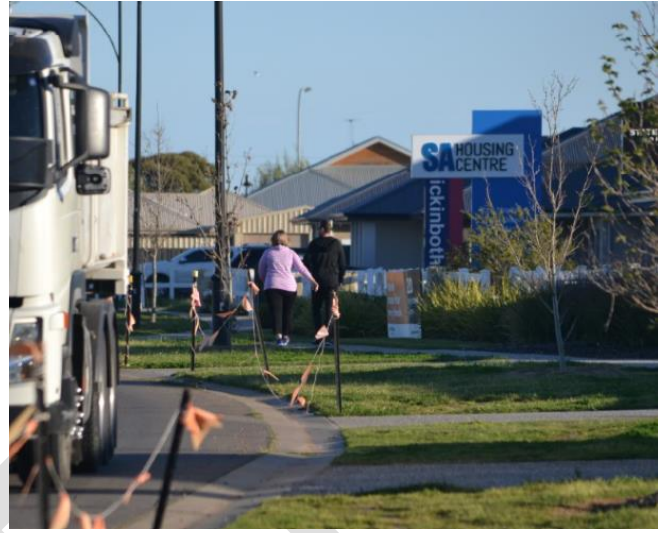


TWO WELLS WALKING AND CYCLING PLAN 2023 - 2026

September 2023



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Council acknowledges that we are on the traditional country of the Kaurna people of the Adelaide Plains and pays respect to elders past, present and emerging. We recognise and respect their cultural heritage, beliefs and relationship with the land. We acknowledge that they are of continuing importance to the Kaurna people living today.

Version	Comments
29 Aug 2022	For Council
March 2023	Consultation
August 2023	Refinements following Consultation
September 2023	Adopted

SCOPE

The scope of this plan is about the envisaged walking and cycling network in Two Wells.

Our Vision - Two Wells residents have options to walk and cycle for transport, local errands, and for health and wellbeing.

BACKGROUND

This Plan was developed through analysis of the existing walking and cycling environment (demographics, site visits, and data) and integrating this with guidance from Council members, staff, stakeholders and the community. This helped identify the barriers and opportunities to enhance the walking and cycling environment for all residents across Two Wells.

The Plan establishes the long-term (ultimate) walking and cycling network, as well as proposed projects to assist create the network.

Safety, connectivity, access for all abilities, and a pleasant experience are goals.

A walking and cycling friendly Two Wells is one with healthy citizens, less noise, clean air, and a strong economy. It's a Two Wells that is nice to be in, where individuals have a high quality of life, accessibility is high and there is a simple route from thought to action to participate in social, cultural, leisure and work activities.

It supports Two Wells liveability by reducing pressure from a potentially congested road network, reducing noise and pollution, increasing the health of the community, and supporting a zero-carbon future.

PURPOSE

The purpose of the Two Wells Walking Cycling Plan is to enable people of all ages and abilities to have options to walk and/or cycle as a regular day-to-day activity for transport, wellbeing and health, and recreation and sport.

The Objectives are:

1. **Enhanced liveability** for residents and business by the wellbeing, health, economic and environmental benefits of walking and cycling
2. A **supportive community and council culture** of living actively through walking and cycling
3. A network:
 - **Of safe and convenient** walking and cycling facilities
 - **For all ages** and abilities of pedestrians and cyclists
 - **That connects to destinations**, such as shops, parks, schools, work places in town and nearby, and future public transport nodes

HOW WILL THIS PLAN BE USED AND UPDATED

This Plan will inform annual Council asset and business planning, as well as grant applications.

Recommendations apply to Council assets as well as assets owned by others. This means some projects will require partnering with the State Government and others.

Some projects are medium to longer term. These show the longer term intent and inform grant funding submissions. Identifying proposals in an endorsed plan increases the opportunity to secure grant funding.

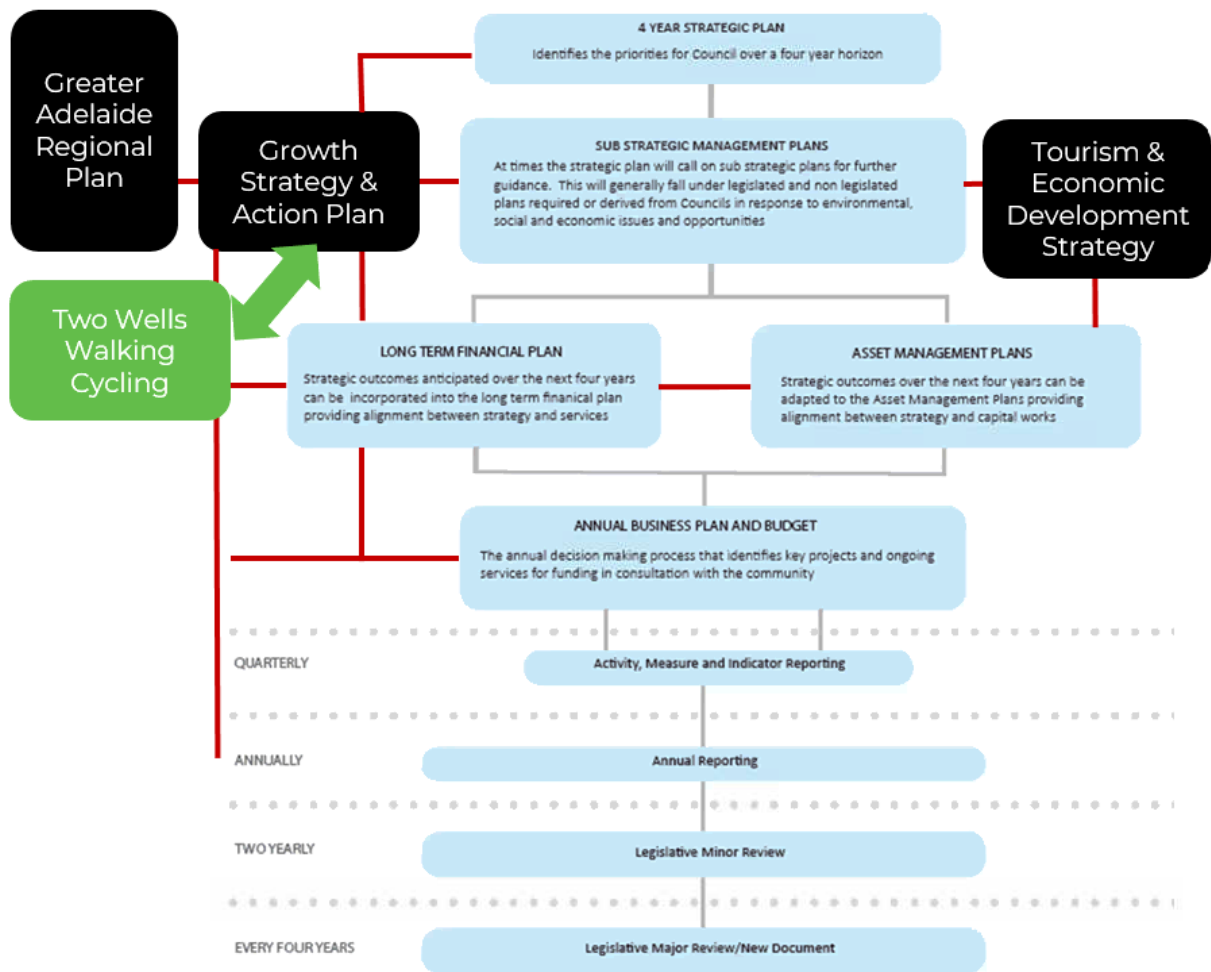
Recognising circumstances change, it is anticipated this plan will be updated in three to four years' time.

RELATIONSHIP WITH OTHER STRATEGIES

Council’s Strategic Plan 2021 – 2024 has outcome areas of:

- Enviable Lifestyle
- Emerging Economy
- Remarkable Economy
- Proactive Leadership

Council’s Growth Strategy identifies strategies and actions to work towards these outcomes. One action is fostering walking and cycling.



How the Walking Cycling Plan relates to Council’s Four-Year Plan, Growth Strategy and Asset Plans

PLANNING CONTEXT

Australian Government

The Australian Government released guide¹ to Walking, Riding and Access to Public Transport in 2013. This guide outlines the importance of planning ahead and constructing networks, encouraging people to walk and cycle and the role of good governance.

	Barrier	Opportunity
Plan	Lack of continuous, convenient connections	Plan comprehensive networks
Build	Lack of physical safety	Built appropriate infrastructure
	Lack of personal safety and comfort	Provide mid-trip facilities, end of trip facilities and prioritise pedestrians and cyclists where appropriate
Encourage	Lack of awareness	Provide information
	Lack of skills	Provide skills training
	Lack of motivation	Encourage greater participation
Govern	Poor governance	Improve governance



Parking for 44 bicycles at Xavier College is a physical way of encouraging cycling

¹ Australian Government (2013), *Walking, Riding and Access to Public Transport*, Ministerial Statement, Department of Infrastructure and Transport, Canberra

Active Transport for Work at Two Wells - 30 Year Plan for Greater Adelaide

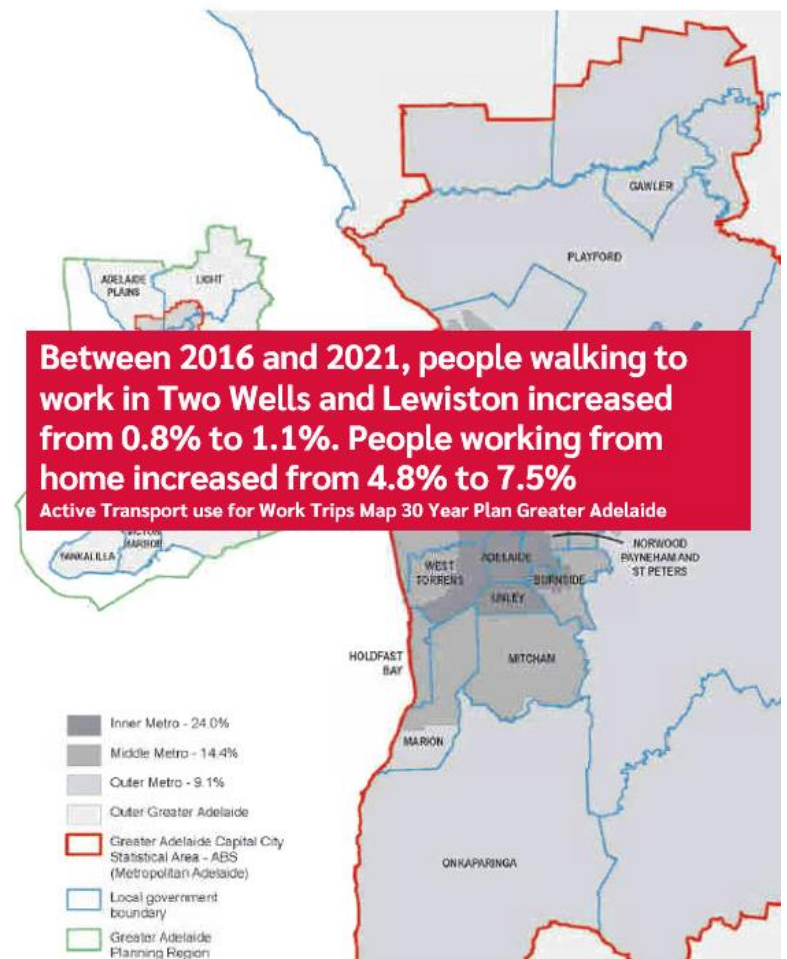
The 30 Year Plan for Greater Adelaide² targets increasing the share of work trips by walking, cycling and public transport where not accessed by car (these are called active transport).

The target for residents of townships in Outer Adelaide is an increase of 30% by 2045. Outer metro has a 9.1% 2017 baseline, and an aim of 11.8% by 2045.

In 2016³, in terms of active transport for work, as could be expected for rural settlements with agriculturally based economies, only 33 people walked to work in Two Wells and Lewiston. This was 0.8% of workers, and a reduction from 2011.

This is well below Outer Adelaide's 9% in 2017 and at odds with intent to increase active transport in the 30 Year Plan.

Map 16 — Active transport use for work trips



Active Transport For Residents of Two Wells and Lewiston to Get to Work in 2021

	Two Wells	Lewiston	Total	% Total	Change from 2016
Walk to Work	18	8	26	1.1%	+6
Cycle to Work	-	-	-	-	-
Worked at Home	84	93	177	7.5	+107
Car (Driver and Passenger)	1179	949	2128	90	+814
Truck	19	23	42	2	+3
Total Workers	1311	1043	2354		

² Department of Planning, Transport and Infrastructure, *The 30-Year Plan for Greater Adelaide 2017 Update*, Government of South Australia 2017

³ profile.id.com.au/adelaide-plains/travel-to-work?WebID=100

Healthy Two Wells Neighbourhoods - 30 Year Plan for Greater Adelaide

The 30 Year Plan for Greater Adelaide⁴ targets increasing the percentage of residents living in walkable neighbourhoods in Outer Adelaide by 25% by 2045.

Outer Adelaide has a baseline of 30%.

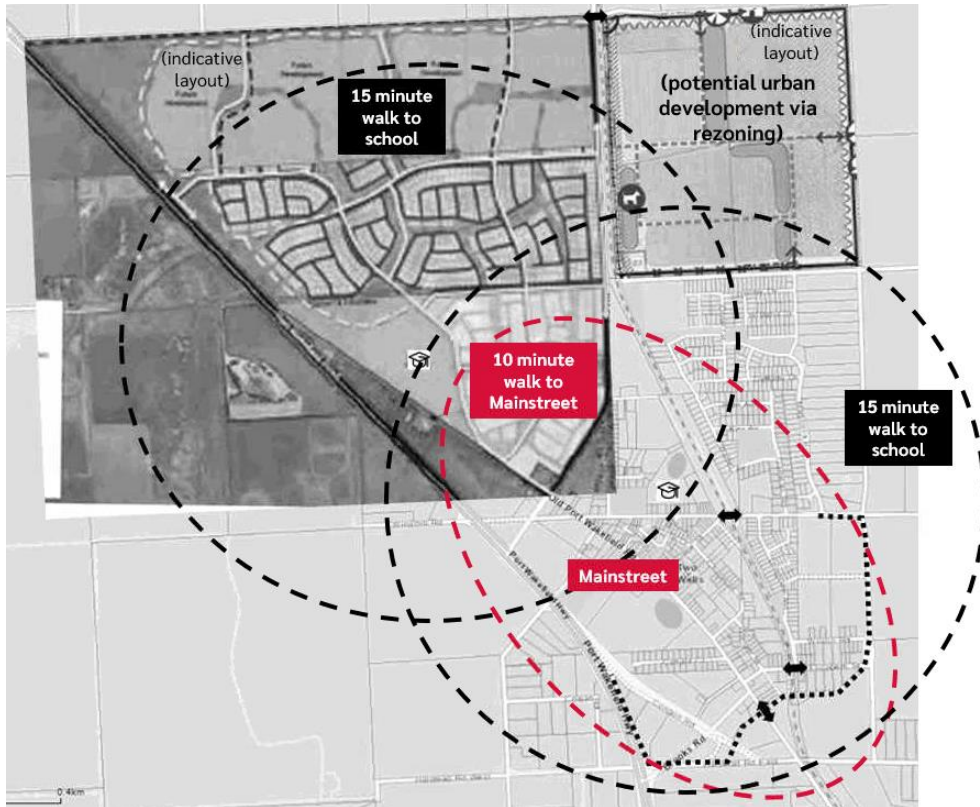
The 30 Year Plan for Greater Adelaide outlines criteria for what constitutes a healthy neighbourhood. These include:

- 10 minute/800m walk to shops, library etc
- Open space within 5 minute/400m walk
- 15 minute walk to school, child care or kindergarten
- 5 minute/400m walk to high frequency bus stop
- 20 minute/5km cycle to work

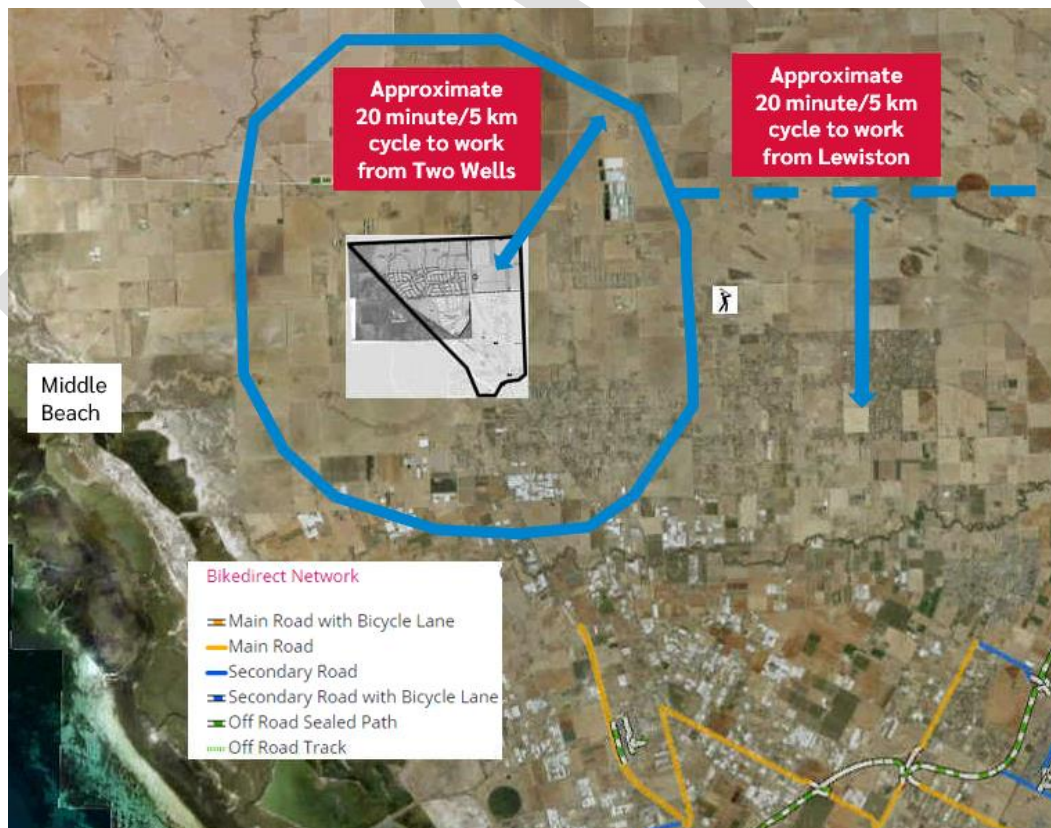
The 30 Year Plan identifies actions to investigate the feasibility of having tailored criteria for walkable neighbourhoods located in outer metropolitan Adelaide.

Related Levers flagged in 30 Year Plan	Comment regarding Two Wells
Deliver the State Public Health Plan through collaborative action between State and local governments to increase opportunities for active living.	The Regional Public Health Plan recognises the wellbeing value of walking and cycling.
Undertake community programs to encourage sustainable travel behaviour change e.g. the Way2Go School Program; TravelSMARTHouseholds; Way2Go; Bike Ed Program; Living Neighbourhoods Program; and Residents to Win Grants Program.	Programs, such as Way2Go and Residents Win, encourage people to walk and cycle.
Support Nature Play SA to make unstructured outdoor play in nature (public open space) an everyday part of childhood.	Upgrading open spaces is important, such as:
Implement the Healthy Parks Healthy People South Australia 2016-2021 report which supports the role of quality open space and green infrastructure in providing access to nature and hence improves the health and wellbeing of neighbourhoods.	<ul style="list-style-type: none"> • Village Green • Hart Reserve, noting upgrade plans emerging from investigations and engagement • Potential for a greater range of recreation activities at the oval precinct, potentially achieved through engagement and master planning. <p>Also important is enabling access to regional spaces, such as the coast and in Lewiston.</p>

⁴ Department of Planning, Transport and Infrastructure, *The 30-Year Plan for Greater Adelaide 2017 Update*, Government of South Australia 2017







15 minute walk to school and 10 minute walk to Main Street at Two Wells








20 minute cycle from Two Wells to work nearby, noting envisaged agribusiness growth around Two Wells, and animal husbandry in Lewiston

Regional Health Plan

The Regional Public Health Plan⁵ identifies challenges around encouraging healthy lifestyles, improving mental health, youth engagement and wellbeing, supporting an ageing population, adapting to climate change, COVID 19, and better access and inclusion. Regional Public Health Planning includes Two Wells.

<p>Population</p> 	<ul style="list-style-type: none"> • 70,123 people • Forecast to increase by 25% (23,359 people) by 2036 • Larger proportions of people aged 5 to 19 years and 45 to 74 years • Smaller proportions of people aged 85 years and over and 20 to 45 years
<p>Age</p> 	<ul style="list-style-type: none"> • The Region's population is ageing • Most growth in retirees, seniors and elderly • Slowest growth in infants and children
<p>Health and Wellbeing</p>  	<ul style="list-style-type: none"> • Lower % of people self-assess their health as fair or poor • Lower % of adults (< half) meet daily fruit consumption guidelines • Higher % of adults experiencing psychological distress • Higher % of males, and lower % of females report mental health problems • Markedly higher % of clients of community mental health service • Slightly higher % of type 2 diabetes prevalent • Higher % of smokers • Higher % of obese adults – highest in women • Twice the death rate in people aged 15-24 years • Lower % of people having trouble accessing healthcare • Higher % of suicides • Lower % of Home and Community Care clients living alone or speaking a language other than English at home • Marginally higher % of people feel they get support in times of crisis • Higher % feel safe walking alone after dark • Higher % of people being physically inactive (but below the Regional SA rate)

⁵ gawler.sa.gov.au/_data/assets/pdf_file/0037/889723/1047-002-Public-Health-Fact-Sheet.pdf

<p>Disability and long-term illness</p> 	<ul style="list-style-type: none"> • A similar % of people needing assistance with core activities • A similar % of people providing unpaid care • A larger % of people under 65 years needing assistance with core activities • A smaller % of people over 65 years needing assistance with core activities • Slightly lower % of people receiving a Disability Support Pension
<p>Early life and childhood</p> 	<ul style="list-style-type: none"> • Lower % of children living in low income welfare dependent households • Higher % of women smoking during pregnancy • Higher % of children consuming an adequate fruit intake • Lower % of children who are clients of the Adolescent Mental Health Service • Lower % of children are obese • A higher proportion of 5 year olds are fully immunised
<p>Housing</p> 	<ul style="list-style-type: none"> • Lower supply of residential aged care places • Lower supply of social housing • Similar % of low income households under mortgage stress • Similar % of low income households under rental stress • Lower % of households receiving rent relief
<p>Cultural diversity and language proficiency</p> 	<ul style="list-style-type: none"> • Lower % of people born in predominantly non-English speaking countries • Significantly lower % of people not speaking English well or at all • Slightly lower % of people who recognise themselves as of Aboriginal or Torres Strait Islander descent • Higher % of people are not accepting of other cultures
<p>Employment, income and education</p> 	<ul style="list-style-type: none"> • A similar level of socio-economic disadvantage • Significantly lower % of people receiving unemployment benefits • Markedly high % of 16 year olds not in full time secondary education • Lower % of school leavers enrolled in a University • Slightly lower % of young people earning or learning • Slightly higher % receive an Age Pension or held a Pensioner Concession Card • Lower % of people holding Health Care Cards • Lower % of households with access to a motor vehicle

Extracts from the Regional Public Health Fact Sheet

Disability Access and Inclusion

Council adopted an updated Disability Access and Inclusion Plan in 2020⁶.

Disability Access and Inclusion Plan 2020 – 2023	Comment regarding Two Wells
<p>SDIP THEME 1 – Inclusive communities for all Social inclusion is a priority for people living with disability as it affects all aspects of their lives. It is our aim that the contributions and rights of people living with disability are valued and understood by all South Australians and that their rights are promoted, upheld and protected. We also want to ensure that people living with disability are supported to advocate for their own rights.</p> <p>Priority 1: Involvement in the community Priority 2: Improving community understanding and awareness Priority 3: Promoting the rights of people living with disability</p>	<p>Enabling involvement in the Two Wells community entails physical paths that are compliant and way-finding tailored to people with disabilities</p>
<p>SDIP THEME 2: Leadership and Collaboration People living with disability want to have a greater role in leading and contributing to government and community decision making. It is our aim that the perspectives of people living with disability are actively sought and that they are supported to participate meaningfully in government and community consultation and engagement activities.</p> <p>Priority 4: Participation in decision making Priority 5: Leadership and raising profile Priority 6: Engagement and consultation</p>	<p>Involve people with disabilities – including young people - in the preparation of the plan</p>
<p>SDIP THEME: Accessible Communities The accessibility of the built environment, quality services and information is key to ensuring people living with disability are included and have the opportunity to equally participate in all aspects of community life. It is our aim to increase accessibility to public and community infrastructure, transport, service, information, sport and recreation and the greater community.</p> <p>Priority 7: Universal Design across South Australia Priority 8: Accessible and available information Priority 9: Access to services</p>	<p>Undertake an access audit of footpaths to determine improvements</p> <p>Provide pedestrian crossings and more disabled parking in main townships</p> <p>Improve signage for people with a disability</p> <p>Provide suitable lighting in public spaces and Council facilities</p>

⁶ apc.sa.gov.au/_data/assets/pdf_file/0028/357157/Revised-Adelaide-Plains-Council-Disability-Access-and-Inclusion-Action-Plan-August-2020.PDF

	<p>Investigate opportunities to provide pedestrian walkways along roadways within towns and settlements</p> <p>Review Council walking trails to incorporate access for all</p> <p>Ensure signs directing disabled people to public access ramps are visible at all times</p> <p>Conduct an audit of footpaths and establish priorities for upgrading to Australian Standards</p> <p>Improve disability signage throughout the Council area and at all Council facilities to ensure compliance with Australian Standards</p> <p>Review street furniture and ensure access to people with disability is not restricted</p> <p>Develop a mobility/access map for townships and settlements</p> <p>Advocate for public transport options that include disability access</p>
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Planning for Healthy and Active Communities

Research⁷ by the National Heart Foundation identifies four interconnected principles to enable a healthy and active ageing residents:

1. Recognise ageing affects all ages across the life-cycle
2. Physical activity works to improve the health and well-being of older people
3. Social engagement provides the motivation to maintain healthy levels of physical activity
4. Design features and infrastructure is needed to facilitate both the physical activity and social engagement required to support the highest possible quality of life for older people

Two Wells Traffic Impact Study 2014

The Two Wells Traffic Impact Study 2014⁸ made the following conclusions.

1. **The road network within the Two Wells township has sufficient capacity to accommodate the current levels of traffic activity**, and is supported by an adequate number of carparking spaces to meet day to day parking demands. In addition, there are also areas where overflow carparking can occur to meet increased demand at times of key events.
2. Further, there is sufficient capacity within the current road network to meet the additional demands expected to be generated by the proposed increase in residential and commercial development to the north of Mallala Road.
3. The existing freight routes along Mallala Road and Gawler Road however which once bounded the township to the north will now fall within the township, and their presence creates an element of segregation between the existing township heart and the evolving area to the north. It is recommended that further investigation be undertaken to relocate freight movement further to the north, beyond the planned residential development, for both safety and amenity reasons.
4. Sustainable transport modes are expected to grow:
 - there is longer-term intent to extend bus services to Two Wells to meet future transport demands
 - **cycling is expected to become a more popular travel** mode in the township, partly due to an increase in population and partly in response to providing attractive infrastructure and a vibrant mainstreet environment
 - **pedestrian movements will similarly increase in the township**, and a vibrant main street environment will encourage people to walk rather than drive between destinations. Key crossing points will need to be identified and designed to enable users to safely cross Old Port Wakefield Road and to move between the main street and the proposed commercial development on its south-western side.

⁷ healthyactivebydesign.com.au/healthy-active-ageing/active-ageing/checklist/ accessed 17 June 2021

⁸ Two Wells Traffic Impact Study 2014 Infracplan

5. The proposed concentration of emergency services within a single facility will require a location which has efficient access to and from the surrounding road network, particularly Port Wakefield Road.

6. The successful integration of the existing township of Two Wells with the new residential development to the north and the commercial development proposed to the west will be dependent on safe and efficient links for walking, cycling and passenger vehicles. The achievement of this will be greatly enhanced by relocation of the existing freight route to a route further to the north (e.g. Sharpe Road).

7. Many of the findings and recommendations of this report are consistent with those contained in the Two Wells Age Friendly Assessment and the Main Street Design Guidelines for Two Wells.

Old Port Wakefield Road, Two Wells Master Plan 2020

The *Old Port Wakefield Road, Two Wells Master Plan May 2020*⁹ identifies proposals to foster an economically successful, vibrant and pleasant main street for people to spend time and visit. This Master Plan builds on the 2014 Infraplan traffic impact study and the 2011 Mainstreet guidelines¹⁰.

⁹ apc.sa.gov.au/_data/assets/pdf_file/0033/659760/Public-Consultation-Notice-Two-Wells-Main-Street-Concept-Plans.pdf


¹⁰ apc.sa.gov.au/_data/assets/pdf_file/0030/354855/D16-4102-Two-Wells-Urban-Design-Guidelines.pdf

Walking and cycling proposals form part of the principles and upgrade proposals in the 2020 Master Plan. These are reproduced below.

Renew the public realm

Selectively refresh the public realm focused on:

1. keeping the relaxed rural feel of the street
2. providing natural existing and future street crossing points
3. specific sites for more outdoor seating/eating, bike parks, planting and shelters
4. support a location for a regular produce market/events area considering the original site under the pines near the bakery; provide service points for power and water in the preferred location.
5. commission – with traders and developers - more public art in the main street and along the trails following an agreed strategy
6. design and deliver the refresh projects in the short term using simple design approaches and existing grant funding




Old Port Wakefield Rd - Main Street


Define safe and accessible movement routes

1. identify priority street crossing(s) e.g. refuge island, zebra or buildouts, and build one or two
2. provide appropriate disabled parking access
3. simplify complicated car park areas
4. provide cycle racks and cycle route markers
5. identify and promote RV parking areas in the main street and on Highway 1.

Onstreet Parking



Pedestrian Crossing





'See' Two Wells

Making the town more attractive and interesting to visitors by:

1. upgrading the 'Wells' heritage area and associated walking trails from the main street, especially from the central main street area;
2. screening or relocating the council depot
3. upgrading wayfinding and information signage for the trails and area viewed from the main street and viewed from the Highway
4. reviewing landscaping south of the main street and along the Highway to get better views of the town from the Highway
5. promote the State listed buildings as part of the heritage trail experience with interpretive signage


Local Signage

Support business to activate the street

Initiate a range of small initiatives including:

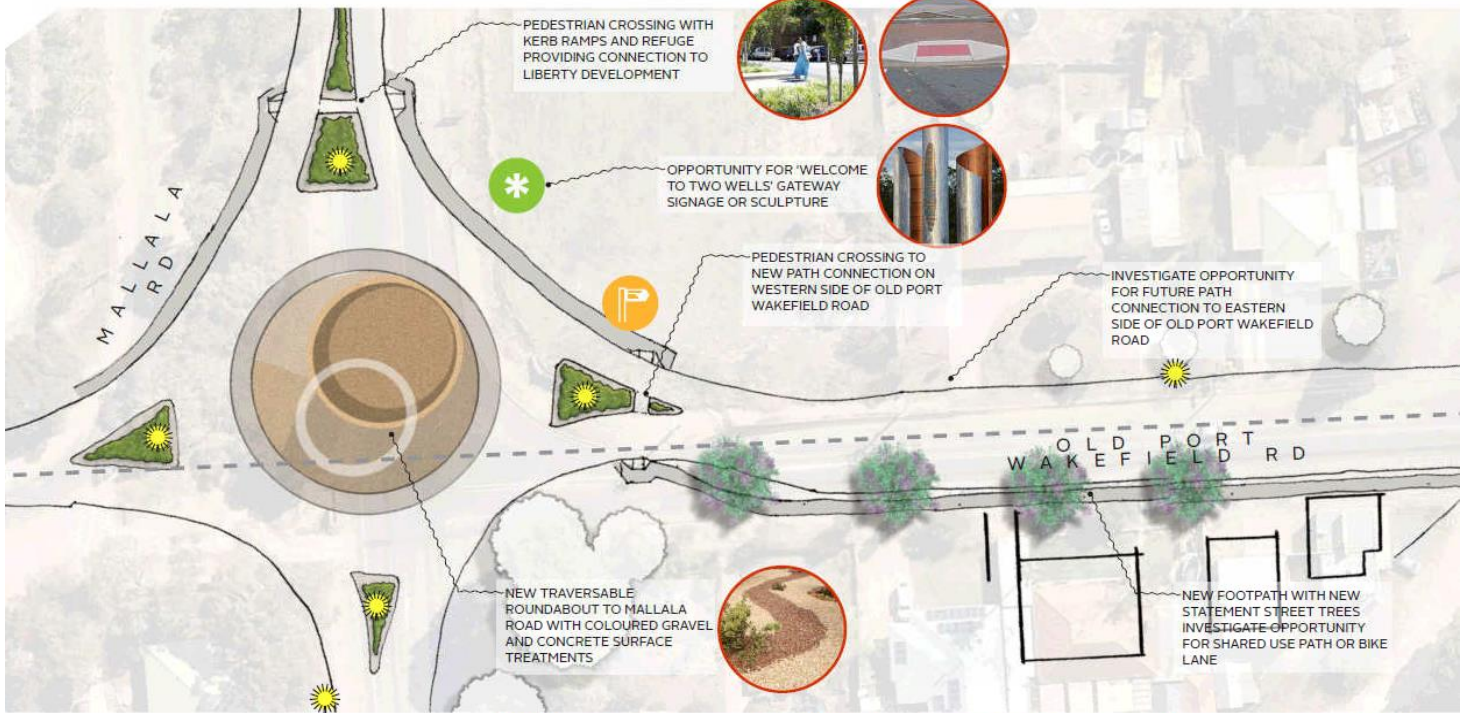
1. a regular street events program led by local businesses
2. a business support programme focussing on marketing, customer service and retail displays
3. make better outdoor dining areas where there is business support (potentially with parklets or an expression of interest grant programme to identify more active business partners)
4. a 'façade refreshing' program for main street buildings, coordinated by council for colours and styles
5. prepare a simple investment attraction strategy and prospectus based on one or two meetings to confirm current owners intentions and potential investors interests, focusing on vacant frontages initially.
6. Promote development of any vacant land on the north side of the street for small business e.g. next to the State Heritage building.



Peterborough Main Street

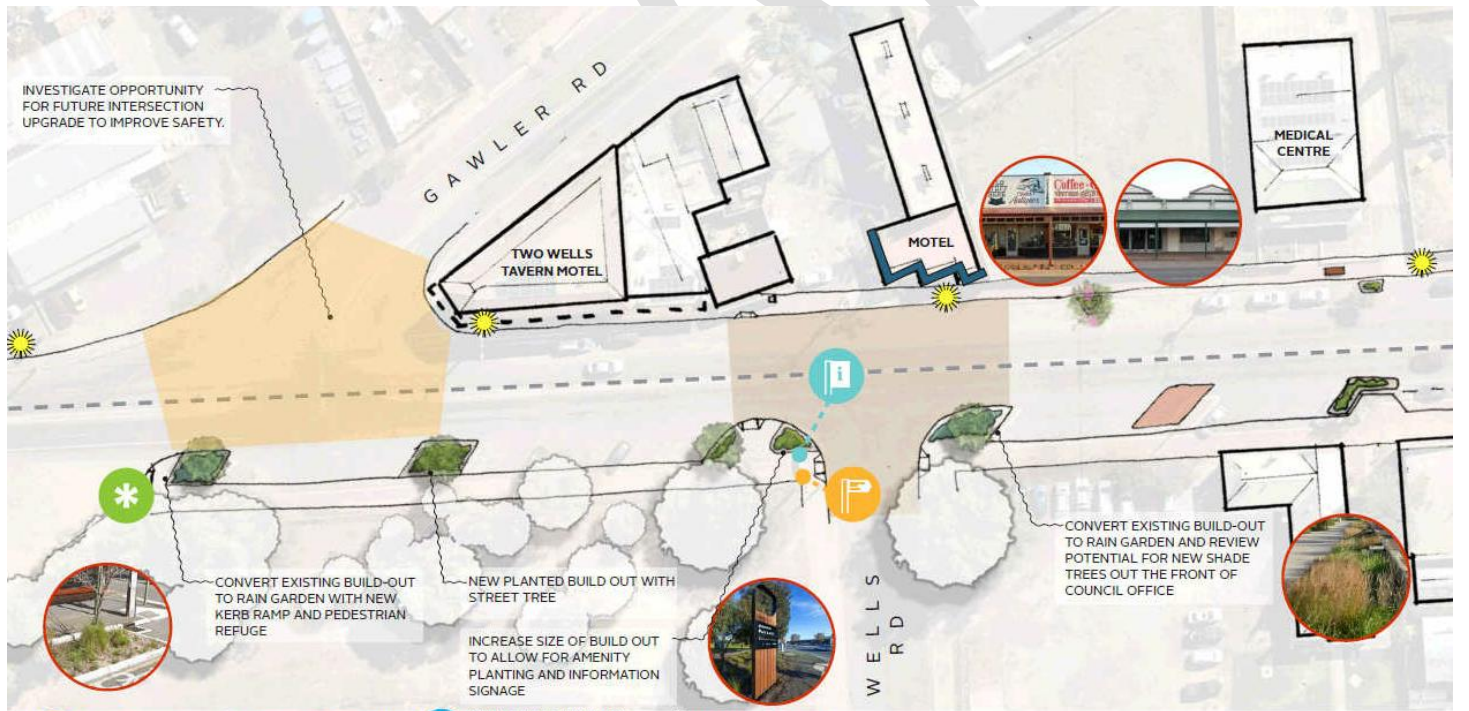
Walking cycling related principles

Walking and cycling principles in the Main Street Master Plan

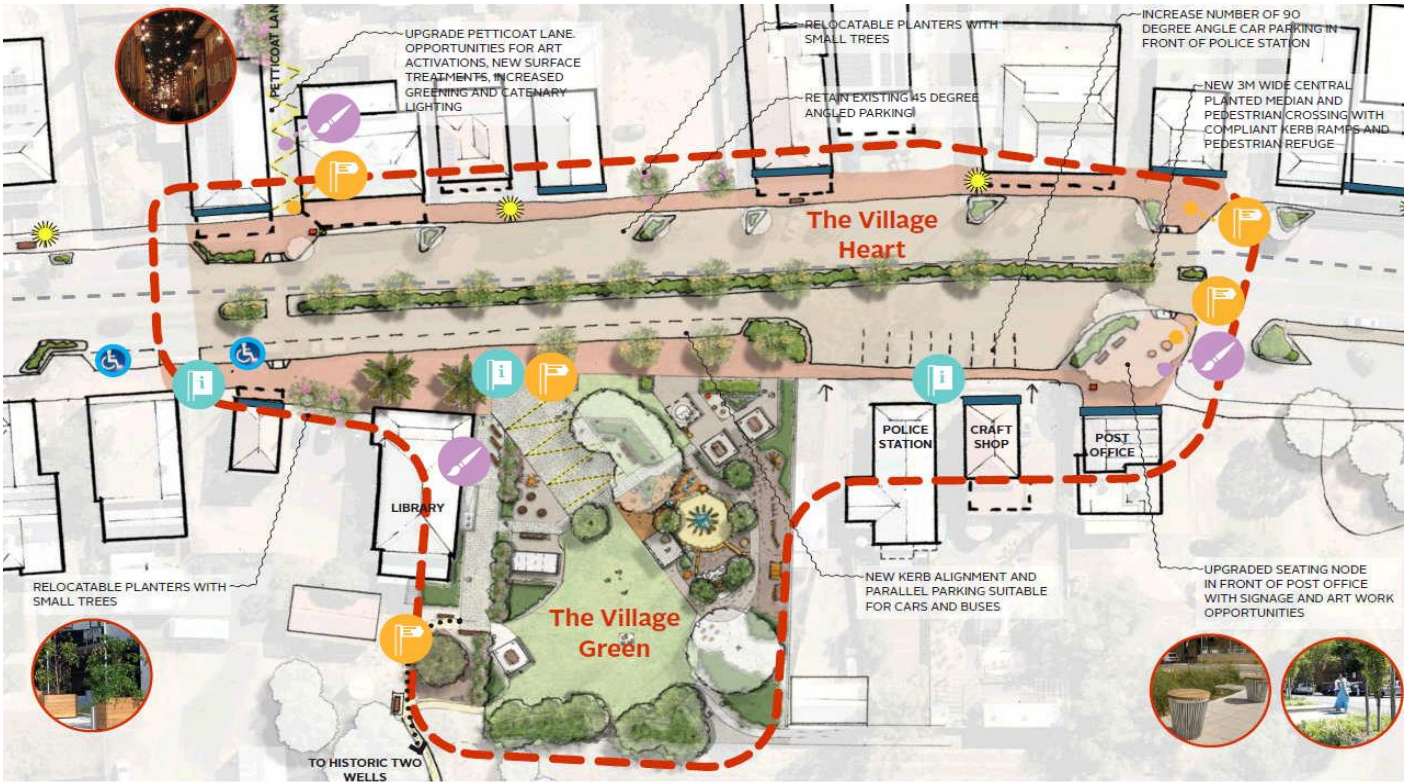


LEGEND

EXISTING TREES	NEW SMALLER STREET TREES	AMENITY PLANTING	NEW PATH	NEW SEATING
EXISTING PALM TREES	NEW LARGER STREET TREES	RAIN GARDENS	SHOP FRONTAGE UPGRADES	NEW BIN ENCLOSURES

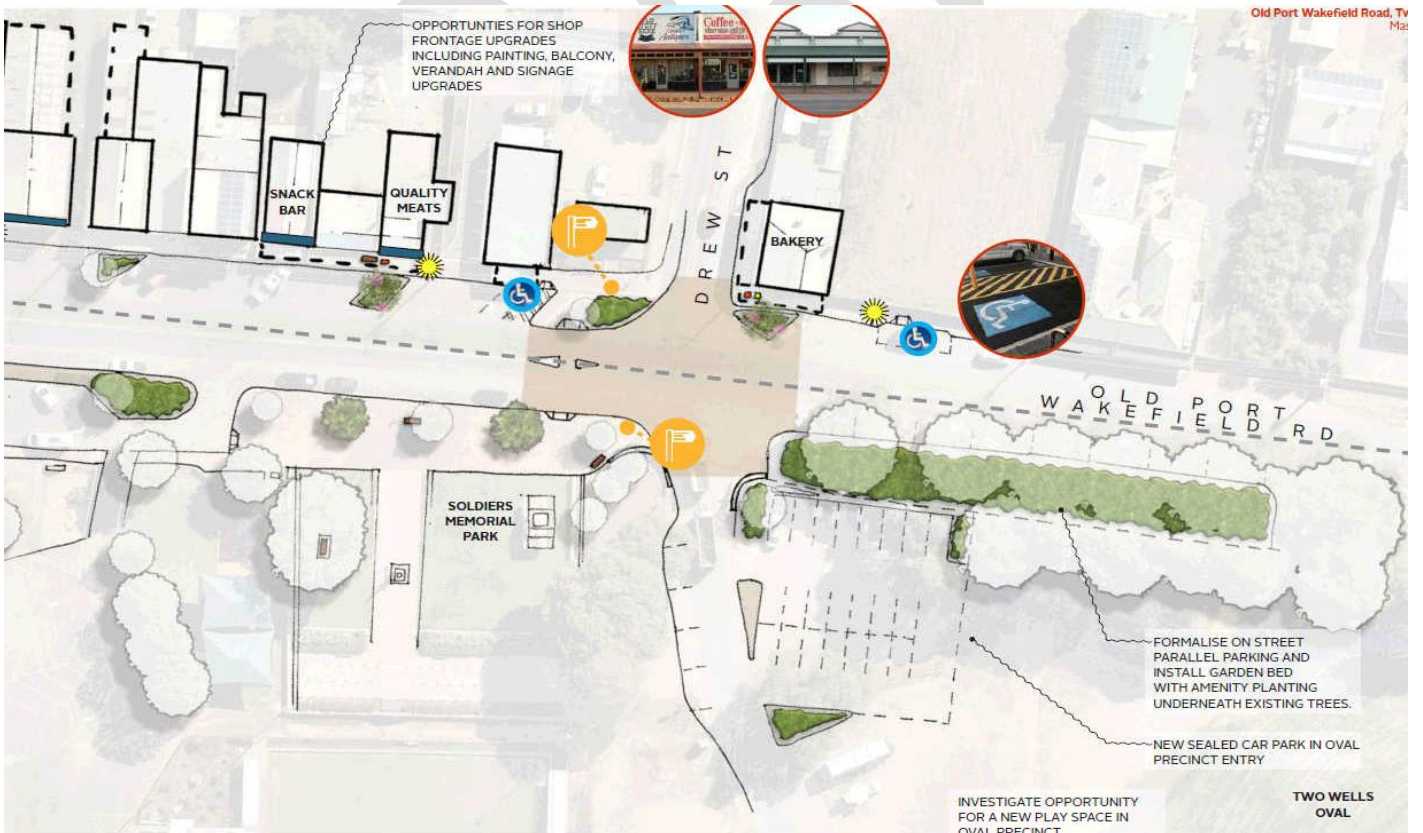


WAYFINDING SIGNAGE	ARTWORK OPPORTUNITIES AND ACTIVATIONS	NEW AND UPGRADED DISABLED CAR PARKING	TWO WELLS RESERVE TRAIL
INFORMATION SIGNAGE	GATEWAY SIGNAGE MARKERS	UNDERGROUND EXISTING POWER LINES	NEW STREET LIGHTING (INDICATIVE LOCATION ONLY)



JENSEN PLUS
 Planning
 Landscape Architecture
 Urban Design
 Social Planning

LEGEND	
	EXISTING TREES
	NEW SMALLER STREET TREES
	NEW AND IMPROVED AMENITY PLANTING
	EXISTING PALM TREES
	NEW LARGER STREET TREES
	RAIN GARDENS
	NEW PATH
	SHOP FRONTAGE UPGRADES
	NEW SEATING
	NEW BIN ENCLOSURES



	WAYFINDING SIGNAGE		ARTWORK OPPORTUNITIES AND ACTIVATIONS		NEW AND UPGRADED DISABLED CAR PARKING COMPLIANT TO AUS STANDARDS		TWO WELLS RESERVE TRAIL
	INFORMATION SIGNAGE		GATEWAY SIGNAGE MARKERS		UNDERGROUND EXISTING POWER LINES		NEW STREET LIGHTING (INDICATIVE LOCATION ONLY)

POPULATION AND WELLBEING CONTEXT

Planned Urban Growth, More Families and Ageing

Two Wells estimated residential population in 2021 was 2828¹¹. Once completed, the land divisions of Eden and Liberty will increase Two Wells population to some 10,000 over the next 20 years.

At 10,000 residents, Two Wells will become South Australia's 12th largest town. There is potential for further urban growth on the Hicks land, noting Council support for investigations for rezoning. This could add a further 2500 or so residents.



Urban growth leads to 10,000 residents, making Two Wells South Australia's 12th largest town

In 2021, Two Wells had higher proportion of children (under 18) and a lower proportion of persons aged 60 or older than Adelaide Plains Council area.

From 2016 to 2021, Two Wells population increased by 705 people (27.8%). This represents an average annual population change of 5.02% per year over the period. The largest changes were in the age groups:

- Young workforce (25 to 34) (+223 people)
- Babies and pre-schoolers (0 to 4) (+80 people)
- Older workers and pre-retirees (50 to 59) (+79 people)
- Tertiary education and independence (18 to 24) (+69 people)

Two Wells is growing in size across all age cohorts, in particular 25 – 34 year olds. This trend is anticipated to continue as more housing is built in the new estates.

¹¹ profile.id.com.au/adelaide-plains

Wellbeing Benefits of Being Active

A survey of 3000 South Australian's identified that people who are physically active more than 150 mins/week have better overall health, better mental health, stronger social connections, greater self-efficacy and require fewer health services. This aligns with the Regional Public Health Plan.





ACTIVE LIVES SURVEY

Why investment in physical activity pays dividends

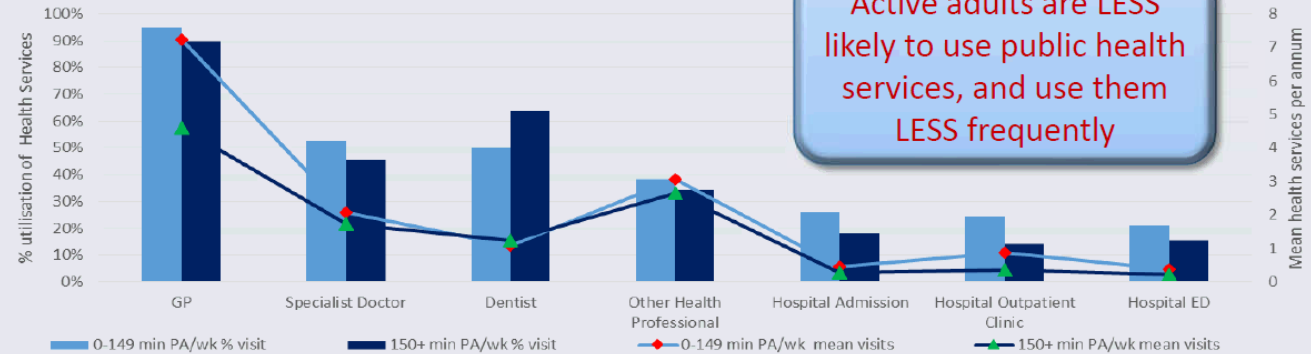
Professor Simon Eckermann
 ahsri
 UNIVERSITY OF WOLLONGONG AUSTRALIA
 & Professor Andrew Willan
 commissioned to analyse health service utilisation data

THE TASK

Conduct a robust academic analysis using 3 methodologies to calculate the value of health services consumed in 2019 by South Australian adults who were active for 150 minutes per week (or more), compared to South Australian adults who were less active.

Paper available: https://www.orsr.sa.gov.au/about_us/publications

HEALTH SERVICE UTILISATION

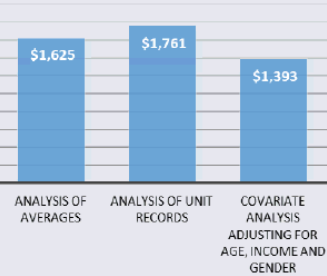


Active adults are LESS likely to use public health services, and use them LESS frequently

2019 GOVERNMENT HEALTH COSTS (based on average analysis)

150+ min/wk		\$2,588 per person per year
0-149 min/wk		\$4,211 per person per year

SAVINGS PER ADULT P.A. (3 levels of analysis)



POLICY OPPORTUNITIES (based on covariate adjusted analysis)

\$804mil* savings per annum (\$1,016m - \$647m)	\$95.4mil* savings per annum (\$121m - \$77m)	\$41mil* savings per annum (\$51m - \$32m)	FOCUS ON YOUTH lifetime savings
All South Australian adults active for 150+ min/week	Increase proportion of active adults by 5% points (from 58% to 63%)	Increase proportion of active adults by 5% (from 58% to 60%)	Shifting from inactive to active: One 18y.o. 5% of one cohort of 18 y.o.'s 5% of one generation of 18 y.o.'s
			\$86.4k \$91m \$917m

* Savings calculations based on reduced health care service utilisation correlated with increased activity levels in the Active Lives survey.

IMPORTANT DISCLAIMER:

The social benefits (overleaf) and other economic benefits derived from productivity, social capital and/or community uplift have not been factored into the above analysis. These benefits would be in addition to the health system savings.

Walking Research of RAA Members

A 2021 survey¹² of members of the Royal Automobile Association found:

- Among those living in regional SA, lack of footpaths alongside roads and lack of footpath amenities are bigger concerns than personal security, whereas the opposite holds in Adelaide.
- Greater Adelaide residents are more likely to walk to commute or as part of public transport trips, with those in regional SA finding it more difficult to walk to public transport services, local shops and public green open spaces.
- The most common purpose for walking is recreation/exercise, followed by travel to shops, as part of a driving trip and going out for food, drink or entertainment.
- Two thirds are comfortable walking at least 1km from where they live to get to places and nearly half are comfortable walking at least 2km, but a quarter are not comfortable walking 1km.
- 6 in 10 try to walk a lot, with 4 in 10 indicating they try to walk as much as possible. 13% try to avoid walking (1 or 2 out of 5). Three quarters of members would like to walk more and a third would like to walk a lot more.
- 86% identified an environmental barrier to them walking more, the top two being unsuitable weather and distance of journeys.
- Members on average named 3 benefits of walking: a third mentioned general health or fitness/stamina; a quarter improved mental health; and between 1 in 10 and 2 in 10 fresh air, relaxation, socialising, physical health, seeing more of local environment/neighbourhood, exercise and cardio/blood pressure.

Main Streets

Research¹³ by the National Heart Foundation shows that:

- It is difficult to estimate the value of non-drive-in spend for main streets. However, it is always bigger than thought.
- A high proportion of all retail expenditure comes from local residents and workers.
- Complete Streets have led to more retail sales, more people shopping locally, revitalisation of areas, new businesses and higher land value.
- Space allocated to bicycle parking can produce much higher levels of retail spend than the same space devoted to car parking.
- Car parking is of less significance to local retail activity than is often thought. Space for people on foot is a more significant attribute.
- In some cases, patrons arriving by foot and bicycle visit Main Streets the most often and spend the most money per month.
- Many car-borne shoppers are “drive-through” shoppers, stopping to pick up one item on the way to their eventual destination, rather than people for whom shopping is their main

¹² Walking (June 2021) raa.com.au/about-raa/advocacy/member-panel

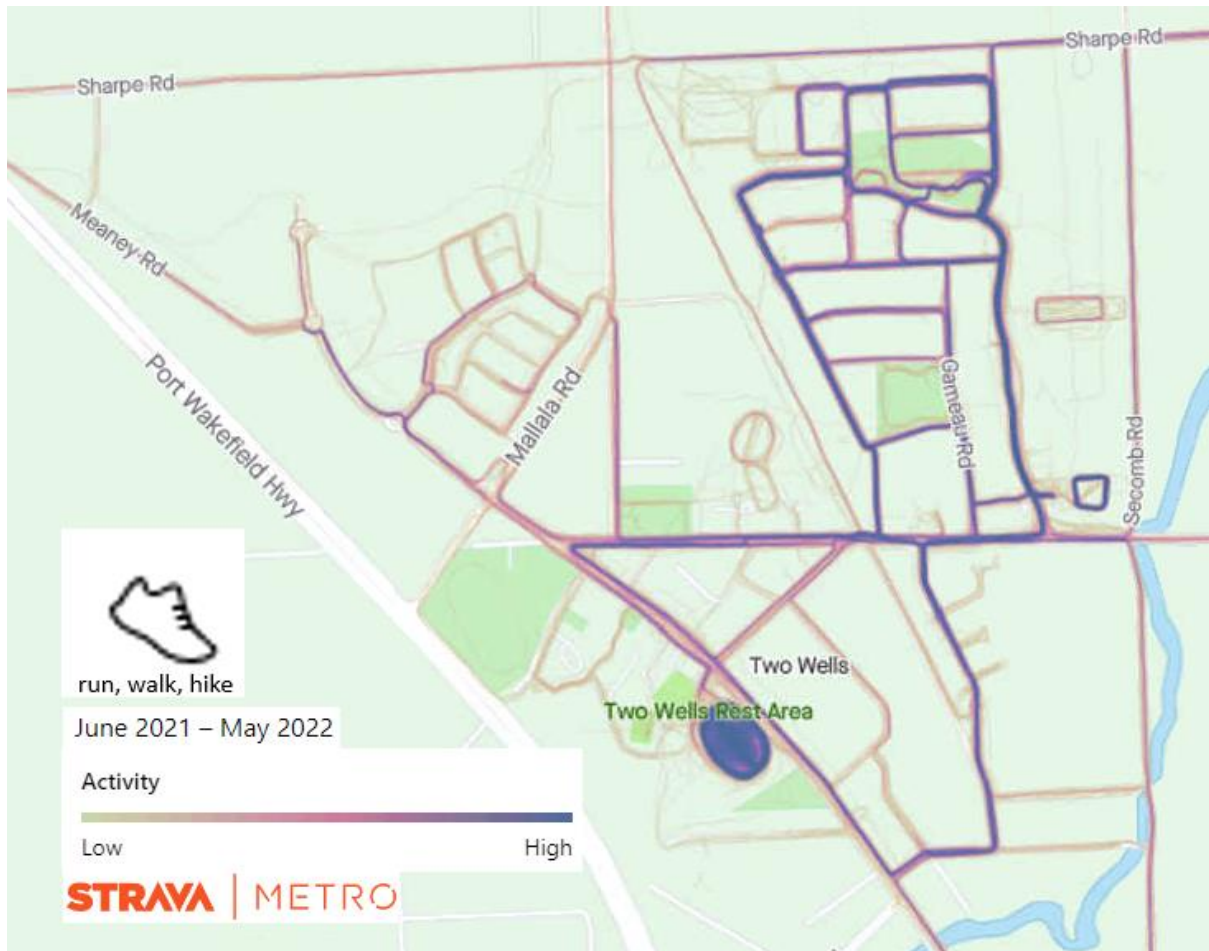
¹³ heartfoundation.org.au/getmedia/1b5746a4-298f-4ae8-9a9f-d46eb4f0e5ca/Good-for-business.pdf

purpose for visiting the area. This has a negative impact on a busy retail street, which is likely to be disproportionate to the extra business that it generates.

- Retail vitality would be best served by traffic restraint, public transport improvements, and a range of measures to improve the walking and cycling environment.

DRAFT

Strava Run Walk Cycle



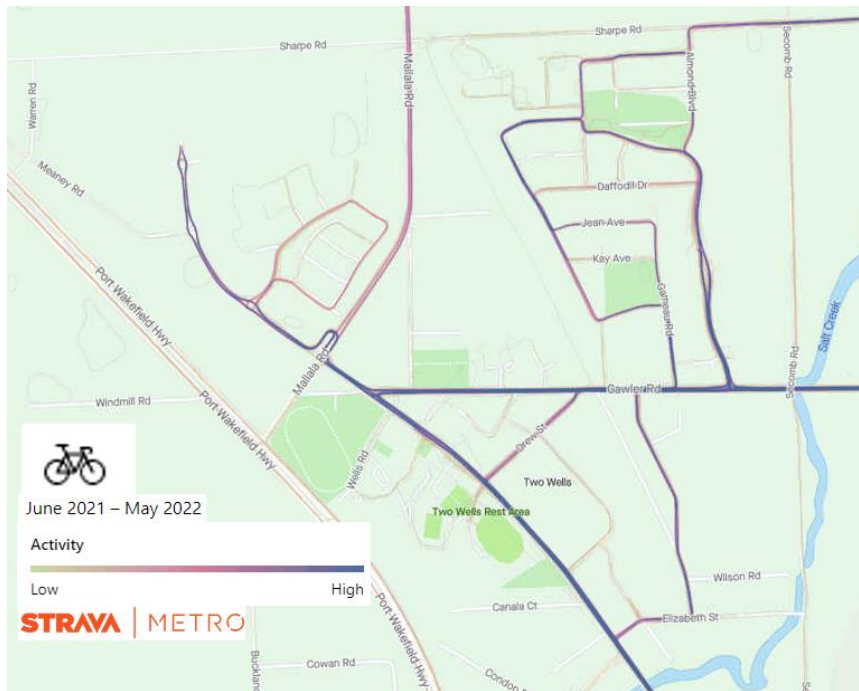
Walking and running strava data in Two Wells mid 2021 to mid 2022

Walking activity is concentrated in Eden, Longview, along Gawler Road, and Main Street/Old Port Wakefield Road. Monitoring walking as Liberty grows is anticipated to show similar levels of activity.

The Strava internet service is for tracking physical exercise and incorporates social network features. It is mostly used for cycling and running using GPS data. Strava records data for a user's activities which can then be shared with the user's followers or shared publicly. Strava Metro¹⁴, a program marketed towards city planners, uses data from Strava users in supported cities and regions.

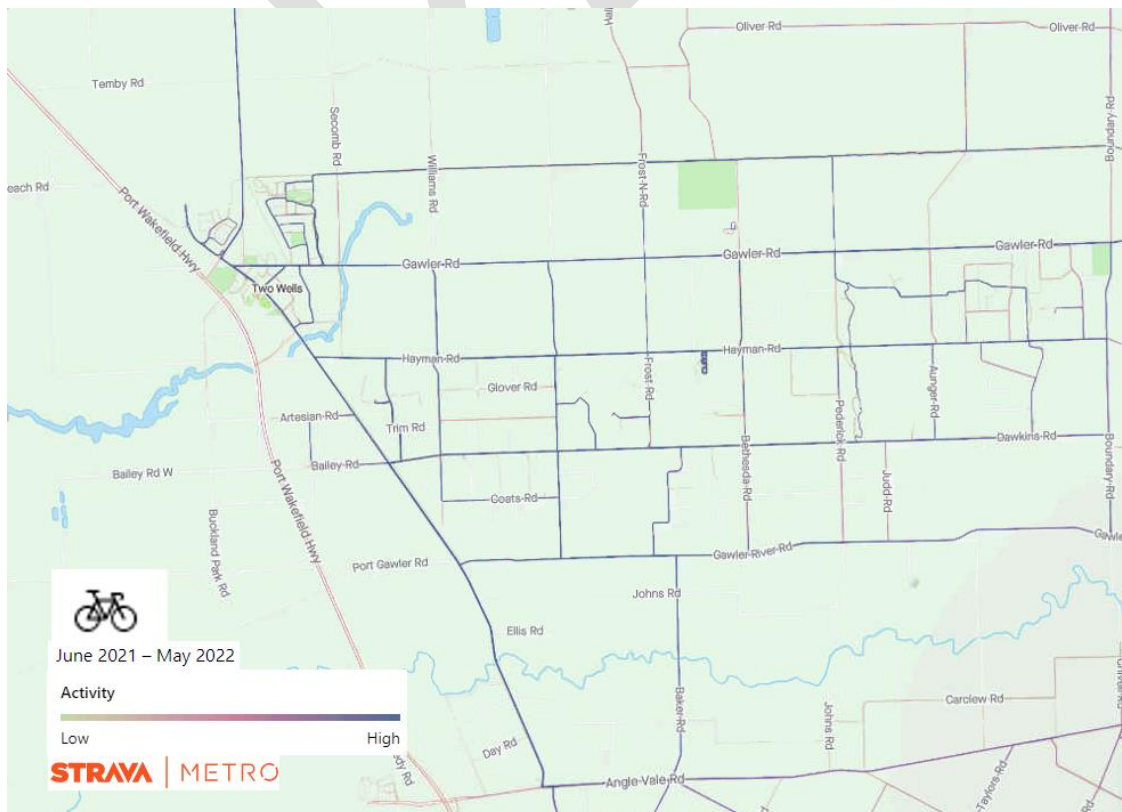
¹⁴ Strava maps are from Council's Strava Metro account and based on Strava guidelines

Strava Cycle



Cycling strava data in Two Wells mid 2021 to mid 2022

Cycling activity is concentrated on the longer roads such as in Eden, Longview, along Gawler Road, and Main Street/Old Port Wakefield Road. Monitoring cycling as Liberty grows is anticipated to show similar levels of activity. The network of roads through rural living areas of Two Wells and Lewiston are all used for cycling.



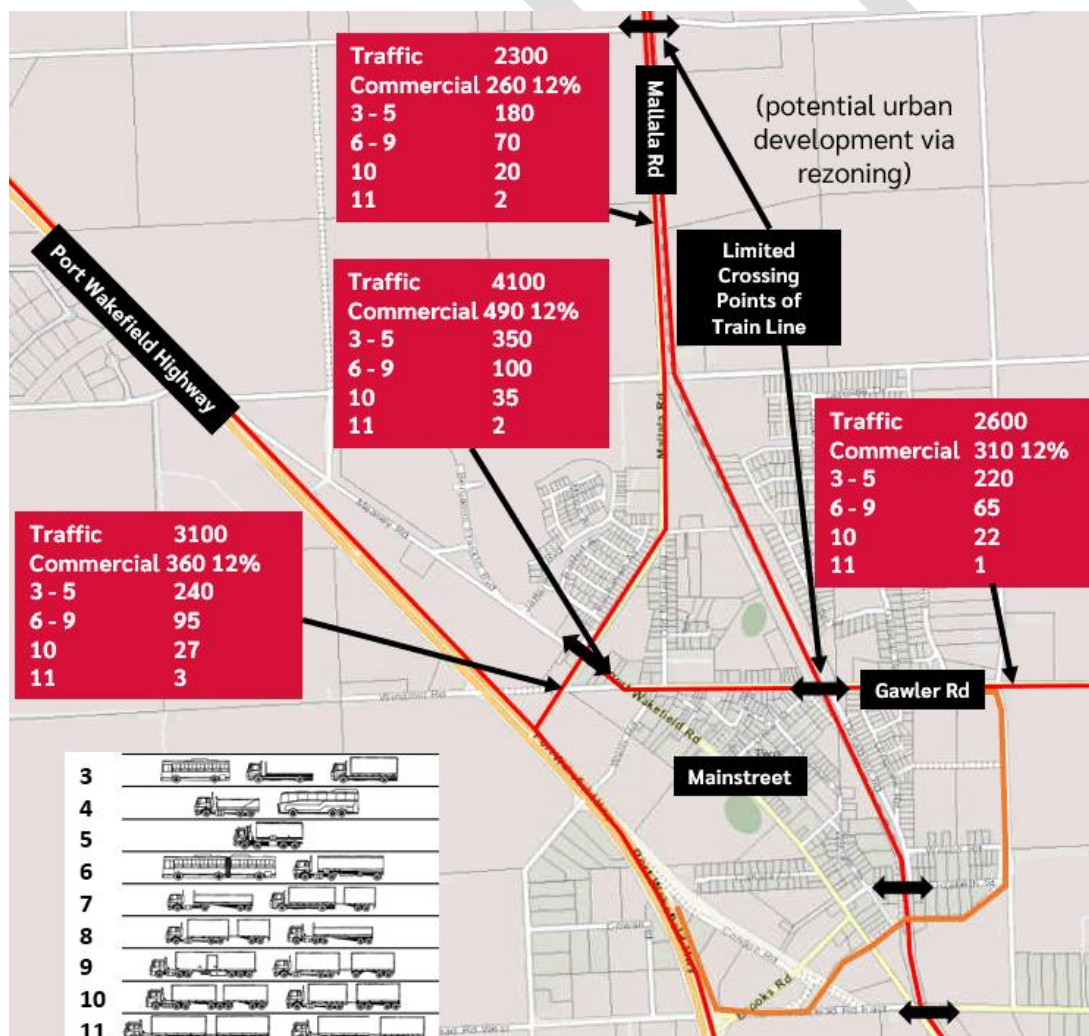
PHYSICAL CONTEXT

Key Physical Challenges

Two Wells is bisected by Gawler and Mallala Roads and by the train line. Port Wakefield Highway separates the township from rural living and agricultural areas to the west.

Gawler and Mallala Roads carry 3 – 4000 vehicles per day, with around 12% commercial¹⁵. Whilst not large numbers, the proportion of commercial traffic and its slow moving nature contributes to less safety and amenity for pedestrian or cyclist movement along or across these roads.

The train line has four dedicated crossing points able to be used by pedestrians, cyclists and traffic. The facilities for pedestrians and cyclists to cross the line at each point are basic. There is no dedicated crossing point for any mode between Gawler and Temby Roads, a distance of 2.4 kilometres, noting residential growth planned at Liberty west of the train line/Mallala Road and the Eden estate, potential rezoning to the east.



The train line and Gawler/Mallala Roads are key physical barriers to walking and cycling

¹⁵ Based on traffic volume estimates location.sa.gov.au/viewer/ May 2021

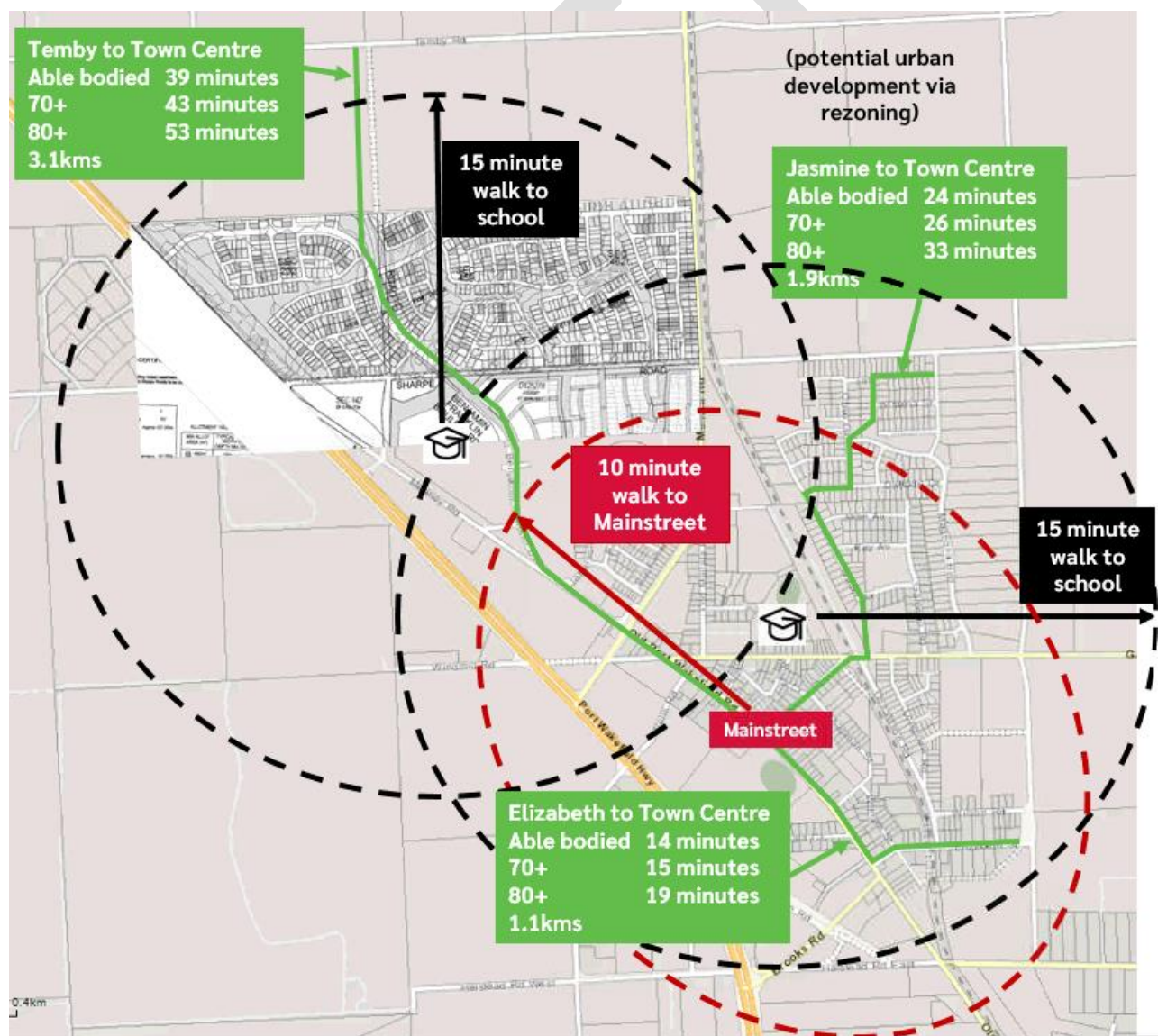
Mixed Accessibility impacted by Distance and Ageing

The average adult walks about 4.8 kilometres/hour¹⁶. When over the age of 70, the average walking is 4.3 kilometres/hour, and this reduces to 3.5 kilometres/hour when over 80.

Two Wells Primary School is walkable for the original township, but less walkable from north of Mallala Road. Xavier College is walkable for the north part of Two Wells. Many students come from further away via other modes.

Two Wells Main street is readily walkable for the southern part of Two Wells, noting traffic and train line barriers.

Accessibility reduces for older people, in particular towards the outskirts of the planned urban areas. This includes the northern part of Liberty as well as the potential urban development on the Hicks land subject to that being rezoned.

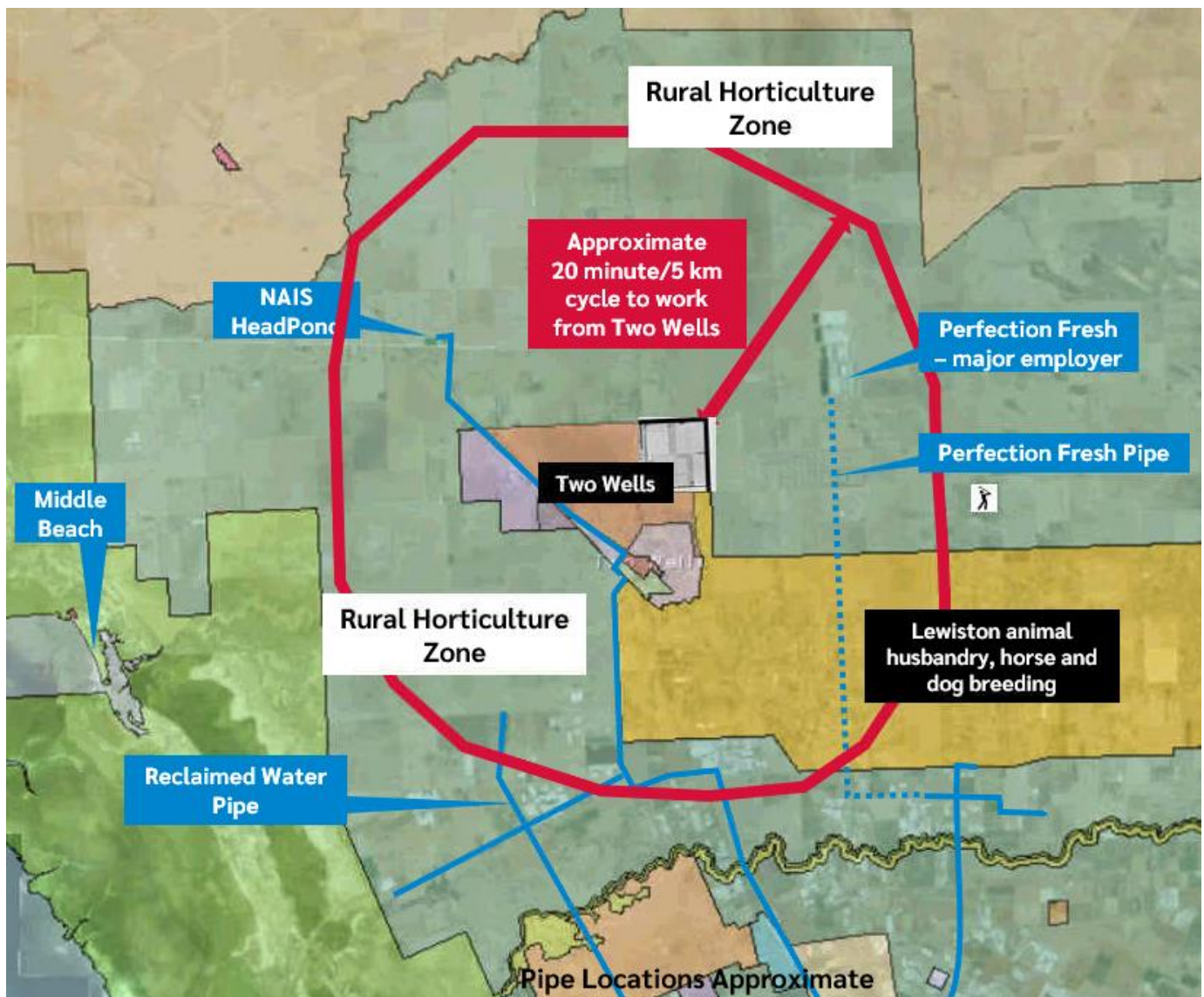


¹⁶ [healthline.com/health/exercise-fitness/average-walking-speed#average-speed-by-age](https://www.healthline.com/health/exercise-fitness/average-walking-speed#average-speed-by-age)

Nearby Agribusiness and Living Future

Two Wells is envisaged as being surrounded by agribusiness, horticulture, and animal husbandry and rural living in Lewiston. As Two Wells grows to 10,000, employment within 5 – 10 kilometres of the town – as well as recreation such as at Middle Beach and Two Wells Golf Club, is accessible via a variety of movement modes. This includes:

- Bicycles
- E-bikes enabling greater distances in less time



Agribusiness employment as Two Wells grows towards 10,000. Providing options to access this employment as well as recreation via bike or ebikes with their greater distance provides options for residents. As an example, Perfection Fresh employees over 500 people and is within a 15 – 20 minute cycle of Two Wells.

SUPPORTIVE AND LESS SUPPORTIVE FACTORS

Based on observations and discussions, the following supportive and *less supportive* factors exist:

Overall Town

- Accessibility to open spaces
- Subject to suitable infrastructure, reasonable walkability to two schools.
- Less walkability to town centre from outer part of planned urban growth due to distance and ageing
- Planned and contemporary infrastructure in estates. Variable level of infrastructure in original township
- Opportunity ahead of change arising from growth to create a network and foster a culture of walking and cycling
- Low culture of walking and cycling

Ease of Walking and Cycling and Safety

- Terrain is flat or with gentle slopes
- Comfortable weather most of the year
- Some street trees
- Remoteness to walking and cycling destinations outside of Two Wells¹⁷
- Limited way finding around the township
- Limited street lighting
- Distances and time to walk and cycle
- Impact of main road traffic noise and train noise on amenity nearby

Footpaths

- Generally consistent footpath materials
 - Many footpaths are narrow (less than 1.2m)
 - Some areas with no footpaths
 - Some kerb ramps are non-compliant
 - Obstructions in narrow footpaths (i.e. stobie poles)
- Some wide commercial driveways result in a long pedestrian crossing distance
- Limited street trees entail less trip hazards *but also less shade*

Cycling

- Bike racks at Xavier
- Emergence of e-bikes enabling greater distances in same time
- No on road cycle lanes in the main street
- Limited end of trip facilities, such as bike racks

¹⁷ Discussions with DIT and also a conclusion in *A GIS-based Walkability Analysis for the Greater Adelaide Metropolitan Area: An Evaluation of the AURIN Walkability Index*, Arsham Bassiri Abyaneh, Andrew Allan, Johannes Pieters, Sekhar Somenahalli, Ali Soltani UniSA Creative, University of South Australia 2021

Traffic/Major Roads

- Low traffic volumes on residential streets
 - Less safety created by traffic type and speed on Gawler and Mallala Roads
 - Pt Wakefield Highway width and traffic speed a distinct barrier
- Many busy road crossings without safe pedestrian infrastructure
- Traffic progressively increasing as town grows, e/g/ Drew Street intersection
- Lack of cyclist space on Gawler Road

Train Line

- Three train line crossing points for traffic, cyclists and pedestrians, *with quality of crossing infrastructure mixed*
- Inability to cross train line north of Gawler Road

FUNDING OPPORTUNITIES

Improving the network will require ongoing and greater levels of investment than has previously been allocated. Implementation relies on internal and external funding.

Timing will be dependent on Council processes and the receipt of grant funding from state and federal sources. Grant applications require a considerable level of planning and business case preparation, which this Plan will assist with.

Below are opportunities Council can pursue, or encourage individuals, community groups and businesses to apply directly in conjunction with this Plan

Co-Funding Options

As recommendations involve collaboration with other authorities, it is important that Council begins communication regarding the proposals and potential co-funding scenarios. Such as DIT, Xavier College, and the developers of various growth areas).

Black Spot Program

The Black Spot Program is part of the Federal and State Government's commitment to reduce crashes on Australian roads. Funds are directed towards significantly reducing crashes by the identification and treatment of locations and sections of road that have an unsatisfactory crash record or that have a significant crash potential.

Funds from the State Black Spot Program are available to councils as subsidy funding for cycling safety projects. Applications can be submitted late in the year for the following financial year. Subsidy funding is two-thirds of the total cost with council required to provide the remaining third.

As an example, notorious locations may be eligible for Black Spot funding for construction of:

- on-road bicycle lanes
- off-road shared use paths
- median refuges or road crossings.

State Bicycle Fund

The State Bicycle Fund is an annual subsidy scheme on a dollar for-dollar basis to councils to progress cycling initiatives. The Fund has fostered a longstanding partnership between the State Government and councils to respond to federal, state and local government strategies that encourage cycling. Suitable projects for funding include:

- development or review of Local Area Bicycle Plans
- construction of on-road bicycle lanes and or off-road cycling or shared use paths
- installation of bicycle parking
- construction or modification of median refuges or road crossings
- the promotion of cycling and cycling facilities.

Subsidy funding is up to 50% of the total project cost with council required to provide the remaining amount.

Developer Contributions

Developments undertaken are a key opportunity to achieve walking and cycling infrastructure.

Power Line Environment Committee (PLEC)

PLEC assists councils enhance streetscapes by undergrounding power lines. Undergrounding enables large trees and assists streetscaping thereby improving the appearance of a locality. Priority is generally given to retail precincts and projects of community benefit.

Office for Recreation and Sport

Funding opportunities are available to local governments, organisations and individuals to provide high quality active recreation and sport facilities, programs, and activities.

ors.sa.gov.au/funding/apply_for_funding

Open Spaces & Places for People Fund

The Open Spaces & Places for People Fund is a State Government program available to councils to strategically acquire, plan, design and develop quality regional open space and public places of community significance.

Preference is given to projects located within the Metropolitan Open Space System (MOSS). MOSS includes the Gawler River. Projects must be on land with free public access and assists councils and their communities to:

- add to their area's vitality;
- enhance public places in terms of use ability, safety and visual appeal;
- develop a 'sense of place' and identity that reflects local culture, heritage and character;
- improve the efficiency and economic performance of urban and rural centres and other strategic places; and
- improve the relationship between public and private areas.

The program also aims to foster the development of an urban design culture within Councils, ensuring a commitment to strategic collaborative practices and high quality, sustainable outcomes. Funding for cycling and walking facilities can be provided under both open space and places for people components. Specifically, the grants accept within their objectives to provide safe walking and cycling links between communities and land uses, as well as improving the environment for pedestrians and cyclists where appropriate.

Community Grants

Although not aimed towards Councils, DIT and the Motor Accident Commission (MAC) offers community grants to groups and organisations to assist in delivering small scale projects that support safer, greener and more active travel choices.

Projects can focus on improving road safety, getting people cycling, walking or catching public transport, replacing car journeys with technology, doing things locally, or using cars in a smarter manner. Council can play a role in encouraging its resident groups, schools, businesses or other active organisations to consider applying for the Community Grants. Details dpti.sa.gov.au/communityprograms/community_grants.

VISION & OBJECTIVES

Our Vision – A Two Wells community with options to walk and cycle for transport, local errands, and for health and wellbeing.

The Objectives are:

Enhanced liveability for residents and business by the wellbeing, economic and environmental benefits of walking and cycling

A network:

- **Of safe and convenient** walking and cycling facilities
- **For all ages** and abilities of pedestrians and cyclists
- That connects to future public transport nodes

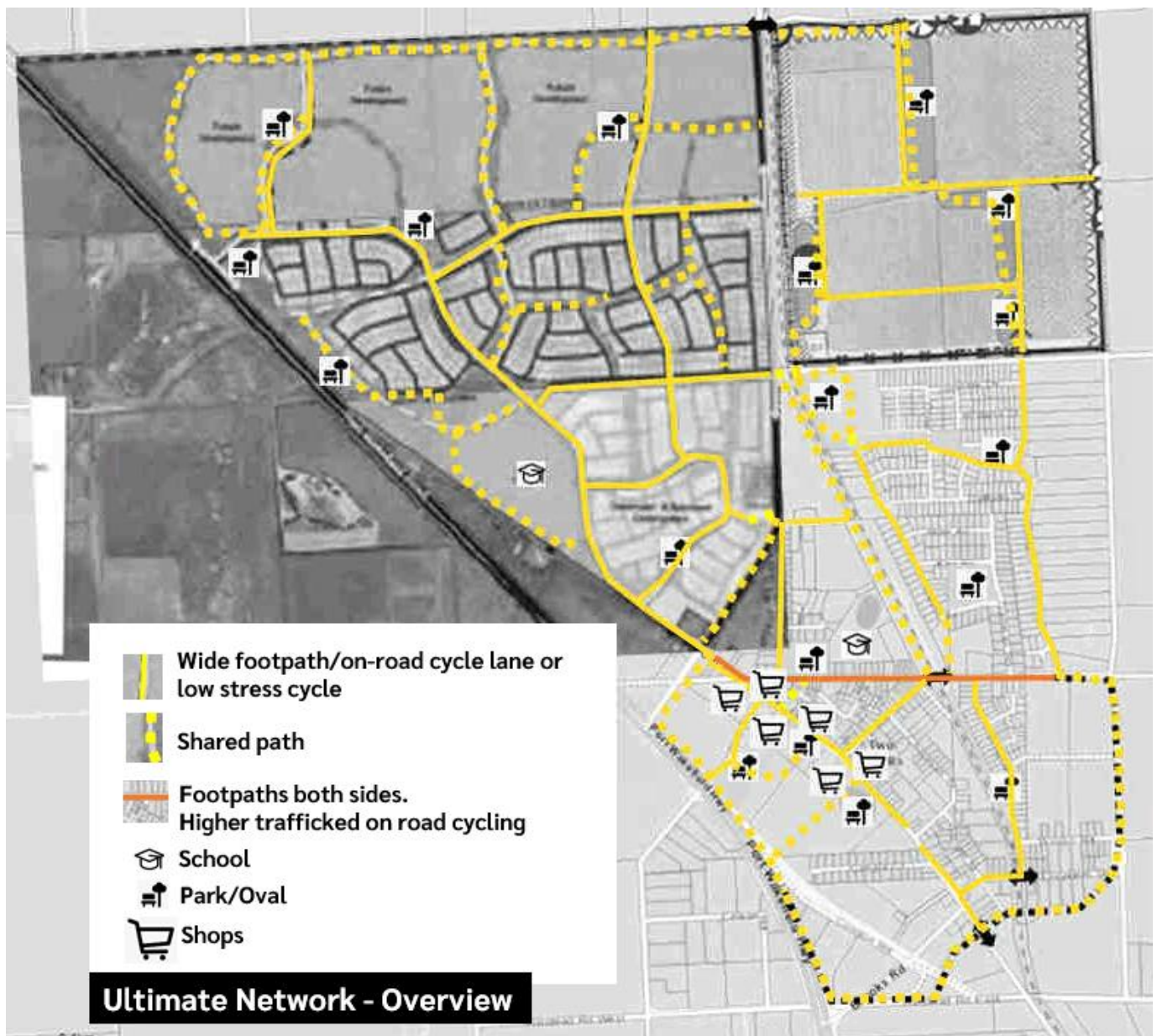
A supportive community and council culture of living actively through walking, cycling and recreating.

Underlying principles –

Physical safety - Essential to encourage use through lessening conflict with car traffic and movement at night, such as through lighting

A network that connects places people seek to go to, be it schools, parks, and shops

ULTIMATE WALKING AND CYCLING NETWORK



The Ultimate Walking and Cycling Network map shows the overall network to be worked towards.

The grey base map comprises original town centre and Eden Estate (sourced SAPPA mid 2021), the concept layout for Tranche 1 and 2 of Liberty (Sourced from Tranche 2 development application), and the concept layout for Hicks land (sourced from the Hicks submission to the 2021 Environment and Food Production Area review). Detailed network planning in master planned developments, such as Liberty, will be finalised as part of the development application process'

EXPERIENCES AND DESTINATIONS



5 Two Wells Centre 5km out & back

6 History Walk 6km loop

3 Freedom Gameau 3.6km out & back

8 Town Circuit 8km loop

6 Wildflower Walk 6km out & back

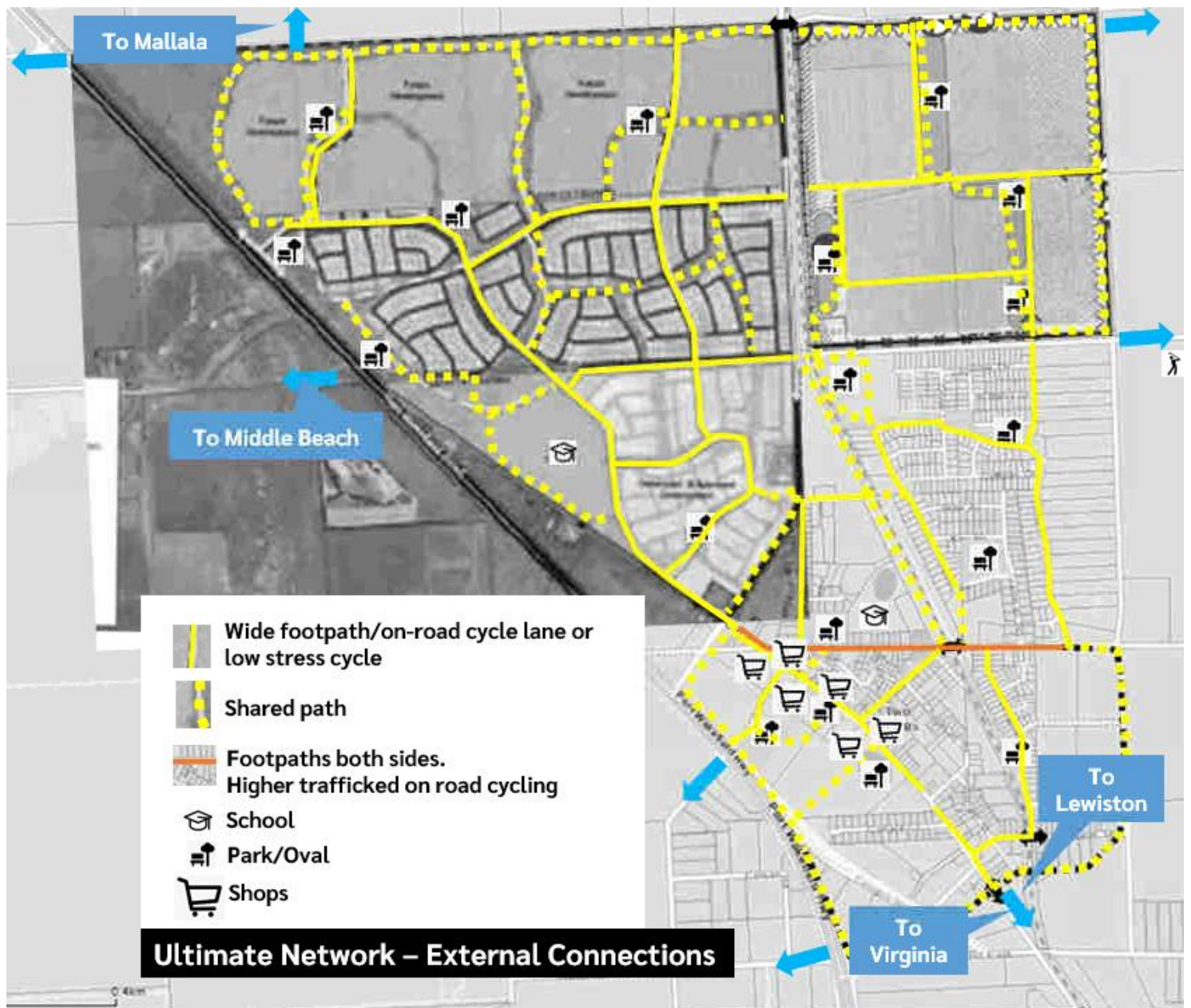
13 Rural View 13km loop

The Experiences and Destinations Map shows a variety of paths and loops.

The Two Wells Centre 5km out and back is the distance used for Park Run¹⁸. The role of a network is to enable individuals' options for being active. The benefit of identifying and naming 'experiences' provides purpose for being active.

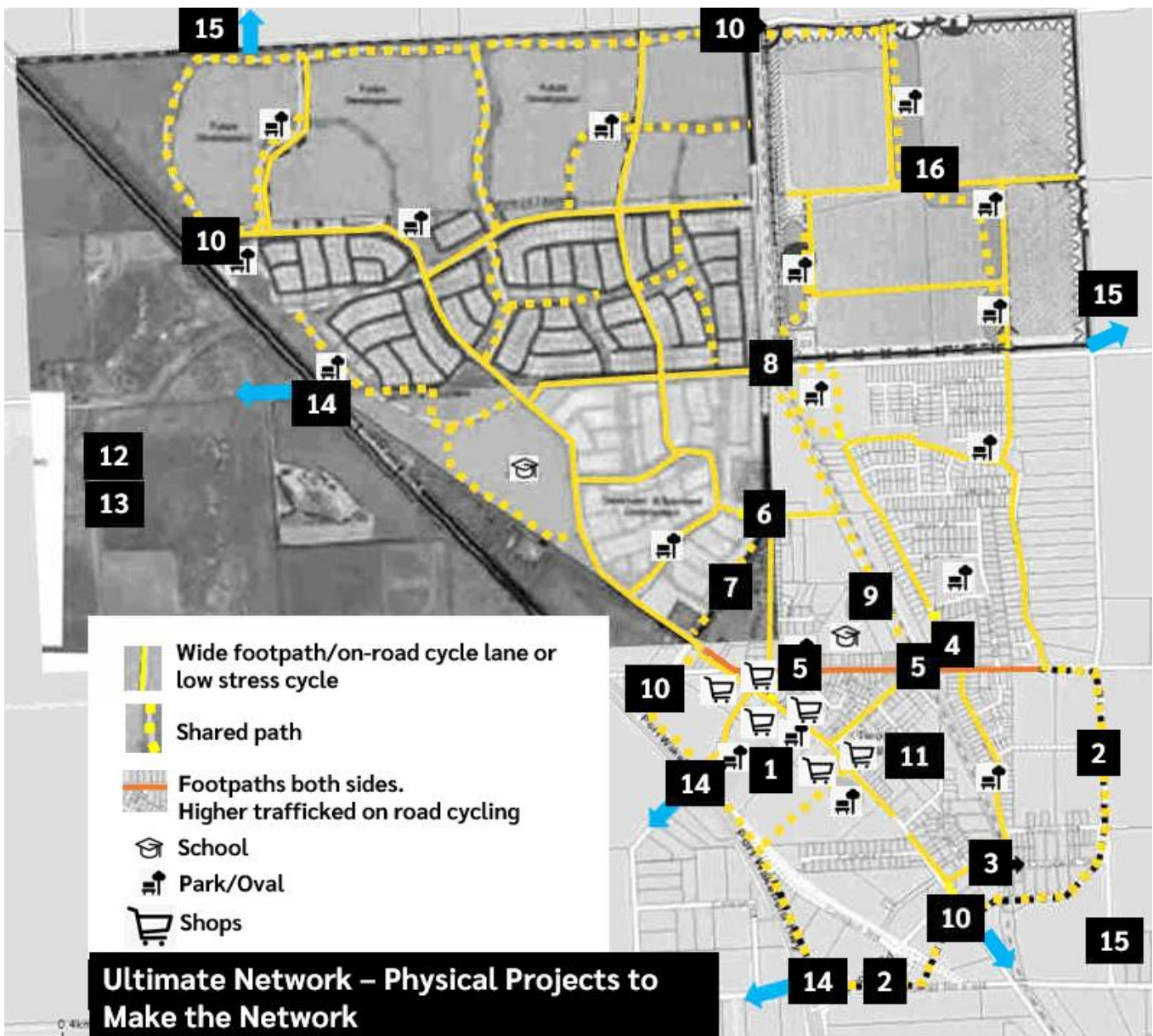
¹⁸ parkrun.com.au/

CONNECT TWO WELLS TO OUR NEIGHBOURS



The Connect Two Wells to Our Neighbours recognises the people and businesses live and work around the township. Consequently, walking and cycling connections externally are important.

PHYSICAL PROJECTS TO MAKE THE NETWORK



- | | |
|--|--|
| 1. Walking/Cycling accessibility with Mainstreet & Recreation Precinct Growth | 10. Physical Town Entries |
| 2. Walking and the new Flood Levy | 11. Light Gaps in the Original Township |
| 3. Install Maze way rail crossings at Elizabeth Street | 12. Communicate through Naming & Wayfinding |
| 4. Better connect Gameau estate | 13. Greening & facilities, e.g. seats, art & bike racks |
| 5. Improve walking/cycling along Gawler Road | 14. Maintain Ability to Informally cross Port Wakefield Highway |
| 6. Cobden/Stockyard Crossing | 15. Join Two Wells Network to Nearby Work & Places |
| 7. Mallala Northern Path | 16. Integrate Hicks future development including preferred train crossing points |
| 8. Grade Separated Walking/Cycling Crossing at Sharpe/Mallala/Train Line | |
| 9. Explore Future for former Train Station including shared paths north of Gawler Road | |

These are the projects needed to be worked towards to create the envisaged network, and to enable its use by the anticipated 10,000 residents in Two Wells.

PEOPLE PROJECTS TO ACTIVATE THE NETWORK

In addition to the physical projects, there are a number of people focussed actions that Council can do to encourage and increase walking and cycling.

Partnering

Partnering draws on the interest of others, such as Walking SA, Bike Adelaide, Heart Foundation, local schools, and Office of Recreation, Sport and Racing, and DIT. This also includes walking, cycling and recreating groups. Partnering opens opportunities.

Promoting

Promotion encourages people to walk or cycle. Promotion can take many different approaches, from advertising that reaches a wide audience, to programs delivered to a target market such as a specific demographic, location or business.

Promotion can be quite cost-effective at changing behaviour, especially when the built environment is walking and cycling friendly.

Promotion that focuses on achieving specific behaviours such as walking or cycling to school or the main street can be an effective way of leveraging major investments in infrastructure.

Activating

Activating can be via wayfinding signage, as well as naming and branding walks. Activating can be via events, local or major, such as Tour Down Under.

The below are possible walks and names. More work is needed to properly establish walks and names.

5 Two Wells Centre 5km out & back

10 Xavier Gameau 10km out & back

5 Wildflower Walk 5km out & back

6 History Walk 6km loop

8 Town Circuit 8km loop

13 Rural View 13km loop

Warnings, Reminders and Enforcement

Cyclists have the same rights and responsibilities as any other road user. However, as private cars are the predominant type of vehicles on the road and are of larger size and can travel at higher speeds, cyclist vulnerability is increased. Evidence shows that driver behaviour is a key concern for cyclists and forms a barrier to encouraging new cyclists.

Related to this is the behaviour of pedestrians and cyclists in a mixed environment, specifically shared use paths.

Conflicts between pedestrians and cyclists do occur and it is the responsibility of all path users to be courteous and exercise caution. Council and/or SAPOL can assist with cyclist and pedestrian safety by warning, reminding and/or enforcing the law to motorists, cyclists or pedestrians as required. This may include an activity that flouts the law, the Australian Road Rules, and/or may potentially cause a safety hazard to themselves or others.

Some examples are:

- motorists who park a vehicle illegally in a bicycle lane
- motorists who do not allow 1 metre between their car and a cyclist when overtaking
- cyclists who; do not wear a helmet, undertake an illegal movement, or run a red light
- cyclists who ride too fast on a footpath and endanger pedestrians.

Guidelines for using shared paths have been established by the Bicycle Network (Victoria). The main points of etiquette to observe on shared paths include:

- Be considerate of other path users
- Keep left unless overtaking (overtake on the right)
- Ride at an appropriate speed - keep it at running pace or below (about 20-25km/h maximum);
- Wheeled traffic gives way to foot traffic
- Ring your bell gently, call 'Passing' and slow down when passing others; and Reminder signs and pavement stickers for all road users are useful.

ABOUT THE PHYSICAL PROJECTS

The following tables outline the potential physical projects.

The number of each is the same number shown on the Ultimate Network Plan.

Timeframe is intended to identify the relative order of projects in terms of the need of the town and with respect to other projects. For example, short term means within 3 – 5 years but this will depend on available budget. At the same time, other opportunities may arise to achieve the outcome in a different way.

Cost is intended to identify the relative cost of projects.

- \$ means smaller cost (Under \$100k)
- \$\$ means a medium cost (\$100k to \$500k)
- \$\$\$ means significant cost (\$500k and above)

Actual costs are subject to more detailed investigations and annual business planning.

This plan is intended to be updated every 4 – 5 years.

1 Walking/Cycling accessibility with Mainstreet & Recreation Precinct Growth

Timeframe – Short to Medium	\$\$ (Medium Cost)	Key Stakeholders DIT Crown Land Town Centre Advisory Group Oval Clubs Key land owners
-----------------------------	-----------------------	--

Intended Outcome – Improve the convenience and comfort for pedestrians and cyclists as growth changes and expands the main street and recreation precincts. The intent is to establish a coordinated pathway network.

Observations – Two Wells Main Street and Recreation precincts will be impacted and change as the residential population of Two Wells grows. This includes underused Crown Land presenting opportunities for further commercial, community or retail activities. These are principally to be developed between Old Port Wakefield Road and Port Wakefield Highway.

The Map ‘Walking and Cycling Proposals for the Main Street and Recreation Precincts’ shows the proposals in the *Old Port Wakefield Road, Two Wells Master Plan May 2020*¹⁹. This Master Plan builds on a 2014 traffic impact study by Infraplan and 2011 Mainstreet guidelines²⁰.

Key proposals in the master plan envisage:

- Establishing a footpath from Mallala Road roundabout to Hart Reserve
- Reimagining the intersection of Old Port Wakefield Road with Gawler Road
- Reimagining the intersection of Old Port Wakefield Road with Drew Street, including the trees area adjacent the Oval entrance
- Upgrading the village heart
- Bike parks and other supportive facilities.

In addition, the Map shows the following

- **Establish a pathway network encompassing the retail/town centre uses, recreation uses and mainstreet.** The network on the map is not proposed paths, rather, that a network joining these areas needs to be established as these areas undergo change and are developed. Investigation are needed as part of more detailed planning.
- **Establish laneway type connections between Applebee Road and Old Port Wakefield** Benefit is increased movement options and opportunity for increased variety of commercial/living spaces. Detailed investigations are needed.

How – detailed investigations and engagement are needed to identify the needs, proposed uses, timing and appropriate siting including pathways.

¹⁹ apc.sa.gov.au/_data/assets/pdf_file/0033/659760/Public-Consultation-Notice-Two-Wells-Main-Street-Concept-Plans.pdf

²⁰ apc.sa.gov.au/_data/assets/pdf_file/0030/354855/D16-4102-Two-Wells-Urban-Design-Guidelines.pdf



Walking and cycling proposals for the Main Street and Recreation Precincts as they change associated with planned residential growth of Two Wells to some 10,000 by around 2040

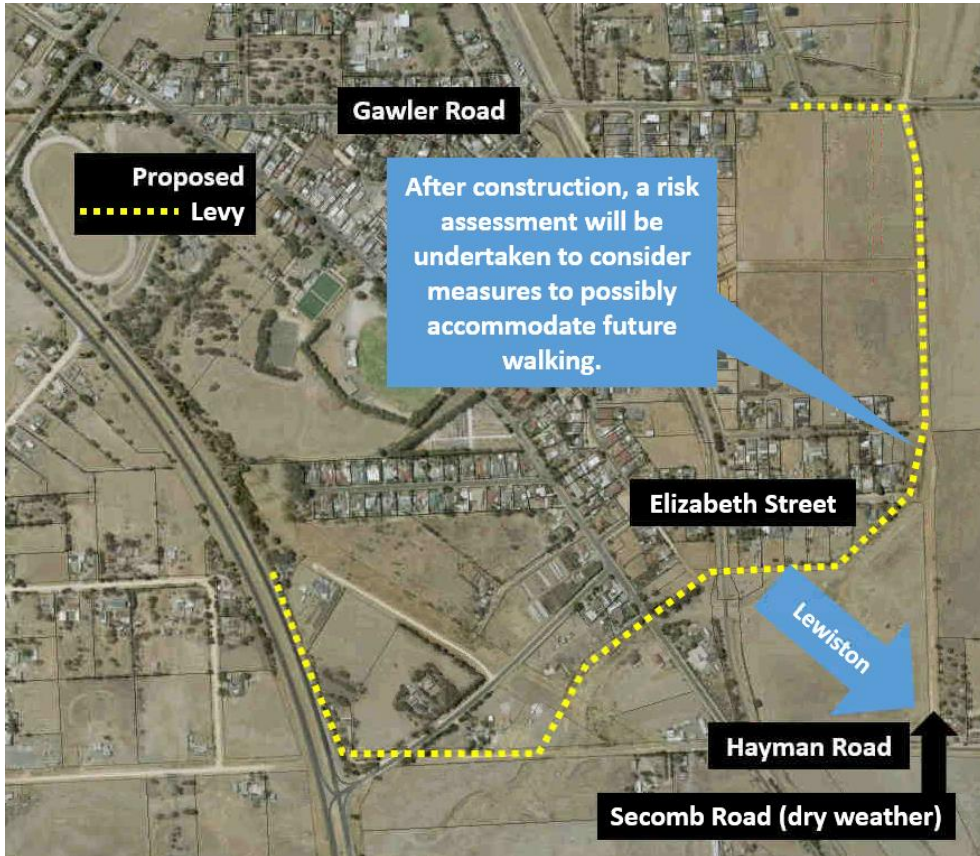


Potential exists in the heart of Two Wells for a 5 kilometre out and back route suitable for recreation such as Park Run²¹, without crossing a main road

²¹ walkingsa.org.au/walk/walk-event/parkrun-x-11-sa-locations/

2 Walking and new Flood Levee

Timeframe - Short	\$ (Levee Funded)	Key Stakeholders Gawler River Flood Management Authority DIT ARTC
Intended Outcome – The intent is that levee enables walking along it in certain parts where possible and future risk assessments allow.		
<p>Observations – Creating a levee to the east and south of the original township has long been intended to reduce flood risk. The levee is sited to follow Salt Creek and provide protection from risk of breakout of the Gawler River. The levee at its highest will be about 1.5 metres in height. The levee is funded. Where the levee intersects Old Port Wakefield Road, detailed design with DIT is needed. Where the levee intersects the railway, detailed design with ARTC is needed.</p> <p>Investigations in latter 2022 identified that the proposed levee design with available funding is at some variance with Austroads Guide to Paths for Walking and Cycling. After construction, a risk assessment will be undertaken to consider measures to possibly accommodate future walking.</p> <p>Investigations conclude levee design not suitable for cycling. ARTC advise walking will not be allowed over the train line.</p> <p>How – detailed design.</p>		



Proposed levee



Looking north to Gawler Road, with the dry weather Secomb Road to the right (east) and an undeveloped part of Longview to the left (west). Levee siting is between fence and tyre tracks 2021

3 Install Maze way rail crossings at Elizabeth Street

Timeframe - Short

\$
(Smaller Cost)

Key Stakeholders

ARTC

Intended Outcome – Formalised pedestrian movement enabled across the train line, creating easier connections from south east Two Wells and the growing Longview to the main street and oval.

Observations – Informal use is enabled on road. Noting the ongoing growth in Longview, creating separated pedestrian movement better enables safety, as well as better movement by all abilities. Lighting and plantings for amenity are important. Technical design will need to meet ARTC standard specifications for maze way.

How – detailed design.



Upgrading Elizabeth Train Crossing an Enabler of Walking and Cycling from housing estates to, for example, the main street and oval



No formalised walking crossing exists at Elizabeth Street 2021

4 Better connect Gameau estate

Timeframe – Short

\$
(Smaller
Cost)

Key Stakeholders

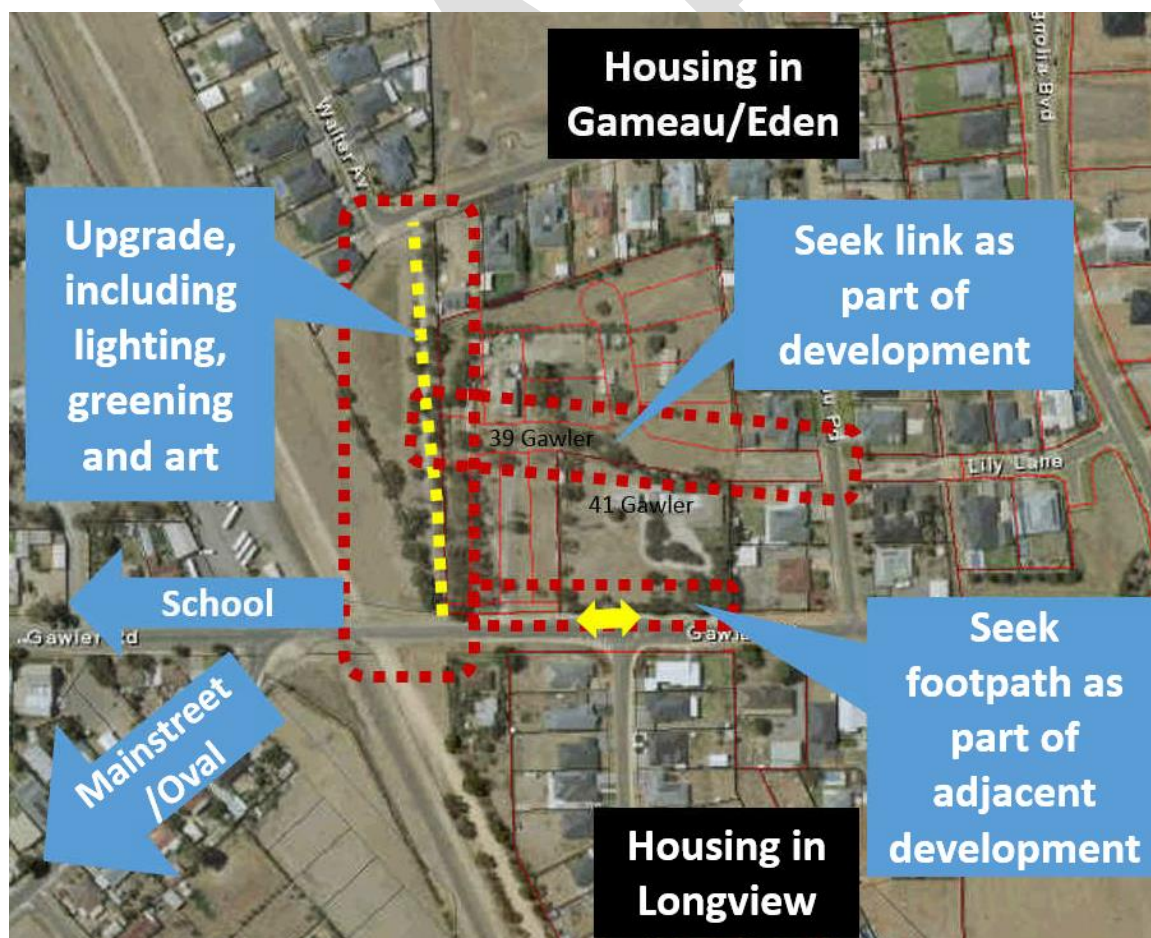
Intended Outcome – Improve sense of safety and amenity for key entry to Gameau and Eden residents.

Observations – The north south walkway is a key access way for residents. It needs improving in particular with lighting. It also presents opportunity for further plantings and art.

There is no northern footpath between the walkway and Gameau Road. Seek footpath as part of future development of 39 and 41 Gawler Road.

Gawler Road is a DIT controlled road and any changes impacting Gawler Road/DIT land need to align with DIT road hierarchy.

How - Install lighting and larger range of low level plants. Consider art. Negotiate with land owners.





*Key pathway from Gawler Road into Gameau and Eden residential areas needs lighting
2021*

DRAFT

5 Improve walking/cycling along Gawler Road

Timeframe – Short - Medium

\$
(Smaller Cost)

Key Stakeholders

DIT

Intended Outcome – Ensure ease of pedestrian and cyclist movement along Gawler Road on both sides and suitable north/south crossing opportunities to gain ready access between housing areas, schools, reserves, and main street.

Observations – Gawler Road is a DIT controlled road and any changes need to align with DIT road hierarchy.

Traffic (12% commercial) is a key barrier impacting walking/cycling along and across Gawler Road. Changes to pedestrian crossings will need to comply with DIT specifications to allow over dimensional vehicles to continue to utilise Gawler Road.

Reasonable numbers of residents live either side, the primary school/children centre/Hart Reserve is on north side, and Main Street/Oval precinct to the south. A better network approach is needed for the length between Eden Estate and Old Port Wakefield Road, to enable orderly movements east west and north south

A maze way over the train line exists on north side of Gawler Road, with a smooth surface at the rails installed in 2022. The northern crossing needs greening, check lighting and possible sign de-cluttering. A maze way needs installing on the southern side, connecting to the footpath to Longview, and westerly to Drew Street, Mainstreet.

Important to foster movement. In particular:

- Hart Reserve to Petticoat Lane/Mainstreet, noting both are important destinations. Hart Reserve a key reserve and to be upgraded
- Gawler/Drew St intersection, noting Drew's direct role to the Mainstreet and proximity to the train line crossing
- East west connecting from northern maze way to Gameau Road

How – detailed investigations



Improving north south and east west connections better connects housing estates with each other, School, Hart Reserve, Main street



Lack of orderly crossing arrangements between Eden/Gameau and Drew Street 2021



Lack of orderly crossing arrangements to the Mainstreet via Petticoat Lane from Hart Reserve and housing to the north 2021. Hart Reserve is to be upgraded including new pathways along Gawler Road and Old Mallala Road



No footpath between train crossing and Gameau Road 2022



Maze way north side Gawler Road with smooth surface 2022



No maze way and footpath Gawler Road southern side means less direct route to the Main Street and Oval from Longview 2022

6 Cobden/Stockyard Crossing

Timeframe – Short

\$
(Smaller
Cost)

Key Stakeholders

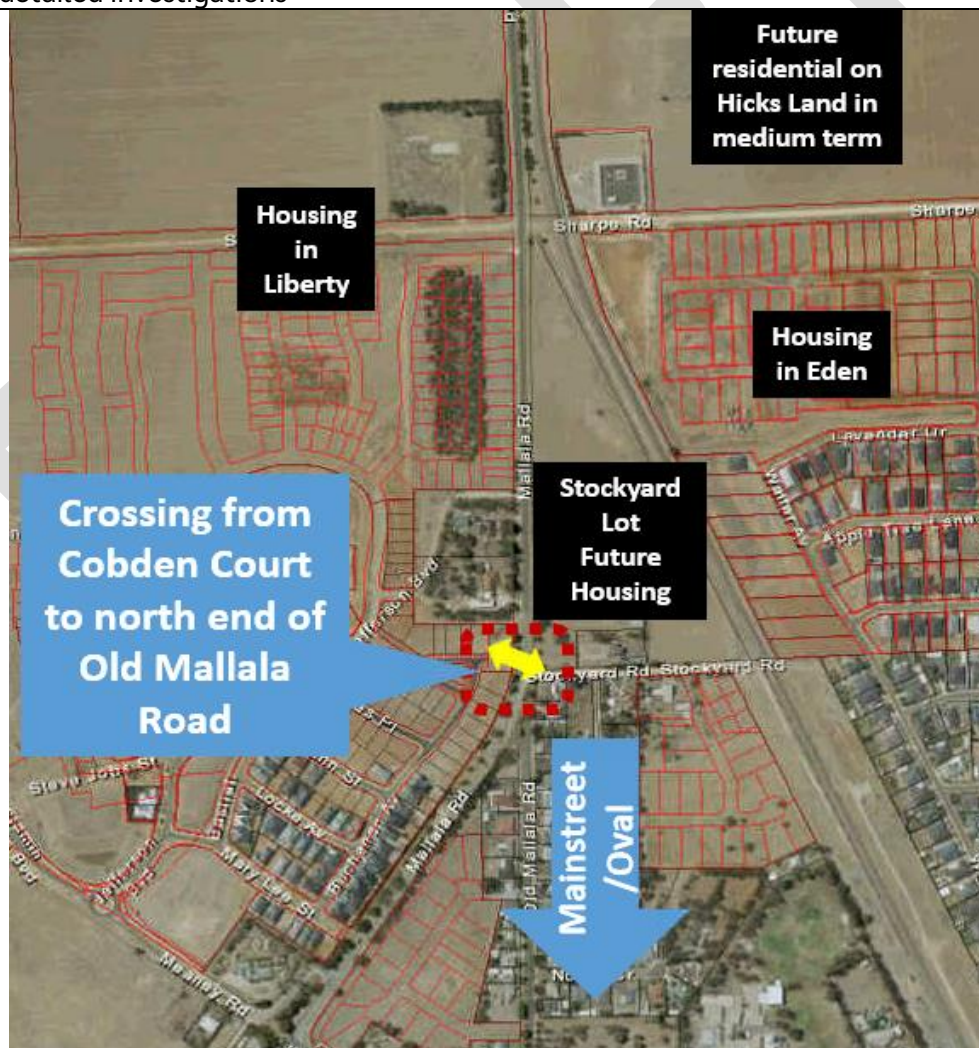
Intersection upgrade

DIT

Intended Outcome – Pedestrian and cyclist movement enabled from Cobden Ct (A2013) across Mallala Road to Stockyard/north end of Old Mallala Road. Support evening use through illumination and amenity through greening. Consider incorporation of historic items, e.g. farm gates.

Observations – Residents are increasing west of Mallala Road and extending northwards. The Mainstreet and oval are to the south. Establishing an orderly crossing at Cobden/Stockyard enables a more direct walk from the eastern northern part of Liberty to the Mainstreet. It also enables convenient walking from Liberty to the original township and Eden to the east. The residential development of the Stockyard Lot means Stockyard/Mallala intersection will be upgraded, and potentially signed speed on Mallala Road adjusted.

How – detailed investigations



Creating an orderly crossing for walking and cyclists at Cobden/Stockyard increases walking and cycling convenience within Two Wells as it grows



Looking west from Stockyard Road and north end of Old Mallala Road to Cobden Court



The reserve at east end of Cobden Court opens to Mallala Road. The Moreton Bay and former hotel ruins add to its appeal. A formed pathway through to Mallala Road can connect into Liberty's pathway network 2021

7 Mallala Northern Path

Timeframe - Medium

\$
(Smaller
Cost)

Key Stakeholders

DIT

Intended Outcome – Provides option from Cobden Connection to the Mallala/Old Port Wakefield Roundabout. Enables more convenient access from Mary Lee Street in Liberty to roundabout and town centre.

Observations – Space exists adjacent the Liberty fence on the north side of Mallala Road for a shared pathway from Cobden Crossing to the Mallala Road/Old Port Wakefield Road roundabout. This creates another option in a more natural setting, noting traffic noise remains. Mary Lee Street can also be connected for walking to the pathway, increasing convenience from within Liberty in addition to Meaney Road.

How – detailed investigations



A northern pathway provides another option for walking from Liberty towards the mainstreet



Space for a pathway adjacent Mallala Road 2021



Mary Lee Street pathway leads to potential pathway on north side of Mallala Road 2021

8 Grade Separated Walking/Cycling Crossing near Sharpe/Mallala/Train Line

Timeframe – Medium

\$\$\$
(Larger Cost)

Key Stakeholders

ARTC
DIT

Intended Outcome – Enabling the eventual 6000 residents of all abilities in planned residential development east and west of the train line and Mallala Road a formalised crossing point to enable walking and cycling convenience.

Observations – There are around 1000 residents in Eden/Gameau and eventually around 5000 residents in Liberty. There are no crossing points between Liberty and Eden/Gameau. It is 1.2km from Gawler Road to Sharpe Road, and 2.4km from Gawler Road to Temby Road. 800m is generally considered ‘convenient’. The Hicks land to the north of Eden may be developed for urban development in the longer term.

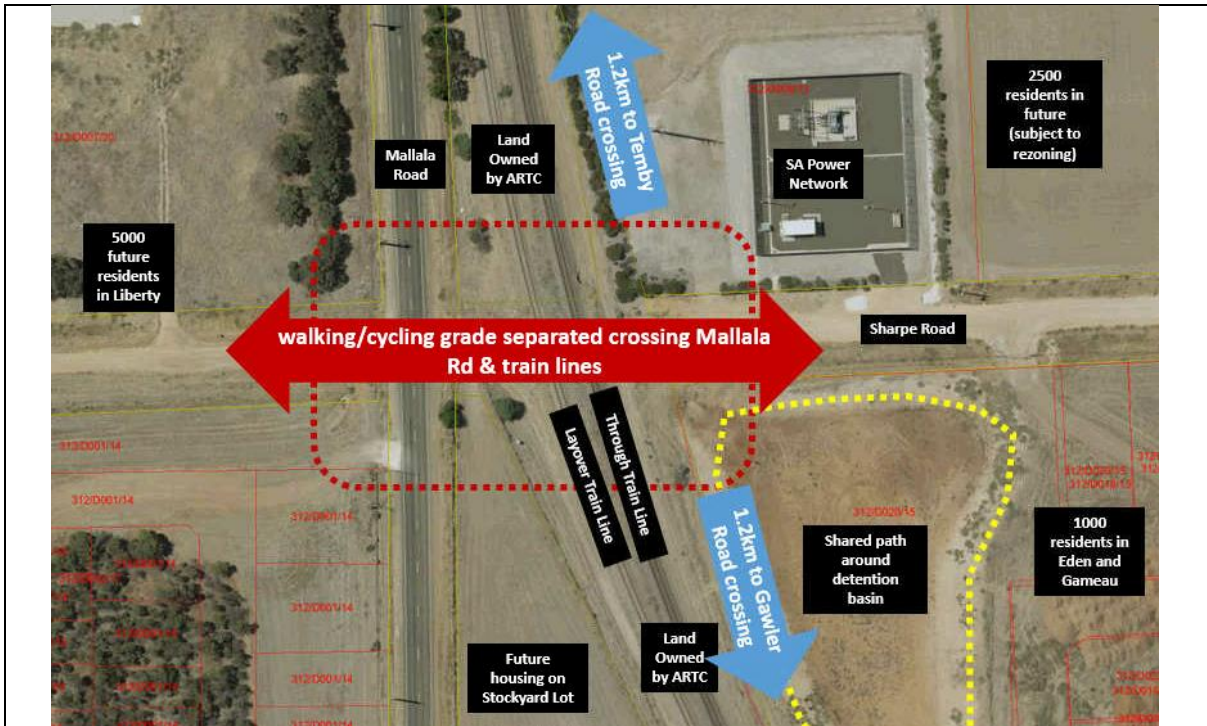
ARTC will only allow crossing via grade separation. Some form of bridge is generally better for walking cycling, including with illumination for night time. Height also enables a public viewing and outlook opportunity, noting Two Wells is flat. Clearance will need to be for double stacking and maybe three stacks. ARTC advice for future freight growth will be determinative.

The Sharpe Road area comprises a through train line and a layover train line. These are controlled by ARTC as part of national rail freight network. Trains can layover for extended time periods, forming an at grade barrier. As the train lines are elevated, an underpass is one option provided lit for pedestrian safety, and designed for flood management (including a pump). There may be other options in the wider locality identified through further investigations. Achieving grade separation is a challenging and ambitious project.

How – further investigations and engagement.



Sharpe Road connects with the train line. The through train line is to the east (left in photo) and layover to the west (right in photo) 2021



Grade separated crossing – such as an underpass - enables connection between the 1000 residents to the east and the 5000 to the west



Sharpe Road looking east from within Liberty 2021

9 Explore Future for former Train Station including shared paths north of Gawler Road

Timeframe – Medium

\$\$
(Medium
Cost)

Key Stakeholders

ARTC
DIT

Intended Outcome – To explore potential land use options at a preliminary level for the former train station land.

This includes its potential use for train purposes, possible bus interchange, and for formalised shared paths north of Gawler Road to Sharpe Road.

Observations – The former station land is reasonably centrally located. The land is in the ownership of Australian Rail Track Corporation and is 6HA. Roads and reserves about the land to the east and west, forming potential shared path connection points. ARTC use appears to be for maintenance purposes, with a portion on the west side north of Gawler Road leased to a bus company.

How – discussions with State Planning Commission, Infrastructure SA, Department of Infrastructure and Transport, and Australian Rail Track Corporation.



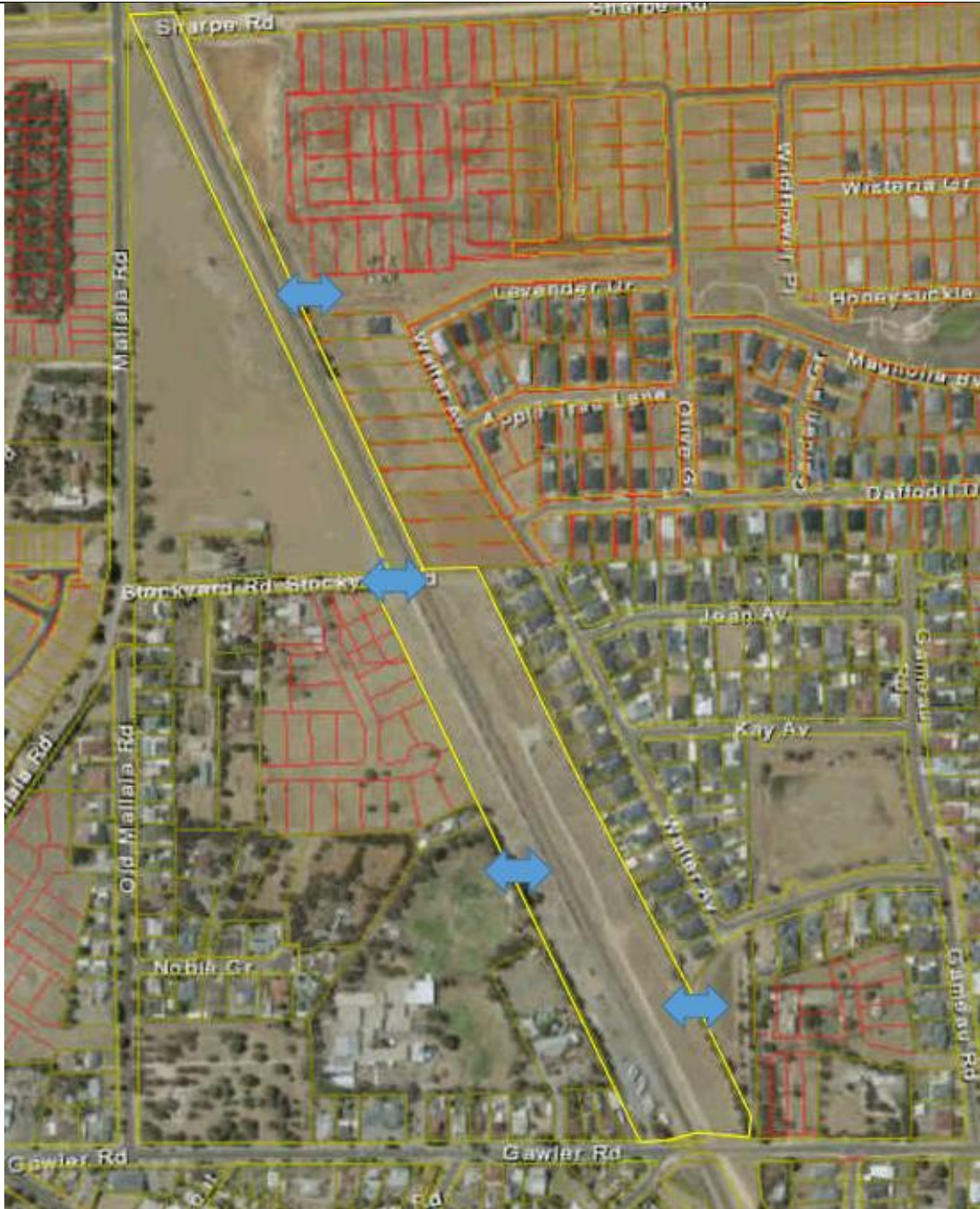
Open area on east side of train line north of Gawler Road, with Gameau and Eden estates to the east (right in photo) and Corston Buses to the west (left in photo) 2021



Former Train Station land looking south towards Gawler Road with Corston Coaches 2021



Informal trail on west side of train line, looking south from where Sharpe Road connect with Train Line 2021



Reserves & roadways adjoin the railway land – 2021

10 Physical Town Entries

Timeframe - Medium

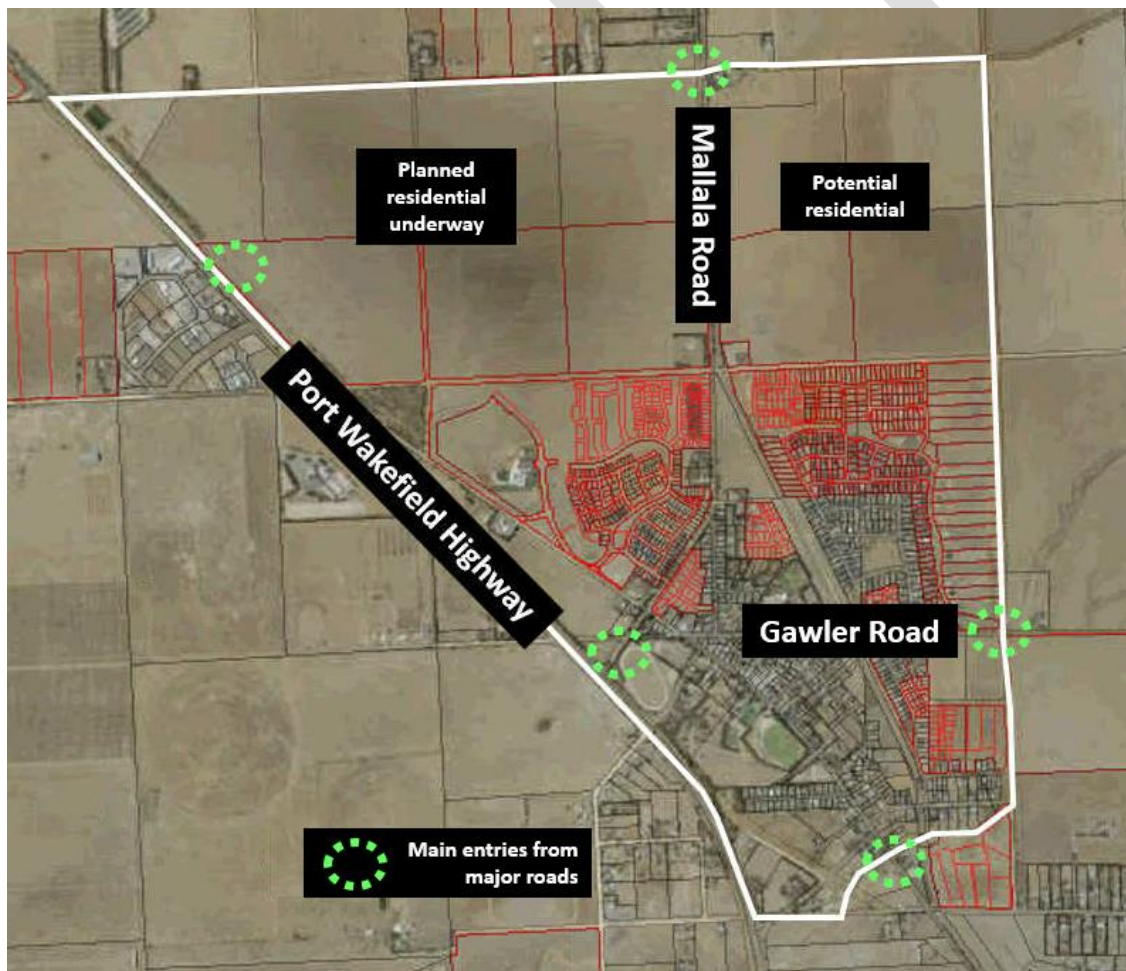
\$
(Smaller
Cost)

Key Stakeholders
DIT

Intended Outcome – Regarding walking and cycling, the purpose of physically marking town entries on the major roads is to visually advise drivers they are entering the town and to be aware of more people being about. This works to modify driver behaviour.

Observations – Some town entries are marked, noting town expansion northwards, and some entries unmarked. ‘Branding’ Two Wells is a consideration as are detail design measures about siting, appearance of the entries. It is recognised town entries have functions well beyond benefiting walking and cycling via modified driver behaviour.

How – detailed investigations.



Physically marking main entries visually advises drivers they are entering a town and to modify their driving behaviour



Old Port Wakefield Road entry south of Brooks Road 2021



Gawler Road entry 2021

11 Light Gaps in the Original Township

<p>Timeframe - Medium</p> <p>Flag lighting</p>	<p>\$\$ (Medium Cost)</p>	<p>Key Stakeholders</p>
<p>Intended Outcome – Progressively upgrade lighting to foster safety at night. Have regard to energy efficiency, visual appearance, street trees, and street lighting inside bedrooms.</p>		
<p>Observations – Several lighting gaps have been identified with input from long term residents and will be referenced by Council asset staff.</p>		

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12 Communicate through Naming & Wayfinding

Timeframe - Medium

\$
(Smaller
Cost)

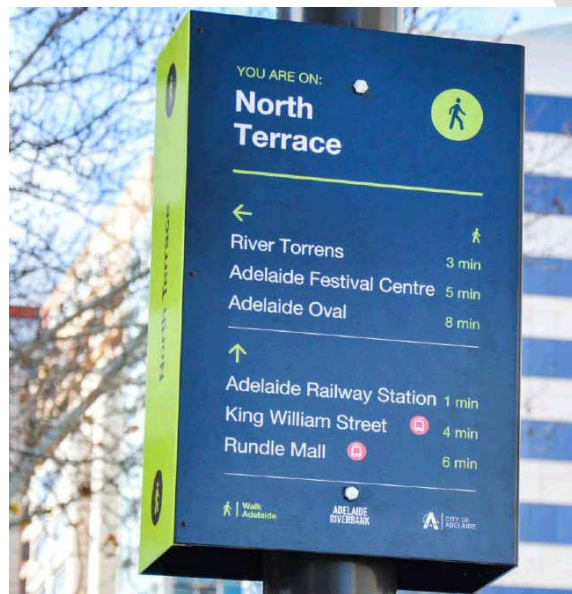
Key Stakeholders

Intended Outcome – Residents, visitors and traders are aware walking and cycling networks exist, where they go, how to access them and how to use them.

Observations – Making information available in a planned way about walking and cycling opportunities assists raise awareness, and thereby use of the facilities. This is called ‘wayfinding’.

The opportunity to ‘name’ certain paths or circuits assists as part of this, e.g., ‘town history loop’ ‘wells walk’. CBD wayfinding is based on a wayfinding strategy and signage suite.

How – detailed investigations about wayfinding



Wayfinding examples

13 Greening & facilities, e.g. seats, art & bike racks

Timeframe – Short - Medium	\$ (Smaller Cost)	Key Stakeholders Landscape Board History Groups
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Intended Outcome – Networks that are pleasant and interesting to experience when walking or cycling, and with facilities that enable use.

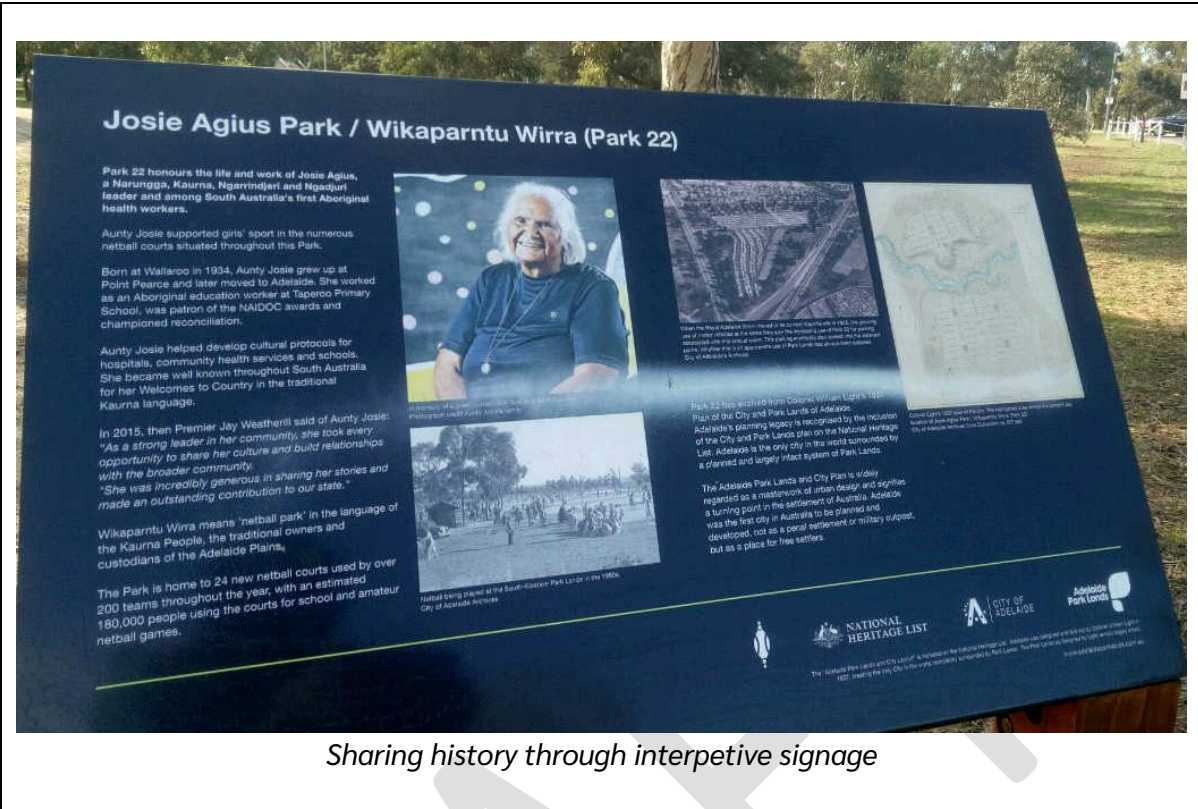
Observations – Along with being a network that enables access to places people wish to go to and that is as safe as possible, a network that is comfortable, interesting and with supportive facilities will encourage greater use.

How -

- where able to be planted, provision of shade from trees
- sharing history about a particular location or building
- creating interest via public art
- enabling rest points via seating (with arm rests)
- making it easier for people to safely park their bike by providing bike racks in key locations, such as shops, schools, and major recreation and open spaces
- by providing water at key points



The Notable Tree and former Hotel at Cobden Court, adjacent Mallala Road



Sharing history through interpretive signage

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14 Maintain Ability to Informally cross Port Wakefield Highway

Timeframe - Ongoing	\$ (Smaller Cost)	Key Stakeholders DIT
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Intended Outcome – Enable people on both sides of Port Wakefield Highway to informally cross via walking and cycling.

Observations – Informal crossing points exist. This project recognises their value in enabling movement across a recognised national highway. The Wells Road crossing will get more important as the main street and recreation offerings expand over the next 10 years. DIT advise²² that generally pedestrians, bicycles, animals and animal-drawn vehicles are prohibited from using freeways and expressways unless otherwise indicated.

How – ongoing discussions with DIT, including with respect to improving informal access paths to be wider, smoother and with ramps:

- Middle Beach Road west of Sharpe Road. Middle Beach with its recreation, water based opportunities is the closest foreshore area to Two Wells
- Buckland Park Road west of Wells Road
- Halstead Road West, west of Brooks Road.



Informal trail from Wells Road to Buckland Park Road on the west side of Port Wakefield Highway 2 Sept 2021

²² mylicence.sa.gov.au/road-rules/the-drivers-handbook/freeways



15 Join Two Wells Network to Nearby Work & Places

Timeframe - Long

\$\$
(Medium Cost)

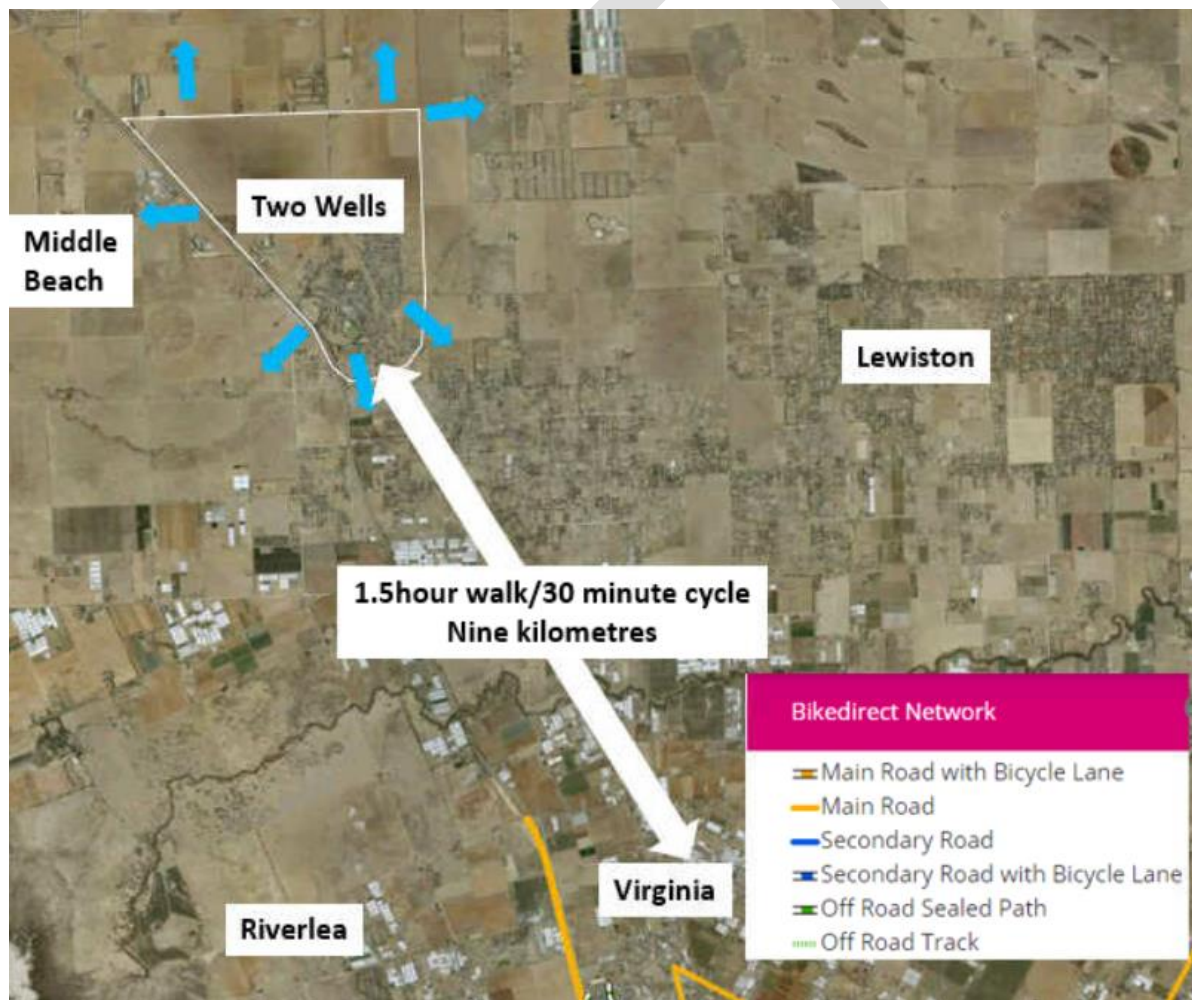
Key Stakeholders

DIT
CC Playford

Intended Outcome –Join the Two Wells cycling and walking network to nearby areas, including surrounding agricultural based employment, living/work in Lewiston, coastal areas including Middle Beach, and urban growth at Virginia and Riverlea.

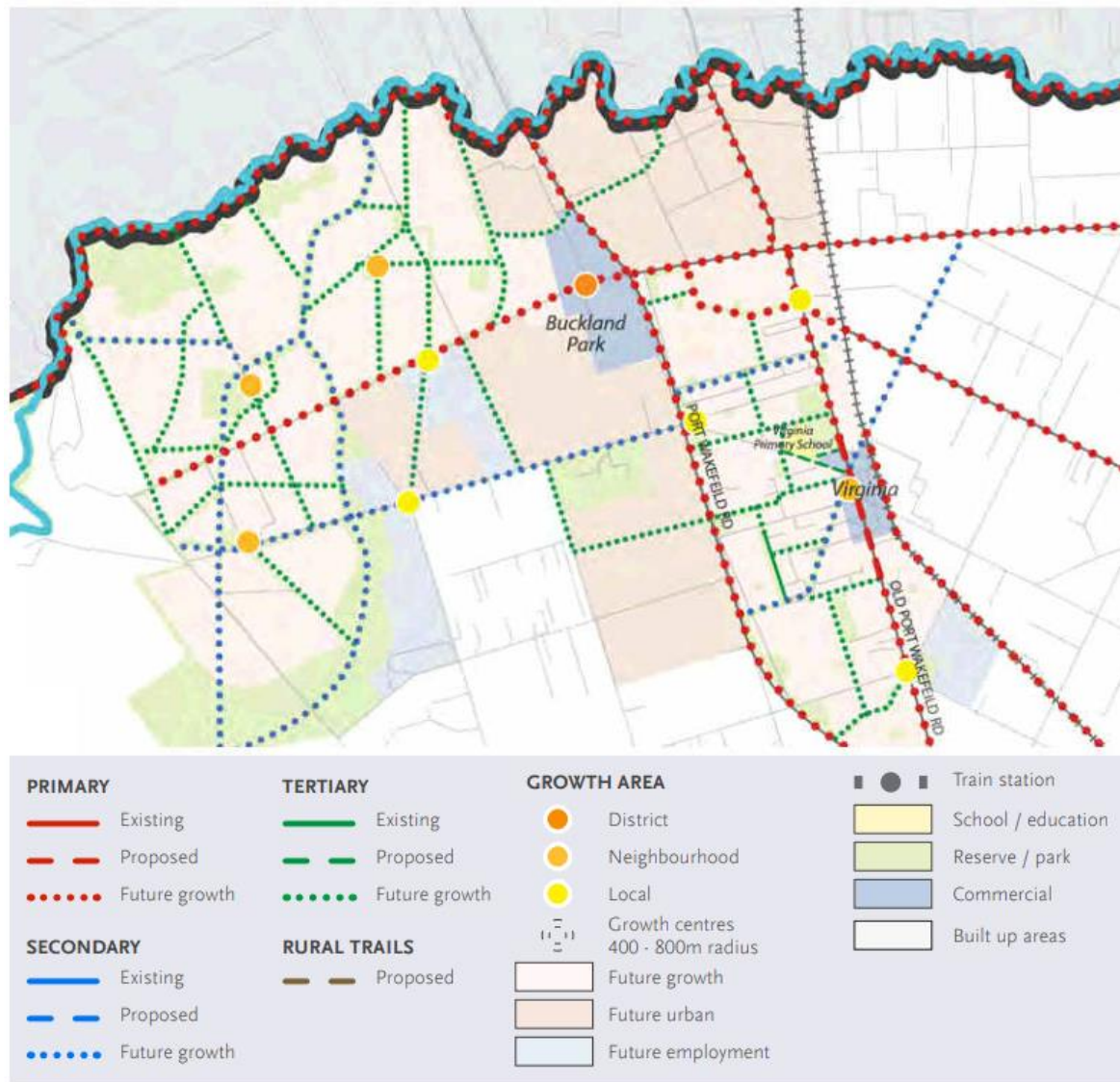
Observations – A walking and cycling network is planned for Riverlea and Virginia. 3,500 people live in Lewiston and a range of open spaces exist.

How - detailed investigation and discussions needed.



Two Wells and its Neighbours - Cycle Instead Network Map 2 Sept 2021

Virginia + Buckland Park Proposed Cycling and Walking Network Plan



Emerging network to the south of Two Wells²³

²³ cdn.playford.sa.gov.au/general-downloads/Policy-Documents/SC-SP_140221_CyclingAndWalkingStrategy.pdf

16 Integrate Hicks future development including preferred train crossing points

Timeframe - Long	\$\$\$	Key Stakeholders
Dependent on Rezoning.	(Larger Cost - potential deed with developer)	State Planning Commission Planning and Land Use Services ARTC DIT Developer and Land Owner
Opening up the Hicks land will only be approved by the Minister for Planning when the land is needed to increase housing supply for Greater Adelaide. This is unlikely to occur prior to 2026.		
ARTC seek no further crossing points		

Intended Outcome – The urban development designed to enable an active lifestyle through walking, cycling and recreating connected into the overall Two Wells network.

This includes ordered train crossing points for vehicles, walking and cycling balanced with train needs, and that maximises access for residents and associated with any northern centre.

Observations – Potential urban development of Hicks influences east west movement patterns to Mallala Road and Liberty. Orderly connections to Eden and agribusiness growth to east and north are envisaged.

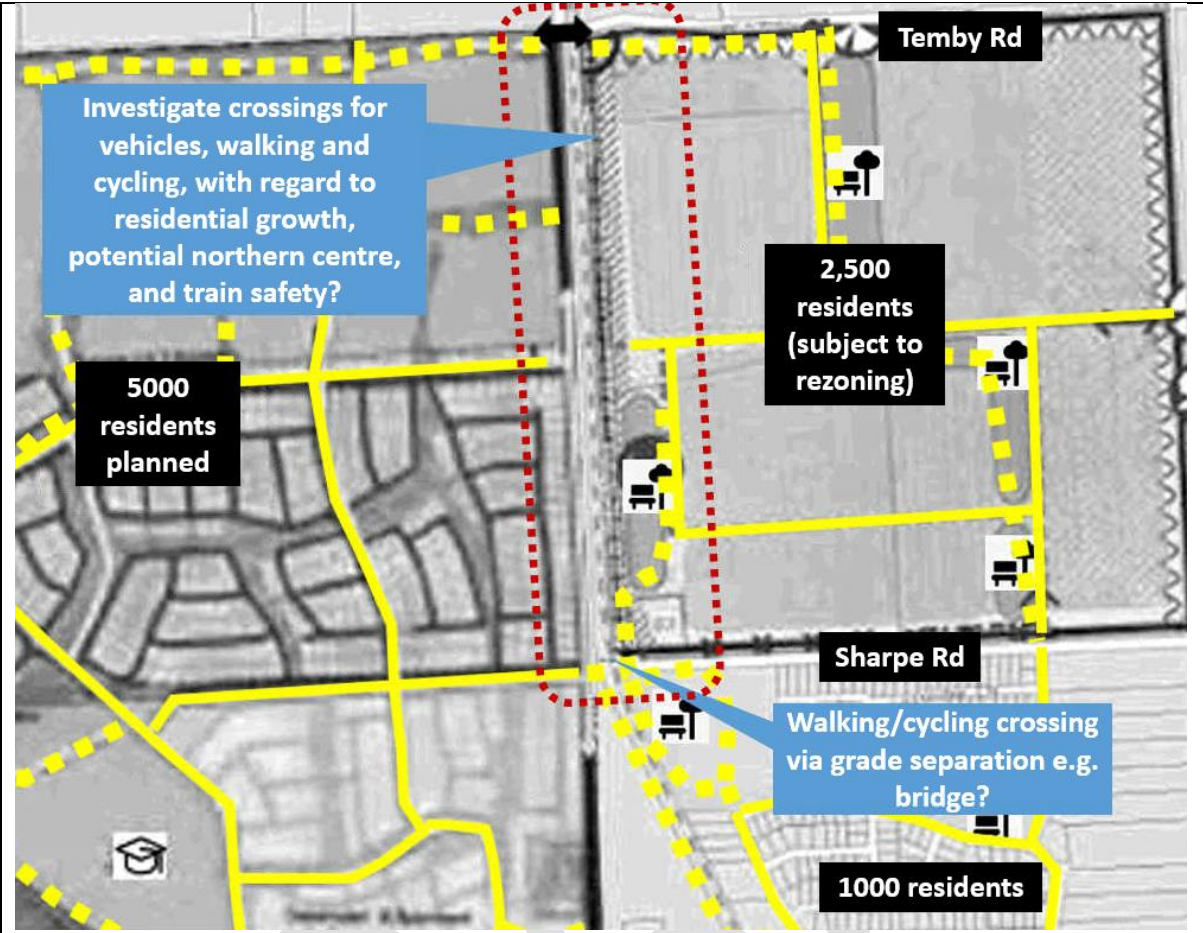
There are no crossing points – including for pedestrians - between Gawler and Temby Roads, a distance of 2.4 kilometres. On the east of Mallala Road, Temby Road provides 13m for vehicles, a small distance.

ARTC has advised they will not support additional at grade crossing points, with grade separation under or over the main options. Grade separation options need costing. If pedestrians/cyclists, costs are above \$0.5M.

Redesigning intersections to have sufficient car storage space between train line and Mallala Road is a consideration. At Temby Road, there is the potential for town entry role.

The options for crossing of the ARTC controlled train line are fundamental to access Mallala Road and Liberty. As Liberty progressively develops northwards, decisions need to be made about the timing, scale and siting of a retail centre for the northern part of Two Wells.

How - A planned approach to train line crossing points for car traffic, walking and cycling balanced with train movements and storage is needed.



Challenges exist around enabling train line crossings



Temby Road Crossing - SA Property and Planning Atlas 2 Sept 2021



Temby Road crossing looking west July 2021. 13m from train line to Mallala Road provides limited vehicle space



Hicks Land Area Under Consideration for Future Urban Development - SA Property and Planning Atlas 2 Sept 2021

ATTACHMENT A – DESIGN TOOLKIT

Austrroads Guide Part 6A: Pedestrian and Cycle Paths provides guidance for designers and other practitioners on the design of paths for safe and efficient walking and cycling, both within the road corridor and outside the road corridor. The guide provides information on considerations that should be given in providing a path, describes the types of paths and covers the requirements of path users, e.g. operating spaces, factors that influence path locations, and geometric design criteria for a path and related facilities such as intersections between paths, and terminal treatments. Detailed guidance is provided on path location, alignment, width, clearances, crossfall, drainage and sight distance requirements.

Below are examples of design treatments commonly employed to improve opportunity and safety for walking and cycling, and to manage speed and volume of traffic.

The Streets for People Compendium²⁴ is a valuable resource when developing cycling and walking neighbourhoods. Best practice design builds speed restraint into the design of the street and creates a safer speed environment. In existing streets, retrofitting of car traffic calming devices are usually required. Key principles for reducing vehicle speeds include:

- reducing lengths of straight road sections
- narrowing road width to create slow points
- limiting forward sight lines and driver's field of vision by incorporating landscaping
- introducing bends (a meandering street), horizontal deflection, at intervals less than 80 metres
- vertical deflection (road humps or speed cushions), 40 to 70 metres apart
- change in pavement texture (paving at junctions or other materials that have audio-tactile properties for motor vehicles, but do not impact on cyclists)
- visual elements such as landscaping, signage and streetscape changes.



Road narrowing with median



Meandering street

²⁴ heartfoundation.org.au/getmedia/a1a95fd5-7d56-4098-8658-5175cf64dc0e/StreetforPeopleCompendium_full.pdf



Shared Zone



Textured pavement at junction



Universal kerb ramp



Shared Refuge



Wombat Crossing



Local Speed Precinct



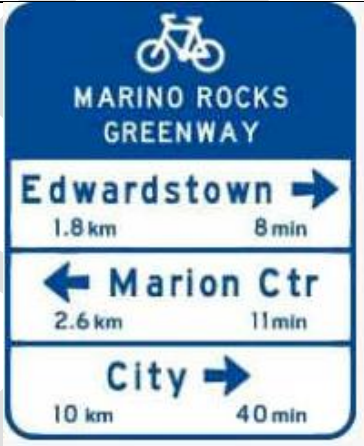
Landscaping in roadway



Slowpoint with cyclist bypass



Sharrow marking



Directional Signage



Bicycle parking rails (short term)



Bicycle repair station



Seating



Typical shared path



Bike car parking lane, angle parking



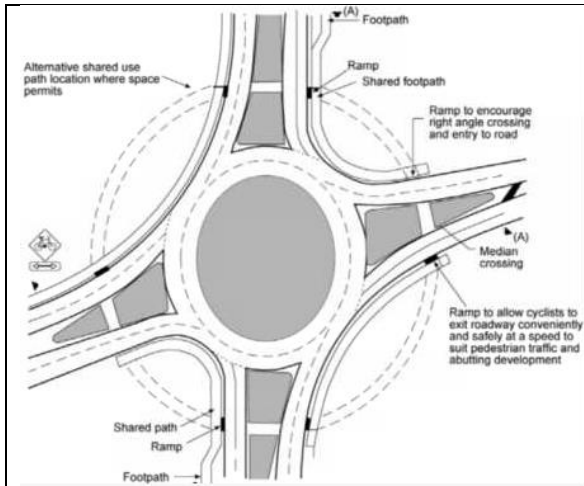
Contra flow bike lane



Exclusive bike lane



Separated Bike Lane



Cyclist separation at large, busy roundabout



Sealed Shoulders

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