is excellent, the key factor being that it takes very seriously Climate Change and its possible impact on present and future generations
- I believe that our Urban Forest is critical for the survival of humanity
- The draft tree policy is an excellent document; well researched, thoughtfully constructed and attractively presented
- The strategy appears to be well thought through, comprehensive and forward looking to support the future well-being of Unley stakeholders

What are the top three priorities for Council in delivering this Tree Strategy?

- Community consultation
- Affordability
- Long term approach
- Sustain trees and re-plant for the future
- Using sensible, green and manageable ways to water and care for trees and plantings
- I like the multiple priorities
- Water management ensuring water doesn't just run down the gutter
- Tree species diversity (including generic diversity)
- Tree age diversity
- Proactive urban forest management
- Sustainability
- A focus on gap filling areas without street trees to meet biodiversity targets, rather than healthy tree removal
- Leave the healthy trees alone!
- Water harvesting strategies

- Appropriate species selection
- Rejuvenating the stock of public trees
- Fruit tree commitment for parks
- Installing watering points for street trees to ensure their long-term health
- Removal of large street trees growing too close to dwellings, causing damage
- Replacement of pedestrian and garden unfriendly species like bottlebrush
- Preservation of Jacarandas
- Maintain a strategic tree replacement program that respects the heritage, appeal and values of the many suburbs
- Have a mix of native and exotic species it is vital to keep a proportion of native species for a healthy biodiversity in our environment
- Like the fact the strategy includes fruit and nut trees
- Effectively funded and implemented tree succession plan
- Funding of sustainable water use trials to support street trees and park trees

Indicators and targets are listed for each Pathway within the draft Tree Strategy. Do you have any feedback regarding these indicators and targets?

- Looks good
- Targets are good achievable and sensible
- Healthy trees posing no risks to amenity should not be removed
- Would agree with plans to eradicate Queensland Box street trees
- Preserve healthy trees as long as possible
- Whole scale removal would have a devastating effect on the local wildlife and negative impact to adjacent gardens
- Sensible and realistic targets

Do you think there is anything missing from the Strategy?

- Trimming of trees around powerlines
- Support for owners of significant trees on private property
- Trees provide a wide range of benefits
- Trees pose a risk and general public must accept this
- Not really, I think it looks pretty good
- Stronger protection measures for heritage trees
- Implementation strategy
- The strategy could do with a concise, jargon-free, cliché-free and easily understood summary of the main objectives
- Replacement is a good thing but why not commit to more trees being planted not just replacement
- Strategic purchases of adjoining private properties to parks

Please provide any further comments:

- Do something instead of talking about it
- It is our opinion that evergreen trees are inappropriate in an urban forest
- There are trees in Unley 400 years old and you cannot replace them

- I have little faith in Council-employed staff to make accurate assessments of trees to remove
- Gap planting
- Very important that entire plantings in streets/parks/avenues, are not actioned at the one time but individual diseased or dying trees are replaced as required
- Jacaranda compliment the heritage buildings
- Focus on the planting of exotic species where possible in avenues
- The Council focus on 'TreeNet inlets' is to be commended
- The contribution of Jacarandas to the beauty of streets and the suburb is consistently recognised by neighbours, visiting family and overseas friends
- FOCUS applauds Council's initiative in establishing a comprehensive Tree Strategy
- Concern registered in regard proposal to replace whole streets at once
- Prefer alternative to 'Pathways' such as 'Focus Areas' since pathways has a well established and more restrictive meaning to myself and some other residents. Well done with the Strategy for thinking longer-term to promote a more sustainable Unley
- It will make a valuable contribution to the Sustainability Strategy being developed by Council
- Strongly support that the choice of trees, especially for our streets, should be made by arborists not by residents





"Someone's sitting in the shade today because someone planted a tree a long time ago." ~ Warren Buffett ~





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The City of Unley recognises the important contribution trees and vegetation make to its community.

Such assets provide environmental benefits by way of supporting flora and fauna, addressing the consequences of climate change while creating a living environment that adds character to the streetscape and economic value to properties.

The City of Unley commits significant resources to ensure it has the best possible streetscape and park environments through the effective management of its trees and understory planting whilst encouraging its community to play an important role. The management of the City's trees is an important function of Council and as community expectations and demands continually rise, managing these important assets is becoming increasingly more difficult and complex.

Cities around the world now regard trees as critical urban infrastructure – as important to how a city functions as roads or public transport. Furthermore, trees are seen as particularly vital to the health and wellbeing of communities. The benefits of urban forests span environmental, economic, cultural and political domains. These benefits are interrelated, with each cumulatively feeding into the creation of resilient sustainable urban landscapes. Given the pressure on governments to plan for greater populations, increased urban density and climate change adaptation, there is a clear opportunity to communicate the importance and benefits of urban forests in creating resilient, sustainable cities that provide healthy and enjoyable places for people to live, work and play.

This City of Unley Tree Strategy provides the foundation of how Council will continue to enrich and enliven our neighbourhood's character and amenity through the continued management of one of our most valuable assets, now and for future generations. The document sets out an ambitious vision for improving sustainability in Unley. This Tree Strategy is an integral part of Council's Environmental Sustainability Strategy.

The Tree Strategy recognises the achievements of previous elected members, administration and field base practitioners who have all played an important part in the establishment of a diverse urban forest. Acknowledging this solid foundation an opportunity exists to build, maintain and enhance this important asset within the City by providing a visionary yet practical approach for future tree managers.

Council will engage the community on this draft Strategy, evaluate feedback and then finalise the document prior to implementation. Once the Strategy has been finalised it is not intended to further consult with the community on every aspect, rather inform the community on specific initiatives as they are implemented.







Purpose

The purpose of this Strategy is to provide a framework that will facilitate the regeneration and expansion of the Urban Forest in the City of Unley and provide sustainability for the City moving forward. Furthermore, the purpose is to align the Strategy with the overall objectives of the Unley Strategic Plan as described in a series of tiered strategies, in particular the Environmental Sustainable Strategy.

This document builds on the significant works already undertaken and currently underway within the City of Unley.

Unley City Council currently has approximately 26,000 Council owned trees within the local government area of 14 square kilometres. Trees constitute an important element of the rich cultural heritage of Unley and are a considerable asset to the community on many levels. They complement the environment, enhance our enjoyment of streets and open spaces by making them more comfortable and pleasant, and just as importantly they provide a wide range of other benefits such as shade, cooling and habitat for wildlife.

Conversely, trees constitute a potential risk to the community and to property on a number of levels, ranging from interference with underground or above ground services to risk to property and personal safety through such events as limb drop or lifting of paved walking surfaces. Like other assets, such as buildings, trees require effective and coordinated management to maximise their benefits to the community and the environment and minimise risks, such as damage to property or personal injury. Council is committed to nurturing, preserving and developing these important community resources.

This Strategy uses a hierarchy of; pathways and objectives, initiatives, indicators and targets. The Strategy seeks to provide an appropriate level of guidance and framework and in some situations recommend developing a more detailed supporting plan or establishing a program to focus efforts.

The Urban Forest PUTTING TREES IN CONTEXT

Urban forestry is broadly defined as the management of trees, shrubs and other vegetation in urban areas. It focusses on the 'forest' or larger population of trees rather than individual trees along streets, in parks and open spaces and within commercial, industrial and residential properties. Trees in cities are a major component of the green infrastructure, the natural resources upon which the City relies. Healthy, resilient and liveable towns and cities that can sustain growing populations in 21st century Australia will feature viable and vibrant urban forests.

The City's urban forest consists of all trees and vegetation located throughout the local government area; irrespective of the tree species origin (native, exotic), location (street, park, garden, school) or ownership (public, private, institutional). As distinct from arboriculture and horticulture, urban forestry considers the cumulative benefits of an entire tree population across a town or city. Looking holistically at the urban forest and its associated ecosystem allows for consideration of the broader issues of climate change, urban heat island effects and population growth that can be influenced by and which can affect an urban forest.

The urban forest, measured as a canopy cover percentage of the total land area, is recognised as a primary component of the urban ecosystem. It is one component of a complex built environment that includes roads, car parks, footpaths, underground services, buildings and other structures. Urban forests mean different things to different people, yet they contribute positively to the way we see our towns and cities and how we use them. Urban forestry can be described as the science and art of managing trees, forests and natural ecosystems in and around urban communities to maximise the physiological, sociological, economic and aesthetic benefits that trees provide society (Schwab, 2008).

Trees are the largest elements in the urban forest. They are such an important and critical part of our urban fabric and support the basic elements that sustain life: the air we breathe, the water we drink and shelter from the wind in winter and sun in summer.

All components of the urban forest allow those living in our towns and cities to connect to the natural landscape. The urban forest can thrive alongside the hard infrastructure associated with urbanisation.

Urban forests play a vital role in the health, social framework and economic sustainability of a city. Trees are working 24 hours a day, every day, improving our environment and quality of life.

The key messages in marketing the Urban Forest to support the goals of this strategy are as follows:

- a healthy and safe urban forest doesn't happen by chance – it is the result of proper planning, management, and community investment;
- healthy urban forests can assist with many community problems;
- urban forests and natural areas are connected; good management of one helps the other.

For an urban forest to be sustainable there must be a wide age-distribution of trees to create a continuous cycle of succession.

Apart from ensuring that there is a new generation of trees to take the place of trees which must be removed for health or structural reasons, the most expensive stages of a tree's life are in the very early stages and in old age or senescence. Hence a mix of ages is more financially sustainable and assists Council spread the risk.

Having a diverse mix of species – both native and exotic - reduces the risk of loss should one species be susceptible to a new pest or disease. Diversity of tree species also provides benefits for biodiversity, aesthetic reasons, improves resilience and the provision of summer shade and winter sun (deciduous trees) (Sydney University, 2008).



UNLEY'S URBAN FOREST

Trees play an important role in the environmental and aesthetic context within Unley adding social, economic and environmental value to the City.

Many street boulevards were established by environmental pioneers in the early 1900s. The majestic Plane Trees of Victoria Avenue and Northgate Street in Unley Park owe their existence to the early arborists and City Planners who delivered on a green vision for the City. Many of the trees existing along the major boulevards of the City date back nearly one hundred years. These early plantings have been complemented by a Council decision in the late 1970s to plant every street that can be planted with street trees.

The City's streetscape is supported by numerous natural park and open space trees many of which pre-date European settlement. While Unley is restricted to 3% open space, many large remnant trees remain to support a diverse urban forest. These park trees are further complemented by private land owner tree plantings many of which also date back to the early 1900s.

The City is fortunate that property sizes within much of Unley are large, enabling trees of a significant size and canopy to have been planted and managed within the private realm. These trees along with those in Council ownership contribute significantly to the aesthetic and environmental 'feel' of the City.

THE UNLEY CONTEXT

THE DEMOGRAPHICS OF COUNCIL'S STREET TREES

Funding was provided during the 2014/15 financial year for Council to undertake a detailed audit of the street tree asset.

The audit involved a street by street assessment of the street trees from a range of pre-determined criteria, and has been designed to provide reliable up to date data on the street tree population to ensure tree succession planning is based on good current information. Furthermore, the audit provides supporting evidence for the establishment of a programmed approach to succession tree planting throughout the City.

The collection of tree status data, analysis and translation of this data are important measures in proactive tree management and planning.

The primary stage of the audit grouped the tree assets in segments covering between 1 to 15 trees per group. Approximately 2,300 asset groups were detailed within the primary stage data collection of the project.





Number of Trees in Population



STREET TREE NUMBERS &

The street tree data was collected between December 2014 and June 2015. The data collected indicates that the City of Unley currently manages 22,426 street

trees within approximately 450 streets. The detail be-

SPFCIFS

TREE STRATEGY 2016-2019

USEFUL LIFE EXPECTANCY (ULE) OF THE STREET TREE ASSET

An analysis of the age of the street tree asset and the Useful Life Expectancy (ULE) becomes critical in assisting the succession planning process. The data collected and taken from the audit below indicates that 53% of the street tree asset has a ULE greater than twenty years. Conversely this indicates that 47% of the trees have a ULE less than twenty years. A tree's ULE is determined using several factors observed during the tree assessment including the tree's age, health and structural condition as well as its aesthetic and environmental contribution to the local area.

It should also be noted that while 74% (16,671) of the tree population within the City is mature, over half of the population has a ULE that exceeds twenty years with 20% (4,485) of the tree asset expected to require replacement within the coming five to ten years. The data reveals that 7% or 1,570 trees will require replacement within the next five years.

The age range for the tree population is moderately distributed and ranges between young and senescent. The following pie-charts show the number of trees within each of the age ranges collected as well as the remaining Useful Life Expectancy estimated for these trees.







The Tree Strategy will directly support the activities of the Environmental Sustainability Strategy and the Greening goal in the Community Plan as outlined in the flowchart below.

COMMUNITY PLAN 2033						
GOALS	⇒	↓ EMERGING		√ MOVING		GREENING
LEAD STRATEGIES	⇒			ENVIRONMENTAL	. SUSTAIN	IABILITY STRATEGY
SUPPORTING STRATEGIES	⇒		STORMWATER (WSUD) STRATEGY	TREE STRATEGY	Þ	WASTE STRATEGY
PROGRAMS	\Rightarrow	SUSTAINABLE LIVING PROGRAM	ASSET MANAGEMENT PROGRAM	TREE PROGRAM		WASTE PROGRAM
PROJECTS	⇒					

The Tree Strategy also links to the delivery of a number of other lead strategies and plans, specifically the Living Well Public Health Plan (Priority 3 - Preparing for Climate Change), the Open Space Strategy (in development) and the Active Ageing Strategy.



The development of this Strategy is underpinned by principles which are reflected through the vision, objectives, strategies, indicators and targets. The City of Unley has developed a set of guiding principles to ensure assets throughout Unley are developed and managed for the needs of the community. Trees within the City of Unley are classified as an asset and managed in a manner consistent with other Council owned assets.

Council has developed a set of guiding principles to ensure assets throughout the city are developed and managed in a responsible, systematic manner to meet the needs of the community:

1.

EQUITY ACROSS THE COMMUNITY

A balanced approach is taken ensuring that residents across the community have equal opportunities for required services.

- Council recognises that trees are an integral part of the environment, add aesthetic quality to life across the City, and will be treated as an asset.
- Street tree plantings or removal will be based on a holistic City wide themed approach promoting the orderly planning of each area.
- Council will design landscapes to reflect the cultural integrity, identity and character of Unley and its neighbourhoods.

2. SUSTAINABLE ASSETS

Assets are designed & maintained in a manner cognisant of a triple bottom line outcome (financial, environmental, social) and use a life cycle approach.

- Council has a responsibility for the planning, establishment, maintenance and removal of all trees located within the City's streetscapes and open space (parks, reserves, streets, medians and nature strips).
- Trees are considered to be community assets that contribute to the wellbeing of the community and to the natural environment.
- Council recognises and values the significance of trees within the urban setting in that they create functional and aesthetic streets-capes, provide natural habitat and natural shade.
- Council will ensure a diversity of tree species and ages to maximise resilience against pest and diseases and weather extremes.

3. RISK SENSITIVE

Asset based decisions are made in a manner where risks are identified, understood and managed (WHS, Environment, Public Safety, Community).

- Tree assessments are undertaken within a risk framework consistent with the industry standards and demonstrate reasonable care.
- Council is committed to protecting and maintaining trees within the municipality whilst meeting its obligation to provide a safe environment.
- Council aims to preserve and protect the City's Regulated trees both on Council owned and private land in line with the legislative controls outlined in the Development Act 1993.

4. STRATEGIC CONSISTENCY

Assets related to services are planned and maintained within an integrated planning framework

- The Tree Strategy complements other relevant strategies and plans including the Environmental Sustainability Strategy, Living Well Plan and Open Space Strategy, to ensure an integrated approach across Council.
- The on-ground delivery of the Tree Strategy through programs and projects will be planned and maintained through annual business planning.

5.

FUNCTIONAL & SERVICE LEVEL

Assets are designed and maintained to ensure they are fit for purpose and meet the agreed level of service.

- Council commits to enhancing existing biodiversity sites and establishing new biodiversity sites through tree management and additional local provenance tree plantings.
- Trees will be selected and maintained in a manner consistent with the desired/targeted service level for each specific site.

COMPLIANT

6.

Assets are designed and maintained to meet compliance requirements at a minimum.

- All new street tree plantings are required to be compliant with relevant legislative requirements.
- Accessibility and walkability are key functions of the Age Friendly City streetscape and it is incumbent on Council to ensure that wherever possible a balance is reached whereby streets, parks and other public land is accessible to all.
- Property owners within Unley have a responsibility to manage trees within the boundary of their properties.

7.

INNOVATION & IMPROVEMENT FOCUSSED

Alternative methods of providing services/assets are regularly examined & improvements considered, to ensure "best value" options are applied.

- Trees will be managed in a manner that recognises and finds a careful balance between the historical character of Unley's inner-city urban environment and new expressions of social, environmental and aesthetic values in streetscape renewal programs.
- Council commits to promote the use of innovative techniques for water sensitive urban design to support tree growing solutions in streets and Council owned open space.
- Council will continue to support an urban forest that can tolerate and continue to thrive in climatic extremes.
- Council will continue to identify opportunities to plant trees within our City/streets to enhance streetscapes.



AND Challenges



Ageing tree populaton

Many of the City's trees, including those in streets and parks, are well over 50 years old (74% of street trees are mature) and reaching the end of their useful life.

The City of Unley manages the population of ageing trees through regular assessments to determine which trees need to be treated or removed, and by planning when, how and with what trees they will be replaced. Managing ageing trees requires careful consideration. Urban tree renewal is not simply a question of replacing dying trees, but is also one of identifying the most resilient and appropriate replacement plan and engaging in a meaningful dialogue with a broad range of stakeholders and community members.

The City of Unley's key challenges in terms of ageing trees are:

- An ageing tree population requires increasing resources to manage and sustain. Over time, the environmental value of urban trees diminishes and they become hazardous to people using the City's public spaces. A high proportion of over-mature trees carries an element of public risk (and cost) and must be managed accordingly.
- Uniform, symmetrical avenues create wonderful vistas along our avenues and main streets, and in the City of Unley these are largely synonymous with broad-canopied deciduous trees such as white cedars and planes.



Trees like us have a finite life. There needs to be community recognition that they start small move through maturity and eventually die. Source: Google Images

To achieve these aesthetics, it is desirable to plant identically aged trees that will maintain the visual consistency of the avenues. However, this can pose challenges for the community when confronted with large numbers of trees requiring replacement at the same time.

While community engagement is important in managing an ageing tree population, particularly in relation to tree removals, there are times when Council will be required to make decisions against the wishes of some of the local community. When arboricultural assessment identifies unacceptable risk concerns with trees, the Council's decision to remove them may over-ride the community's wish for the trees to be retained. In these instances, the appropriate level of information will be provided to the local community.



Water is one of the primary element needed for vegetation growth. The recent extended drought and water restrictions severely damaged the health of the City of Unley's urban forest, resulting in an increase in tree mortality. The most recent useful life expectancy mapping that has been undertaken shows that about 74% of our trees are mature and potentially could reach the end of their useful lives within a similar period. Much of this is due to the long term effects of low water availability.

Mature trees help to ameliorate the urban heat island effect both through shading of urban surfaces and atmospheric cooling through evapotranspiration. Maximising the potential for vegetation to cool the city through evapotranspiration is another important reason to maintain soil moisture.

Adequate available soil moisture is critical for healthy vegetation. Extended years of drought have left soil moisture levels morbidly low, affecting tree health throughout the municipality. In particular, trees in traditionally irrigated landscapes were affected by a combination of low rainfall and decreased irrigation due to watering restrictions.







TreeNet inlets capturing stormwater from water run off and utilise the water to support tree growth.



While recent seasonal rains have been valuable, soil moisture remains depleted and this poses an ongoing threat to tree health. A number of active and passive approaches are currently undertaken to replenish soil moisture and ensure it is maintained at levels to provide healthy growth. Changes to irrigation practices, mulching, water well installation, soil injection, water barrier and tanker watering have preserved the health of many trees. Tree health monitoring and measurement of soil moisture provide strategic guidance to direct resources and will be vital in ensuring the health of the future forest.

With an expected long-term low water future and the desired move away from reliance on costly potable water, alternative water sources are needed to ensure healthy vegetation growth. The capture and reuse of stormwater is an important way to decrease reliance on potable water, particularly given the great quantity of stormwater flowing along creeks through the City. The City that has traditionally shed water needs to capture, store and reuse it. However, this presents challenges as well as opportunities. In particular storing stormwater for reuse in dry periods is challenging in densely-built urban areas, but can be supported by wetlands, underground tanks and water sensitive urban design.

The City of Unley is committed to a journey towards becoming a water sensitive city. In doing so, it will create a more liveable, resilient and sustainable city for future generations. The implementation of Water Sensitive Urban Design (WSUD) techniques integrated into traditional work programs is one such approach which will contribute to achieving this outcome. The development of integrated WSUD strategies into Council works programs is one way to focus on delivering urban greening, enhanced streetscapes and mitigated urban heat load for future generations. The concept of liveability within the urban environment in the context of this strategy seeks to improve micro climate benefits which will stem from enhanced tree health and shade across the city.

While larger scale water sensitive urban design opportunities may not always exist in a highly urbanised Council like Unley, there are always smaller scale micro initiatives that can be trialled and implemented. The reduction of footpath widths to provide wider nature strips, tree stormwater inlet and waterwell installations and Second Tier Greening of nature strips are just a few initiatives trialled and pursued to support water retention within the City. Innovation in water retention and re-use need to be continually researched, explored and trialled to ensure water availability to support tree growth.

These initiatives enable the improved retention of soil moisture and ultimately facilitate a broader palette of tree species which can be planted in the street tree network.



Stormwater diversion pits capturing rain water from property overflow and storing the water in a pit slowly dispersing into the nature strip supporting tree growth.





The Australian Government's most recent report on climate change, the Critical Decade, states unequivocally that it is 'beyond doubt' that climate change is occurring. The primary cause of the observed warming and associated changes since the mid-20th century – human emissions of greenhouse gases – is also understood with a high level of confidence.

Whilst the effects of climate change are just becoming discernible, they will become increasingly prominent. The effects over coming decades will include warmer average temperatures, heat waves, more extreme storm events and lower average annual rainfall. We have already observed the damage caused by extreme heat and floods in Australia in recent years, and it is likely that these events will become more prevalent.



Future Climate Shift

The risks to cities of more severe weather conditions will increase, bringing with them high economic, social and environmental risks and costs. Specifically in relation to trees, the impacts of climate change will include:

- The susceptibility of vegetation to increasing and emerging pests and diseases will challenge the urban forest's ability to withstand and recover from these outbreaks. Recent observations in NSW pine plantations have found that drought-stressed trees are suffering increased incidence of attack from insect stem borers, bark beetles and fungi. Changes in climate can affect pests' life cycles. Warmer summers can increase insects' development rate and reproductive potential, while warmer winters can increase over-winter survival. Many pests and diseases may have extended geographical ranges as warmer temperatures affect flight behaviour and vector spread. Introduced pests may also find conditions more favourable for population growth. Forests not previously at risk could become vulnerable as pests and disease ranges change.
- Extreme weather events directly affect vegetation health, generally leading to a reduction in canopy cover and overall decline. Heat extremes can lead to foliage and trunk scorch and canopy desiccation. Storms can shred foliage, break branches and uproot trees.
- Lower rainfall may result in increasing frequency of tree death in many species and overall forest health decline in response to frequent and severe drought.
- Inundation can lead to soil erosion, salinity, tree instability, tree mortality and damage to infrastructure. In southern Australia, more frequent extremes of wet and dry periods may increase the incidence of the root rot pathogen *Phytophthora cinnamomi*. Trees weakened by this disease have a reduced capacity to survive drought.

In the Unley context, it is increasingly important to research and develop appropriate tree species lists, both native and exotic, for use in streets and parks that will adapt to climate change in the future. Increasing the diversity of species used will assist Council adapt and maintain a healthy, environmentally sustainable and resilient tree population.

Urban Heat Island & Extreme Heat

The urban heat island effect is common worldwide as cities become warmer than nearby suburban and regional areas, particularly at night. After a hot day, parts of the city can be four to seven degrees hotter than surrounding rural areas. This phenomenon occurs all year round, but it is more acute during hot weather.

In periods of prolonged heat, the urban heat island effect increases pressure on the city. It exacerbates heat stress, particularly for vulnerable people such as the elderly, the very young, and those with pre-existing medical conditions. Heat waves already kill more Australians than any other natural disasters and have led to many deaths nationally over the past 50 years. Victoria's Chief Health Officer found that the heat wave preceding the 2009 Black Saturday fires contributed to an increase above normal of 374 deaths in inner Melbourne almost double those who died as a result of the fires. People living in high-density areas are at greater risk during heat events as a result of the urban heat island effect (Reference: City of Melbourne Urban Forest Strategy).

This heat also contributes to the decline of certain tree species. Extreme heat, particularly if combined with low soil moisture, causes the foliage and even the bark of some trees to scorch, which can lead to tree decline.

The urban heat island effect has three main causes:

• Impervious hard surfaces: Buildings and pavements are typically impervious and have high heat absorption capabilities. Asphalt and concrete trap and store heat from the sun, while solar radiation is reflected of building surfaces along street canyons, causing greater absorption of solar energy and a reduction in the reflective power of these surfaces.

- Human activity: Motorised transport is a major contributor to increased greenhouse gas emissions. In hot weather, the use of air conditioners increases, generating more waste heat.
- Low vegetation coverage: With less vegetation, cities receive less natural cooling from shade and evapotranspiration. Urban forests have proven to be one of the most effective methods for mitigating heat retention in urban areas, particularly central business districts. However, there are several challenges we face in tackling the urban heat island, including:
- The current urban heat island effect will be exacerbated by predicted climate changes.
- The existing tree canopy cumulatively covers 26.1% of Unley's public streets and park areas. This leaves a large proportion of Unley's streets and parks without natural shade.
- It can take 20 years for a tree to grow to a size that will effectively assist in mitigating the urban heat island effect.
- Vegetation cover must be primarily composed of species that are able to survive and remain healthy under hotter conditions.
- Mitigating the urban heat island effect may require increased water use during dry periods to maintain tree health and maximise evapotranspiration.

The use of Green Infrastructure, including trees, increases the resilience of the City of Unley to climate change. Street trees, green corridors and well-designed parks contribute towards a reduction in the urban heat island by providing shaded places that are also safe, sustainable and attractive.



Population Increase & Urban Infill

As well as having ecological value, old trees or established vegetation add character and heritage value to an area. Unfortunately, they are often casualties of infill housing construction. Loss of individual trees, particularly along boundaries, can reduce the privacy of existing houses, and the amenity value and character of a City. Over a broader area, the effects of the loss can accumulate, as important parts of the area's ecology are lost, and wildlife corridors dislocated, affecting birdlife and seed distribution.

Loss of individual trees, particularly along boundaries, can reduce the privacy of existing houses, and the amenity value and character of a City, Increased development densities often result in greater site coverage by buildings and pavements, resulting in:

- Reductions in the extent of vegetation on private land, especially large canopy trees.
- Reduction of permeable ground surfaces that allow for the infiltration of rainwater into the soil.
- Increased shading of streets by buildings, potentially to the extent that tree growth suffers due to the lack of sunlight.
- Increased pressure on public spaces to accommodate more uses – whether for recreation in parks or for traffic and parking in streets – which can result in direct competition with plantings for space as well as making more demanding growth conditions due to more extensive hard or compacted surfaces.

Canopy trees need room to grow and the competition for the physical space to grow mature trees (above and below ground) is rapidly increasing.

In servicing the population density increase, the urban forest has been gradually reduced as the existing trees make way for development or other land usage. In many instances, the opportunity to replace the trees and open spaces has been lost forever. Private property allotment sizes vary throughout the city of Unley, but, most residential allotments are becoming increasingly smaller and the commercial sites have maximised their built form to extend to property boundaries. Trees are competing with off-street parking, rear studio apartments and swimming pools and in some instances, the desire for 'maintenance free' yards.



A Perth example showing the loss of vegetation through urban infill



The City of Unley has a wide and varied population of residents, living in apartments, terrace houses, small and large lot suburban housing. Our residents have different perspectives and interaction with trees and the urban forest. The community as a whole also includes business owners and employees who may visit and engage with the City and its trees every day. As such, the City encompasses many people with an extremely diverse range of interests and attitudes toward trees. These are often influenced by an equally diverse range of community factors such as age, income, education, cultural background and exposure to natural



Significant failure of Cedar in Myrtle Bank caused property damage and 'near miss' personal injury.

environments. At the extreme there is often the irrational fear of trees, even though statistically there is far greater chance of being killed by lightening than dying due to a tree failure.

Appropriate maintenance and pruning can often alleviate concerns, and appropriate repair or redesign of infrastructure can also be undertaken with little impact to the tree and the tree can continue its valuable contribution for many decades to come.

It is also important that people recognise and are informed about the need for change. Trees are living organisms and as such will grow, mature and eventually die.



As trees age they will require maintenance and then eventually require removal and replacement. In a natural ecosystem this happens gradually and with little fanfare or impact on people. In an urban environment an ageing or hazardous tree cannot usually be left until it completely falls apart.

Tree removal can be traumatic and emotional. Often trees have been in place for many decades and people have grown up with them and become attached to their presence, their size and their aesthetic appeal. The trees may also represent associations, memories and links to past events and historical places. For these and many other reasons, some parts of the community often have expectations of trees being retained for very long periods and beyond their useful life expectancy. They may even entertain retaining a tree no matter what the costs or risks. There will come a time, however, when the benefit of keeping an individual tree is far outweighed by the hazard to life or property and the monetary cost of maintaining it. As with all assets, a tree will need to be replaced with the next generation, as painful as this may be. When managing and establishing an urban forest the needs of the many may often have to outweigh the preferences of the few.

Tree Succession Planning & Programming

A significant challenge faced by Council is the fact that many boulevard and specimen trees are reaching the end of their natural life. Coupled with the effects of drought, increasing intensity of heat during summer, and water restrictions, this decline has been accelerated and in many cases is irreversible. The opportunity now exists to transform our street tree assets into a healthy, diverse, resilient and well-designed forest that will enable our City to adapt to a changing climate, mitigate urban heat island effects and provide protection and wellbeing to the community.

Tree succession planting is applied on a whole-of-street basis. By its nature, it involves the process of tree removal. It is in practice a difficult task to accurately judge the life expectancy of any individual tree when making a decision to remove it. The first principle must always be that if the tree cannot be maintained to an acceptable level of risk or amenity then it should be removed. Criteria for tree removal, as part of succession planning, must therefore be clear and consistent, so that all parties affected by the strategy are well informed. The information supporting priorities for succession renewal planting should also be based on sound arboricultural knowledge.

A significant target from this Tree Strategy will be the creation of a Street Tree Succession Program. The purpose of the Succession Program will be to provide a street tree succession renewal framework that will facilitate the regeneration of the Urban Forest in the City of Unley and provide sustainability for the City moving forward. The Succession Program is also aimed at ensuring that the City of Unley continues to have tree lined streets that will provide solid, sustainable environmental foundations for the future communities of the City while retaining the aesthetic qualities of our streetscapes.



Age Friendly City

66 Ageing is a cause for celebration in the City of Unley - our people are living longer and healthier. The City of Unley has a key role to play in helping our community to get the most out of their lives. We need to ensure that our City is accessible for everyone, promotes health and wellbeing and provides opportunities for connection, inclusion and contribution. We want our people to live fulfilled lives throughout their lifetime and never feel like they need to leave the City of Unley This summary quotation from the current City of Unley Active Ageing Strategy provides streetscape design challenges for the future. The City promotes that within the municipality; every street that can be planted with street trees has and will continue to be planted. Our community expects tree-lined streets with a height and canopy that provides shade and scope to an otherwise harsh streetscape.

As an urbanised inner city municipality, many of the streets are narrow from property boundary to kerb. Trees require space to grow, mature and survive. Within limited space they often come into conflict with the street hard infrastructure. They potentially impact on the accessible width of a footpath carriageway and regularly lift the pavement as they mature. This provides challenges as we strive to reach the goal of creating an environment that is pleasant, safe and accessible through Age Friendly pathways.

A balanced approach will be required in reaching the Age Friendly goals with the community potentially being asked to accept a modified streetscape with smaller less intrusive trees or more innovative solutions are explored such as narrowing roadways to provide more space for trees.



Street tree in Mary Street, Unley. The challenge is to decide if the tree remains or the need for an legislative age friendly footpath takes priority.

Vision & Pathways

TO REGENERATING UNLEY'S TREE ASSET

The City of Unley's tree vision is to create a resilient, healthy and diverse urban forest that will provide solid, sustainable environmental foundations for the future communities of Unley.

The City of Unley's urban forest contributes greatly to the City's character and is integral to ensuring Unley is a green city. A healthy urban forest can provide cleaner air, filtered stormwater and lower city temperatures.

Trees create important habitat for mammals, birds, insects and reptiles and make beautiful city streets. Streets filled with trees and landscaping can also have psychological benefits in reducing stress and providing spaces for relaxation and contact with nature. The longevity of trees can span decades and even centuries. These trees may persist as monuments to human intervention or management of the landscape longer than the labours of any other human endeavour. They are part of our heritage, and are a living link between the present generation and those which have preceded and those which will follow.

The City of Unley recognises the economic, social and environmental value of trees and is committed to maintaining and enhancing trees across the City of Unley in parks, reserves, open space and streets to 'green' the City, contribute to a liveable City, strengthen habitat and biodiversity. Trees are a valued asset and contribute strongly toward the Urban Forest and Green Infrastructure of the City.

PATHWAYS

The control and management of trees within the City of Unley urban environment can be classified into 3 key pathways:

Pathway 1 - Street Trees

Street trees in the City of Unley have an important function and role to improve the micro-climate and liveability of the City, and contribute to its diverse inner urban, heritage, environmental and social character. This will be achieved by improving the design, management and sustainable maintenance of new and existing streetscapes which recognise the layers of natural and constructed history of Unley. An increased range of tree species will be used to reflect changes in the local neighbourhood character, the City's open space character and to improve biodiversity.

Pathway 2 - Park Trees

As the urban population grows and private green space becomes less available, public open space increases in social and community value. The City of Unley has significantly less open space than most local government authorities within metropolitan Adelaide. Furthermore, within this open space are significant parcels of remnant vegetation including trees which pre-date European settlement. There is a responsibility that these remnant and other important trees within the City are managed and enhanced for today and future generations.

Pathway 3 - Private Trees (Regulated and Significant)

It is well recognised that many of the largest and most significant trees within the City are located within the boundaries of private properties.

Growing and maintaining large canopy trees is a worthwhile investment and a cornerstone of today's movement toward sustainable communities. The City of Unley contains numerous remarkable trees; trees with historic, cultural, social, aesthetic and botanic value. Many are at threat from development, urban infill, pests and diseases, pollution and other factors.

Trees take many years to grow. As we already have an established urban forest, it makes sense that the City should implement strategies and actions to retain trees that are healthy and in good condition. Specifically, Regulated Trees are usually the larger trees within the City and have been found to be more valuable (providing between 4 to 8 times the benefit) than small trees (Portland, 2004). Therefore, the City recognises it needs to promote the maintenance and protection of these assets.





OBJECTIVE:

Encourage attractive, healthy and appropriate street trees for the benefit of the community which contribute to the: • liveability and wellbeing of our City • environment and sustainability both now and in the future.

INITIATIVES

1. SELECTION AND LOCATION

- 1.1 Ensure tree species selection and associated guidelines are in line with site specific locations taking into account:
 - Age Friendly requirements;
 - transport functions;
 - open space needs;
 - utilities and service provisions;
 - food security considerations; and
 - Environmental Sustainable Strategy outcomes.
- 1.2 Develop a palette of species suitable for street tree planting which considers varying infrastructure location situations, service requirements and takes into account the impact of pedestrian egress and Climate Change.
- 1.3 Proactively support Council resource sharing initiatives to propagate, develop and establish new street tree species. Actively support trial planting opportunities.

2 PLANTING AND ESTABLISHMENT

- 2.1 Develop and implement site establishment protocols and guidelines to ensure the long term viability of trees selected in streets.
- 2.2 Develop formative pruning guidelines and programs for early establishment of trees to maximise canopy potential.
- 2.3 Develop site preparation guidelines to ensure sustainable planting conditions for new trees ensuring maximum canopy potential, including below ground spaces and water infiltration. Examine the suitability of incorporating waterwell installations within replacement planting programs.
- 2.4 Develop and maintain sustainable tree planting programs and schedules to ensure new sapling trees are provided with the best development potential.
- 2.5 Develop and ensure watering programs and schedules meet new tree requirements during establishment phase.
- 2.6 Research and consider contemporary trials to determine the value and impact of growth fertilisers, water retention initiatives and other environmental sustainable treatments.

3 MAINTENANCE

- 3.1 City of Unley adopt a proactive approach to managing the risks in existing street trees.
- 3.2 Undertake tree maintenance to meet site specific expectations in line with Australian Standards.

- 3.3 Ensure City of Unley tree maintenance staff and contractors are capable of delivering in line with competency and capacity standards.
- 3.4 Council will encourage the development of staff skills in arboriculture and recruit suitably qualified staff.

4 REMOVAL OF TREES

- 4.1 Develop and implement a Second Generation Tree Strategy and program which prioritises streets for tree renewal, is based on sound sustainability principles, is funded and is aligned to the Unley Community Plan. (The 2014/15 street tree audit identified that there are 16,671 mature street trees in the City. This figure represents 74% of the total number of trees.) From an asset management perspective this raises a concern that many of the mature trees could reach the end of their useful life expectancy and require replacement at a similar period in time.
- 4.2 Remove individual trees as requested or identified ensuring appropriate Visual Tree Assessment and approval processes are followed.
- 4.3 Ensure weed species trees are not planted and where necessary are removed from inappropriate locations.

5 REPLACEMENT

- 5.1 Ensure that a diverse and sustainable range of species is used through street tree planting and replacement across the City. The 2014/15 street tree audit identified that two species of tree (*Jacaranda mimo-sifolia* – 5,386 and *Lophostemon confertus*-Queensland Box – 4,112) constituted 42.4% (9,498 of 22,426) of Council's street tree asset. A reliance on a dominant species leaves the City vulnerable to pest and disease and potential loss of the street tree asset.
- 5.2 Develop and implement plant procurement specifications in line with the Street Tree Succession Plan and individual tree replanting requirements.
- 5.3 Develop and implement protocols for nursery stock selection in line with relevant Australian Standards.
- 5.4 Explore opportunities to develop supplier relationships and pre-order processes and standards in advance.



6 RESIDENT RELATED

- 6.1 Council will consult and engage the community and affected landowners (in line with Council's Community Engagement Process) where large scale plantings, street tree renewals and tree removal works are to occur. Council will appropriately inform and involve the community in tree management through community engagement and encouraging the community to be involved in adopting and supporting tree planting and follow up watering.
- 6.2 Establish clear protocols and guidelines in relation to the Local Government Act (Section 221) as they relate to trees.

STREET TREES

INDICATORS AND TARGETS:

Indicator 1	An annual tree succession program which identifies streets for renewal based on dentified criteria and funded at sustainable levels.
Target 1	City of Unley Street Tree Succession Program developed in Year 1 (2016).
Indicator 2	Through street tree succession planning, the City of Unley will have a mixed age class distribution of street trees across the City.
Target 2	A street tree renewal target of 2,000 trees planted over the next 5 years (2016-20).
Indicator 3	Work toward a long-term goal to increase the species diversity of street trees within the City. The City move toward a more healthy, environmentally sustainable, resilient tree population
Target 3	A street tree diversity reduction from 42.4% to 40.5% (415 trees) of tree species <i>Jacaranda mimosifolia</i> (Jacaranda) and <i>Lophostemon confertus</i> (Queensland Box) over the next 5 years (2016-20).
Target 3 Indicator 4	Jacaranda mimosifolia (Jacaranda) and Lophostemon confertus (Queensland Box)
	<i>Jacaranda mimosifolia</i> (Jacaranda) and <i>Lophostemon confertus</i> (Queensland Box) over the next 5 years (2016-20).
Indicator 4	Jacaranda mimosifolia (Jacaranda) and Lophostemon confertus (Queensland Box) over the next 5 years (2016-20). Newly planted trees are maintained to ensure their short and long-term survival.



OBJECTIVE:

Ensure park and open space trees are resilient, safe, healthy, sustainable, diverse and positively contribute to:

- the health and wellbeing of our City
- supporting Unley as a liveable City.

INITIATIVES

1. SELECTION AND LOCATION

- 1.1 Ensure tree species selection and guidelines are in line with park and open space site specific situations taking into account:
 - age friendly needs;
 - open space strategy requirements;
 - shade and shelter requirements;
 - environmental sustainable considerations;
 - existing infrastructure, including current and proposed use;
 - long term viability, maintenance and risk considerations;
 - food security considerations; and
 - impact on recreational use by park users.
- 1.2 Develop a diverse palette of species suitable for park and open space tree planting that considers:
 - environmental contribution;
 - varying infrastructure location situations;
 - Climate Change;
 - seasonal change ie deciduous/evergreen;
 - size and scale;
 - adherence to CPTED (Crime Prevention Through Environmental Design) principles;
 - heritage and memorial considerations; and
 - food security opportunities.

2 PLANTING AND ESTABLISHMENT

- 2.1 Develop and implement site establishment protocols and guidelines to ensure the long term viability of trees selected in parks.
- 2.2 Develop formative pruning guidelines and programs to guarantee the viable early establishment of trees to ensure the 'best chance' to maximise canopy potential.
- 2.3 Develop site preparation guidelines to ensure sustainable planting conditions for new trees ensuring maximum canopy potential, including below ground spaces and water infiltration.
- 2.4 Develop and maintain sustainable tree planting programs and schedules to ensure new sapling trees are provided with the best development potential.
- 2.5 Develop and ensure watering programs and schedules meet new tree requirements during establishment phase. Where possible use recycled water options including those available through the Managed Aquifer Recharge network.
- 2.6 Research and consider contemporary trials to determine the value and impact of growth fertilisers,

water retention initiatives and other environmental sustainable treatments.

3 MAINTENANCE

- 3.1 Council adopt a proactive approach to managing the risks in existing park and open space trees.
- 3.2 Develop auditing and maintenance condition assessment protocols to reduce risk and ensure Unley's parks provide a safe experience for park users.
- 3.3 Undertake tree maintenance to meet site specific expectations in line with Australian Standards.
- 3.4 Ensure City of Unley tree maintenance staff and contractors engaged by Council are capable of delivering in line with competency and capacity standards.
- 3.5 Council will encourage the development of staff skills in arboriculture and recruit suitably qualified staff.

4 REMOVAL OF TREES

- 4.1 Develop park tree removal protocols that consider and balance:
 - habitat retention;
 - nature play;
 - tree aesthetics;
 - veteran tree management;
 - risk and safety to park users;
 - inappropriate and/or weed species;
 - potential damage to park infrastructure; and
 - park development needs.
- 4.2 Remove individual trees as requested or identified ensuring appropriate Visual Tree Assessment and approval processes are followed.

5 REPLACEMENT

- 5.1 Develop and implement plant procurement specifications in line with Second Generation programs and individual tree replanting requirements.
- 5.2 Develop and implement protocols for nursery stock selection in line with relevant Australian Standards.
- 5.3 Explore opportunities to develop supplier relationships and pre-order processes and standards in advance.

6 RESIDENT RELATED

- 6.1 Council will consult and engage the community and affected landowners (in line with Council's Community Engagement Process) where large scale plantings, park tree renewals and tree removal works are to take place. Council will appropriately inform and involve the community in tree management through community engagement and encouraging the community to be involved in adopting and supporting tree planting.
- 6.2 Council will consider removal of resident planted trees in parks which do not conform to an approved park management plan or are deemed an inappropriate species.



PARK TREES INDICATORS AND TARGETS:

Indicator 1	Through park and open space tree succession planning, the City of Unley will have a mixed age class distribution of trees with the potential to reach Regulated size across the City.
Target 1	Renewal target of 250 new trees with the potential to reach Regulated size upon maturity over the next 5 years (2016-20) within Council's parks, reserves and open space.
Indicator 2	Supporting Council's vision of encouraging food security throughout the City by ensuring, a selection of fruit and nut trees are available for selection and planting in Unley's parks where appropriate.
Target 2	Renewal target to plant 100 fruit and nut trees over the next 5 years (2016-20) within Council's parks, reserves and open space.
Indicator 3	Newly planted trees as part of park and open space succession planting are maintained to ensure their short and long-term survival.
Target 3	Annual survival and health achievement target of 90% in first 12 months of the tree's life.
Indicator 4	Work toward a long-term goal to increase the species diversity of park trees within the City.
Target 4	Move towards a park and open space tree composition of no more than 5% of one tree species, nor more than 10% of one genus and no more than 20% of any one family (matches City of Melbourne target).

PRIVATE (REGULATED & SIGNIFICANT TREES)

OBJECTIVE:

Ensure private Regulated and Significant trees within the municipality are protected in line with The Development Act 1993 in balance with Council's commitment to encourage sensitive and sustainable development.

INITIATIVES

1 FACILITATOR

- 1.1 Examine opportunities through a review of Unley Council's Development Plan to retain Regulated and Significant trees within private properties.
- 1.2 Council will provide incentives for the community to become engaged in the planting and ownership of trees within private properties to adapt to the impacts of Urban Infill and assist in preserving the Urban Forest.
- 1.3 Review, update and maintain Unley's Council's Significant Tree list (included within Council's Development Plan).
- 1.4 Develop a palette of trees appropriate for planting within construction sites to assist developers and new property owners maintain Unley's urban forest. Examine the possibility of trialling trees identified within the palette to act as a source for developers and the wider Unley community.
- 1.5 Investigate the feasibility of auditing and/or mapping Council's listed Significant and remnant trees. Potential for data to be stored as a GIS layer for Council and community reference.



2 DEVELOPMENT PROTECTION

- 2.1 Develop and establish clear procedural protocols for dealing with Development Applications which include Regulated and Significant trees within a development site to assist with the delivery of Council's Environmental Sustainable Strategy.
- 2.2 Develop and establish clear procedural protocols for dealing with Development Applications involving the removal of Regulated and Significant trees.
- 2.3 Define relevant tree policy protocols within Council's Development Plan (Objectives 60 & 61) to ensure Council is optimising its ability to protect and retain Significant and Regulated trees.
- 2.4 Develop a pro-forma or set of questions to assist and guide developers in addressing relevant Development Plan tree environmental criteria to enable Council administration to make informed assessment decisions.

3 MONITORING/COMPLIANCE

3.1 Develop and establish clear procedural protection protocols for monitoring and ensuring compliance for Development Applications that include Regulated and Significant trees within a development site.

PRIVATE TREES

INDICATORS AND TARGETS

Indicator 1	With an aim to retain more Regulated and Significant trees on private property throughout the City, establish clear, consistent, rigorous and agreed policy interpretations of objectives and principles of development control within Council's Development Plan.
Target 1	Review and establish agreed Development Plan policy and objective interpretations in Year 1 of this strategy.
Indicator 2	Encourage and support the planting of appropriate trees on development sites to ensure the long-term sustainability of the urban forest.
Target 2	In the life of this strategy develop a 'Places and Spaces Tree Palette Guide' to be made available and promoted to developers and property owners within developed sites.

City of Burnside: Tree Management Strategy – Our Next Generation: Burnside's Urban Forest City of Melbourne: Urban Forest Strategy – Making a Great City Greener – 2012 – 2032 University of Technology Sydney: Institute for Sustainable Futures – Benchmarking Australia's Urban Tree Canopy City of Marion: Tree Management Policy Morton A.: Urban Tree Management Principles – Speakers' Paper – The Australian Institute of Landscape Architects 2005 Tree Management Forum Burwood Council: Street Tree Management Strategy City of Yarra: Yarra Environment Strategy National Urban Forest Alliance: July 2014 – Australian Partnership Plan 2014-2020 City of Unley: Age Friendly Strategy City of Darebin: Green Streets Streetscape Strategy – 2012-2020

ferences

City of Darebin: GreenStreets Streetscape Strategy – 2012-2020 Curtin University: Cool Communities: Urban Trees, Climate and Health Ecological Associates: Independent Inquiry Into Management of Trees on Public Land City of Sydney: Urban Forest Strategy

2

TREE STRATEGY 2016-2019

THE CITY of Unley B

Civic Centre 181 Unley Road Unley South Australia 5061

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INFORMATION REPORT	
REPORT TITLE:	UPDATE – WALKING AND CYCLING PLAN 2016-2021 (WCP)
ITEM NUMBER:	32
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	SATYEN GANDHI
JOB TITLE:	MANAGER TRANSPORT AND TRAFFIC
ATTACHMENTS	1. 25 JULY 2016 COUNCIL REPORT WALKING AND CYCLING PLAN 2016-2021

1. EXECUTIVE SUMMARY

- A draft of the Walking and Cycling Plan 2016-2021 (WCP) was presented at the December 2015 Infrastructure and Sustainability Committee meeting and endorsed subsequently by Council for community engagement, subject to several amendments to the draft.
- At the meeting Council adopted the following:
- 1. The draft Walking and Cycling Plan 2016-2021 be adopted to provide a plan to guide future works, and the implementation of projects not completed in the 2016/17 year be considered in future budgets to allow further information regarding those projects to be provided.
- 2. The projects identified from the Walking and Cycling Plan that are proposed for implementation in 2016/17 be approved, noting the issues relating to extending Mike Turtur bikeway to Greenhill Road, and Administration be authorised to change the scope of works if necessary, when detailed costs are known, to keep the works within the approved budget.
- 3. A future report be presented to Council discussing the impacts of projects completed in the first year, and funding options for the remaining projects.
- The attachment 1 to this report provides information on the report to Council and actions as adopted by Council, for the first year (2016/17) implementation.

2. <u>RECOMMENDATION</u>

MOVED: SECONDED:

The Committee recommends to Council that:

1. The report be received.
3. RELEVANT CORE STRATEGIES/POLICIES

- Community Plan 2033 Moving
 An integrated, accessible and pedestrian-friendly City
 Alternative travel options
- Active Ageing Strategy
 Focus Area 1 Outdoor Spaces and Buildings
 Focus Area 2 Transportation

4. DISCUSSION

Council's current Bicycle and Pedestrian Plan was adopted in 2006. Following a successful application for grant funding from the Department of Planning, Transport and Infrastructure, a review of this plan has been undertaken.

A draft of the Walking and Cycling Plan 2016-2021 (WCP) was presented at the December 2015 Infrastructure and Sustainability Committee meeting and endorsed subsequently by Council for community engagement, subject to several amendments to the draft. It was also endorsed that a report outlining the outcomes of the community engagement be brought back to Council.

The input and direction of the Infrastructure and Sustainability Committee as endorsed at the December 2015 meeting, has been a point of guidance to the process of WCP plan development. The committee and community engagement inputs have been valuable in developing the WCP.

As per above, a report was presented to the 25 July 2016 Council meeting providing information on the community feedback received and seeking Council direction on the WCP plan. At the meeting Council adopted the following:

- The draft Walking and Cycling Plan 2016-2021 be adopted to provide a plan to guide future works, and the implementation of projects not completed in the 2016/17 year be considered in future budgets to allow further information regarding those projects to be provided.
- The projects identified from the Walking and Cycling Plan that are proposed for implementation in 2016/17 be approved, noting the issues relating to extending Mike Turtur bikeway to Greenhill Road, and Administration be authorised to change the scope of works if necessary, when detailed costs are known, to keep the works within the approved budget.
- A future report be presented to Council discussing the impacts of projects completed in the first year, and funding options for the remaining projects.

Attachment 1 (to Item 32/16) is copy of the report presented to Council at its 25 July 2016 meeting. The report provides details on actions to be undertaken in current financial year and projects for future works. Aligned with this, Council will be undertaking the priority works as identified in the report and adopted by Council.

Attachment 1

DECISION REPORT

WALKING AND CYCLING PLAN REVIEW
523
25 JULY 2016
SATYEN GANDHI
MANAGER TRANSPORT AND TRAFFIC

1. EXECUTIVE SUMMARY

- The purpose of this report is to provide information on the outcomes of the community engagement undertaken in relation to the draft Walking and Cycling Plan 2016-2021 (WCP), and also to provide comments by Administration on some components of the draft Plan.
- The WCP sets out the walking and cycling networks across the City of Unley, and the actions necessary to achieve the desired network and environment.
- The actions recommended in the Plan range from advocacy and education, to infrastructure improvements and changes. These are set out in the five year action plan section of the WCP.
- The draft WCP was recommended to Council to endorse for community engagement by the Infrastructure and Sustainability Committee in December 2015. Community engagement occurred in April/May 2016 and a significant amount of feedback was received. In general, the Plan was supported by the community, but has since been updated to reflect the feedback received.
- A number of the proposed projects require further investigation to determine feasibility and viability. For this reason, outright adoption of the Strategy is not proposed at this time.
- Funding has already been allocated for the 2016/17 financial year to undertake the first tranche of work, and the proposed projects to be undertaken with this funding are discussed, as well as a process to determine funding in future years.

2. <u>RECOMMENDATION</u>

That:

- 1. The report be received.
- 2. The draft Walking and Cycling Plan 2016-2021 be adopted as a future aspirational goal, and the implementation of projects not completed in the 2016/17 year be considered in future budgets when further information regarding those projects is available.

- 3. The projects identified from the Walking and Cycling Plan that are proposed for implementation in 2016/17 be approved, noting the issues relating to extending Mike Turtur bikeway to Greenhill Road, and Administration be authorised to change the scope of works if necessary, when detailed costs are known, to keep the works within the approved budget.
- 4. A future report be presented to Council discussing the impacts of projects completed in the first year, and funding options for the remaining projects.

1. RELEVANT CORE STRATEGIES/POLICIES

- Community Plan 2033 Moving An integrated, accessible and pedestrian-friendly City Alternative travel options
- Active Ageing Strategy
 Focus Area 1 Outdoor Spaces and Buildings
 Focus Area 2 Transportation

2. <u>DISCUSSION</u>

Council's current Bicycle and Pedestrian Plan was adopted in 2006. Following a successful application for grant funding from the Department of Planning, Transport and Infrastructure, a review of this plan has been undertaken.

The WCP 2016-2021 is at Attachment 1 to Item 523/16, and is available for the general public on the Council website. The draft Plan reflects a number of key strategies which have been adopted since 2006, at both state and local government levels. These include the State Government's 30 Year Plan for Greater Adelaide and Integrated Transport and Land Use Plan; as well as Council's Community Plan 2033, Open Space Strategy, and Active Aging Strategy.

The Community Plan 2033 envisions an environment where safe bike and walk ways are a feature of our City. The WCP details the walking and cycling networks to help achieve this vision, including the necessary infrastructure improvements, as well as what Council can do to help the cultural shift that is required to achieve the vision, such as education and advocacy. A proposed 5-Year Action Plan is provided by the consultants, which details the individual projects required to achieve the networks.

A draft of the Walking and Cycling Plan 2016-2021 was presented at the December 2015 Infrastructure and Sustainability Committee and endorsed subsequently by Council for community engagement, subject to several amendments to the draft. It was also endorsed that a report outlining the outcomes of the community engagement be brought back to Council.

Community engagement was undertaken in April and May 2016. Council's Community Engagement Toolkit indicated that a high to very high level of engagement should occur, where the community has an opportunity to actively participate. The community engagement process consisted of the following:

Community Engagement Process

Consultation

- Advertised on Council website with link to Your Say Unley page
- Advertised in Eastern Courier/Messenger newspaper
- Promoted in Council's 'Unley Life' column in Eastern Courier/Messenger newspaper

- Posters at various community facilities (Unley Civic Centre, Goodwood Library, Unley Library, Council community centres)
- Posters at various high volume cycling locations around the City of Unley (ie Greenhill Road/Porter Street intersection, Greenhill Road/King William Road intersection)

Methods of providing feedback

- Your Say Unley website: All marketing material encouraged the community to access the Your Say Unley website for further information and to provide feedback via the online survey.
- Hard copy: Hard copy surveys were available at the Civic Centre, libraries and community centres.

Information made available to the community

The Your Say Unley website included several documents for the community to access and comment on, including the entire draft WCP and also important individual pages. This enabled those with higher levels of interest to look indepth, and others to just view the proposed network diagrams. The documents available included:

- Draft Walking and Cycling Plan 2016-2021
- Proposed Cycling Network
- Proposed Walking Network
- Proposed Cycling Recommendations
- 5-Year Action Plan

Feedback received

A pleasing level of interest was shown by the community. There were 486 individual visitors to the Your Say Unley page to either access additional information or provide feedback. 312 people downloaded one or more of the attached documents. 97 actual survey responses were received, including 87 online and 10 by hard copy or email.

Based on the number of visitors to the engagement page and number of responses received, this is considered a good outcome. It should be noted that 89% of respondents were residents of the City of Unley. The majority of the respondents supported the draft plan. There are 76 respondents who supported the plan and 18 did not.

Some of the key themes of the community feedback/ suggestions are shown in table below:

Consultation of Draft Plan	No. of
	respondents
Signage: Etiquette signage on shared paths, and way-	20
finding	
Footpath maintenance: smooth surface, remove debris,	18
trim overgrown foliage, remove clutter	
Reduce traffic speed / enforce existing speed limits	11
Enhanced Bike Lanes: Green coloured and chevron	8
marking	
Maintain line marking on bike lanes and paths (faded)	8
King William Road: Complete safe connection from Mike	7
Turtur Bikeway to Greenhill Road & improve crossing at	
Greenhill Road	
Concerns and improvements for Porter / Rugby Bicycle	7
Boulevard (note: consultation for this will be undertaken	
separately and not part of this Plan)	
Improve lighting	6
Glen Osmond Creek Shared Path	6
Improve crossing at Greenhill Road / Porter St (note: DPTI	5
are currently undertaking these works)	
Roundabout upgrades	3
Improve safety at East Avenue rail and tram crossings	3
Crossing at King William Road / Glen Osmond Creek	3
Greenway	

There were a number of respondents who had concerns regarding the Porter Street / Rugby Street Bicycle Boulevard. However, this has not been included as a key theme in the table above because consultation will be undertaken separately for this specific project rather than as part of the WCP.

Community feedback has been a valuable driver in determining the recommended priorities within the WCP. The majority of respondents have provided their views highlighting the need for improved signage, line marking and more frequent maintenance of the existing assets. The recommendation has been informed by the community feedback.

The consultant has suggested that all of the recommendations be implemented over a period of five years. However, to be consistent with Council's strategy of funding implementation of Local Area Traffic Management Plans, Administration suggests that the High Priority recommendations be addressed as soon as possible subject to budget availability. Once these have been implemented Council will be in a position to assess the network wide impact of these measures and further refine the schedule for future works.

Council also needs to be cognisant of the fact that there are some inherent tensions between the WCP and other Council Strategies. For example, the reduction of the speed limit on Fisher Street and Ferguson Avenue is inconsistent with the provisions of the Unley Integrated Transport Strategy, as they are classified as Type IIA and IIB LR1 links, although this document will be reviewed over the coming 12 months.

Increasing Clearway hours along main roads is unlikely to be supported by Trader Associations and unlikely to be supported by the Unley Business and

Economic Development Committee, although this is consistent with the DPTI initiative Operation Moving Traffic.

Based on community feedback received as well as technical analysis, the actions proposed to be undertaken in year 1 are outlined in Table 1 below. Please note that actions for the Rugby/Porter Bike Route are considered high priority in the WCP, but are to be undertaken through a separate DPTI funding and Council consultation and development process as determined at the June 2016 Council meeting. Also note that improvements to the Wood Street / Weller St cycling route included below are already funded for the 2016/17 financial year and as such will be undertaken in year 1 as a separate project to the WCP actions. The consultant's full proposed 5-Year Action Plan is available at Section 12 of the draft WCP.

Before considering the proposed actions in the first year, from an Administration perspective, there are a number of matters in the Plan that merit further discussion, or at least bringing to Council's attention:

- <u>Simpson Parade Culvert, Page 57, \$660 000.</u> This is, by a considerable margin, the largest capital cost recommendation from the Plan. There is no data in the plan about the number of cyclists that use the East West cycling routes. Council does not own (or own any interest in) land that would enable this link to be constructed. Rather than endorsing the construction of this project, Administration would recommend further investigations into the demand for, and feasibility of, construction of this link.
- Mike Turtur bikeway connection to Greenhill Road on King William Road. This is a very challenging section of road, and rather than simply trying to fit more infrastructure into an already congested corridor, it is recommended that discussions are held with DPTI and Adelaide City Council in relation to the possible re-engineering of the intersection. DPTI have plans to ban right turns from King William Road onto Greenhill Road. These bans are likely to cause considerable angst for residents of the area and visitors to the Road. If those turns are banned, then there will be space in the road corridor to incorporate the bikeway extension. If they are not banned, then it may be possible to reduce the southbound lanes to a single lane commencing at Greenhill Road. These are both matters which should be further investigated before deciding on the design of the bike way extension. The removal of 20+ car parks to accommodate this extension (individual parks not identified at this stage) will have significant implications on the locality.
- <u>Maintenance of Mike Turtur and Marino Rocks bikeways.</u> The issues with the Railway Terrace ticket machines highlighted the fact that Council was spending considerable money on maintaining infrastructure on DPTI land. Discussions are underway with DPTI in regard to formal agreement regarding these activities. At this stage, it is not recommended that Council undertake any further work at its cost on DPTI owned assets until this Agreement is finalised.

- <u>Maintenance Programs.</u> If Council is going to develop maintenance programs that reflect the requirements for higher levels of maintenance along cycling corridors, then it needs to be acknowledged that these higher maintenance levels will have higher on-going costs than are currently allowed in future budgets.
- <u>East Avenue/Cromer Parade/Canterbury Avenue, Page 56, \$50 000.</u> This is possibly the most studied intersection in the Council area. Whilst there may be changes afoot from existing work, it is unclear what further changes (after those) can be made to enhance the intersection for cyclists, other than banning left turns from East Avenue into Canterbury. DPTI have given specific directions regarding their preferred design, and are likely to contribute funding if Council adopts that design.
- <u>The implications of on-street parking removal for residents of Park and</u> <u>Mitchell streets.</u> Non cycling residents of these streets are unlikely to have looked at the Plan, and are therefore unlikely to be aware of the proposed removal of significant numbers of on-street car parks. Council may want to consider further consultation with those residents before adopting this suggestion.
- Recommendations in Section 11.7 relating to data collection have significant cost and resourcing implications that are not addressed in the 5 Year Action Plan and will impose additional costs on Council.
- The Estimated costs in the table below have been provided by the Consultant based on their professional expertise. When detailed design occurs, there may be increases. It is recommended that Administration be authorised to adjust the scope of work to remain within budget.

Location	Route Type	Timing	Works	Estimated Cost (AUD)
City-wide	Low Traffic Bikeways (refer Figure 12 in the WCP)	Year 1	Audit routes and prepare Wayfinding Signage & Sharrows Plan. Commence installation of routes and program others for years 2-5. Prepare map of routes and update as they are completed (hard copy and on- line)	\$100,000
City-wide	Route Maintenance	Year 1	Develop maintenance program that reflects higher needs along cycling routes	In-house
City-wide	All Low Traffic Bikeways	Year 1-5	Review route network and program implementation of safe road crossings over next 5 years to suit budgets.	\$5,000
Mike Turtur Bikeway	Shared Path	Year 1	Audit path to identify locations for surface repair, vegetation removal/addition, line marking, signage and lighting assessment. Upgrade path as required.	\$50,000
King William Rd – Mike Turtur Bikeway to Greenhill Rd	Main Road	Year 1	Investigate options, prepare designs and install works to improve link from Mike Turtur Bikeway to Greenhill Road. May include: Install one-way cycle path on west footpath, install kerb build-out at bus stop, upgrade bike lanes with chevron buffers and greening, remove (20+) on-street parking spaces.	\$50,000
Norman Tce, Leah St to Ethel St	Low Traffic Cycle Route	Year 1	Support Shared Street, traffic rearrangements. Liaise with DPTI to incorporate into their proposed overpass project and potentially contribute funds.	N/A
Devon St South, Victoria St to Rail Line	Local Link	Year 1	Signage & Sharrows. Liaise with DPTI as part of proposed Overpass project	\$5,000
Wood St / Weller St	Low Traffic Cycle Route	Year 1	Bicycle logos, way-finding signage, upgrade road surface	\$20,000
Total				\$230 000

3. ANALYSIS OF OPTIONS

<u>Option 1 – The draft Walking and Cycling Plan 2016-2021 be adopted as a future aspirational goal, and the implementation of projects not completed in the 2016/17 year be considered in future budgets.</u>

The projects identified from the Walking and Cycling Plan that are proposed for implementation in 2016/17 be approved, and Administration be authorised to change the scope of works within the approved budget if necessary when detailed costs are known.

A future report be presented to Council discussing the impacts of projects completed in the first year, and funding options for the remaining projects.

The WCP has been updated to be broadly consistent with, as well as help achieve, strategies that have already been endorsed by Council. It supports the Community Plan 2033's vision of an environment where safe bike and walk ways are a feature of our City, and where pedestrians can move through our City freely and safely. Endorsement of the WCP and a commitment to undertaking the year 1 actions will help achieve this vision.

Option 2 - Provide an alternative recommendation/s

Council may wish to make an alternative recommendation/s on the matter.

4. <u>RECOMMENDED OPTION</u>

Option 1 is the recommended option.

5. POLICY IMPLICATIONS

5.1 Financial/budget

\$225 000 has been included in the 2016/17 budget, which will enable a number of the high priority actions to be achieved. However, in addition to adoption of the WCP, it should also be considered how the WCP will be delivered over the coming years. Administration needs to further investigate some of the proposed projects, especially the Simpson Parade extension, to determine the feasibility and viability.

5.2 Legislative/Risk Management

• The proposed treatments are generally compliant with the relevant Australian Standards and best practice designs.

5.3 Staffing/Work Plans

• Council has sufficient internal resources to meet the project management requirements. The majority of the detailed designs and civil works are likely to be carried out by contractors and will be sourced in accordance with Council's procurement policy.

5.4 Environmental/Social/Economic

• There have been a number of studies undertaken both locally and overseas which demonstrate a direct link between cycling and the environmental, social and economic benefits. The recommendations are also in alignment with Council's Community Plan 2033.

5.5 Stakeholder Engagement

- Community engagement on an early draft of the WCP occurred with Elected Members and with the Unley Bicycle User Group (UBUG). The draft was further updated and community engagement occurred with the wider community in April/May 2016.
- Should the draft WCP be endorsed by Council, no further community engagement is considered necessary. Community engagement will occur for individual projects undertaken as part of the plan, as recommended by Council's Community Engagement Toolkit.
- 76 respondents supported the plan
- 18 who responded did not support the plan.

6. INTERNAL REPORT CONSULTATION

- Assets and Environment team
- Community Active Ageing Strategy Staff

7. <u>ATTACHMENTS</u>

- 1. Draft Walking and Cycling Plan
- 2. Summary of Changes to Consultation Draft

8. <u>REPORT AUTHORISERS</u>

Name	Title
David Litchfield	General Manager Economic Development and
	Planning

INFORMATION REPORT

REPORT TITLE:	UPDATE – REVIEW OF UNLEY INTEGRATED TRANSPORT STRATEGY
ITEM NUMBER:	33
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	SATYEN GANDHI
JOB TITLE:	MANAGER TRANSPORT AND TRAFFIC
ATTACHMENT	BRIEF OF UITS REVIEW AS PER WORKSHOP WITH THE COMMITTEE

1. EXECUTIVE SUMMARY

- Council's current Unley Integrated Transport Strategy (UITS) was adopted in 2002 and is due for a review. The current strategy has been instrumental in guiding the transport vision of Council. A review of the strategy would assist in making it a contemporary strategy that takes into account the vision of our Community through Council's Community Plan 2033 and external factors like updates to State Government's development/land use policies, changing trends and future transport challenges.
- A workshop was undertaken with the committee to guide the brief for the review of the strategy (Attachment 1 to Item 33/16).
- Following a procurement process, GTA consultants have been selected as the preferred consultants to assist Council in reviewing the strategy.
- The review will generally be divided in to three stages namely, Stage 1 Issues and opportunities, Stage 2 – Vision and objectives, Stage 3 – Strategies and actions.
- Administration intend to engage endeavour to engagement with the committee, at each stage of the review in the form of workshops and/or report seeking direction as appropriate.
- It is envisaged the project will be completed in May 2017, subject to Council endorsement.

2. <u>RECOMMENDATION</u>

MOVED: SECONDED:

The Committee recommends to Council that:

1. The report be received.

3. <u>RELEVANT CORE STRATEGIES/POLICIES</u>

- Community Plan 2033 Moving
 An integrated, accessible and pedestrian-friendly City
 Alternative travel options
 Equitable parking throughout the City
- Active Ageing Strategy
 Focus Area 1 Outdoor Spaces and Buildings Focus Area 2 Transportation

4. DISCUSSION

Council's current UITS was adopted in 2002 and is due for a review. The current strategy has been instrumental in guiding the transport vision of Council. A review of the strategy would assist in making it a contemporary strategy that takes into account the vision of our Community through Council's Community Plan 2033 and external factors like updates to State Government's development/land use policies, changing trends and future transport challenges.

Aligned with this, a workshop was undertaken with the Infrastructure and Sustainability Committee in developing the brief for the review of the strategy. Following a Council procurement process, GTA consultants have been selected as the preferred contractor to review the UITS. The following figure 1 shows the general approach that will be taken to deliver the project. Periodical updates and workshops will be undertaken with the Infrastructure and Sustainability Committee as appropriate, to guide the development of the review.

Scope of the strategy includes the following in general terms:

- Transport: All modes including vehicles, bicycles, pedestrian and public transport.
- Parking: businesses, residents, visitors/shoppers and commuters.
- Implications of State Governments policies such as DPA of main road corridors and Unley Central.
- Consistency with other Council strategies and in particular the Active Ageing Strategy.



Figure 1 – Planned stages of UITS review

As outlined in the figure above, the project will be undertaken in various stages. It is envisaged the Infrastructure and Sustainability committee will be involved in various stages, either in the form of a workshop and/or formal reports seeking input/direction. The project is planned for completion in May 2017 subject to Council endorsement.

Consultants Brief – Review and Update of the Unley Integrated Transport Strategy (UITS Review) Introduction

The City of Unley wishes to engage a consultant to undertake a review of the Unley Integrated Transport Strategy 2002 (UITS).

The review should be undertaken in accordance with Council's strategic goal of "Moving our path to an accessible city". There are three main objectives involved in achieving this goal, which are:

An integrated, accessible and pedestrian-friendly city

- Improved connectivity and ease of movement between precincts
- Enhanced mobility and accessibility for our community
- Pedestrians can move through our city freely and safely
- Shared zones are a feature throughout residential streets

Alternative travel options

- Safe bike and walk ways area feature of our city
- Reduced motor vehicle congestion
- Public transport is an attractive and well used travel option

Equitable parking throughout the city

- On-street parking is optimised
- The mix of residential and business parking needs are met
- Commuter parking only occurs in appropriate areas

The UITS Review and Update is one of the supporting initiatives of Council's strategic goal "Moving".

As Adelaide is rapidly developing and changing, it is considered timely to undertake a comprehensive and holistic review of the Unley Integrated Transport Strategy.

The review of the UITS will encompass updating the strategy in relation to policies, plans, guidelines and other relevant strategies for South Australia that have been updated since 2002, as well as taking into consideration the developments and changes that have occurred in and around Unley since 2002.

The aim of the review is to deliver a contemporary, practical and user-friendly *Integrated Land Use and Transport Strategy* based on sound research of transport requirements and economics for the area.

The review area is within the boundaries of the City of Unley and described in the plan below:



Plan 1: The review area for the review of the Unley Integrated Transport Strategy.

The scope is described below.

Start-up meeting

The consultant will meet with Council to discuss the project. The consultant will prepare a Review Plan. Strategy Review

The Consultant will be responsible for identifying, as a minimum,

- Where are we now? since the last strategy review, numerous developments have occurred in and around Unley and policies have been updated. What is our current policy and legislative framework? Where are we placed in all of this? Identify any shortfalls or opportunities for improvements.
- Where do we want to get to? to align ourselves with relevant medium to long term strategic plans of Council, Greater Adelaide and SA. From Council's strategic plan and community plan, what is the vision for our transport strategy? What are the pressure points in the next 5 years that we need to consider?
- What do we need to do to get there? considering the options for reaching our strategic goals in an action plan. The development of specific action plans will be required, including community engagement of a draft strategy. Identify any Council policies which will require review as a result of this review.

Consider the following matters during the review:

- Current bus routes are they the right ones to service out residents' needs?
- Capacity for further utilisation of existing public transport through the City is it at capacity at peak periods? Consider modelling different public transport options.
- 30 Year Plan Strategy and implications for corridors with all this potential new development.
- East/West connectivity
- Overarching desire to have more people using bicycles and walking around the Council area rather than driving.
- Initiatives to achieve this outcome.
- Managing the through traffic burden.
- Heavy vehicles off Glen Osmond Road.
- Commuter Parking.
- Penetrating the Parklands.
- Recommendations from recent parking & traffic studies in the area.
- Any other relevant factors to consider.

Input provided by Council from:

- Available traffic data for the city
- Information/outcomes of the local area traffic management studies
- Available GIS data

Information to be collected by Consultant (including but not limited to):

- Community/stakeholder views
- State and Federal Government initiatives that may impact
- Crash Data

The items listed in this brief are the minimum required and the consultant may submit a proposal with the quote with further details of how the consultant proposes to complete the UITS Review and Update. In addition to the above, please refer to Figure 1 for an example of the Review and Update structure. Figure 1: Review & Update Structure Example



Deliverables include:

- A brief Review Plan
- Community Engagement Stage 1 (see below)
- Updated Draft Strategy & Report on recommended changes refer to Figure 1
- Community Engagement Stage 2 (see below)
- Updated Strategy

Community Engagement

Community Engagement for this project will be undertaken in accordance with Council's Strategic goal of: "Living our path to a thriving city". The focus will be on the strategic objective: "Collaborative and engaged community" with the outcome:

• Individuals and groups have access to meaningful community engagement opportunities, and use them.

The purpose of Community Engagement will be to help generate buy-in / community ownership of the new Strategy. Community Engagement will take place in two stages:

- 1. First stage will be at the start of the review letting stakeholders know we are doing a review and inviting suggestions from stakeholders.
- 2. Second stage will be consulting on the draft "Integrated Land Use and Transport Strategy".

Stakeholders may include, but not be limited to:

- City of Unley Executive Management Team
- City of Unley Elected Members
- Neighbouring Councils
- DPTI
- Unley Residents / Property owners
- Unley Businesses

Reporting to Council

Reporting will consist of formal and informal reporting to Council.

Formal reporting includes fortnightly progress updates and any changes to the study schedule/program.

Informal reporting will consist of updates via phone and email as and when required, general communication to keep the Council Officer(s) informed.

Innovation / Added Value

Council welcomes innovation and any smart initiatives that will add value to the review and benefit the local community.

Variations

There will be no variations to this contract.

Timeframe

A total of 6 months to undertake the review and complete the deliverables as outlined above. Following table clarifies the responsible party for undertaking relevant project work and provisional target dates for the delivery of each stage. Consultant should submit a detailed project schedule with the submission.

Stages	Responsibility
Request for quotation period (3 weeks)	Council
Award contract	Council
Start-up meeting	Consultant & Council
Review Plan	Consultant
Community Engagement Stage 1	Consultant & Council

Review – analyse existing UITS & update as per current policies/strategies	Consultant
Deliver Updated Draft UITS – by Xmas 2015!	Consultant
Community Engagement: Stage 2	Consultant & Council
Review of Feedback	Consultant & Council
Option assessment	Consultant
Amendments to Draft UITS	Consultant
Final UITS	Consultant
Council Report: seeking endorsement on final UITS	Council

The UITS Review shall consider relevant legislative framework, guidelines, standards and policies including but not limited to:

- Unley Integrated Transport Strategy 2002
- City of Unley Strategic 4 Year Plan 2013-2016
- City of Unley Community Plan 2033
- City of Unley Pedestrian and Bicycle Plan 2005
- Council's Residential On-Street Parking Policy 2014
- City of Unley's Development Plan 2014
- Streets for People Compendium for South Australian Practice 2012
- Austroads Guides
- Australian Standards
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices
- Pavement Marking Manual
- Unley Community Profile Data

INFORMATION REPORT

REPORT TITLE:	2015/16 PROJECT STATUS UPDATE
ITEM NUMBER:	34
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	JOHN DEVINE
JOB TITLE:	GENERAL MANAGER, ASSETS & ENVIRONMENT

1. EXECUTIVE SUMMARY

The 2015/16 Annual Business Plan provided a suite of Operating and Capital Projects which had been approved for delivery during last financial year.

This report provides a summary of the status of each project in the 2015/16 program at the end of June 2016, and a summary of the projects included in the 2016/17 Annual Business Plan.

2. <u>RECOMMENDATION</u>

MOVED: SECONDED:

The Committee recommends to Council that:

1. The report be received.

3. RELEVANT CORE STRATEGIES/POLICIES

5.6 Enabling information systems and robust reporting5.7 Uphold the reputation of the City of Unley

4. DISCUSSION

During the 2015/16 annual budget process a suite of Operating and Capital Projects were identified for delivery in the coming year. These projects are summarised in the Annual Business Plan and Budget document. The projects stem from a number of sources, such as the Council's Four Year Plan, investigations that have been conducted during the year, or identified community needs or opportunities.

In February 2016 Committee members were given an update on the status of each relevant project.

All projects identified under the "Operating" category in the 2015/16 Business Plan have either been completed or where well advanced at the end of the Financial year. In the attached project summary an explanation on the status of projects that were not completed has been provided.

The undergrounding of power lines along a section of Goodwood Road between the tram crossing and Victoria Street is one of the larger projects that was scheduled during 2015/16 and 2016/17. Construction activity progressed more slowly than anticipated generally due to a delayed start as a result of South Australian Power Networks (SAPN) having longer than expected negotiations with DPTI, and deeper trenching than anticipated was required due to the location of the main stormwater pipe along Goodwood Road. However, the civil component of the undergrounding was completed by the end July 2016. Key stakeholders continue to be engaged on the progress of the project.

The priorities identified in the recommended remedial action plan for Ridge Park, covering trees, biodiversity and some of the landscape work in the park has been completed.

Council provided funding during 2015/16 to undertake a tree risk assessment audit of the trees within the reserve. Noting the environmental importance of Ridge Park, the Administration also undertook an ecosystem risk assessment of the trees within the park.

The priority tree risk assessment audit recommendations, were implemented earlier this year. The Administration also identified key signage for this park as a priority and as such both informative and educational signage has been introduced to the reserve in strategic locations. Specifically the educational signs have been used to demonstrate the benefits of the dam and the associated Managed Aquifer Recharge system at Ridge Park. Identifying the historical encroachments across the Council area was completed by the end June 2016, as was a business case examining options to manage these encroachments in the future. This business case will be presented to Council at its August meeting.

The Capital Program of projects was mostly completed by year end.

Construction of the new open space and playground in Katherine Street was delayed due the significant rainfall throughout July, but is well advanced, and expected to be completed by the end of August.

Final design of the streetscape improvements along the PLEC section of Goodwood Road has been completed and schematic diagrams of the upgrade are on display at a number of prominent sites. This work includes new footpaths, kerb and gutter, side street plateaux, furniture and landscaping.

A new asset management information system interfaced with other Council systems such as GIS, Finance, Pathway (Customer Requests), and Assetic (Predictive Modelling) went live on 27th January 2016. The work also involved introducing mobile tablets to the outside work force. Work on bedding down the new systems, equipment and operational processes continued through to the end of the financial year.

A complete summary of the Operating and Capital Programs is attached for the information of Committee members.

For the information of Committee members a summary of the Operating and Capital projects for the 2016/17 has also been provided for your information.

Appendix 4 – Operating Projects by Primary Strategy

Title	Responsible Officer	Update	
Emerging			
Undergrounding of Goodwood Road – Stage 1 Council contribution to the continuation of undergrounding of power lines - tram crossing to Surrey Street	Oliver Pfueller	SAPN engaged SEM Civil as contractor for the undergrounding works. Works started late Januar Civil construction (trenching and conduit laying) h	
Undergrounding of Goodwood Road – Stage 2 Council contribution to the PLEC undergrounding of power lines - Surrey Street to Victoria Street	Oliver Pfueller	 been completed, all new pits have been installed a well as some replacement stobie poles. Installatio of cables and transformer boxes will be carried ou until September, followed by the removal of stobie poles. Property owners and other stakeholders, including the Retailers' Association continue to be engaged and kept informed about progress. Works should be completed by October/Novembe 2016. 	
Living			
Town Hall Opportunities Investigation Investigate and cost the feasibility of recovering the Town Hall stage and remedial work required to re-open the Town Hall gallery	Alan Johns	Completed and report provided to Cr Salaman.	
Moving			
Review of Unley Integrated Transport Strategy (UITS) The existing UITS was completed in November 2002 and provides the underlying strategy that has governed movement issues in the Council area. The planning landscape has changed significantly since that time and the strategy needs to be updated to address corridor and infill development.	David Litchfield	A report on update of UITS review is scheduled to be presented at August 2016 I&SC meeting	

Title	Responsible Officer	Update
Safer and Effective Designated Unley Cycle Transport Corridors Project to deliver and implement the outcomes and recommendations from the audit of the City of Unley bicycle transport routes undertaken in 2014-15.	Reb Rowe	The list of initiatives has been supported by the committee and actions have been implemented as per the motion endorsed with exception of change of priority at Glen Osmond Creek shared use path intersection with garage access of #65 Hughes Street.
Greening		
Second Generation Street Tree Implementation (Year 1 of ongoing program) This initiative is to increase the level of street tree replacement to a more sustainable level.	Trevor Stein	Year one of the program saw over 300 street trees in poor condition removed and replaced. These trees were identified from the City-wide audit as requiring removal in the first year. In total over 500 street trees were replaced during 2015/16.
Tree Risk Assessment Implementation (Year 2 of 4) Ridge Park The outcome from this work will be to complete a tree risk assessment of Ridge Park and identify the recommended remedial actions to ensure park users and Council are protected	Lee Anderson	Tree risk audit and implementation of priority works has been completed.
CRC Water Sensitive Cities (Year 2 of 3) This partnership with the CRC will provide Council with access and involvement with a wider network of participants to assist with developing water sensitive cities technologies, practices and policies.	Brenton Curtis	CRC provides Council with access to a network of researches and information on water sensitive cities. Council is a participating member of the SA Regional Advisory panel and also supported the recent CRCWSC needs and opportunity workshop for South Australia. Council has also worked with a researchers to determine heat island impacts and outcomes for the City of Unley with current and future works
Unley City wide Greening	Kat Ryan/Trevor	16/17 will have a focus on greening streetscapes across the City, sites are currently being

Title	Responsible Officer	Update
	Stein	investigated and should be determined over the coming months.
Removal of feral olive trees from Fullarton and other parks Given feral olives are a widely recognised noxious tree, this one year project follows on from a previous olive tree removal project to complete the eradication for Fullarton Park (and other parks if the budget permits)	Lee Anderson	Olive removal at Fullarton Park has been completed.
Community fruit trees in parks To provide funding to allow Council to progressively increase the number of fruit trees throughout the City in public places as an ongoing program	Kat Ryan	Souter Park was successfully planted up in 15/16 with associated interpretive signage. 16/17 potential sites include Princess Margaret & Howard Florey.
Organisational Excellence		
Identification of Encroachments (2 year program) Council is investigating the way it manages encroachments onto Council property. The first step in this process is to identify all historic encroachments across the Council area, and will take approximately 12 months and overlap two financial years.	Alan Johns	Encroachment Officer appointed and commenced 11/1/16. Data collection completed and Report to Council in august 2016.
Increase in resourcing to deliver Level of Service (LOS) new and vested assets The purpose of this project is to provide the budget funds required to meet the change of service on existing assets and new assets vested to Council.	Mark Clarke	On track. New & upgraded assets are being maintained to appropriate standards with associated costs being tracked.
Net Operating Projects		\$1 661 500

Appendix 5 – Capital Works Program

New Capital 2015-16 by Primary Strategy

Title	Responsible Officer	Update
Emerging		
Goodwood Road Streetscape and Wayfinding Strategy Delivery Year 1	Oliver Pfueller	Detailed design is complete and tender for construction of the streetscape upgrade for Goodwood Road will be called during August / September. Liaising with DPTI & SAPN to ensure design work is coordinated across all parties. Ongoing engagement with key stakeholders including Ward Councillors, property owners & tenants, Retailers' Association, etc
Living		
King William Rd Master Plan	Brenton Curtis	Sites still to be determined by Urban Design for construction in 16/17.
Moving		
Implementation of Local Area Traffic Management Studies	Satyen Gandhi	A report outlining community feedback is to be presented to Council in August 2016 meeting, with recommendations to be implemented in FY 16/17.
Traffic Calming to reduce speed – Grove and George Streets Unley Park	Satyen Gandhi	Project completed.

Greening		
Development of Katherine Street Open Space	Matt Sanderson	Delayed due to inclement weather. Due to consistent rain Contractor is unable to operate machinery on highly reactive clays within the site. There is approximately 4 weeks' worth of work remaining. The completion date will be subject to weather.
Street Tree Watering Well Program – 200	Mark Clarke	The program was completed for the last financial year and 97 units were installed.
Stormwater and Water Sensitive Urban Design Implementation	Brenton Curtis	The first 2 rain gardens have been installed in Fisher St. Council has also made an application to EPA rain garden program for funding in 16/17. With additional site likely to be constructed along Fisher St.
Irrigation Connections - Recycled Water	Matt Sanderson	Souter Park Reserve is now connected to the recycled water network.
Brown Hill Keswick Creek	John Devine	The revised Stormwater Management Plan (SMP) was submitted to the SMA in March. We are still waiting on approval but expected at July Board meeting.
Eastern Oxford Terrace Greening	Lee Anderson	Work on installing swales and new vegetation along the verges has been completed.
Green Infrastructure Implementation	Kat Ryan	Civic Centre Unley Road entrance, western aspect wall selected for vertical garden. Work has commenced with development approval and plant prorogation as well as manufacture of supporting framework. 16/17 will have a focus on greening the verges across the City including a demonstration site in Edmund Ave.

Install Solar panels & battery storage on Council owned Buildings	Kat Ryan	10kW Solar Panels were installed at the Unley Swimming Centre in December 2015.
Lower Sturt Creek Catchment Stormwater Management Plan	Brenton Curtis	This work has commenced and is in the early stages of the study, in partnership with 5 other Councils and State Govt.
Organisational Excellence		
Asset Management System – Stage 2	Brenton Curtis	The new integrated asset management system has now been in operation for six months and is becoming truly imbedded into the operational teams culture and day to day operations. This approach to cyclic and preventative maintenance is starting to show some benefits with a reduction in the number of customer requests across the areas of signage, buildings and graffiti. This should also be able to be replicated across other asset classes over time as the program delivery has time to impact on the assets. Discussion with Elected Members will continue over the coming months regarding Level of Service, customer experience and resourcing. This asset management approach and system has received some recognition of late with a commendation at the recent IPWEA awards and a winner at the Stormwater SA awards.

New Operating Projects by Primary Strategy – Detail – 16/17

Title	Responsible Officer
Strategies endorsed by Council	
Age Friendly Strategies Delivery of initiatives relating to Council's Age Friendly Strategy endorsed in December 2015. The proposed 2016-17 program includes an Age Friendly mapping and footpath pilot; a round table forum with the Australian World Health Organisation (WHO) Member Councils and commencement of the Active Ageing Alliance.	
Funding of Royal Adelaide Show Traffic Management Costs Council has historically funded the traffic management activities associated with the Royal Show. In 2014, DPTI issued new guidelines for traffic management events indicating that the event organiser should pay for these arrangements. The Royal Agricultural and Horticultural Society of South Australia (RAHS) have indicated that they would prefer that Council continue to fund these arrangements. At Council's January 2016 Meeting the CEO was delegated responsibility to negotiate a funding arrangement for Council's consideration as part of the 2016-17 Budget deliberations. The proposed amount of \$20k is a contribution to the total estimated cost of \$32k. The amount, annual increase and the period of the agreement (3 years) is currently being considered by the RAHS Board.	David Litchfield
Street Tree Watering Well Program Originally an Elected Member initiative, Year 3 of this program is to install tree water wells in appropriate streets to assist in providing water to street trees. This program will deliver between 125 to 150 units and for 2016-17 it is proposed to tie in the installation of wells with the second generation street tree implementation program.	Mark Clarke/Trevor Stein

Title	Responsible Officer
Second Generation Street Tree Implementation (Year 2 of ongoing program) This Elected Member initiative is to increase the level of street tree replacement to a more sustainable level to support Council's Greening goal and draft Tree Strategy. It is proposed that Council's draft Tree Strategy will be adopted in 2016.	Trevor Stein
Implementation of City Wide Park Tree Risk Assessment Audits This project is for the commencement of the implementation for the remedial actions from the tree risk assessment in the following reserves: Howard Florey Reserve, Dora Guild Playground and Fraser Reserve to address identified risks associated with certain trees.	Trevor Stein
CRC Water Sensitive Cities (Year 3 of 3) In January 2014, Council endorsed a motion to become a participant of the Cooperative Research Centre for Water Sensitive Cities (CRC). This partnership with the CRC provides Council with access and involvement with a wider network of participants to assist with developing water sensitive technologies, practices and policies. Recent outcomes from this partnership include the production of a heat map which shows the radiant heat of the City of Unley urban environment. This is being used to identify where Council should focus its greening infrastructure works.	Brenton Curtis
Community fruit trees in parks (Year 2 of 3) To allow Council to progressively increase the number of fruit trees throughout the City in public places as an ongoing program supporting Council's Greening Goal and Tree Strategy. Princess Margaret and Howard Florey are likely locations for the coming year.	Trevor Stein/Kat Ryan

Title	Responsible Officer
Identification of Encroachments (Year 2 of 2)	Alan Johns
This project forms the basis to council's encroachment policy presented to Council in December 2013. Council	
is investigating the way it manages encroachments onto Council property. This project is to identify all historic	
encroachments across the Council area, map them and prepare a business case to be presented to Council in	
2017.	

New Elected Members Initiatives

Removal of feral olive trees and other inappropriate vegetation from Ridge Park – Cr Hughes Removal of feral olive trees and other inappropriate vegetation from Ridge Park, in particular along the Glen Osmond Creek. Feral olives are a widely considered noxious tree. This project follows on from a previous olive tree removal project to complete olive eradication in Fullarton Park.	Trevor Stein
Unley City Wide Greening Initiative Implementation of identified streetscape opportunities within the City of Unley that can value add or improve the greening of the streetscape for both amenity and environmental benefits.	Kat Ryan

Appendix 5 – Deferred Existing Operating Project

Title	Responsible Officer
Undergrounding of Goodwood Road – Stage 2	Oliver Pfueller
This project was delayed in 2015-16 until the 2016-17 financial year. This is Council's contribution to the Public	
Lighting Environmental Committee (PLEC) undergrounding of power lines on Goodwood Road – between	
Surrey Street and Victoria Street.	

Appendix 6 – New Capital Draft New Capital 2016-17 by Primary Strategy

Title	Responsible Officer
Strategies/Projects endorsed by Council	
Goodwood Road Streetscape & Wayfinding Strategy Delivery	Oliver Pfueller
Unley Central Entrance Oxford Terrace Detailed Design	Keith Davis
Main Street Improvement Program	David Litchfield
Implementation of King William Road Master Plan – Kerb build outs	Keith Davis
Public Art Strategy Implementation- including Goodwood Road	Matthew Ives
Stormwater and Water Sensitive Urban Design Implementation	Brenton Curtis
Green Infrastructure Implementation	Kat Ryan
Brown Hill Keswick Creek	John Devine
Implementation of City of Unley Cycling & Walking Plan	Satyen Gandhi
Traffic Calming Wood Street Hyde Park/Millswood	Satyen Gandhi
Pedestrian Refuge Facility – Marlborough St Malvern	Satyen Gandhi
Safety Works at Goodwood Primary School	Satyen Gandhi
Install Solar Panels and Battery Storage on Council owned Building	Kat Ryan

Title	Responsible Officer
Strategies/Projects endorsed by Council	
Goodwood Road Streetscape and Wayfinding Strategy Delivery This project will complete an improved streetscape including signage, street furniture, repaved footpaths & kerbs, landscaping, art work, vegetation and side street activation for Goodwood Road between the tram crossing and Victoria Street. The work will be undertaken on completion of the undergrounding of power lines on Goodwood Road.	Oliver Pfueller
Unley Central Entrance Oxford Terrace Detailed Design This project involves the design development and documentation of Stage 1A. The creation of a new built environment which prioritises pedestrian movements through the community space will integrate the existing commercial and civic functions in Oxford Terrace at this important juncture with Unley Road.	Keith Davis
Implementation of King William Road Master Plan – Kerb build outs In 2014 Council commissioned a King William Road Project Report which considered all aspects of the precinct. From this a vision, a suite of achievable projects were developed which included the concept of parklets and the piloting of such. Following the success of the parklet pilot program, it is proposed kerb build outs will be constructed in appropriate locations.	Keith Davis

Title	Responsible Officer
Public Art Strategy Implementation- including Goodwood Road	Matthew Ives
This program supports Year 3 (of 5) of the Public Arts Strategy. The majority of this funding is to be	
invested in public art complementing the Goodwood Road Streetscape Project listed above.	
	Matthew Sanderon
Stormwater and Water Sensitive Urban Design Implementation	
Year 2 of a program to support Council's Greening goal and Draft Stormwater Strategy (WSUD). This	
project will continue the design and implementation of some of the priority WSUD opportunities including	
Leader Street Streetscape Renewal and localised rain gardens across the City based on investigation of	
suitable sites. It is highly likely that Council will continue to receive external grants to match this funding.	
Green Infrastructure Implementation	Kat Ryan
Year 2 of a Council program, this project is aligned to the draft Green Infrastructure Strategy which is a	
supporting strategy to Council's draft Environmental Strategy. For 2016-17 it is proposed that the	
program undertake further green wall/roof initiatives at Council owned facilities and investigate	
opportunities for enhancing environmental outcomes by greening at key infrastructure works such as the	
Leader Street Streetscape Renewal.	

Title	Responsible Officer
Brown Hill Keswick Creek (BHKC) The City of Unley together with the Cities of Burnside, Mitcham, West Torrens and the Corporation of the City of Adelaide have collaborated to develop a catchment based approach to mitigating flood risk and use of stormwater where feasible in the Brown Hill and Keswick Creek catchment. Council's contribution to the BHKC Project for 2016-17 is estimated at \$250k with proposed works to be undertaken relating to the South Park Lands detention basin and the Lower Brown Hill Creek Upgrade sub projects.	John Devine
Implementation of the City of Unley Cycling & Walking Plan 2015-2020 (WCP) – Cr Hewitson The WCP provides strategies/actions for the next five years to further increase walking and cycling within the community. Input from Council and the Unley Bicycle User Group (UBUG) has helped shape the plan. The Unley Cycling and Walking Plan has not yet been adopted by Council but Community Engagement on the Plan recently commenced in April 2016. If the Plan is adopted, these funds would allow Council to begin to implement the high priority recommendations in the Plan. In addition, Elected Members have highlighted consideration of the corner of Canterbury Terrace and East Avenue Clarence Park (net \$25k on the assumption that a State Bicycle Fund grant is obtained) and Wood Street Hyde Park/Millswood (estimated at \$20k and linked to the traffic calming project below) as priorities for implementation in 2016-17. These will be considered from this allocation. Based on a \$200k spend, maintenance is estimated at \$7,500.	Satyen Gandhi

Title	Responsible Officer
	Satyen Gandhi
Traffic Calming Wood Street Hyde Park/Millswood – Crs Sangster and Rabbitt Residents have raised safety issues for both motor vehicles and cyclists due to the design of the existing traffic calming devices. The proposal includes the installation of speed humps on the motor vehicle roadway between bicycle paths on either side and links to additional cycle works to be prioritised as part of the Implementation of Cycling and Walking Plan. The proposal should also discourage commuter through-traffic, which has been an ongoing volume and speed issue with the local residents.	
	Satyen Gandhi
Pedestrian Refuge Facility – Marlborough Street Malvern - Crs Sangster and Rabbitt	
Residents from Resthaven and the general locale have difficulty crossing Marlborough Street due to the volume and speed of traffic travelling through the intersection. This Elected member Initiative proposes	
that a pedestrian facility (kerb extension and refuge) be installed at the intersection of Marlborough Street and Cambridge Terrace to make this crossing safe for all residents. This project will only be considered if matching funding is received.	

Title	Responsible Officer
	Satyen Gandhi
 Safety Works at Goodwood Primary School – Cr Schnell A resident has applied for a grant from DPTI focussed on improving safety around Goodwood Primary School that requires matching Council funding. The proposed works include: Parking controls for improved sight distance at the intersection of Hampton Street South and Surrey Street, upgrade the intersection by installing kerb-extensions to reduce the crossing distances, and Installation of an Emu Crossing at Hampton Street South The likely cost of installation would be approximately \$30k for the intersection upgrade and \$30k for an Emu crossing. This project will only be supported if matching funding is obtained and the community engagement supports the changes. Council's contribution will only be \$30k. 	
Install Solar Panels and Battery Storage on Council owned Building – Cr Hughes This initiative provides an opportunity for Council to demonstrate leadership in energy efficiency by proposing the installation of solar panels and battery storage on a Council owned building such as the Unley Museum. Administration will be investigating the suitability and feasibility of sites prior to the Budget being adopted in June. The site is also expected to act as a demonstration project for residential properties.	Kat Ryan

INFORMATION REPORT

REPORT TITLE:	REVIEW OF UNLEY BICYCLE USER GROUP (UBUG) COMMITTEE OPERATIONS
ITEM NUMBER:	35
DATE OF MEETING:	9 AUGUST 2016
AUTHOR:	SATYEN GANDHI
JOB TITLE:	MANAGER TRANSPORT AND TRAFFIC
ATTACHMENT	LIST OF PRIORITIES – LATE ATTACHMENT

1. EXECUTIVE SUMMARY

To provide an update on requested actions from Unley Bicycle Users' Group (UBUG).

2. RECOMMENDATION

MOVED: SECONDED:

The Committee recommends to Council that:

1. The report and updated actions be noted.

UBUG Priorities

GOC – Glen Osmond Creek Path

MTB – Mike Turter Bike Way

Types of Work	Action	Location	Completion Schedule/comments
Types of Work Maintenance	Action Fix pot holes Upgrade pavement surfaces where repairs needed Repair edges of paths Trim overgrown foliage and increase cleaning of debris from the paths	 East Avenue Duthy Street (West side of West Terrace) On MTB, Railway Terrace west of Goodwood Road King William Road & Goodwood Road Section of MTB Greenhill Street and Young Street section of MTB Near Wayville tram stop on MTB GOC Weller Street Duthy/George bend GOC George/Maud Street Rugby/Porter GOC MRG between Emerson and Gordon 	Completion Schedule/comments Completed. Inspected and assessed to be within acceptable level of service. Completed Inspected and assessed to be within acceptable level of service. Completed. Overgrown foliage work is completed. Overgrown foliage work is completed. A number of trees have been identified for removal. However, until the agreement between Council and DPTI on
	increase cleaning of debris from	Rugby/PorterGOC	number of trees have been identified for removal. However, until the agreement

Signage and	Replace large Give Way road signs with smaller Give Way path signs. Remove instances where 'end of path' signs occur and blue bike route signs.	 GOC Leicester Street hotel carpark Crossing point George Street of GOC Charles Walk & Culvert Street Leader Street Rugby/Porter route Rugby Street at Edmund GOC Through Council Depot Weller Street Eton and Wattle Streets On MRG at Addison Road and Fairmont Avenue 	GOC Completed Delayed for George Street and Leicester Street – Scheduled for end of August completion. Scheduled for end of August completion
Marking	Install and relocate painted bicycle symbols as appropriate.	 Rugby/Porter Wattle Street GOC Duthy/George bend On MTB west of Goodwood Road intersection 	Completed
	Introduce green paint in the bike lanes where driveways intersect especially on high traffic roads	 Rear carpark access to commercial sites, priority to busy locations. (Identified as Duthy Street) 	Work scheduled to be completed late September/October. Please note Line marking work is normally undertaken in the warmer weather periods.
	Improve signage around the Goodwood Station	Goodwood Station	Under investigation – to be carried out as per recommendation of Walking and Cycling Plan. – Sep/Oct
	Provide safety edge lines and reflective strips to sharp bends, walls and bollards.	 Charles Walk and Culvert Street Rugby/Porter Through Council Depot To MRG at Emerson Road On MRG at Cowper On MRG at Canterbury and Canterbury/Addison On MRG at Nairne Terrace 	Completed
	Improve lighting	Charles Walk and Culvert Street	Under investigation

	'Black Spot' signage	Musgrave Street on MTB	Completed
Priority Change	Priority change to crossovers	Charles Walk & Culvert Street crossing	FYI 16/17 following endorsement of
	that intersect the bike path	point	Walking and Cycling Plan. Inform
	(requires re-design)	Rear of Ultra Tune on Unley Road	Community of intended improvements
		Crossing to Meals on Wheels on GOC	in line with budget priorities.