

# GROWTH BACKGROUND PAPER



May 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	Comment
May 2023	Adopted 24 April 2023
April 2023	Refined following consultation
July 2022	Consultation ABS 2021 data available added.
July 2022	Consultation
August 2021	Council 23 August 2021

## **Purpose**

The purpose of this paper is to summarise opportunities and constraints relating to the growth of Adelaide Plains.

The paper will inform staff, Councillors, other spheres of government, infrastructure entities, and local residents and businesses of issues to consider as urban growth continues.

**This Paper informs the Growth Strategy and Action Plan.**

## **About Growth**

This background paper is focussed on urban growth (what can be called 'planned urban growth') that is both occurring, and will occur, in Adelaide Plains.

The key component of urban growth to date is residential growth at Two Wells. The background paper begins to address the issues that this growth will present to Council, along with the additional demands associated with this residential growth e.g. employment and services, and the opportunities this presents to Council and the community.

This paper includes summary information about economic growth recognising the relationship between residential and economic growth. This paper also provides an overview of recent and forecast long term growth influencing Adelaide Plains and draws observations about the challenges to be planned for.

## **About Adelaide Plains**

Adelaide Plains Council is a vibrant community located about 45 kilometres north of the Adelaide CBD. With large areas of rural and horticultural land, Adelaide Plains Council also has a large tidal coastal region (47 kilometres of coast) facing the Gulf of St Vincent, a number of vibrant and historic townships and settlements and a rapidly growing urban areas in and around Lewiston and Two Wells.

Covering an area of 935 square Kilometres and containing both the Light River and Gawler River, along with almost 6000 rateable properties the Adelaide Plains Council provides a diverse economic base with a strong community focus. It is a place where people can choose to live and work locally, with quality services, facilities and open space that support community wellbeing and resilience. Adelaide Plains Council promotes the growth of tourism and encourages is a place that provides local opportunities.

## OBSERVATIONS

### **Economic Growth is Bringing Change**

1. Agriculture is changing, with greater value adding on farm and in commercial operations.
2. Horticultural growth is supported, particularly in the southern part of Adelaide Plains around Two Wells, noting current water challenges
3. Land for animal husbandry is being impacted by urban growth, bringing change in Lewiston.
4. Tourism experiences are centred around key attractors, notably the Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara and Mallala Motor Sport Park

### **Urban Growth is rapidly changing Adelaide Plains**

5. Urban growth is impacting Two Wells, Adelaide Plains and northern Adelaide.
6. Demand at Two Wells is being driven by available and serviced land, government stimulus, the northern connector, and opening of facilities such as Xavier College.
7. 2021 ABS indicates growth in a younger population at Two Wells.
8. Two Wells is forecast to grow to around 10,500 in 2041. This is 5.8% per annum from 2016. By comparison, Mount Barker is 4.25% per annum. The numbers in the 2012 Two Wells Amendment were indicative and dependent on land development layouts, school and open space provision. Given the current and proposed development pattern, it is considered unlikely that Liberty would reach in excess of 3000 allotments. The Hickinbotham Group have progressed Eden, with the 265 lots mostly developed. Liberty envisages some 1,900 lots, noting the zoning allows upto around 3,000 lots.
9. Planned urban growth is yet to be taken up at Mallala.
10. Adelaide Plains population is likely to grow from 9,655 in 2021 to 18 - 19,000 by 2041 (20 years)

### **Options for Future Planned Urban Growth**

11. Council decisions of 2019 support investigations for further planned urban growth at Two Wells (Hicks Land) and Dublin.

### **Council's Role in Growth**

12. As a service and infrastructure organisation, Council needs a coordinated approach to managing and facilitating growth that leads to liveable and economic towns and districts, and in managing hazards.
13. A strategic growth perspective informs Council's operational and service decisions
14. A strategic growth perspective informs the role of State and Australian governments, and development, infrastructure and community partners.

### **Ongoing Investigations and Planning Is Needed**

15. We have inadequate understanding about what demographics are forecast to move into Two Wells e.g. while total numbers can be estimated, population structure, age and composition still requires further investigation
16. What social infrastructure does a growing Two Wells need? How does growth impact Council's direct role in libraries, recreation, sport, parks and culture? How does growth impact the viability of public transport at Two Wells? What transport network might best serve a growing horticultural area and Two Wells township?
17. Investigations and discussions are needed to address these emerging gaps and further plans for the urban growth that is already underway and will continue over the next 20 years.

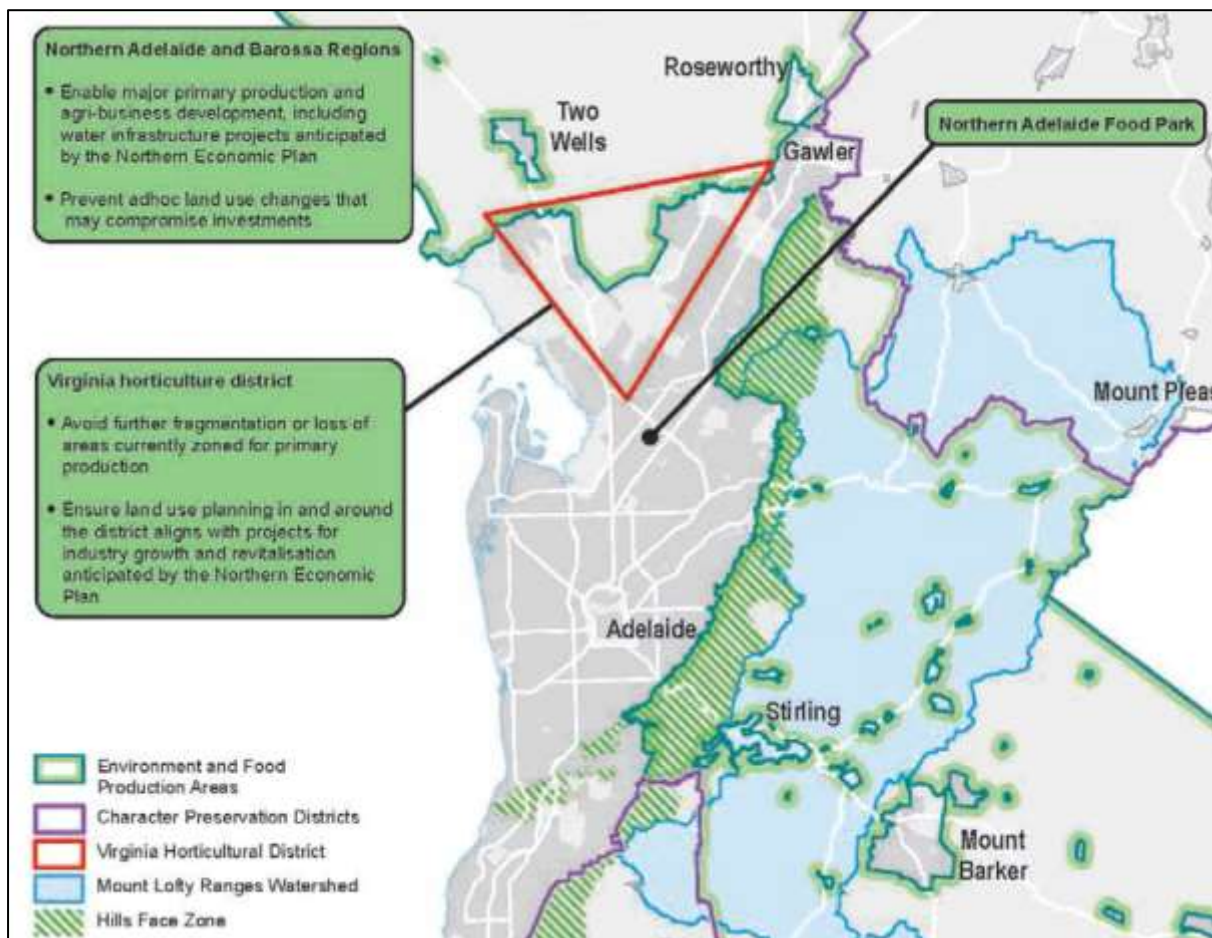
## 30 Year Plan for Greater Adelaide

### Liveable Growth

The 30 Year Plan for Greater Adelaide<sup>1</sup> plans a region that is liveable, economically competitive, sustainable and responsive to climate change.

The Plans policies have been analysed for relevancy for Adelaide Plains (**Attachment A**).

Aside from towns and settlements, all of Adelaide Plains is within the Environment and Food Production Area, with the Two Wells and Lewiston area part of the Virginia Horticulture District.

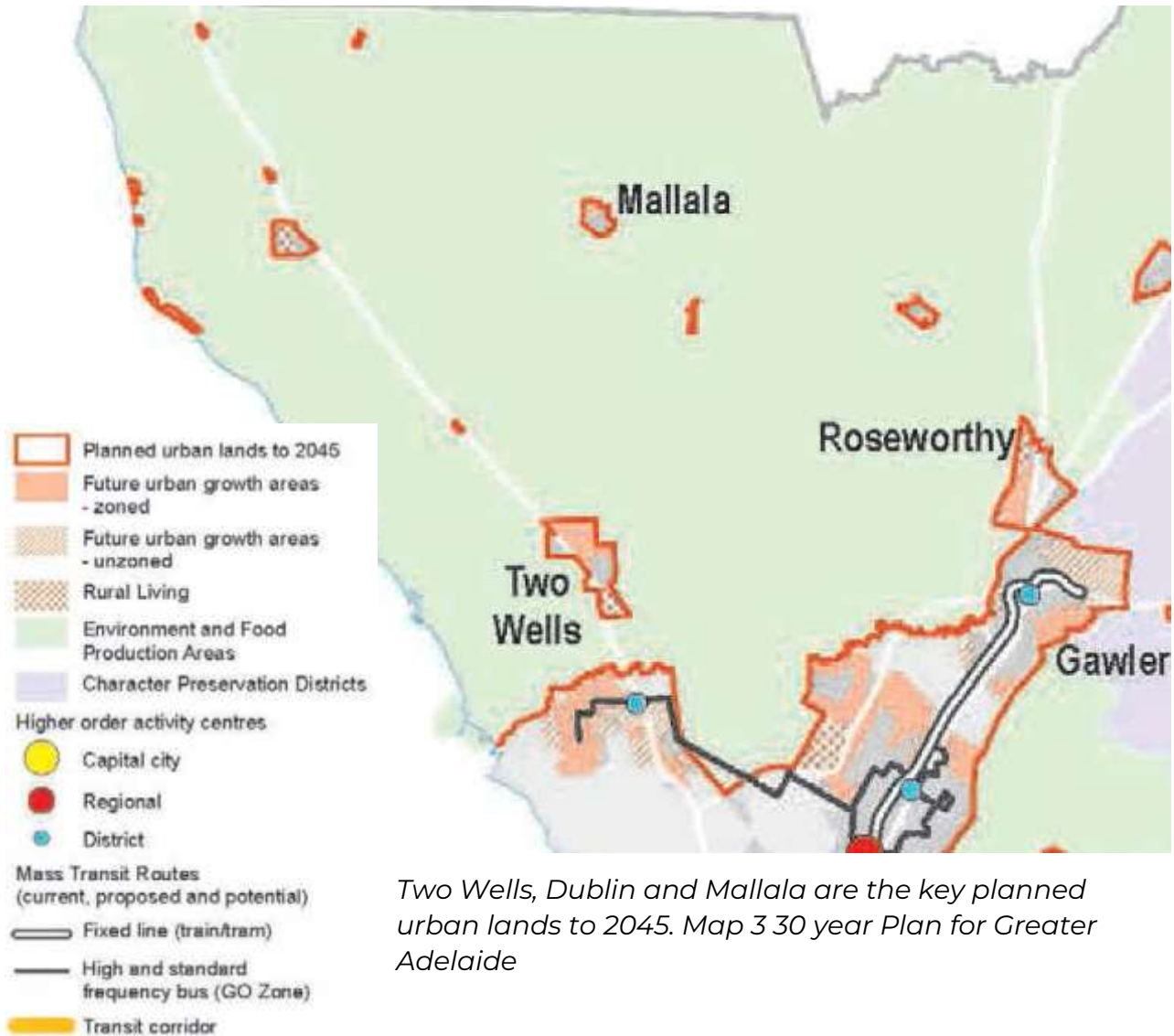


Two Wells/Lewiston is part of the Environment and Food Production Area and the Virginia Horticulture District. Map 3 30 year Plan for Greater Adelaide

<sup>1</sup> [livingadelaide.sa.gov.au/](http://livingadelaide.sa.gov.au/)

## Planned Urban Growth

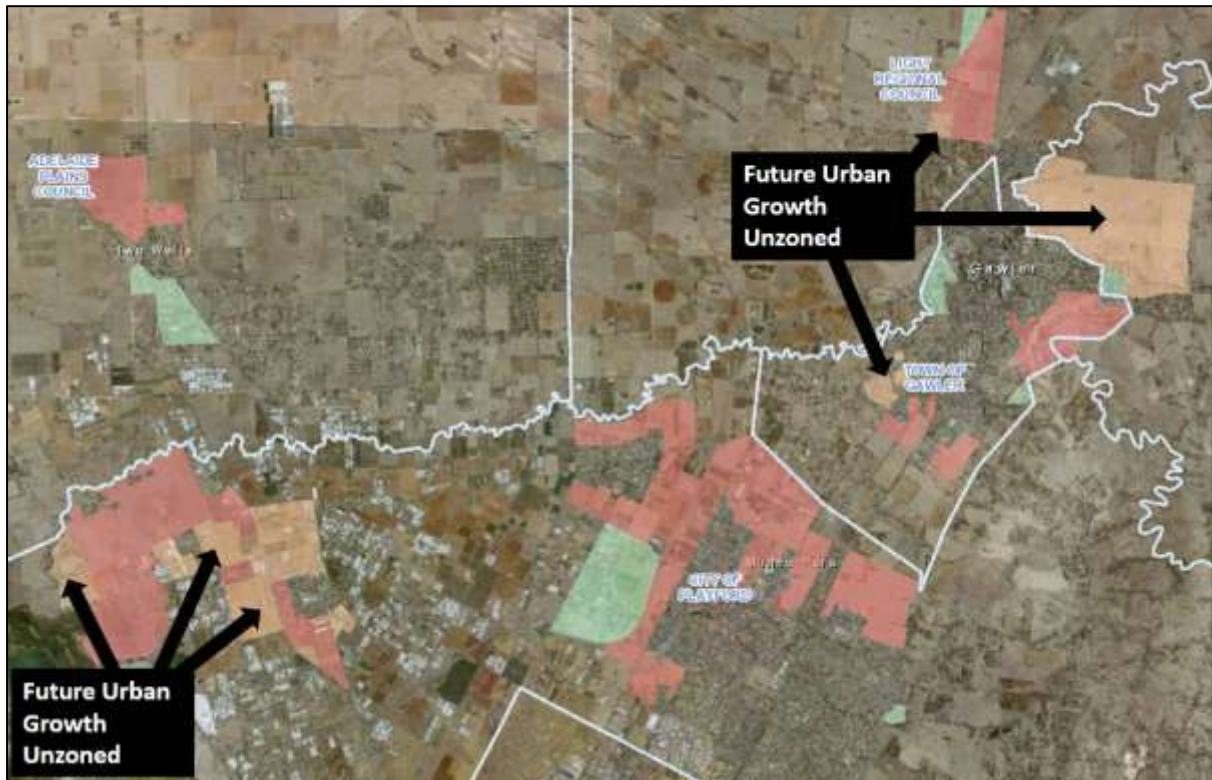
The 30 Year Plan identifies planned urban lands to 2045. This includes land already zoned and land to be zoned at some point in the future.



These extracts from the 30 Year Plan for Greater Adelaide demonstrate the significant areas of growth proposed within the Northern Adelaide Plains, including Adelaide Plains Council. Planned and future urban growth areas will require associated physical and social infrastructure to cater for the incoming population to this region.



Significant land areas are flagged for future urban growth but are yet to be released for that purpose by being rezoned. This includes land in Virginia east of the new Riverlea as well as east of Gawler.



*Significant Areas are planned but yet to be rezoned For Future Urban Growth around Virginia and Gawler*

The northern edge of Adelaide is planned for significant fringe growth, including within Two Wells.

The goals and policies of the 30 Year Plan for Greater Adelaide – being updated over 2022 and 2023 -influence how growth is to occur in order to achieve towns and communities that are liveable, sustainable and competitive.

## Investigations Undertaken and Underway

Understanding existing investigations assists to consider the scope of further investigations. Numerous studies including by Council inform current planning of Adelaide Plains. The table arranges studies based on each particular focus.

Investigations Undertaken Influencing Adelaide Plains			
	Economic Focus	Social Focus	Environmental Focus
2022	Tourism and Economic Development Strategy  Long Term Financial Plan	Equine Sector	Two Wells Traffic
2021	Planning and Design Code introduced	APC Office Accommodation (underway)  Public Health Regional Heritage (underway)  Trails (proposed)  Cemetery Capacity	Gawler River flood study (underway)
2020	Two Wells CWMS Feasibility	Disability Access and Inclusion Plan  Aged Housing	Adelaide International Bird Sanctuary Management Plan  Two Wells Mainstreet Master Plan
2019	Hicks Two Wells/Leinad Dublin Rezoning Requests		Webb Beach Community Emergency Management Plan
2018	Food Bowl Development Plan Amendment	Residents Survey	
2017	Allied Food Industries Land Supply  2W2W Economic Corridor Accelerating Regional Growth from Two Wells to Whyalla		Gawler and Light River Floodplain Mapping  Two Wells Stormwater Management
2015	NAIS Market Proving (Arris)  Broadacre Farming	Lewiston Community Focal Points	

Investigations Undertaken Influencing Adelaide Plains			
	Economic Focus	Social Focus	Environmental Focus
	(Dublin township expansion - Minister declined to support)  Equestrian/Horse Keeping Precinct		
2014	Mallala Township Development Plan Amendment  Two Wells Retail Demand  Strategic Directions (Development Act S30)		Adaptation Frameworks for Middle Beach, Thompson Beach, Webb Beach and Parham  Two Wells Traffic Study
2013	Horticulture Framework  Horticulture Plains State of Play  Two Wells Residential Development Plan Amendment		Coastal Settlements Adaptation
2012 & earlier		Heritage 1983	Two Wells Main Street Design Guidelines 2011  Gawler River Open Space 2009  Mallala Transport 2005

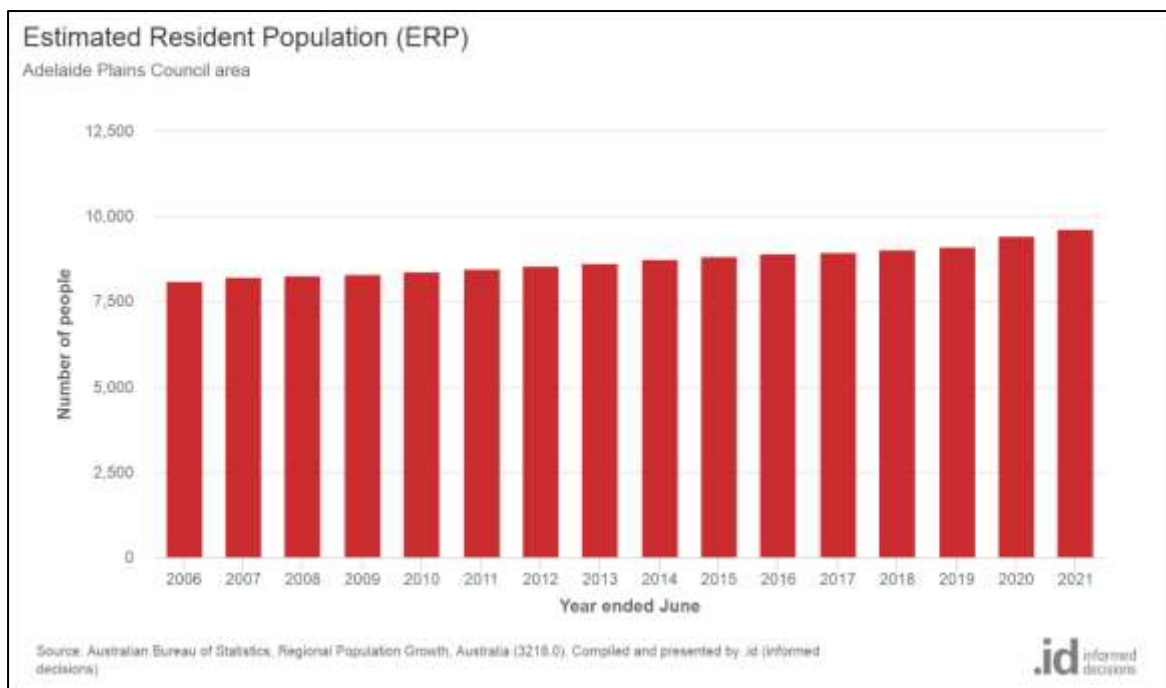
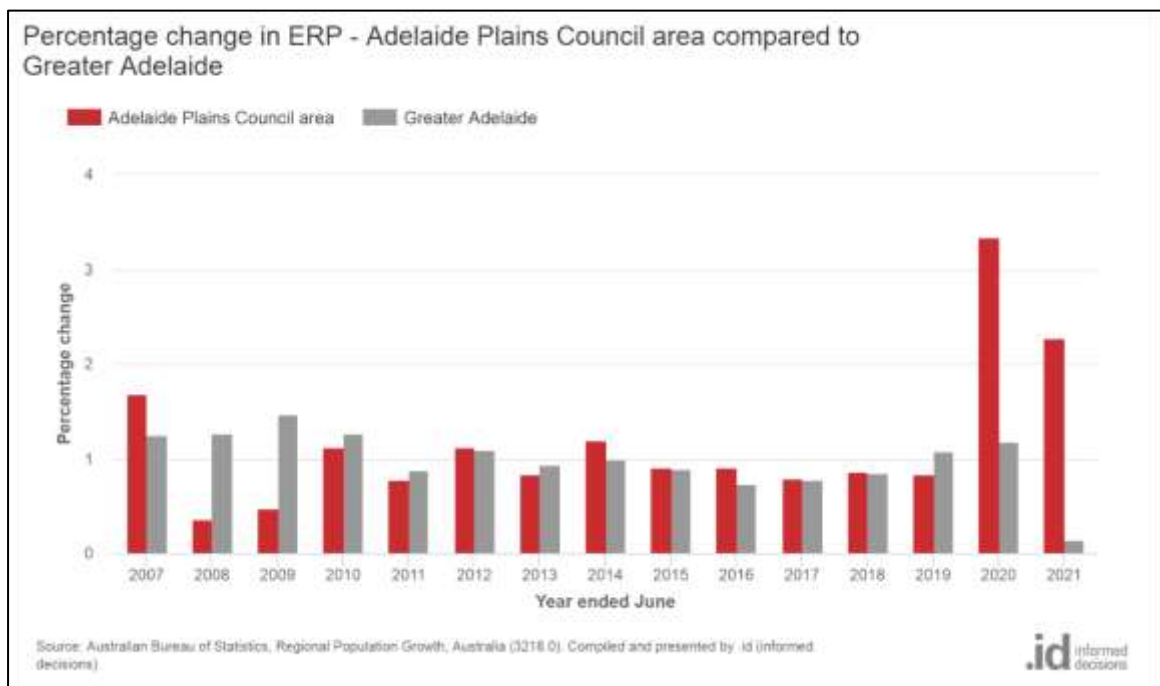
## Population and Development Trends

### Residents

Council's residential population has grown steadily from around 8,100 in 2006 to an estimated 9,655 in 2021. When compared to Greater Adelaide, Adelaide Plain's rate of residential growth has mirrored Greater Adelaide's small increases, aside from being slightly greater in 2007 and 2014.

2020 saw a 3.3% rate of growth, and 2021, 2.3% in Adelaide Plains.

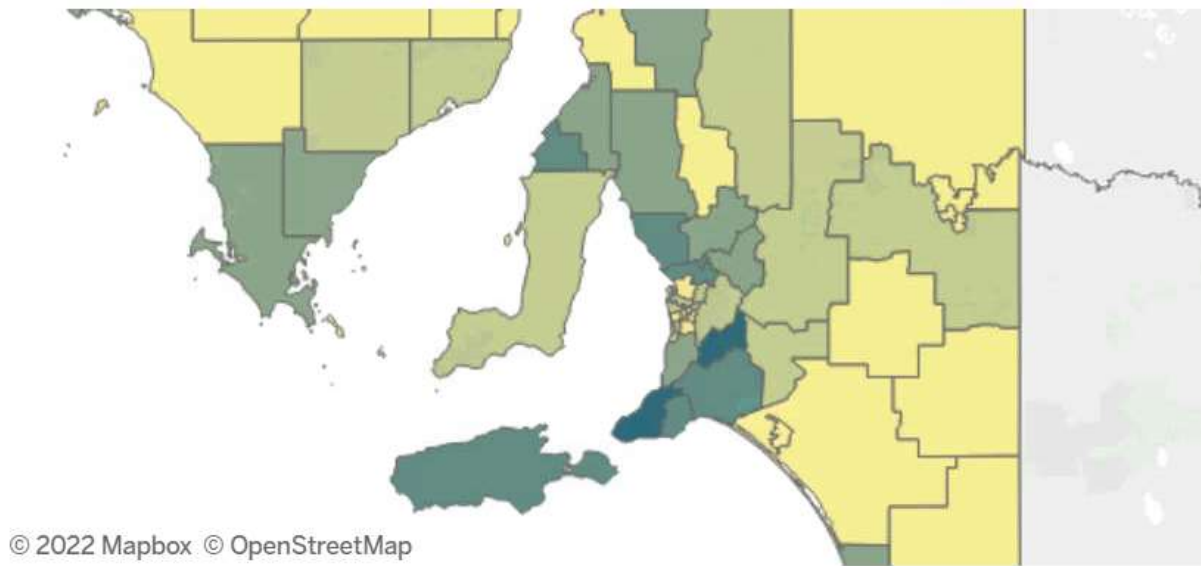
Both are markedly greater than Greater Adelaide's 1.2% in 2020 and 0.14% in 2021.



**Regional population change, estimated residential population, by LGA, All, 2020 to 2021**

**South Australia**

Click on map area for more information.



**Population change, 2020 to 2021 (%)**

- 2.5 or more
- 1.5 to less than 2.5
- 0.5 to less than 1.5
- 0.0 to less than 0.5
- Decline

**State**

**South Australia**

1,773,396 persons (2021)

1,770,277 persons (2020)

0.2% (3,119 people) change in population (2020 to 2021)

Adelaide Plains experienced 2.5% Population Change from 2019 to 2020, and 2.3% from 2020 to 2021

Within a Greater Adelaide context, along with Mt Barker and the CBD, Adelaide Plains experienced population change of 2.5% or more from 2019 to 2020<sup>2</sup>.

<sup>2</sup> [www.housingdata.gov.au/](http://www.housingdata.gov.au/) accessed 27 May 2021

## Residential Building Approvals

Since 2001, house approvals within Adelaide Plains have been around 50 – 70 each year.

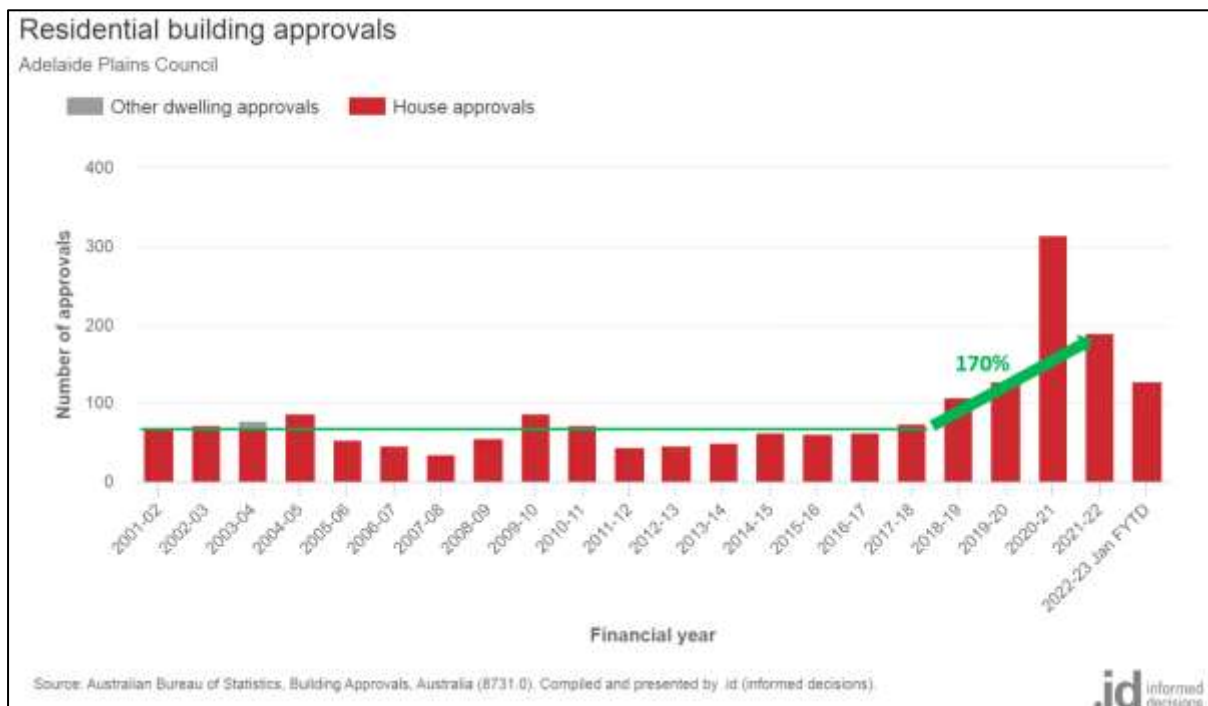
House approvals rose to 129 in 2019-20, 314 in 2020-21 and 189 in 2021-22.

If house approvals continue at around 189 per year, this is around 170% more than the average of 70 per year that was characteristic until around 2018.

Factors stimulating this rate include serviced and available greenfield land, government stimulus such as first home buyer and home builder, and the northern connector.

Adelaide Plains increasing dwelling growth rate is opposite to South Australia overall where rates have fallen annually since 2017-18.

Adelaide Plains increased rate of dwelling approvals was seen in Light and Playford till 2019-20 but reduced in 2020-21 similar to SA.



	17-18	18-19	19-20	20-21	21-22
Adelaide Plains	75	108	129 84% greater than 70 dwellings/annum typical 2001 - 2018	314 350% greater than 70 dwellings/annum typical 2001 - 2018	189
Light	66	73	98	163	122
Playford	819	940	1234	1495	1592

Dwelling Approvals Adelaide Plains Compared to Neighbouring Regions<sup>3</sup>

<sup>3</sup> [plan.sa.gov.au/state\\_snapshot/land\\_and\\_housing](http://plan.sa.gov.au/state_snapshot/land_and_housing) accessed 21 April 2021

### Value of Approvals

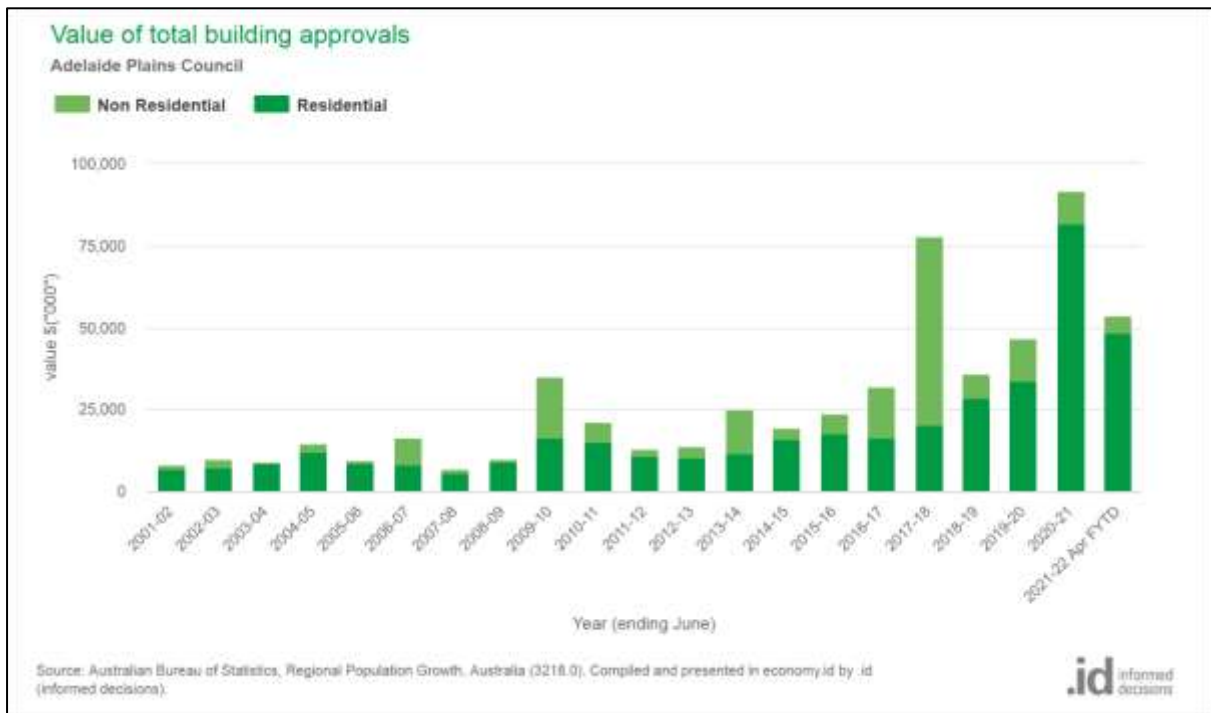
Value has typically been between \$10M and \$25M per annum. From 2016-17, value began to increase to around \$30M.

The \$75M of 2017-18 is possibly associated with capital works of Eden and Liberty subdivisions, and the new school (Xavier).

The subsequent value around \$40M - \$50M and \$92M in May 2021 is likely attributable to the larger numbers of house approvals.

Since the Foodbowl Development Plan Amendment of 2018, around \$9M/annum larger scale agribusiness development has occurred.

Value of approvals in Adelaide Plains has mirrored recent growth in building approvals. Increases in number and value of building approvals can also be seen in growth in rate revenue.





## Jobs Growth/Employment

Within increased growth comes the requirement for a regional economy to provide additional employment in the local area or face capital being spent outside the regional as well as associated higher impacts on transport infrastructure and carbon emissions as employees travel to employment outside the region.

Main sectors of employment for residents of Adelaide Plains are:

- Agriculture, Forestry and Fishing
- Manufacturing
- Construction
- Retail Trade
- Transport, Postal and Warehousing
- Health Care and Social Assistance.

From 2016 to 2021, changes in industry sectors of employment have been pronounced in:

- Construction
- Administrative and Support Services
- Education and Training
- Health Care and Social Assistance
- Other Services.

As a % of SA jobs, Adelaide Plains local jobs have increased from 0.19% in 2006 to 0.35% in 2021. More residents are working in construction, administration, education, health care and other services.

Local jobs						reset	export
	Adelaide Plains Council		South Australia		Adelaide Plains Council as a % of South Australia		
Year (ending June 30)	Number	%change	Number	%change			
2021	2,987	+7.74	854,282	+0.89	0.35		
2020	2,756	+4.34	846,660	-0.07	0.33		
2019	2,636	+19.45	847,230	+1.33	0.31		
2018	2,124	+6.72	835,928	+2.13	0.25		
2017	1,981	-6.11	818,141	+1.34	0.24		
2016	2,102	--	807,208	--	0.26		
2011	1,708	--	804,301	--	0.21		
2006	1,395	--	742,876	--	0.19		

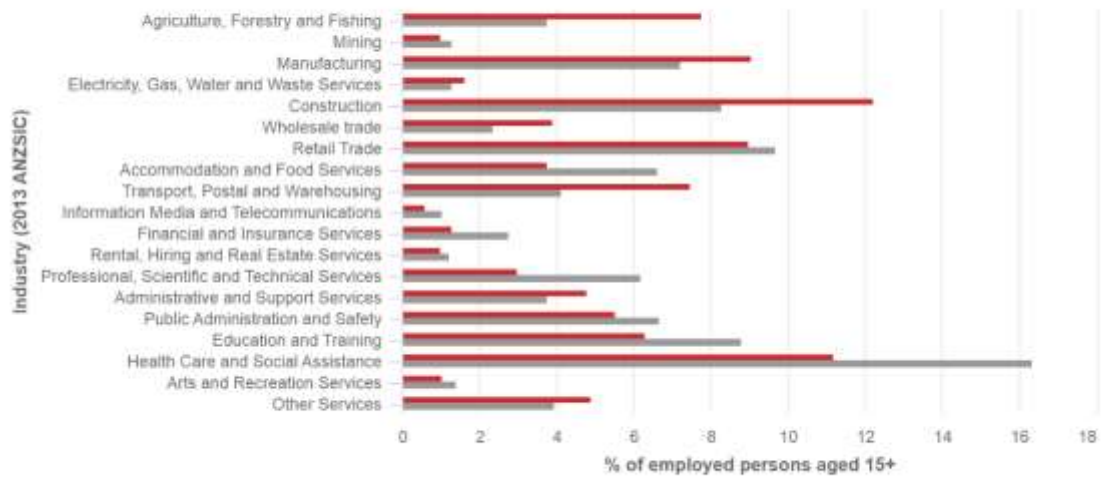
Source: Australian Bureau of Statistics. Australian National Accounts: National Income, Expenditure and Product, catalogue number 5206.0, and the National Institute of Economic and Industry Research (NIEIR) ©2019. Compiled and presented in economy.id by .id (informed decisions)  
Please refer to specific data notes for more information



## Industry sector of employment, 2021

Total employed persons

Adelaide Plains Council area South Australia

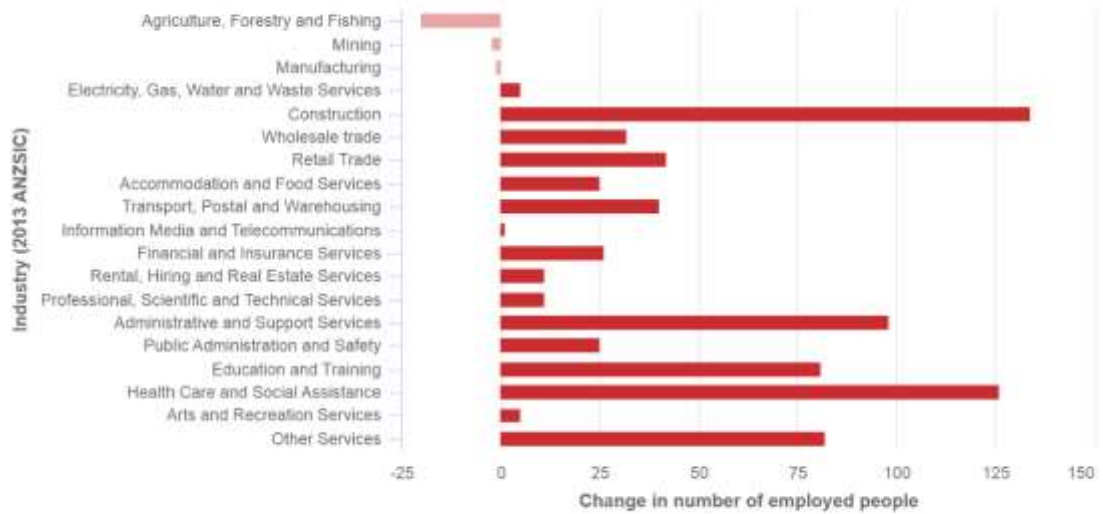


Source: Australian Bureau of Statistics, Census of Population and Housing, 2021 (Usual residence data). Compiled and presented in profile.id by .id (informed decisions).

.id informed decisions

## Change in industry sector of employment, 2016 to 2021

Adelaide Plains Council area - Total employed persons



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 and 2021 (Usual residence data). Compiled and presented in profile.id by .id (informed decisions).

.id informed decisions

### Current and Emerging Community Profile

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

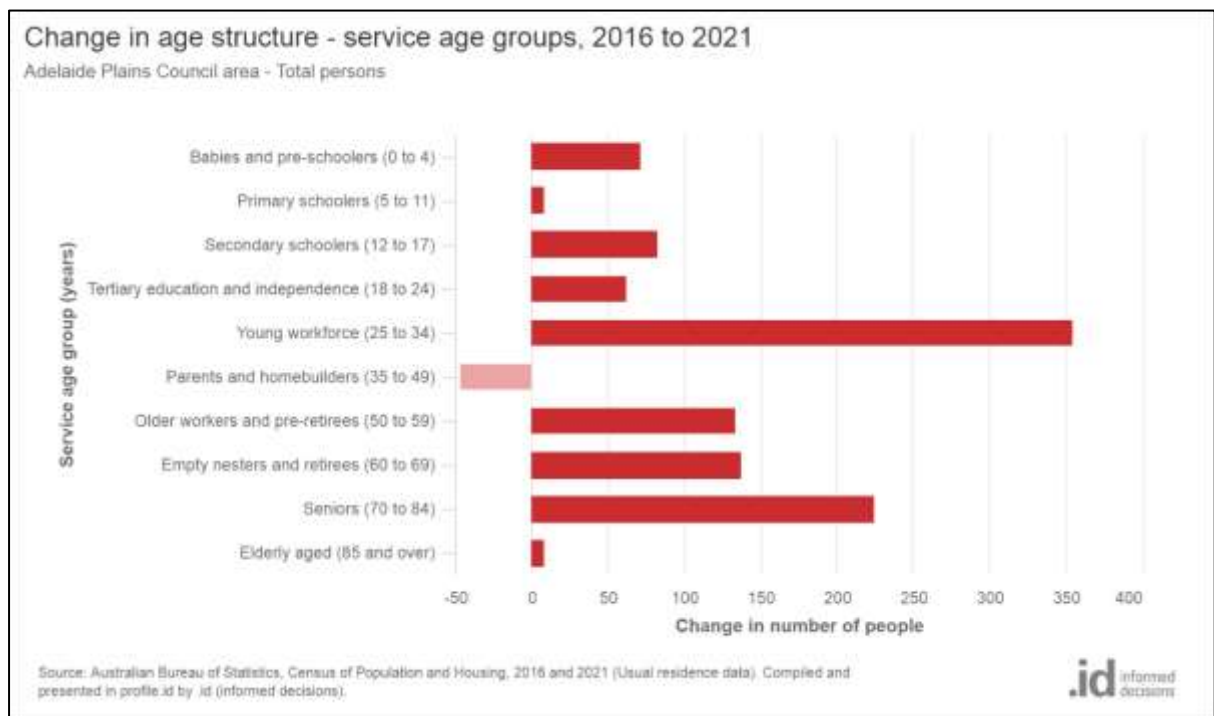
In 2021, the largest age group was 55 to 59 year olds. The group that changed the most since 2016 was 25 to 34 year-olds, increasing by 355 people.

The largest changes in age structure between 2016 and 2021 were in the age groups:

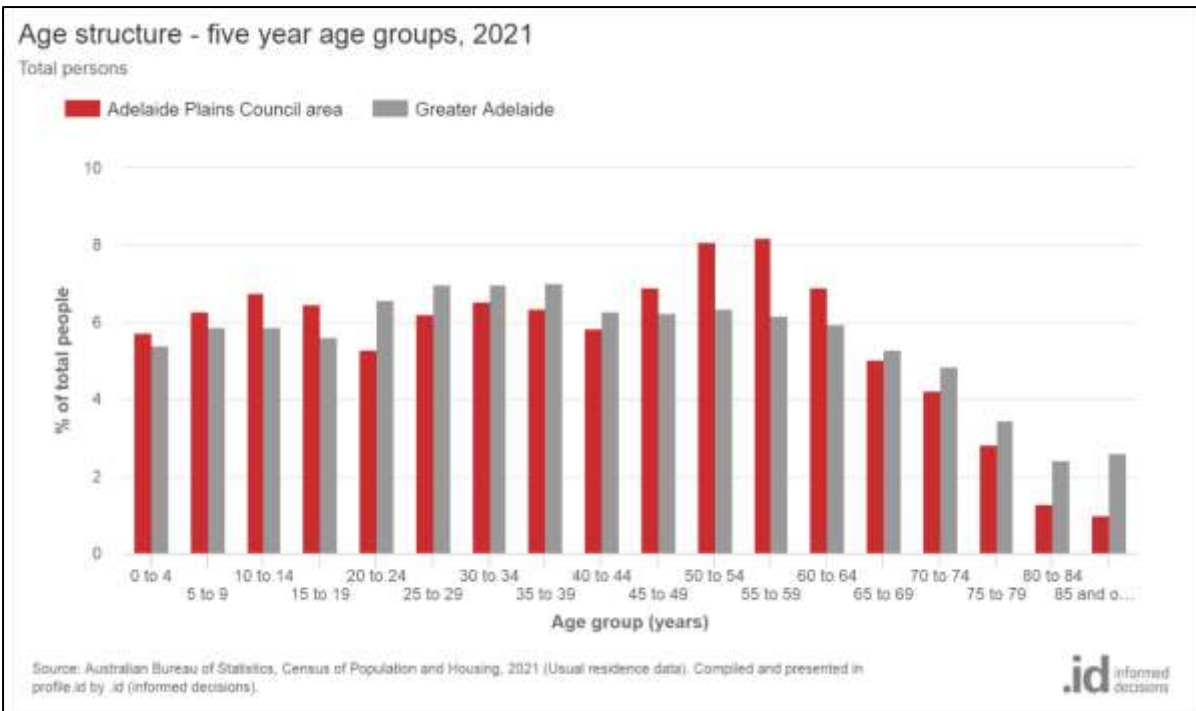
- 25 to 34 (+355 persons)
- 70 to 84 (+225 persons)

The major differences between Adelaide Plains and Greater Adelaide were:

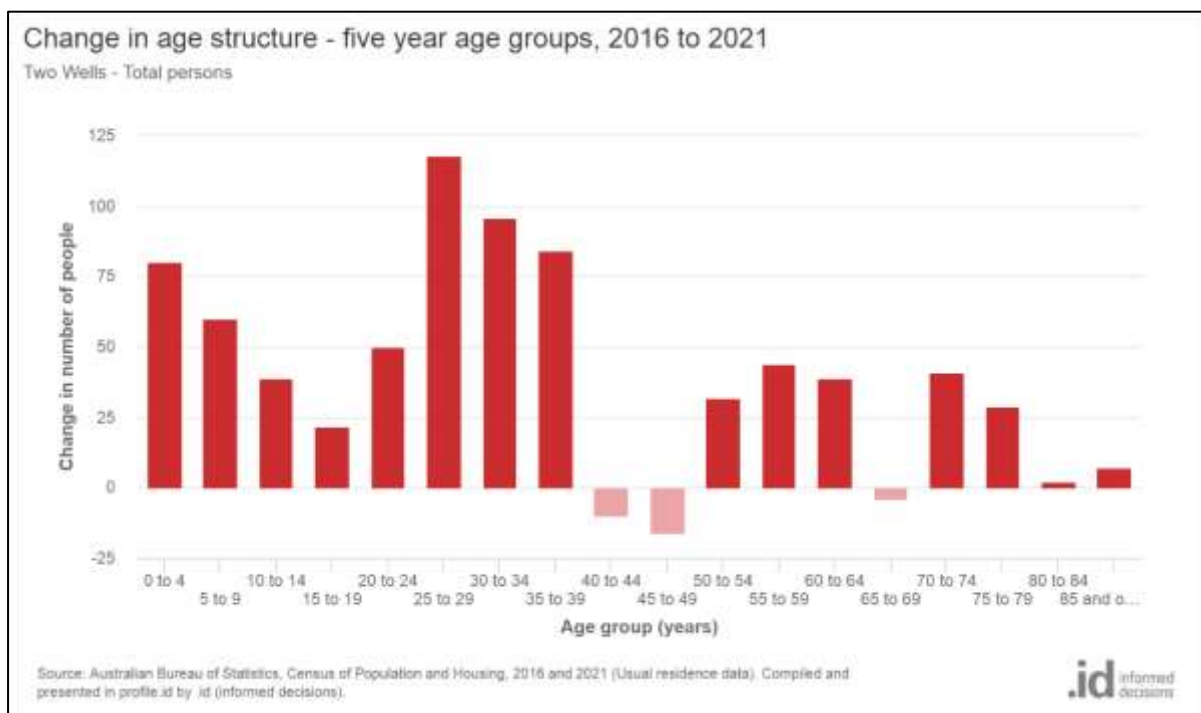
- A larger percentage of 'Older workers & pre-retirees' (16.3% compared to 12.6%)
- A larger percentage of 'Secondary schoolers' (8.3% compared to 6.9%)
- A smaller percentage of 'Seniors' (8.4% compared to 10.7%)
- A smaller percentage of 'Frail aged' (1.0% compared to 2.6%)



*Adelaide Plains experienced growth in younger and family rearing ages as well as what can be called empty nesters (2016-2021)*



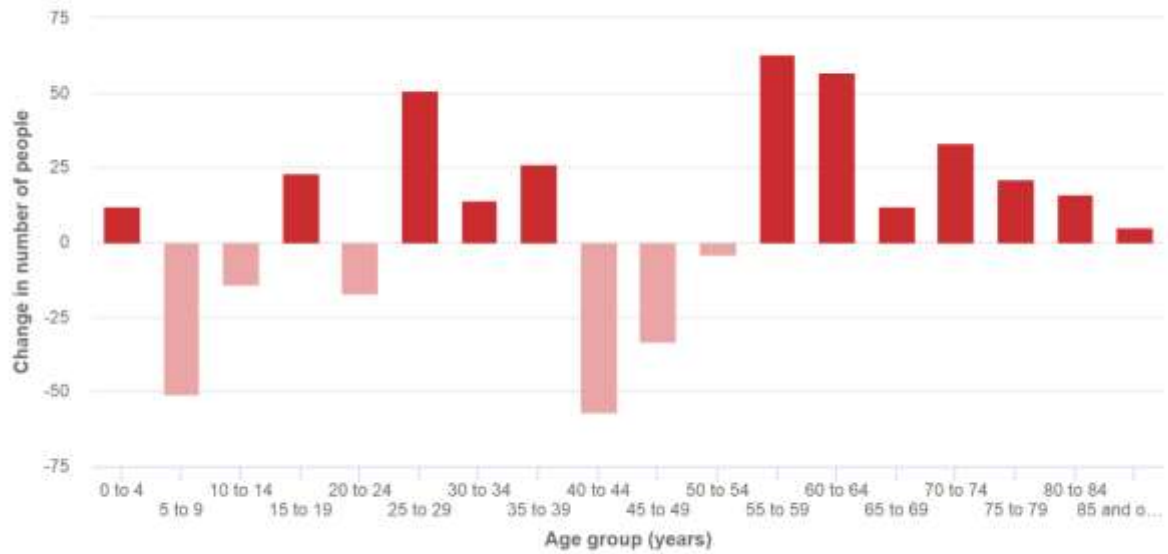
*Compared to Greater Adelaide, Adelaide Plains has higher proportion of children, youth and empty nesters, and lower proportion of family rearing age, and retirees (2016-2021)*



*Two Wells from 2016 – 2021 has experienced growth in children, young adults, family rearing age, empty nesters and older retirees.*

### Change in age structure - five year age groups, 2016 to 2021

Lewiston - Total persons



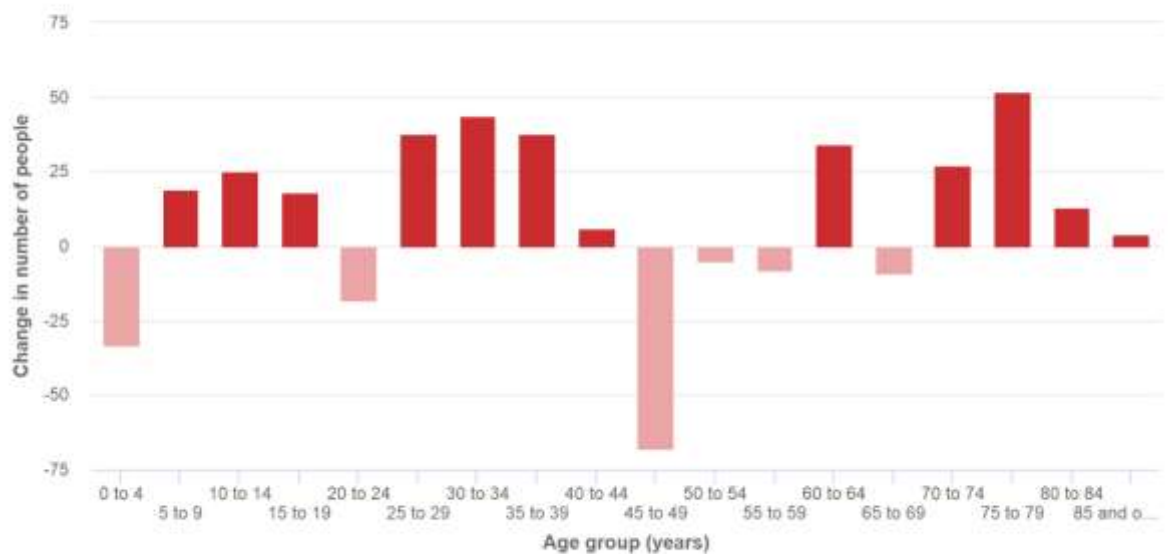
Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 and 2021 (Usual residence data). Compiled and presented in profile.id by .id (informed decisions).

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*Lewiston from 2016 – 2021 has experienced growth in family rearing age, empty nesters and retirees, and a decline in children and mature family age*

### Change in age structure - five year age groups, 2016 to 2021

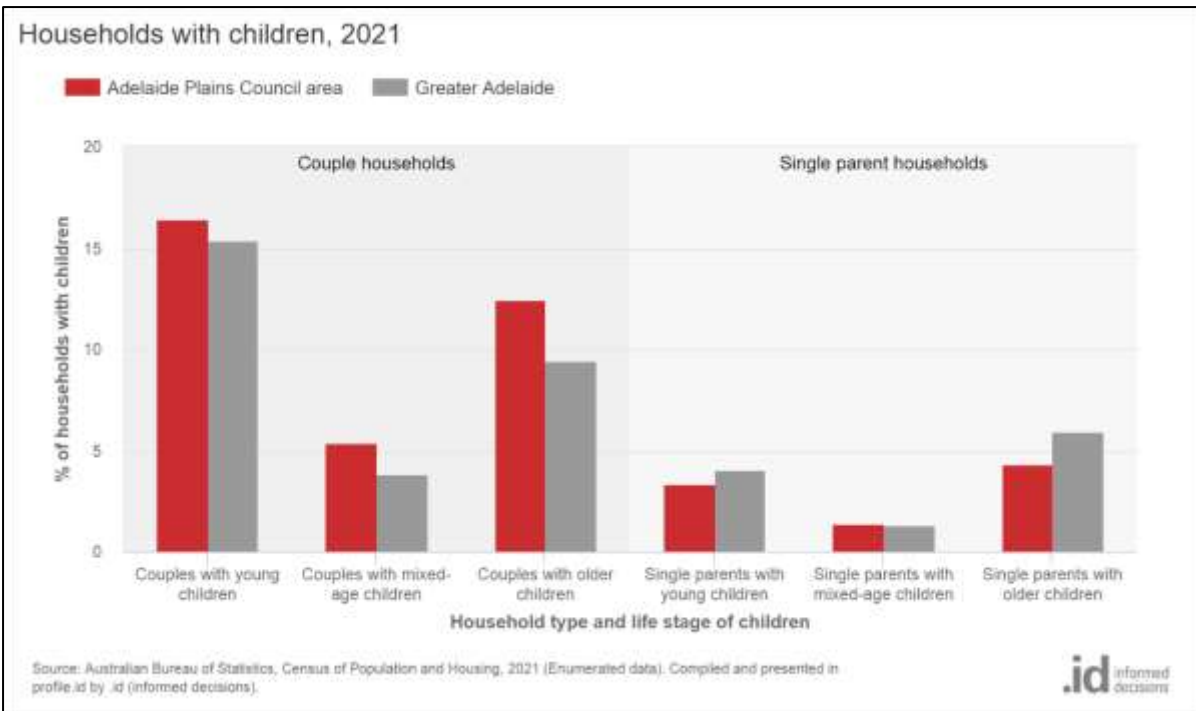
Mallala - Rural Remainder - Total persons



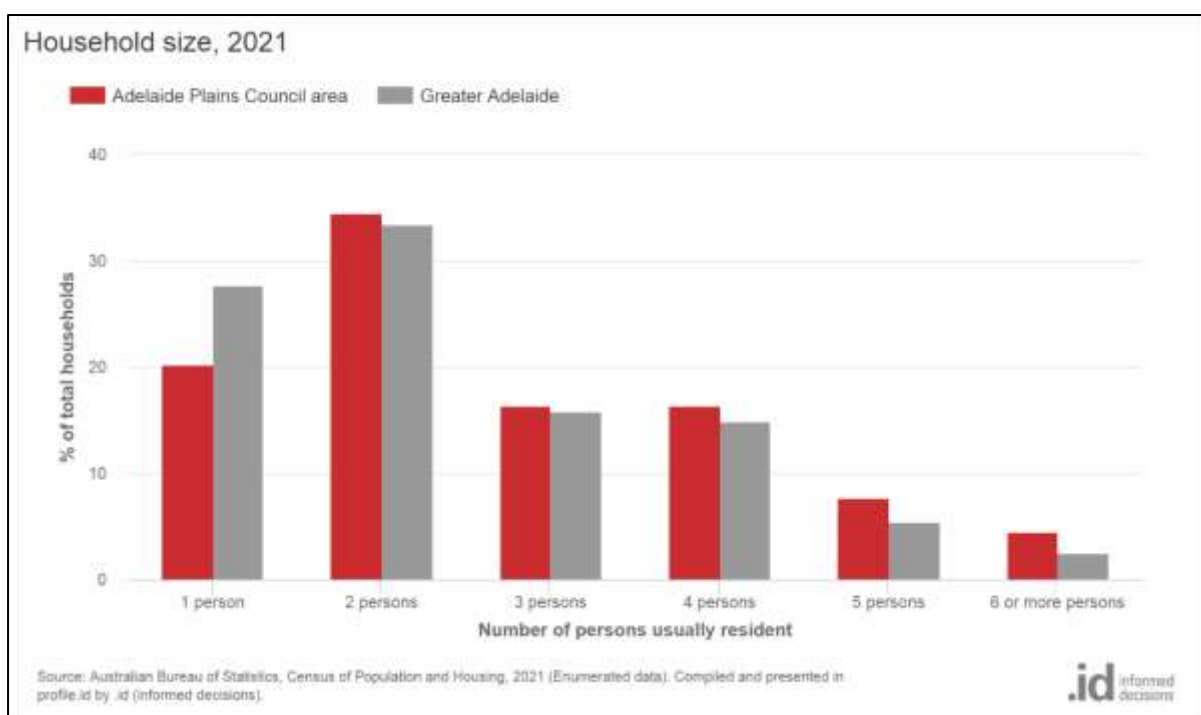
Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 and 2021 (Usual residence data). Compiled and presented in profile.id by .id (informed decisions).

.id informed decisions

*Mallala – Rural Remainder from 2016 – 2021 has experienced growth in children, family rearing age, older retirees, and decline in young children, young adults and mature families*



*Compared to Greater Adelaide, Adelaide Plains has higher proportions of couples with children*



















*Compared to Greater Adelaide, Adelaide Plains has a lower proportions of single person households*

Between 2016 and 2021, the LGA with the highest net migration to Adelaide Plains Council area (+383) was from Salisbury, whilst the highest net loss (-101) was to Gawler.

In 2021 compared to Greater Adelaide, there was a higher proportion of people in the younger age groups (0 to 17 years) and a lower proportion of people in the older age groups (60+ years). Overall, 22.6% of the population was aged between 0 and 17 compared to 20.5% for Greater Adelaide. 21.3% were aged 60 years and over, compared with 24.6% for Greater Adelaide.

Based on available data from the 2021 Census, families are moving to Adelaide Plains Council, in particular Two Wells and to a lesser extent, in Mallala-Rural Remainder. Lewiston and Mallala-Rural Remainder are experiencing ageing.

Adelaide Plains / Greater Adelaide based on ABS

<p><b>WORK</b> (Unemployment rate) 2021</p>  <p><u>4.2%</u>   <u>5.5%</u></p>	<p><b>HOUSEHOLDS (2021)</b></p> <p>Family</p>  <p><u>62%</u>   <u>54%</u></p> <p>Lone Person</p>  <p><u>20%</u>   <u>27%</u></p> <p>Group Households</p>  <p><u>3.2%</u>   <u>3.6%</u></p>	<p><b>PEOPLE</b> 0 – 24 years (2016 – 2040)</p> <p>(no data)</p>
<p><b>CARS</b> No motor vehicle (2021)</p>  <p><u>2%</u>   <u>7.5%</u></p>	<p><b>DWELLINGS</b></p> <p>Separate House</p>  <p><u>97%</u>   <u>73%</u></p> <p>Medium Density Dwellings</p>  <p><u>0.9%</u>   <u>23%</u></p>	<p><b>PEOPLE</b> 25 – 64 years (2016 – 2040)</p> <p>(no data)</p>
<p><b>INTERNET</b> Internet at Home (2016)</p>  <p><u>76%</u>   <u>80%</u></p>	<p><b>POPULATION</b></p>  <p><u>9977</u>   <u>1.38M</u></p> <p>People (2021)</p>	<p><b>LANGUAGE</b> Speak a language other than English at home (2021)</p>  <p><u>5.6%</u>   <u>21.3%</u></p>
<p><b>VOLUNTEER</b> Residents who did voluntary work (2021)</p>  <p><u>14.4%</u>   <u>15.5%</u></p>	<p><b>POPULATION</b></p>  <p><u>18500</u>   <u>1.89M</u></p> <p>Estimated Population (2040)</p>	<p><b>ECONOMIC</b> Low Income Households (2021)</p>  <p><u>20%</u>   <u>23%</u></p>
<p><b>RELATIVE DISADVANTAGE</b></p>  <p><u>979</u>   <u>989</u></p>	<p><b>FORECAST GROWTH</b> (% average annual change)</p>  <p><u>3%</u>   <u>1.1%</u></p>	<p>Rent &lt;\$304/week (2021)</p>  <p><u>52%</u>   <u>43%</u></p>

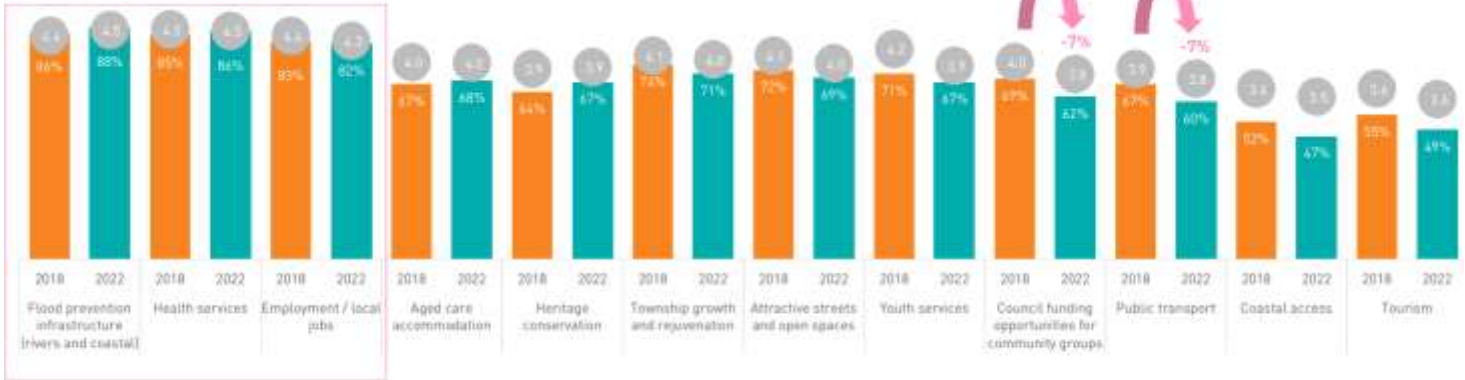
## Resident Satisfaction

In line with 2018, Flood prevention, Health services and Employment most important to the community in 2022.

Of less importance in 2022 is Council funding opportunities for community groups and public transport.

2018 to 2022 aggregate importance

■ Important 4-5 ■ mean



ADELAIDE PLAINS COUNCIL | AUGUST 2022

Q20 Using a scale of 1 to 5, where 1 is not at all important and 5 is extremely important, how important are the following social and environmental issues to you in relation to Council's future planning? Base: All respondents (n=308)

RATING LEVEL: Extremely High: 4.5 and above High: 4.0-4.4 45  
Moderate: 3.5-3.9 Mixed: 2.5-3.4 Low: 2.4 and below

The 2022 residents survey<sup>4</sup> affirmed the importance of planning for hazards, for health services, and employment.

A similar survey was underway in 2018.

<sup>4</sup> [PowerPoint Presentation \(apc.sa.gov.au\)](http://apc.sa.gov.au)

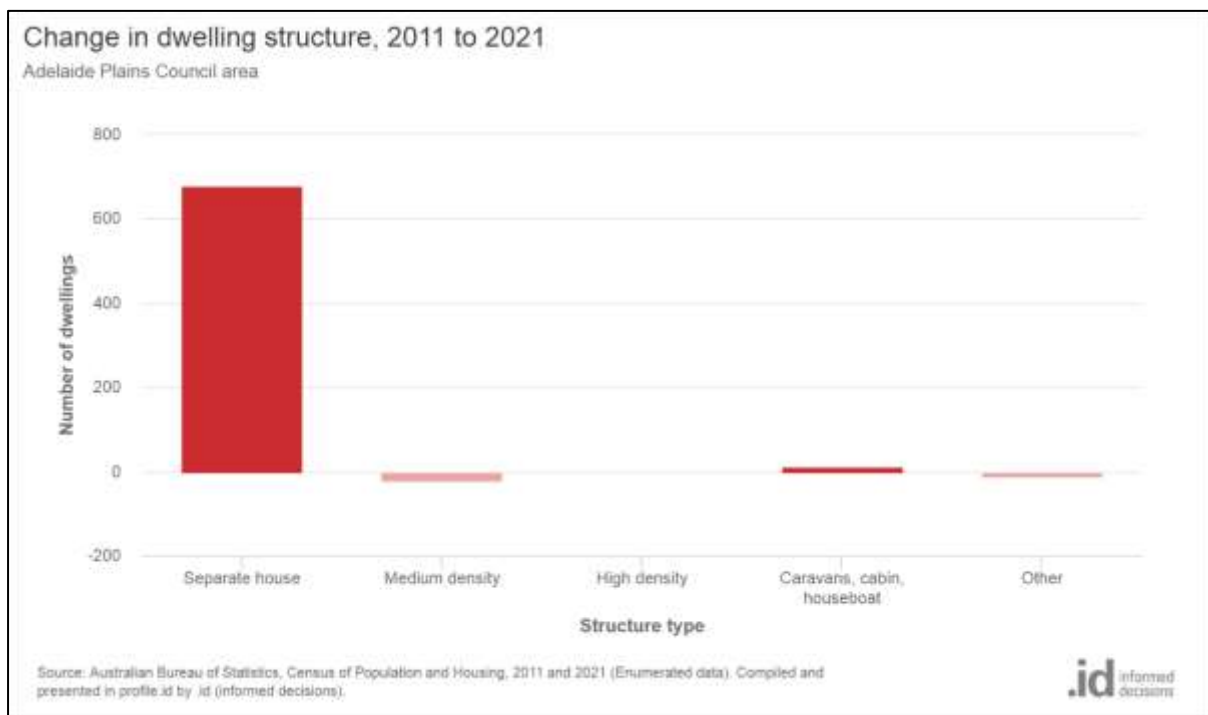


## Housing

The provision of affordable and suitable housing is part of the objectives within the SA Housing Authority's Our Housing Future 2020 – 2030<sup>5</sup> and is guided through the provisions of the Planning and Design Code from an assessment and approval perspective. Growth planning should consider housing supply and housing choice through providing a mix of housing styles and sizes along with a variety of allotments types from smaller medium density sites to more traditional allotments.

A growing population also has clear implications on requirements for additional housing and services. Council is responsible for rezoning additional land for residential development and is responsible for some of the social and community services along with State and Australian Government service departments.

SA Housing Authority has units in Two Wells. A Local Affordable housing plan toolkit<sup>6</sup> is available.

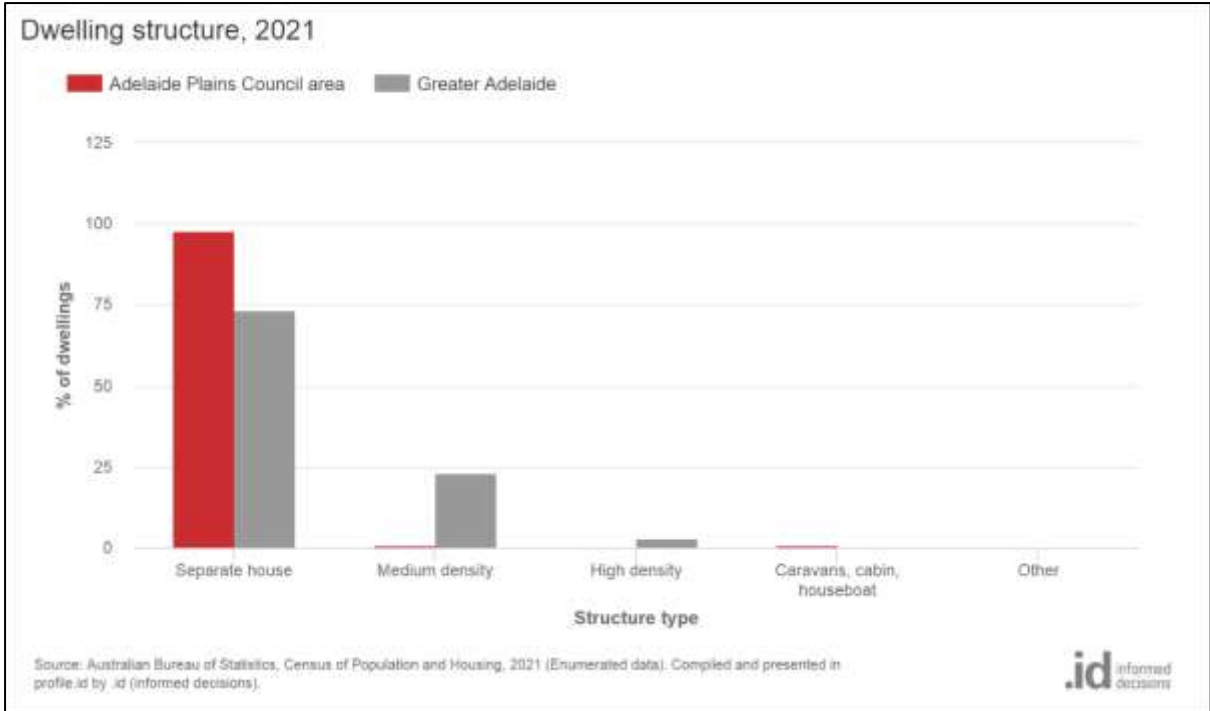


Across Adelaide Plains, from 2011 – 2021, growth in separate houses has been dominant, with a decline in medium density housing

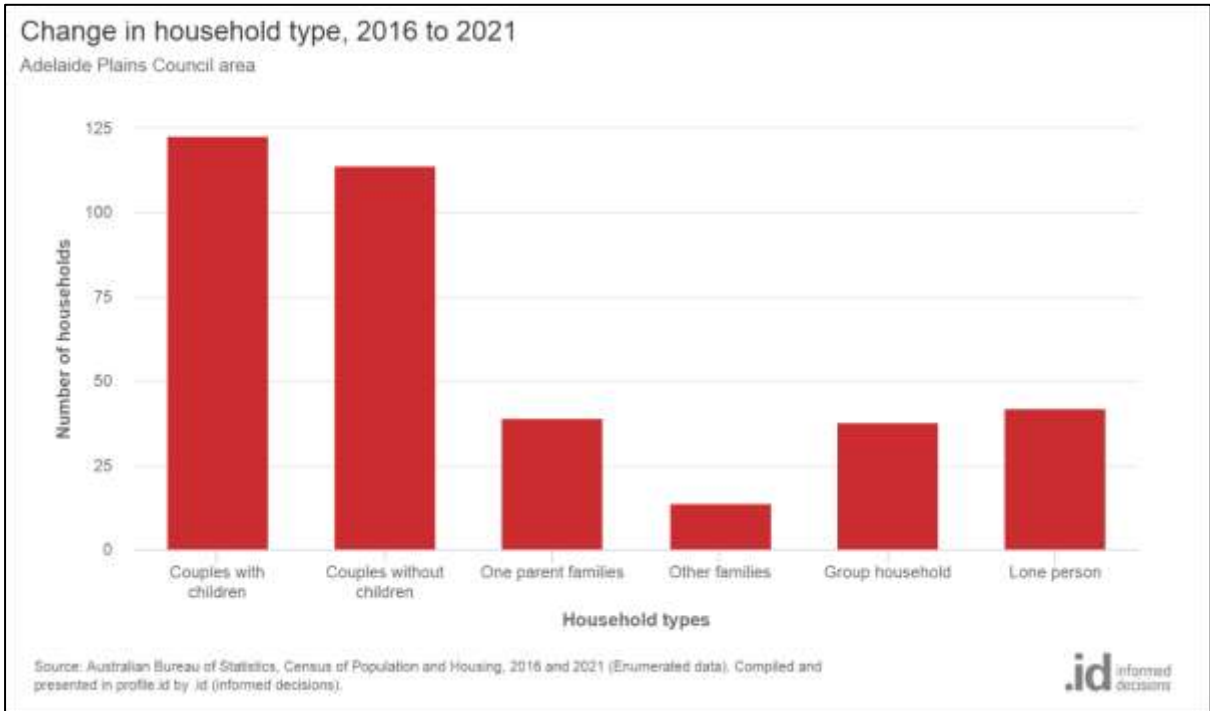
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<sup>5</sup> [housing.sa.gov.au/our-housing-future](https://housing.sa.gov.au/our-housing-future)

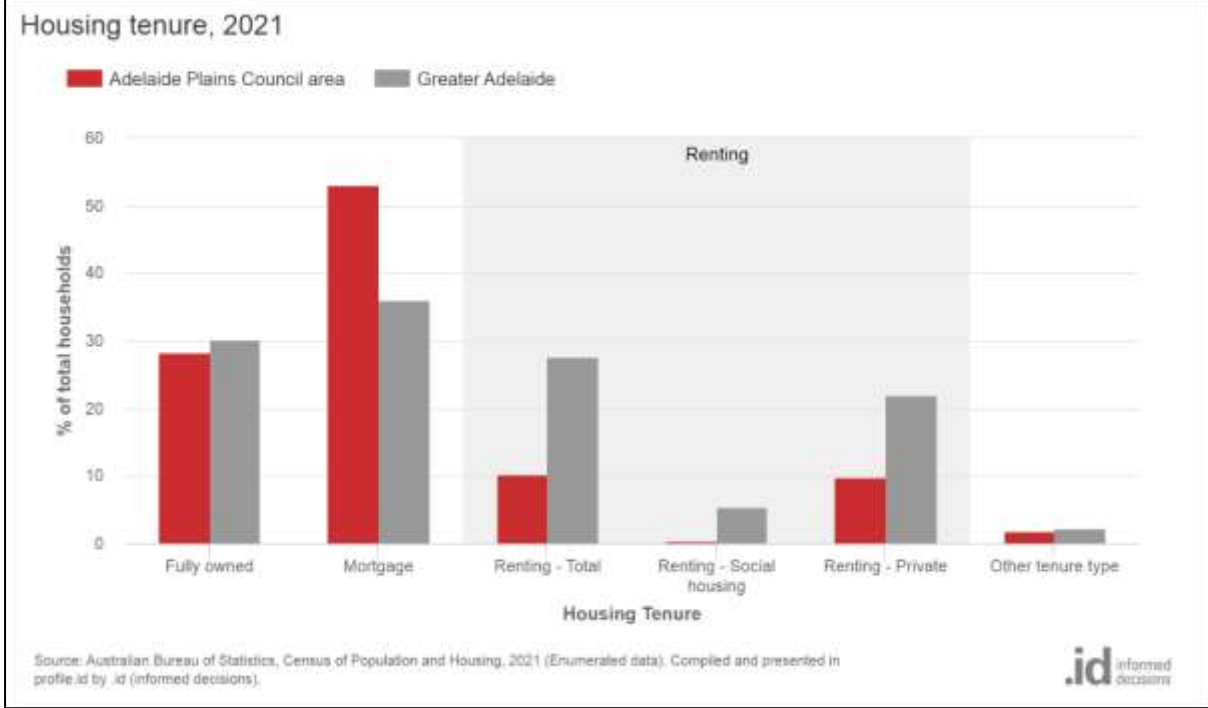
<sup>6</sup> [housing.sa.gov.au/documents/general/Local-Affordable-Housing-Plan-Toolkit.pdf](https://housing.sa.gov.au/documents/general/Local-Affordable-Housing-Plan-Toolkit.pdf)



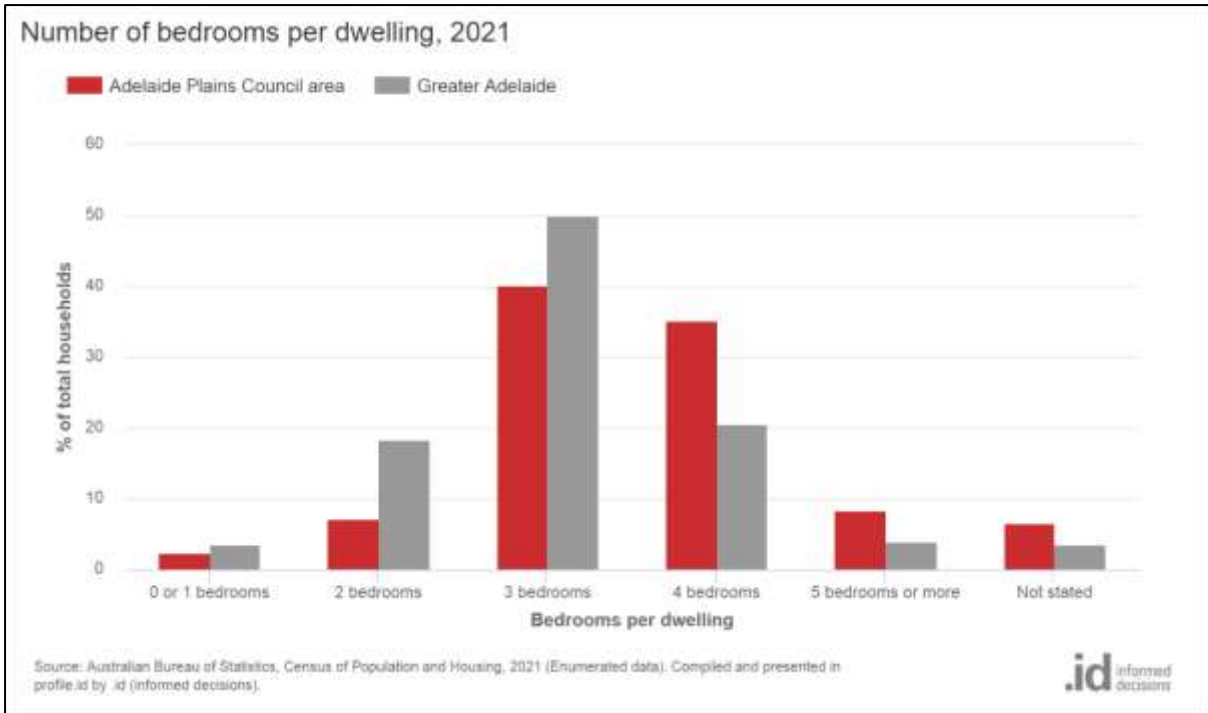
*Compared to Greater Adelaide, Adelaide Plains is dominated by separate houses, with negligible other forms of housing.*



*Across Adelaide Plains, Greatest growth has been in couples, with and without children, with some growth in group and lone person households*



*In 2021, compared to Greater Adelaide, higher proportions of households had a mortgage, and fewer households rented privately. Adelaide Plains had negligible amounts of social housing.*



*Compared to Greater Adelaide, Adelaide Plains has lesser proportions of dwellings with 1 – 2 bedrooms, and greater proportions of dwellings with 4 or more bedrooms.*

Regarding aged housing, in 2019, Council explored options for funding, operation and management of its existing retirement living portfolio. The intent was to ensure it continues to serve our older community.

Council identified several opportunities to increase the quantity and the quality of retirement living in Mallala and Two Wells.

The aged living review<sup>7</sup> identified:

- several providers with interest in Adelaide Plains, including regarding land parcels identified for potential development
- The aged review identified a strong preference in Mallala and Two Wells for people to remain in their town as they age (e.g. local people do not want to have to leave Mallala to go to Two Wells and vice versa).

Regarding seasonal workers accommodation, this is important as part of attracting seasonal workers for agribusinesses. The Australian Government program encourages overseas seasonal workers and provides a range of information about legal, wellbeing and housing<sup>8</sup>. Several providers specialise in seasonal housing, be it through regular housing managed and available for seasonal workers or through temporary seasonal workers accommodation.

Amended regulations<sup>9</sup> now fast track approvals of temporary accommodation for seasonal workers.

Adelaide Plains has limited housing choice for the growing number of lone and couple households or those in need of social housing.

Further work on housing mix and variety is required to plan township communities that provide a variety of housing choice to suit various individuals and groups – including aged and seasonal workers.

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<sup>7</sup> Aged Living Review, Urban and Regional Planning Solutions, 2021

<sup>8</sup> [palmscheme.gov.au/worker-support](https://palmscheme.gov.au/worker-support)

<sup>9</sup>

[plan.sa.gov.au/news/article/2021/new\\_regulations\\_fast\\_track\\_temporary\\_accommodation\\_for\\_seasonal\\_workers](https://plan.sa.gov.au/news/article/2021/new_regulations_fast_track_temporary_accommodation_for_seasonal_workers)

## Towns and Settlements

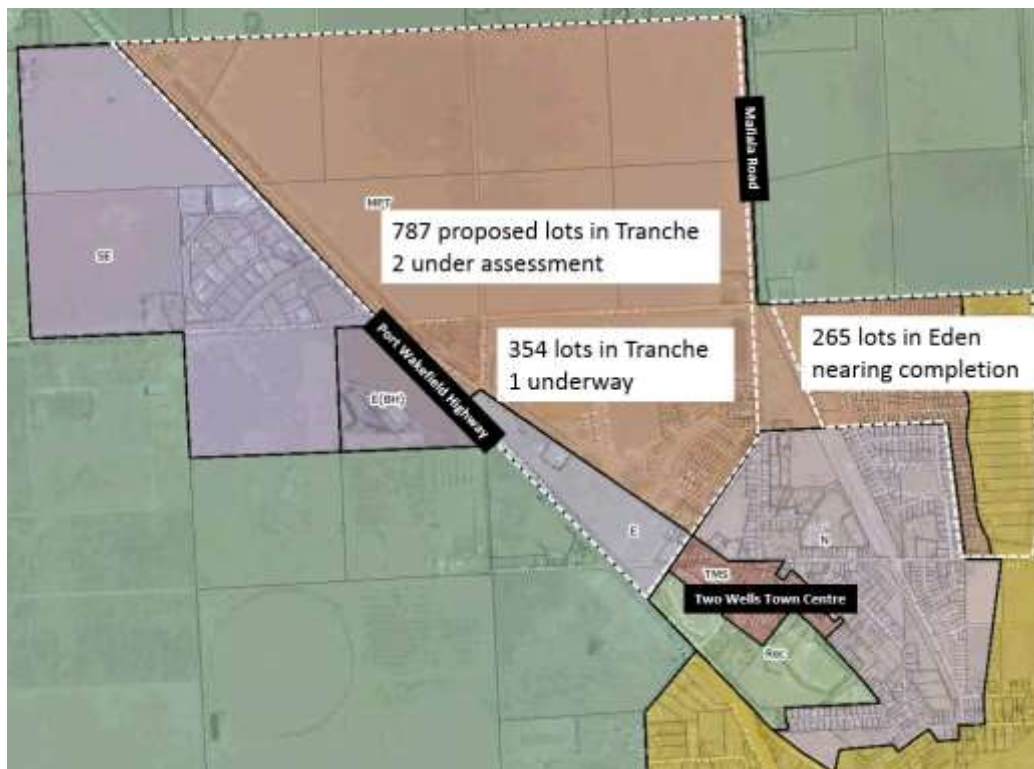
### Two Wells

Hickinbotham Developments and Council have been working together since the mid-2000s to realise planned urban growth at Two Wells. This includes:

- 2007 Memorandum of Understanding
- 2012 Infrastructure Deeds
- 2013 Rezoning

In 2013, significant decisions were taken and the Two Wells Residential Development Plan Amendment was gazetted.

At the time, The Planning Minister stated "This DPA will allow for the provision of up to 3,400 new dwellings and up to 9,700 more residents living in Two Wells over the next 20-30 years. The Two Wells township expansion is a \$1.225 billion project creating more than 3,000 regional jobs during the next 20 years, including more than 450 jobs annually in the construction industry. The future needs of the community will be catered for with a new local centre, provision for a school, improved flood protection and an environmentally friendly design. It will also incorporate a community waste water treatment plant that will service the proposed development and internal buffers to protect existing land uses"



*New subdivisions are planned to enable around 2,200 new dwellings over the next 10 – 20 years*

The numbers in the 2012 Amendment were indicative and dependent on land development layouts, school and open space provision. Given the current and proposed development pattern, it is considered unlikely that Liberty would reach

in excess of 3000 allotments. Based on a Deed<sup>10</sup> of 2012, the Hickinbotham Group have progressed the Eden land division, with the final lot settling in early 2023. The Liberty Estate envisages some 1,900 lots, noting the zoning allows up to around 3,000 lots. Tranche 1 with 354 lots is under development and Tranche 2 with 787 is proposed.

The Eden and Liberty housing estates contain modern housing on allotments of a variety of sizes, significant open spaces for recreation and active lifestyles, and effective stormwater and traffic management, Within the Liberty estate, Xavier College is established.

Council and Hickinbotham Developments will continue established arrangements to lead to the successful delivery of Eden and Liberty.

### *Two Wells Main Street and Town Centre*

Old Port Wakefield Road is the village heart of the historic Two Wells township, housing local services, amenities and historical buildings. With a fast-growing population, Council is seeking to revitalise the 'village heart' of the town, guided by the vision and principles presented in the 2020 Two Wells Main Street Masterplan<sup>11</sup>.

The 2020 Plan builds on the investigations and engagement captured in the 2011 Master Plan<sup>12</sup>, and is underpinned by the 2019 retail study.

After years of planning, in 2022, Council strategic acquired eight hectares of 'Crown Land' for the purposes of delivering commercial, retail and community



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<sup>10</sup> Development Deed 7 November 2012 DC Mallala and Hickinbotham Developments

<sup>11</sup> [apc.sa.gov.au/\\_data/assets/pdf\\_file/0033/659760/Two-Wells-Main-Street-Master-Plan.pdf](https://apc.sa.gov.au/_data/assets/pdf_file/0033/659760/Two-Wells-Main-Street-Master-Plan.pdf)

<sup>12</sup> [apc.sa.gov.au/\\_data/assets/pdf\\_file/0030/354855/D16-4102-Two-Wells-Urban-Design-Guidelines.pdf](https://apc.sa.gov.au/_data/assets/pdf_file/0030/354855/D16-4102-Two-Wells-Urban-Design-Guidelines.pdf)

facilities<sup>13</sup>. With the Adelaide Plains' population growing at an unprecedented rate, the purchase of this strategic landholding in the town centre of Two Wells positions our broader region for further substantial economic growth and will provide convenient access to amenities for residents and visitors alike.

The land is bound by the Port Wakefield Highway, Old Port Wakefield Road, Wells Road and Windmill Road with extensive exposure to arterials and the historic main street.

### *Two Wells Original Township – Large Sites - CWMS - Levee*

Two Well's original township is a mix of cottages, dwellings built pre and post the two wars, and from the 1960's onwards. Some 20 large lots are used for non-residential purposes and can be characterised as underdeveloped.

The original township does not have a community wastewater management scheme (CWMS). One consequence is new housing needs site area of 1200sqm or greater to accommodate on site waste treatment. Original residential areas are mostly within a Neighbourhood Zone and partly a Rural Living Zone. Within the Neighbourhood Zone, a variety of small lot housing may be granted planning consent, including dwellings with site areas between 250 and 450 sqm, ancillary accommodation (akin to granny flats) and retirement housing, subject to minimum requirements for on-site treatment. However, until a CWMS is in place, housing sites need to be around 1200sqm.

Dwelling Type	Minimum Site Area (sqm)	Minimum Site Frontage (m)
<b>Neighbourhood Zone</b>		
Detached Dwelling	450 <sup>1</sup>	15
Semi-Detached Row Dwellings (minimum of three)	300 <sup>1</sup>	10
Group Dwelling (needs two or more)	350 <sup>1</sup>	20
Residential Flat Building (needs two or more)	250 <sup>1</sup>	20
Ancillary Accommodation (on the same site as another dwelling)	-	-
Retirement Facility Supported Accommodation	-	
<b>Rural Living Zone</b>		
Detached Dwelling	10,000 (1HA)	

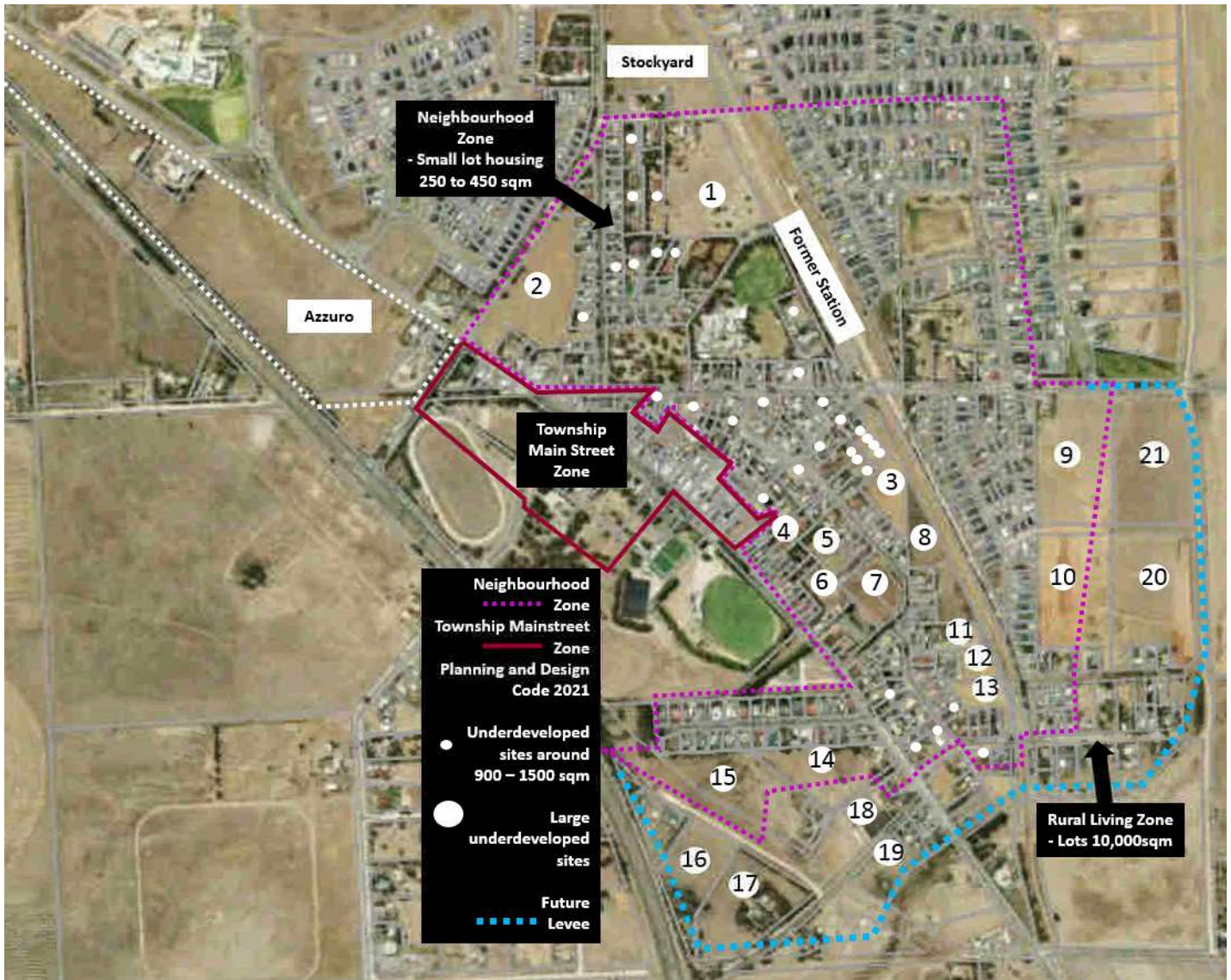
<sup>13</sup> [apc.sa.gov.au/our-council/major-projects/two-wells-investment](http://apc.sa.gov.au/our-council/major-projects/two-wells-investment)



<sup>1</sup> Minimum 1200sqm is needed to accommodate on site waste treatment

### Site Areas and Frontages Anticipated for new Housing in Two Well's Original Residential Areas

Council, SA Water and the LGA are investigating a CWMS. If introduced, new housing would not be constrained to sites of 1200sqm. In parallel, planning for a levee to the east and south is underway. Funding for the levee has been secured.



*Potential Development Sites within the Township. Note funded levee location.*

Should a CWMS be installed, analysis of development potential has been undertaken. Sites up to around 900sqm already developed with a relatively substantial house are unlikely to offer potential for additional dwellings. Sites of around 800 - 900sqm or greater with a lower value building or vacant offer potential for housing development. There are around 30 sites between 0.1HA and 0.7HA that offer this form of potential for housing development. Initial analysis identifies around 21 large sites developed with few buildings, with non-residential purposes or vacant. The large sites are generally between 0.7HA and 3HA. 15 are



within the Neighbourhood Zone and six within the Rural Living Zone. The 21 large sites and 30 sites together equate to some 52HA.

If 75% of large sites and 25% of small sites developed at 12 dwellings/HA, this would yield around 400 dwellings. If each dwellings has 2.67 residents on average, this is 1100 residents. If developed at 20 dwellings/HA 9 around 400sqm lots on average), this is 1900 residents.

The proposed levee potentially opens up several large sites and numerous smaller sites sited within the area of the proposed levee.

Development sites not included within this analysis include:

- Within the Township Main Street Zone
- Azzurro land of about 15HA within the Employment Zone
- Stockyard Lot, noting a land division is underway
- The former Train Station land under the care and control of ARTC.

Several zone boundaries don't follow title boundaries, e.g. large lots 14 and 15. Commercial land uses on north side of Gawler Road/Old Port Wakefield Road in the Neighbourhood Zone. Consider placing in Town Centre Zone.

On site greening policy will need review considering locations that densify through small lot housing, greening is recognised as critical to improve amenity, reduce heat load, and enable on site water infiltration.

#### *Potential Urban Growth – Hicks Land*

Initially supported in principle by Council in 2019, progressing the potential urban growth of the Hicks land is a key urban growth action for Two Wells.



*The Hicks land at Two Wells is north of the Eden housing estate, and east of the railway line*

During consultation on the growth strategy in 2022, Hicks expressed support for the growth strategy. In order to enable urban development of the Hicks land, the land would need to be rezoned with community engagement, the EFPA lifted through various processes including State Parliament., and suitable infrastructure deeds and suitable access arrangements regarding ARTC/DIT infrastructure in place.

The potential urban development of the Hicks land immediately to the east of Liberty and separated by Mallala Road and the ARTC train line will need to involve the Hickinbotham Group, DIT and ARTC as key stakeholders amongst others.

Temby Road level crossing would not support high traffic volumes or large vehicles given the short set back distance to Mallala Road. Rail activity within the corridor will only increase into the future, not decrease. Therefore, traffic management studies and risk assessments will need to be undertaken given the population forecast for Two Wells will exceed 10,000 by 2040, which is only 18 years away.

ARTC has a policy of no new level crossings, but is open to negotiating a reduction in the number of existing level crossings in exchange for a new or upgraded level crossing. It is likely grade separation (e.g., bridge over rail) may be required to avoid vehicles queuing during train movements and provide the connectivity over the rail corridor to ensure the future developments in Two Wells are not disjointed.

Potential urban development of the Hicks land – including suitable transport arrangements involving movements potentially impacting the train line - needs further investigation.

Along with the Planning and Design Code, Two Wells future is influenced by a possible CWMS for the original township, a levee, and a rezoning.

Small lot housing is potentially facilitated via establishment of a CWMS. This small lot housing is highly walkable to the main street and recreation facilities. Careful siting, design, and on-site greening is important, learning from infill development in metropolitan Adelaide.

If 1100 residents associated with CWMS is added to the two subdivisions, this could lead Two Wells population being 10,000 – 10,500. The proposed levee suggests investigating review of the Rural Living Zoning. Further investigations of the Hicks land are warranted.

Provided economic and market conditions continue favourably to support take up of lots, the Liberty development could be completed in ten to 15 years from now.

## Mallala

The township of Mallala had 733 residents in 2016.

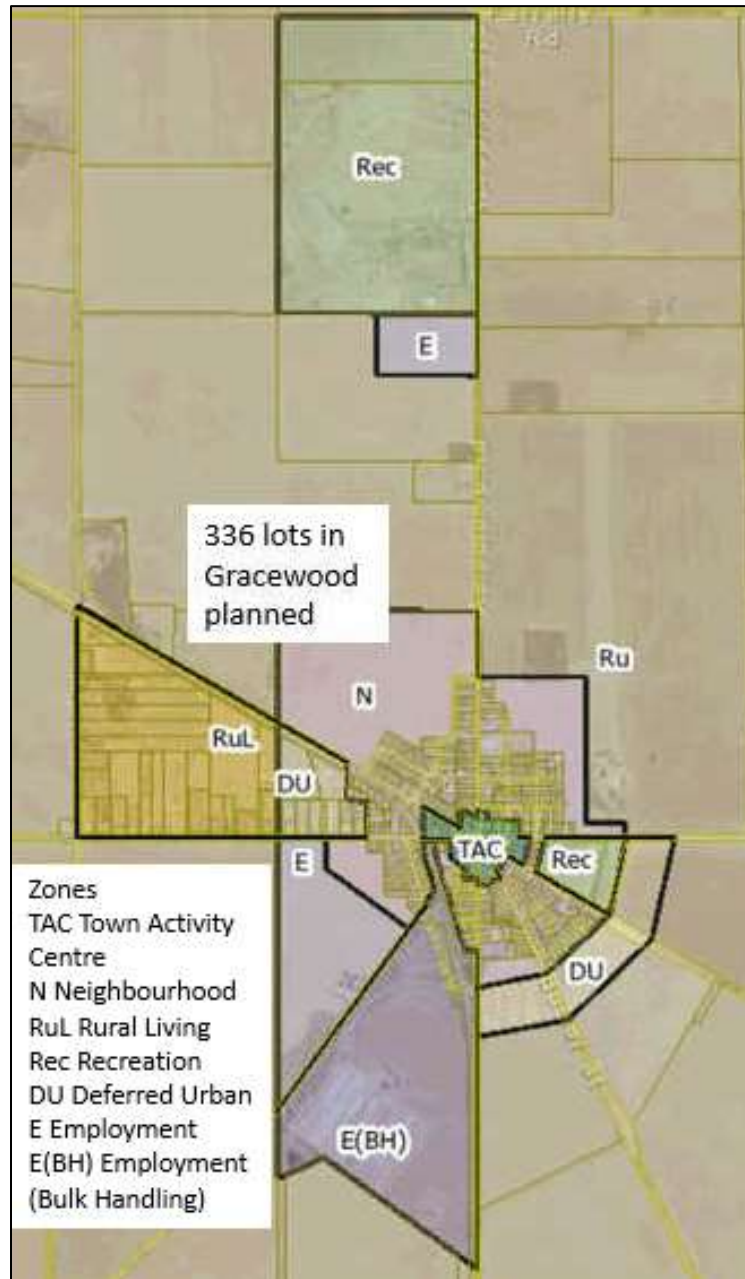
In 2014, the Mallala Township (Transport, Commercial and Minor Residential Zones Boundary Adjustment) Development Plan Amendment was approved. This rezoned 42HA for residential purposes and 22HA as deferred urban.

The Gracewood land division proposes to progressively establish 336 lots over the next 20 years.

336 lots developed at 2.67 residents/dwelling equates to 900 residents. Should this occur, and noting some potential infill within the town, in the long term, Mallala would be around 1600 – 1700 residents.

The first stage of Gracewood was lodged in 2019 but has not yet been approved. Discussions are ongoing.

The Peregrine Group acquired the Mallala Motor Sport Park in 2017.

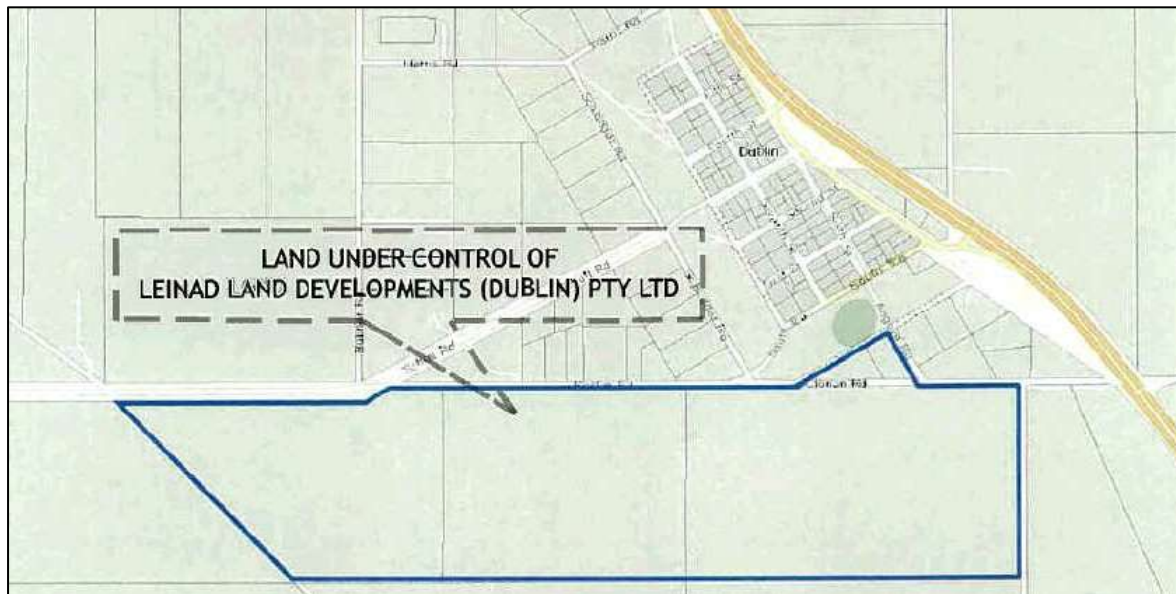


Mallala planned urban growth envisages a town of 1600 – 1700 residents. Further urban growth will increase demand for services.

## Dublin

Dublin and its immediate adjacent agricultural areas had 405 residents in 2021

In response to a request from a private landowner, in 2015, Council proposed to rezone land. The Minister declined to support the rezoning due to other land available around Two Wells, Mallala and in Playford. Dublin was also seen as having limited facilities and low demand for land, with only 27 dwellings being built over the preceding decade.



Council's 2013 Strategic Directions Report contemplated Dublin's expansion.

Figure 5.1 Dublin Township Structure Plan (Source: Strategic Directions Report: Development Plan Review February 2013)



Leinad's submission to the 2022 growth strategy consultation outlines that Leinad control land abutting the south side of Ruskin Road and also land further south and west. Leinad seek to expand Dublin in an orderly, economic and sustainable manner. Expansion southwards will:

- Enable housing to the south of the Park Lands, as originally intended in the towns plan
- Strengthen and define the town centre and Parklands
- Enable reinstatement of the original rectilinear form of the Park Lands to the south of the town
- Bolster the country town lifestyle, act as a commuter settlement, and a gateway to coastal settlements.
- Underpin additional services and retail, and local jobs

Leinad support the Growth Strategy and seek to work cooperatively with Council.

Gurung and Wait made a submission to the 2022 growth strategy consultation. Their submissions suggested to rezone some existing Rural Living lots and expand the Rural Living Zone further west.

Under the scenario proposed in submissions by Leinad, Gurung and Wait:

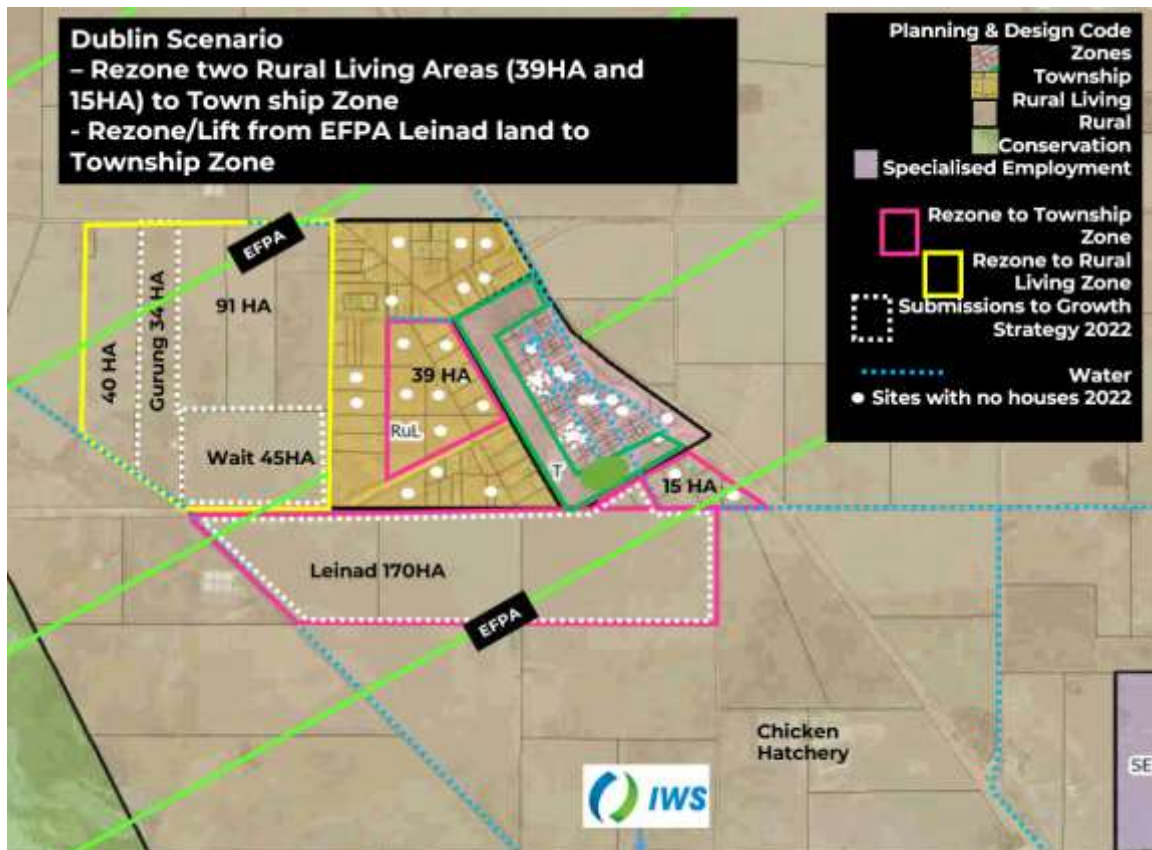
- If the Leinad Land and Township Zoned former Rural Living lots are all developed at 6 dwellings/hectare, with 2.65 residents/dwelling, this yields potentially 3,500 residents.
- If the agricultural land rezoned to Rural Living is all developed with 1 HA lots, assuming 2.65 residents/dwelling, this yields potentially 500 residents.
- Added to Dublin's 405 residents of 2021, in total, Dublin could be in the order of 4,500.
- Accounting for the variability of owners intentions with land, if around 25% of sites are developed (rather than all sites), this entails Dublin could grow by 1000 to around 1400. If undertaken over 20 years to 2041, this rate of growth is 6% per annum, 1% higher than experienced at Two Wells from 2016 – 2021.
- If a 3% per annum rate of growth is experienced over 20 years to 2041, this is an increase of 345, leading to a total population of 750.

Council's 2015 request to rezone land at Dublin was not supported by the Minister for Planning at the time due to insufficient demand for housing. Various factors have changed including:

- Increasing employment in Adelaide Plains. Jobs in Adelaide Plains increased from 2,102 in 2016 to 2,987 in 2021. This is an increase from 0.26 to 0.35% of all jobs in SA
- northern expressway increasing convenience to metropolitan Adelaide
- increased interest in working from home.

Leinad advise in their submission that the Greater Adelaide Land Supply (2021) flags the need to accommodate an additional 115 dwellings per annum. Leinad also advise that in response to a call for expressions of interest, Leinad have received interest from 24 parties for lots between 1000 and 1800 sqm.





*The scenario proposed in submissions by Leinad, Gurung and Wait involve expansion of the township zone to the west and south, and further Rural Living to the west*

Council's Business Plan for 2022/23 contains a project to undertake the Dublin Township Growth and Tourism Master Plan. Staff have commenced preparing a Background Paper and informal discussions with local stakeholders about the Dublin District. This acknowledges planning for Dublin's growth needs to be informed by and complement the future of nearby coastal and rural settlements, agricultural areas and the Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara.

For Dublin, further investigations are needed around:

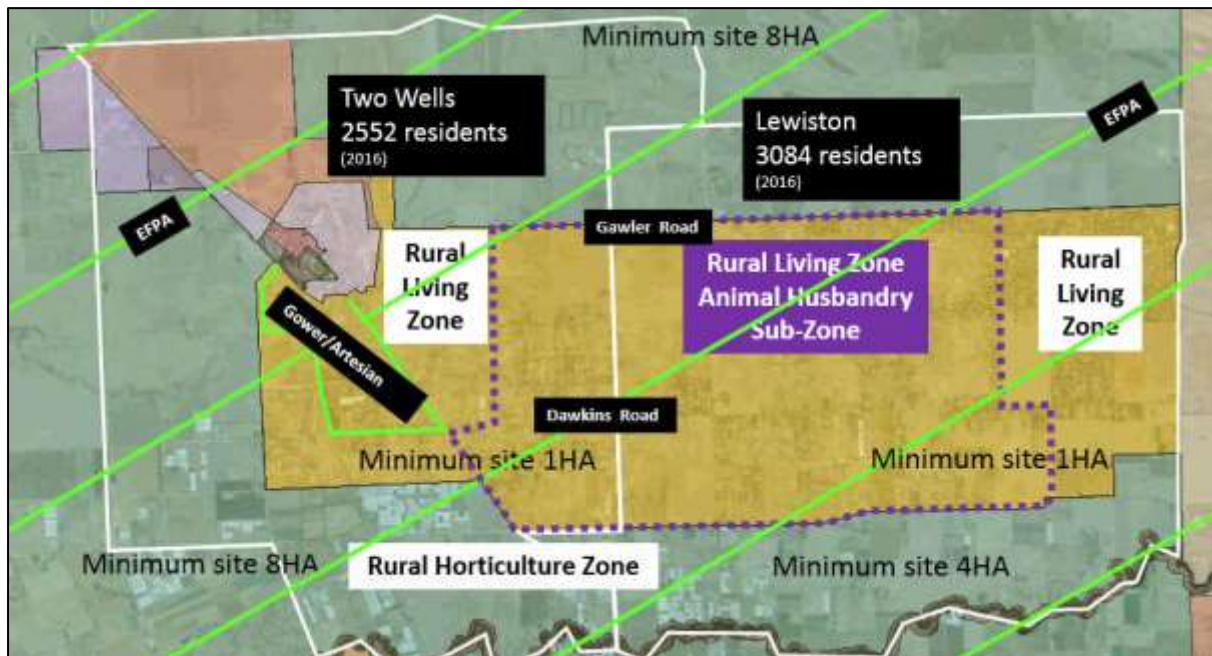
- opportunities to grow tourism and business experiences
- need for land supply release for housing, including rural living as transition to agriculture. Assessment of value of soil for food production and environmentally needs consideration
- potential for conflict with established uses, such as the chicken hatchery and waste facility to the south
- community infrastructure and open space
- hard infrastructure, e.g. sewer and water.

Dublin's future is influenced by its relative proximity to Greater Adelaide arising from the northern connector, employment growth, the Carlslake Road Employment Area, the Adelaide International Bird Sanctuary and a historical rezoning request (see Options for Future Planned Urban Growth).

## Lewiston

Lewiston had 3,310 residents in 2021, up from 3,084 in 2016<sup>14</sup>.

Lewiston is within the Environment and Food Production Area (EFPA). Recent years has seen a dog park established with the playground intersected by the shared horse trail. This is a focal point within Lewiston.



*Two Wells and Lewiston's Rural Living Area is within the Environment and Food Production Area*

### Planning and Design Code

The Planning and Design Code<sup>15</sup> nominates Lewiston for Rural Living, with the central area for Rural Living and Animal Husbandry. The Rural Living Animal Husbandry area has been planned for several decades to be developed for animal husbandry. The Rural Horticulture Zone surrounds Two Wells and Lewiston.

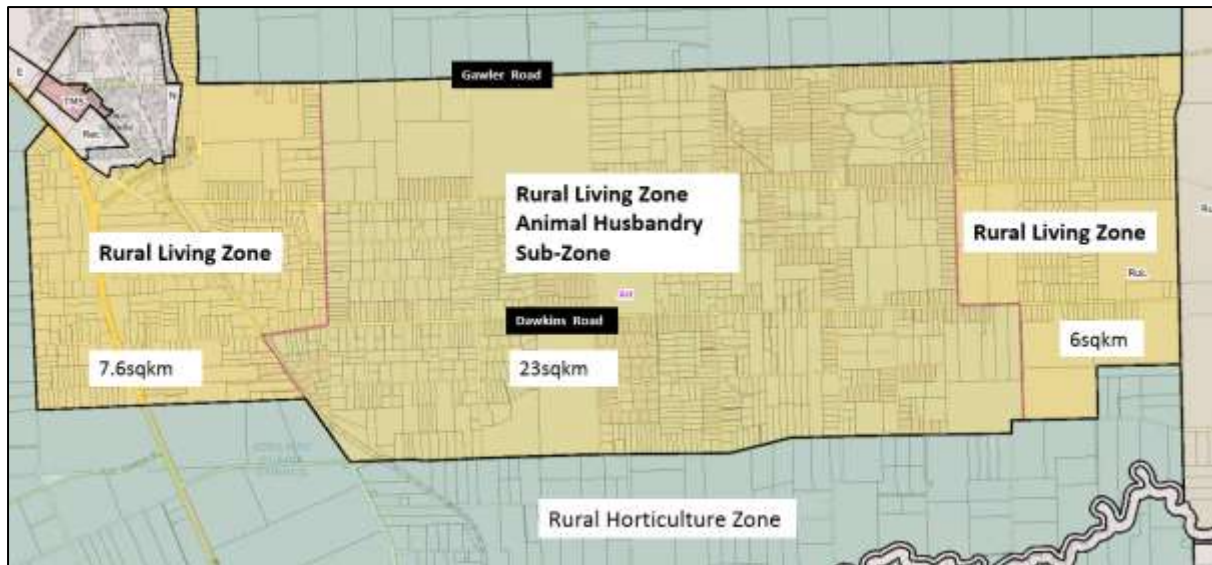
The Planning and Design Code continues this.

The total area of the Rural Living Zone, including the Animal Husbandry Subzone is 36sqkm. As an indicator of size, this is five times the size of Adelaide Airport.

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<sup>14</sup> ABS 2016

<sup>15</sup> Planning and Design Code April 2021



Much of Lewiston is zoned for Rural Living purposes, with the central area zoned for Rural Living and Animal Husbandry purposes, and with Horticulture surrounding

The desired outcome of the Rural Living Zone is 'A spacious and secluded residential lifestyle within semi-rural or semi-natural environments, providing opportunities for a range of low-intensity rural activities and home-based business activities that complement that lifestyle choice.'

The Animal Husbandry Sub Zone has a desired outcome of 'Large-scale horse keeping and dog kennelling in association with detached dwellings on large allotments.'

The Planning and Design Code provides for the following:

- Minimum site area is 1HA
- Residential development associated with animal keeping, shops up to 50sqm, or with light industry up to 100 sqm
- Division for residential living

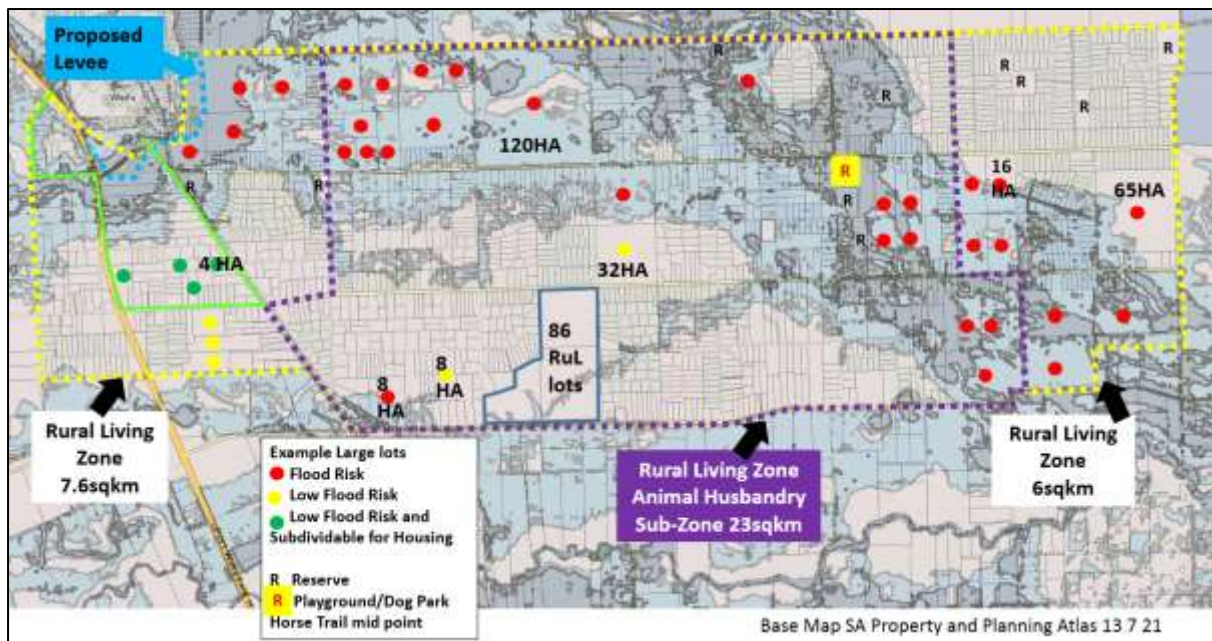
Performance assessed

- Ancillary accommodation
- Detached dwelling
- Dwelling
- Group dwellings
- Retirement living
- Tourist accommodation
- Land division

This policy provides for a variety of activities that will continue to drive growth within Lewiston/Two Wells and subsequent population increases and likely demand for services in the future, subject to flood risk and provisions of the Environmental Food Protection Area (EFPA).



## Larger Lots and Flood Risk



### Two Wells / Lewiston Larger Lots and Flood Risk

The Two Wells / Lewiston Larger Lots and Flood Risk map shows:

- Flood risk impacts about half the area
- The red dots are 32 example large lots (typically larger than 8HA) impacted by flood risk
- The yellow dots are 2 example large lots with low flood risk
- Rural living lots are typically 20 times larger than the average suburban block.
- Remnant larger land holdings are mostly surrounded by 1 hectare land holdings.
- 86 rural living residential lots are being developed. These were lodged prior the EFPA limiting residential subdivision becoming operational in March 2019.

### Environment and Food Production Area

The EFPA has been introduced to:

- protect our valuable food producing and rural areas as well as conserving our prized natural landscapes, and tourism and environmental resources
- support our sustainable growth and encourage the building of new homes in our existing urban footprint where supporting infrastructure already exists
- provide more certainty to food and wine producers as well as developers on the direction of future development in metropolitan Adelaide

The EFPA does not allow for the division of land for purely residential purposes.

Council made a submission<sup>16</sup> to the 2021 Review of the EFPA by the State Planning Commission. Council advised it is open to the EFPA continuing in place over Two Wells / Lewiston

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<sup>16</sup> Refer full Adelaide Plains Council EFPA submission

Rural Living Zone and Animal Husbandry Subzone, noting further detailed investigations on the impact of the EFPA restrictions over time to be undertaken, subject to:

- The barrier of the EFPA limiting subdivision for low intensity residential living where associated with horse or dog keeping being corrected.
- The lack of the EFPA Area being explicitly communicated directly in the Rural Living Zone and Animal Husbandry Subzone of the Planning and Design Code (perhaps as an Overlay) being corrected.

Recognising the distinct character of Lewiston and the Rural Living Areas of Two Wells, for the purpose of growth planning, these are called a 'settlement'

Lewiston is a mix of established rural living, rural living with associated animal husbandry, a network of reserves and interspersed large parcels in primary production. Factors influencing its future include:

- A variety of horse and dog based activities throughout
- Established rural living throughout
- NAIS water nearby to the south
- Interspersed reserves and the dog park/horse trail midpoint hub
- A shared trail network in the north east
- Sections of trails in the west
- Gawler Road as a more trafficked DIT road
- Flood risk
- Gawler River to the south
- Ongoing urban development nearby in Two Wells and south of Gawler River

Recognising 3084 residents in 2016 and land approved for division but yet to be released to market, Lewiston has potential for around 3,500 residents.

Better understanding these factors as well as the EFPA needs investigating.

### Coastal & Rural Settlements

The coastal and rural areas have various settlements, with surrounding areas, with generally less than 200 people. All settlements are constrained by valuable agricultural or conservation land in their ability to accommodate further urban growth. The surrounding land is within the Environment and Food Production Area.

Whilst populations may increase slightly through redevelopment of existing residentially zoned land, the prospects for marked population growth do not exist.

The settlements are part of the social and economic life of Adelaide Plains.

	Coastal and Rural Settlement	Population	
		2016	2021
		Using ABS 'State Suburb' which includes districts around each settlement	
	COASTAL		
1.	Parham	216	185
2.	Webb Beach	47	40
3.	Thompson Beach	201	219
4.	Middle Beach	79	94
	RURAL		
5.	Wild Horse Plains	108	96
6.	Long Plains	68	62
7.	Windsor	170	133
8.	Barabba	117	135
9.	Fischer	62	78
10.	Redbanks	182	185
11.	Lower Light	206	203
	TOTAL	1456	1430
12	Lewiston	3084	3275
	TOTAL with LEWISTON	4540	4705

Whilst limited opportunities for growth exist, the settlements play an important role as part of the social and economic life of Adelaide Plains. Opportunities to augment their futures should be explored.

## Economic and Social Facilities

### Social Infrastructure and Community Services



#### Overview of Existing Social Infrastructure and Community Services

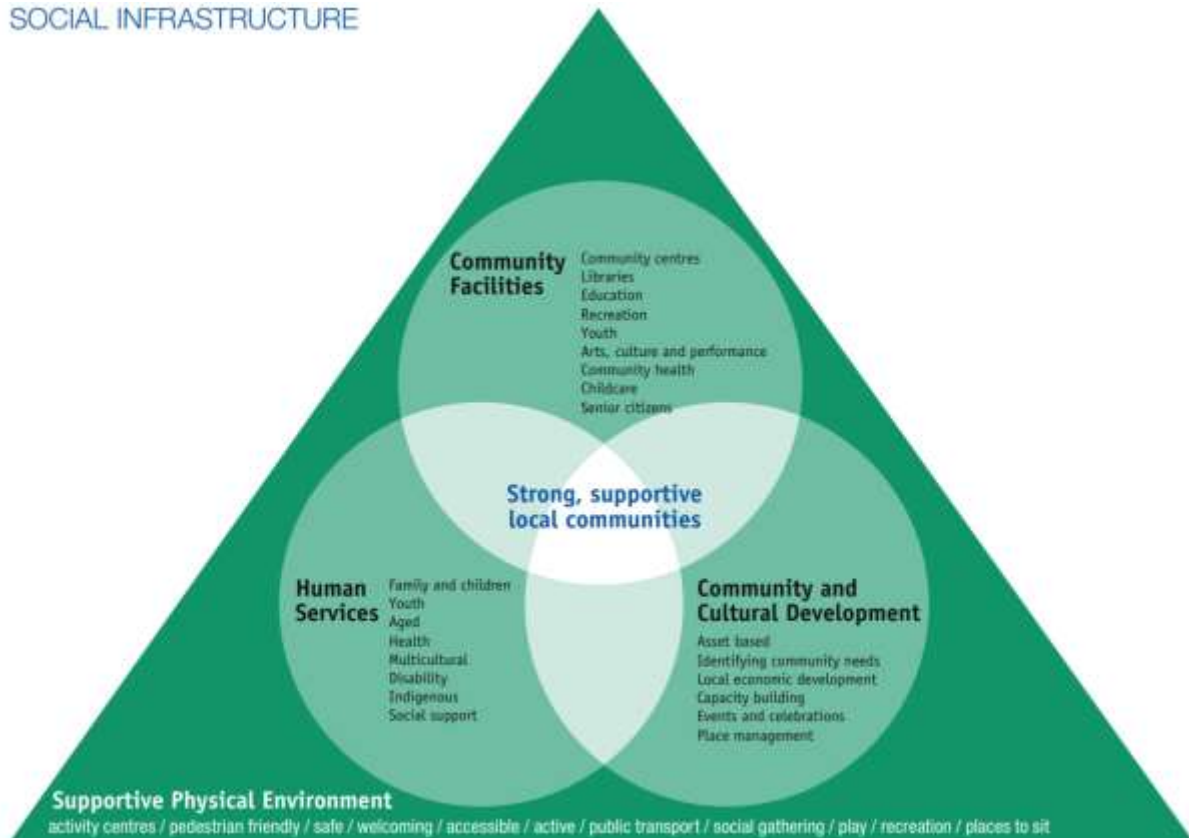
As Adelaide Plains continues to experience urban growth, based on research<sup>17</sup> for the Local Government Association, the following themes are important to contribute to strong and supportive local communities:

- Community diversity
- Sense of community
- Housing choice and affordability
- Access, amenity and lifestyle
- Integration of new and existing communities

Social infrastructure is understood as including community facilities, human services, and community and cultural development.

<sup>17</sup> [charlessturt.sa.gov.au/\\_data/assets/pdf\\_file/0022/160276/Planning-Social-Infrastructure-and-Community-Services-for-Urban-Growth-Areas-February-2012.pdf](http://charlessturt.sa.gov.au/_data/assets/pdf_file/0022/160276/Planning-Social-Infrastructure-and-Community-Services-for-Urban-Growth-Areas-February-2012.pdf)

## SOCIAL INFRASTRUCTURE



Social Infrastructure Includes Facilities, Services and Community and Cultural Development

Adelaide Plain's townships and settlements level of social infrastructure reflect the agricultural and coastal based communities and their strengths. This is illustrated in the initial application of the townships and settlements to the social infrastructure hierarchy (see table).

Identifying future social infrastructure should have regard to:

1. The specific growth context of Adelaide Plains informing a social infrastructure hierarchy
2. Understanding existing capacity in social infrastructure, as well as gaps and inefficiencies. Community engagement is essential to inform this.
3. Comparative studies to understand what kind of facilities of what size have worked in similar urban growth areas.
4. Integrating with other planning underway.
5. Funding, delivery, and staging.





*The new Xavier College at Two Wells aims to introduce Year 9 in 2023*



*The new Riverbanks B – 12 School at Angle Vale opened in 2022, immediately to the south east of Lewiston*

The draft Regional Public Health Plan<sup>18</sup> identifies the top regional health challenges as:

- Improving mental health and reducing psychological stress (and suicide prevention)
- Access and inclusion (services, transport, digital, disability access)
- Youth engagement and wellbeing
- Supporting an ageing population
- Encouraging healthy lifestyles.

From these challenges, three lighthouse projects are envisaged:



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<sup>18</sup> Consultation 2022

Hierarchy Level & Population	Hierarchy Includes	Current APC	Future APC (2041)
		9,500 residents	18,000 residents
Neighbourhood 2 – 3000	Small neighbourhood house and similar buildings that provide space for small meetings, gatherings and activities	Dublin, Parham and Thompsons Beach sports and social clubs are examples of neighbourhood level spaces. Lewiston (3,000) playground/dog park is also an example of a gathering space	Towns will continue to serve wider districts.  If Two Wells itself is 15,000, are local neighbourhood spaces needed in Liberty & Town Centre?
Local 5 – 10,000	Community halls or small community centres, public schools, child care centres or kindergartens and access points for a range of services	Two Wells (2500) and Mallala (733) each have Primary School, Kindergarten, Oval/Clubrooms, Council Library and Office.  Two Wells has two child care. Mallala none.  Two Wells has Community Centre (Hall). Mallala has Institute (Hall).  New School at Two Wells. Museum at Mallala.	If Mallala itself grows to around 1600, is a multi-purpose community hub needed? Is something similar needed if rezoning goes ahead at Dublin?  If Lewiston grows to 3500, are better developed focal spaces needed? Should a fodder/hardware store with value added local retail be considered?
District 20 – 50,000	District libraries, multipurpose community centres, high schools, community health facilities and facilities and services for particular groups such as young people, older people or people from diverse cultural backgrounds	Several shooting ranges	If Two Wells grows to 10,000, Is a multi-purpose community hub/health facility with services for particular groups needed? Are a wider range of recreation and sport facilities needed?
Sub Regional 100,000+	Major cultural and civic facilities, major recreation and sporting	Motorsport Park	Motorsport Park  What might AIBS and the coastline become as



	facilities, tertiary education such as TAFE, health services and higher order entertainment and leisure facilities.		a regional recreation facility? What facilities might the coastal settlements need?
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During 2022 consultation, the Hickinbotham Group affirmed to not formalise a retail-based centre within the Liberty Estate. This position is based on community and council sentiment to retain the primacy of the historic town centre, and based on experience of low prospect of viability of a satellite retail centre within the existing or potential growth areas. Note the Planning and Design Code does not preclude retail development.

Council is to undertake a community infrastructure study over 2023 and 2024. That study needs to be completed to determine whether some form of neighbourhood space should be sought to be established in the northern part of Two Wells. If to be established, such spaces are generally better collocated with open space.

Acknowledging the barrier of the train line/Mallala Road between the 5000 residents to be at Liberty and potential urban development of Hicks land, the Hicks land offers some potential for a local centre, as well as local open spaces for recreation and sport.

Adelaide Plain's townships and settlements existing level of social infrastructure reflect the agricultural and coastal based communities and their strengths.

As growth continues – including planned urban growth - further investigations and engagement are needed to identify particular social infrastructure needs, noting the particular Regional Public Health challenges. This is particularly but not exclusively the case for Two Wells.

Council's role is investigating and engaging about needs, and in some case, direct social infrastructure and services provision (e.g. library, ovals, parks, walking and cycling facilities), and in other cases, facilitating and advocating about needs with others (e.g. transport, public transport, education, aged care).

Recreation and Sport Trends



Popular Recreational and Sport Activities<sup>19</sup>

<sup>19</sup> [orsr.sa.gov.au/\\_data/assets/pdf\\_file/0012/31215/Game-On-Booklet.pdf](https://orsr.sa.gov.au/_data/assets/pdf_file/0012/31215/Game-On-Booklet.pdf)

## *Two Wells Recreation and Sport Infrastructure*

For Two Wells, the 2016 Open Space Study<sup>20</sup> found:

'Potential to expand the existing sports ground to a higher level sportsground to support activities and events for the surrounding region (including the growth area of Buckland Park and Lewiston community).

There will be a need for additional recreation open space to cater for the local needs of the growth area. Additional sporting open space could also be required.

There is good community capacity for participation in activities.

There will also be a requirement for additional sporting open space linked to the existing sportsground to cater for the sports needs of the additional population.'

Given that Lewiston does not have sporting facilities, the potential requirements in Two Wells should also aim to cater for Lewiston. The Two Wells future population plus the Lewiston population in the future could be around 14,000 people. Based on this figure and using the PLA benchmarks, there would be justification for three sports areas or one large sports area and one smaller sports area with the provision of:

- 3 Australian rules ovals
- 2 cricket pitches
- 3 soccer pitches
- 1 x 8 tennis court tennis facility
- 4 netball courts'

Specific Recommendations for Two Wells Oval were:

- Consolidate courts and concentrate activities nearer to clubrooms and oval.
- Review and improve traffic conflicts, circulation and car parking (formalise vehicle circulation, better connect parking).
- Provide additional opportunities for sport competitions and training (e.g. soccer, softball or hockey if there is demand).
- Increase play provision and locate closer to oval and clubrooms.
- Manage and limit pedestrian/vehicle conflicts (match days).
- Increase training areas.
- Remove and redevelop BMX (demand for skate park).
- Explore parking opportunities for RV and campervans (showers, toilet and dump point – charge for services).
- Relocate and improve public toilets.
- Increased landscape planting to oval to provide amenity and shelter (wind break).
- Modify community centre to support new sport and recreation functions.
- Improve lighting to oval and surrounding facilities.
- Manage or restrict dog walking on the oval (faeces).

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<sup>20</sup> [apc.sa.gov.au/\\_data/assets/pdf\\_file/0030/356493/D16-15679-FINAL-Open-Space-Plan-Background-Report-September-2016.pdf](http://apc.sa.gov.au/_data/assets/pdf_file/0030/356493/D16-15679-FINAL-Open-Space-Plan-Background-Report-September-2016.pdf)

- Maintain emergency services access (safe area or muster point).
- Address drainage issues across the site.

A Development Deed was agreed between Hickinbotham Developments and the then District Council of Mallala in 2012. The Deed involved the land that is the Eden and Liberty residential areas.

The Deed envisages the provision of

- One playing field that can be used for Australian Rules Football in the winter season and cricket in the summer season. To be provided at or before occupation of 1500 dwellings
- One soccer pitch. To be provided at or before occupation of 2100 dwellings
- Two courts that can each be used for tennis in the summer season and netball in the winter season. To be provided at or before occupation of 1500 dwellings
- Seven playgrounds being provided, one each at the occupation of 500, 1000, 1500, 2000, 2500, 3000, 3500 dwellings

Eden with 265 lots is nearing completion of all 265 lots in 2022. Liberty Tranche 1 involves 364 lots. If 125 dwellings/annum are assumed as being completed in Liberty, 1500 could be reached around 2030.

Two Wells Sport and Recreation Infrastructure		
Need as per 2016 Study	Provision	Comment
3 Australian rules ovals	Two Wells Oval (winter)	Overflow at Two Wells Primary or other facility
	Xavier Oval (winter) (via Deed when 1500 dwellings occupied)	Pending 1500 dwellings <ul style="list-style-type: none"> <li>• Eden 265</li> <li>• Liberty Tranche 1 - 364 total</li> <li>• Liberty Tranche 2 - 787 total proposed</li> <li>• Liberty Tranche 3 - tbd</li> <li>• TOTAL 1400</li> </ul>
	Third Oval (needed)	<ul style="list-style-type: none"> <li>• To west of Two Wells Oval?</li> <li>• In Hicks?</li> <li>• Formally share Primary School?</li> </ul>
2 cricket pitches	Two Wells Oval (summer)	Overflow at Two Wells Primary or other facility
	Xavier Oval (summer) (via Deed when 1500 dwellings occupied)	Pending 1500 dwellings <ul style="list-style-type: none"> <li>• Eden 265</li> <li>• Liberty Tranche 1 - 364 total</li> </ul>

		<ul style="list-style-type: none"> <li>• Liberty Tranche 2 - 787 total proposed</li> <li>• Liberty Tranche 3 - tbd</li> <li>• TOTAL 1400 proposed or constructed</li> </ul>
3 soccer pitches	Xavier Soccer (via Deed when 2100 dwellings occupied)	Under construction 2021 south of Xavier
1 x 8 tennis court facility	Two Wells Oval has six tennis/four netball Courts	Potential to expand to be the eight tennis court facility pending investigation of demand
	Two Courts are envisaged at Liberty, each able to be used for tennis and netball. (via Deed when 1500 dwellings occupied)	
4 netball courts	Two Wells Oval has six tennis/four netball Courts	
	Two Courts are envisaged at Liberty, each able to be used for tennis and netball. (via Deed when 1500 dwellings occupied)	Should there be other local courts?

The Deed obligates Hickinbotham and now Xavier to consult with Council with respect to the design and construction and arrangements for the shared use (including nature and extent of availability for community use) of 'School Recreation Infrastructure' comprising oval, soccer pitch and two tennis/netball courts.

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

- Open space within 5 minute/400m walk

Residents with a larger neighbourhood parks within 1600m engage in 150 minutes more recreational walking per week than those with smaller parks<sup>21</sup>.

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<sup>21</sup> [healthyactivebydesign.com.au/design-features/public-open-spaces](http://healthyactivebydesign.com.au/design-features/public-open-spaces)



*Small spaces can be designed for multiple sports*

Note that indoor recreation centres with 3+ courts typically need a population of 50,000 to support<sup>22</sup>.

Upgrading recreation and sport facilities, including play spaces, open spaces and trails, should use universal and child safety environs design principles. Water and energy saving initiatives including water harvesting, installation of new or upgrades to existing irrigation infrastructure, connection to existing water infrastructure should form part of upgrading recreation precincts.

The following guidelines are available from ORSR

- Recreation and Sport Facility Design<sup>23</sup>
- Recreation and Sport Facility Management Guide<sup>24</sup>
- How to Plan for a Community Recreation and Sport Hub<sup>25</sup>
- How to Establish Regional Planning Groups – Guide<sup>26</sup>
- How to Develop a Regional Recreation and Sport Plan<sup>27</sup>

More work needs to be done around recreation and sport associated with planned growth, in particular growth at Two Wells and Mallala.

<sup>22</sup> Pg 35 in [lga.sa.gov.au/\\_data/assets/pdf\\_file/0026/469421/Murraylands-and-Riverland-Regional-Sport-and-Recreation-Facilities-Needs-Analysis-Phase-1-Report-171213.pdf](http://lga.sa.gov.au/_data/assets/pdf_file/0026/469421/Murraylands-and-Riverland-Regional-Sport-and-Recreation-Facilities-Needs-Analysis-Phase-1-Report-171213.pdf)

<sup>23</sup> [PowerPoint Presentation \(orsr.sa.gov.au\)](http://orsr.sa.gov.au)

<sup>24</sup> [PowerPoint Presentation \(orsr.sa.gov.au\)](http://orsr.sa.gov.au)

<sup>25</sup> [PowerPoint Presentation \(orsr.sa.gov.au\)](http://orsr.sa.gov.au)

<sup>26</sup> [PowerPoint Presentation \(orsr.sa.gov.au\)](http://orsr.sa.gov.au)

<sup>27</sup> [PowerPoint Presentation \(orsr.sa.gov.au\)](http://orsr.sa.gov.au)

### Tourism Infrastructure

The signature tourist attractors to Adelaide Plains include the Adelaide International Bird Sanctuary Winaityinaityi Pangkara, Mallala Motor Sport Park, and the Mallala Museum.

Along with these, as an established agricultural area, places valued by residents are also enjoyed by visitors. For example, the Two Wells Bakery, recreating in parks and reserves – be it walking, cycling or horse based - experiencing older buildings, and visiting cemeteries.

Existing camp grounds and camping facilities include the Mallala Camp Ground, Parham Camp Ground and Middle Beach Caravan Park. Submissions to the 2022 consultation suggested considering opportunities for recreation vehicle parks as part of the Two Wells main street and oval precinct, and Two Wells to be a RV friendly town.

In 2019 South Australia visitation<sup>28</sup> to caravan parks grew by 19% and night's growth was 31% to surpass 1.3M trips and 5.5M nights, both the highest since records of visitation have been kept. This shows a strong trend in demand for caravan and camping sites in SA.

Key themes in Council's Tourism and Economic Development Strategy are:

- Coast
- Main Streets and Townships
- Primary Industries and Food
- Business Support and Growth.
- Population, Infrastructure and Employment.



The Adelaide International Bird Sanctuary, Mallala Motorsport Park, and Mallala Museum are key attractors for visitors to Adelaide Plains

Compared to other regions, Adelaide Plains is less well known for tourism experience. Opportunities to augment visitor experiences should be considered.

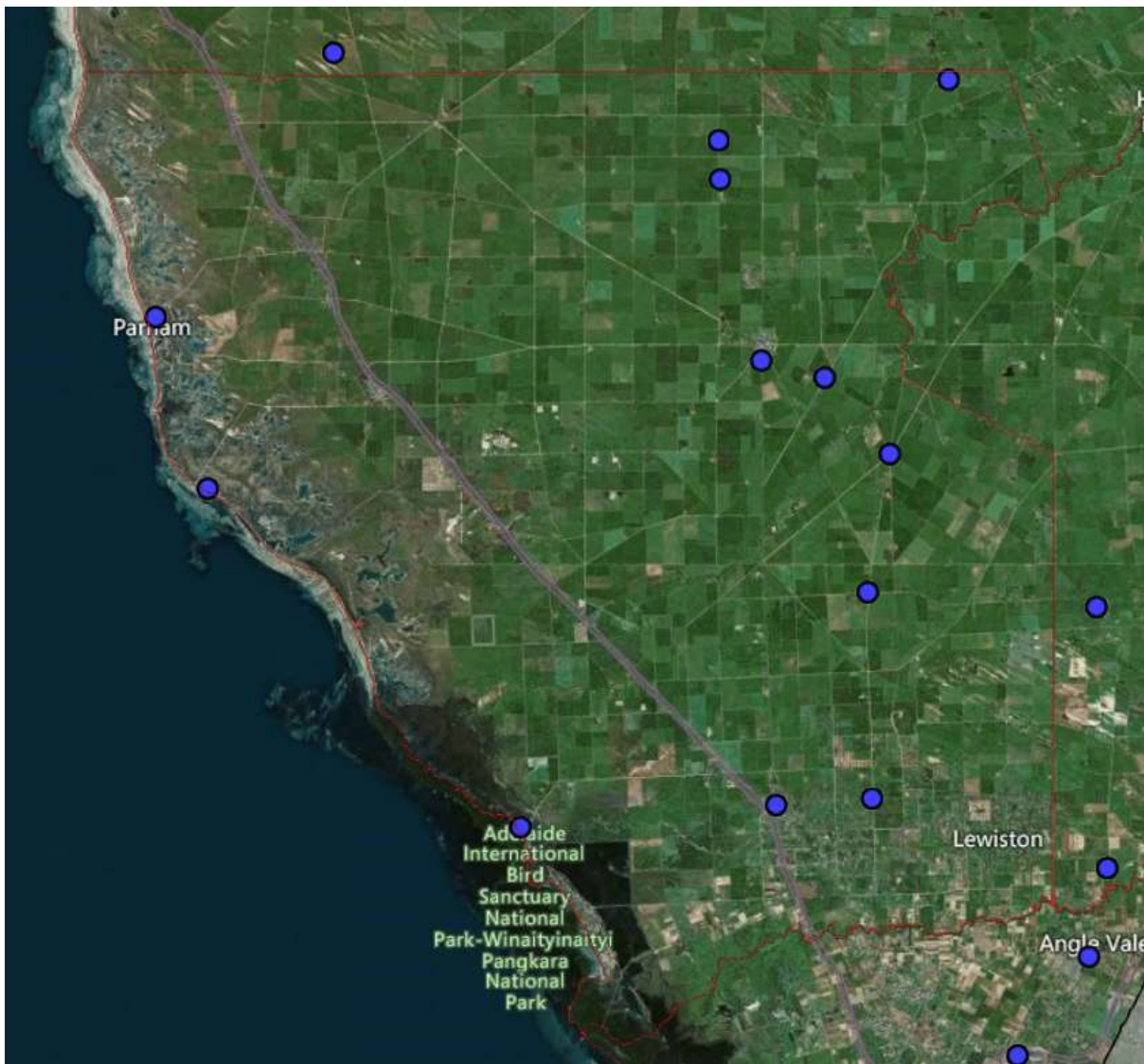
<sup>28</sup> [caravanindustry.com.au/caravanning-and-camping-most-popular-holiday-type-for-australians-in-2019-with-60-million-holiday-nights](https://caravanindustry.com.au/caravanning-and-camping-most-popular-holiday-type-for-australians-in-2019-with-60-million-holiday-nights)



### *Telecommunication Black Spots*

Telecommunication services are provided by the private sector operating within Australian Government guidelines.

The Mobile Black Spot Program<sup>29</sup> identified gaps with community input until 2018 at which time it closed for nominations. Local communities and councils are encouraged to engage with the mobile network operators and infrastructure providers, as well as state governments, to explore opportunities to improve coverage through Federal and state government initiatives. Experience has shown that when local communities and councils engage with the mobile providers it increases the likelihood of an application being put forward under government funded programs.



*Black Spots Identified in 2018*

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<sup>29</sup> [infrastructure.gov.au/media-technology-communications/phone/mobile-services-coverage/mobile-black-spot-program/faq](https://infrastructure.gov.au/media-technology-communications/phone/mobile-services-coverage/mobile-black-spot-program/faq)



The Peri-Urban Mobile Program (PUMP)<sup>30</sup> is a grants program that provides funding to improve mobile connectivity in bushfire priority areas along the edges of Australia's major cities. The program targets long standing mobile coverage and reception issues in the peri-urban fringes of Australia's major cities.



*Lewiston, Two Wells and part of Port Wakefield Highway are eligible for funding to improve mobile connectivity under the Per-Urban Mobile Program. A planning application has been lodged for a mobile tower in Lewiston.*

With community input, Council can engage with authorities where needed to improve mobile coverage.

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<sup>30</sup> [infrastructure.gov.au/media-technology-communications/phone/mobile-services-coverage/peri-urban-mobile-program](https://infrastructure.gov.au/media-technology-communications/phone/mobile-services-coverage/peri-urban-mobile-program)

## Utilities Infrastructure

Water, sewer, electricity, gas, and communications infrastructure are important for residents and business to plan their future. Solar renewables are establishing, noting Adelaide Plains is part of the SA wide electricity network.

New development, be it housing or business, is responsible for funding connections to utilities infrastructure. However, some infrastructure needs augmenting, and this can be a barrier to growth.

As a rapidly growing local government area, provision of infrastructure is an ongoing challenge. Timing of infrastructure provision, funding and what infrastructure is the responsibility of council, state government or private sector needing to be addressed.

RDA Barossa have priorities<sup>31</sup> around water systems, energy for industry, high value agriculture, and an international standard equine centre.

The proposed Adelaide Plains/Light Regional Council subsidiary aims to advocating and assist securing infrastructure enhancements. This is for infrastructure that is the direct responsibility of councils as well as that of other agencies.

Sewer for the new housing estates at Two Wells is the responsibility of the private sector. Council operates CWMS at Mallala and Middle Beach. Council is investigating a CWMS for the original township at Two Wells.



Examples of Utilities Infrastructure provided by Agencies

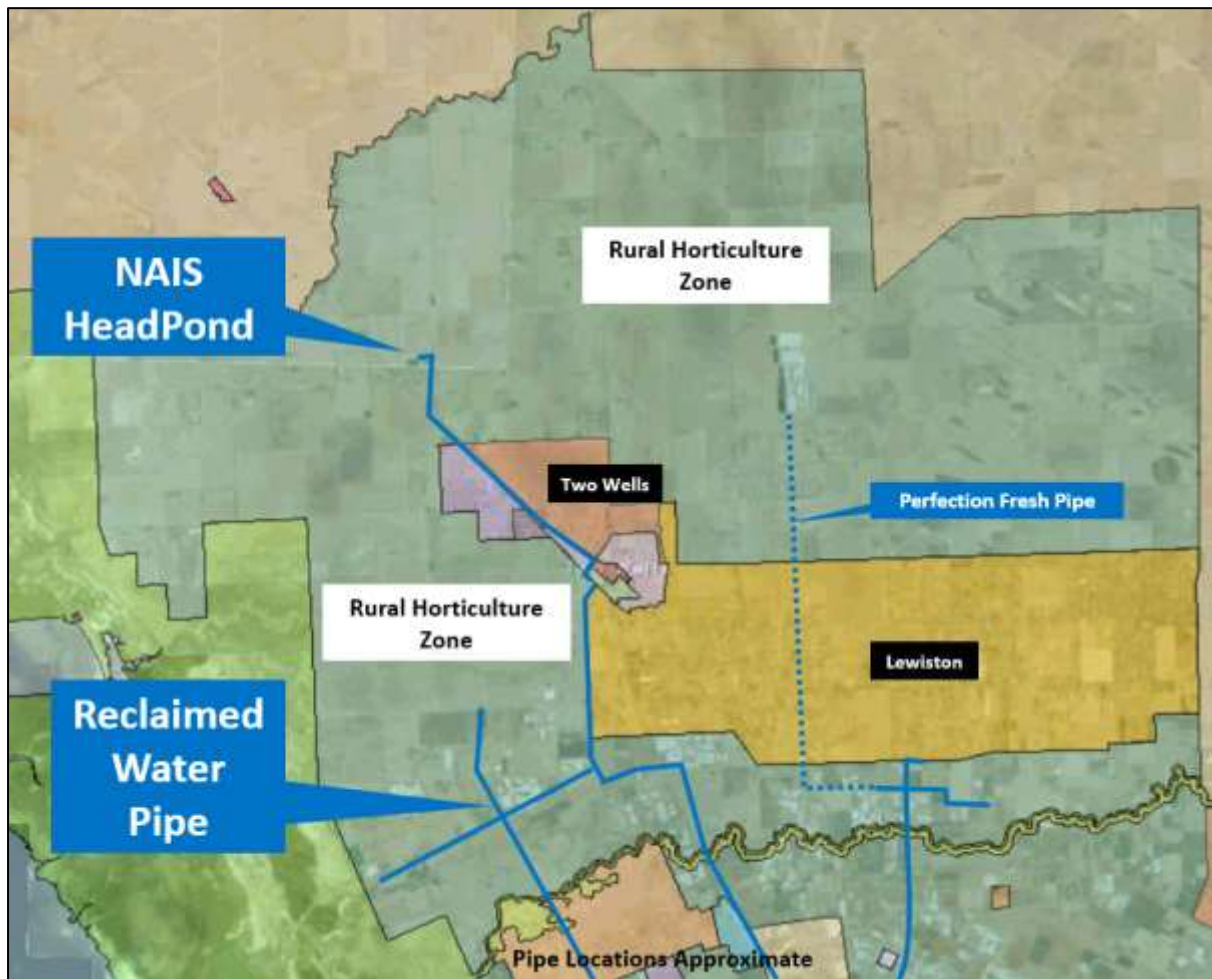
Ongoing work involving infrastructure providers, government and private sector is needed to ensure sufficient utilities for growth.

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<sup>31</sup> [barossa.org.au/priorities/](http://barossa.org.au/priorities/)

## Northern Adelaide Food Bowl and Irrigation Scheme

The Northern Adelaide Irrigation Scheme (NAIS) provides recycled water to irrigate crops, particularly horticulture. The project jointly funded by the South Australian and Australian Governments<sup>32 33</sup>involved new water treatment facilities at Bolivar.



The Rural Horticulture Zone has a total area of 17,600 hectares

Delivered by SA Water, NAIS was intended to unlock 12GL of water to be used in agricultural food production. The goal is to support development of over 300 hectares of high-technology horticulture, and a further 2,700 hectares of advanced agri-food production.

Capital contribution, availability charges and consumption charges all form part of potential users of NAIS accessing the water. [sawater.com.au/nais/invest-in-nais](http://sawater.com.au/nais/invest-in-nais)

Current arrangements entail extremely low rates of take up of NAIS. The horticulture industry cite barriers of high capital contribution/connection costs, infrastructure augmentation requirements, access to NAIS infrastructure and the high cost and quality of water.

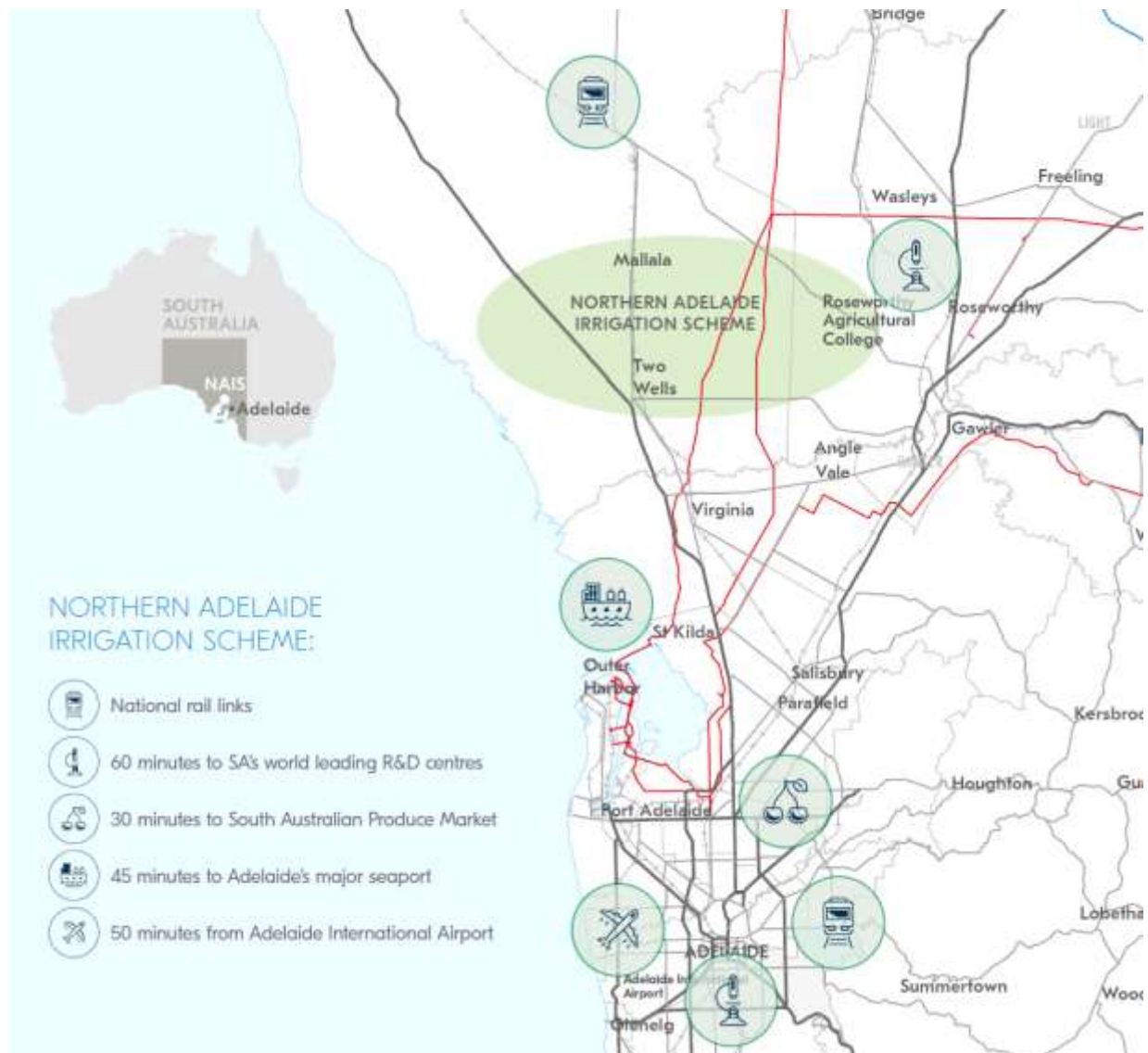
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<sup>32</sup> Australian Government \$45.6M and SA Government \$110M. SA Water NAIS Call for Project Proposals 2018

<sup>33</sup> [nationalwatergrid.gov.au/program](http://nationalwatergrid.gov.au/program)



This results in economic development, particularly horticulture, not being stimulated. The Rural Horticulture Zone is a total area of 17,600 hectares.



Success of the Northern Adelaide Irrigation Scheme is fundamental to the liveable growth of Adelaide Plains<sup>34</sup>

The Northern Adelaide Irrigation Scheme: Market Proving Study<sup>35</sup> was undertaken by Arris for Council in 2015. The Allied Food Industries Land Supply Study<sup>36</sup> of 2017 recognised that high quality, fit for purpose recycled water offered through NAIS will likely lead to a diversification of primary industry activities occurring across southern and central regions and a shift in the manner in which farms operate and the land area required to accommodate new enterprises.

<sup>34</sup> Image from SA Water NAIS Call For Project Proposals 2018

<sup>35</sup> [Microsoft Word - Market Proving Study draft .docx \(apc.sa.gov.au\)](#)

<sup>36</sup> [apc.sa.gov.au/\\_\\_\\_data/assets/pdf\\_file/0017/355211/Allied-Food-Industries-Land-Supply-Study.pdf](http://apc.sa.gov.au/___data/assets/pdf_file/0017/355211/Allied-Food-Industries-Land-Supply-Study.pdf)

The study flagged that new entrants that may look to establish:

- Intensive horticulture – high value field and enclosed environments (both covered and high-tech)
- Tree crops (i.e. nuts, olives)
- Intensive animal keeping (e.g. feedlots, intensive poultry and pork)
- Viticulture;
- Organic produce
- Speciality crops (e.g. medical cannabis or hemp for fibre).

Direct allied food industries may include:

- Washing/processing/packing of produce (e.g. packing shed)
- Winery
- Bulk commodity storage
- Feed/hay processing mill

Ancillary food industries may include:

- Chemical resellers
- Cold storage
- Transport and logistics
- Equipment sales and service
- Nurseries
- Value-adding industries (e.g. food manufacturers)

AIS head-ponds and pipes were installed in Adelaide Plains around 2018 – 2020. This occurred concurrent with an update regarding the Horticulture Zone in the then Development Plan (now Planning and Design Code).

Council decision of 28 February 2022 ‘that the Chief Executive Officer brings back a report detailing the benefits or otherwise to Adelaide Plains Council and its ratepayers in reducing the size of the Horticultural Land tenure sizes within areas of Adelaide Plains Council and details the process involved and position of Department of Planning to support same.’

The Northern Adelaide Plains Food Cluster<sup>37</sup> is an industry-led organisation driving the strategic direction for the Northern Adelaide Plains with a focus on increasing profitability and sustainability for local businesses.



NAIS is intended to foster establishment of a diverse range of horticulture based and allied development south of Light River and centred around Two Wells. This will significantly intensify land use activity, economic development and employment.

The uneconomic pricing of water as a barrier entails APC continuing advocacy with SA Water.

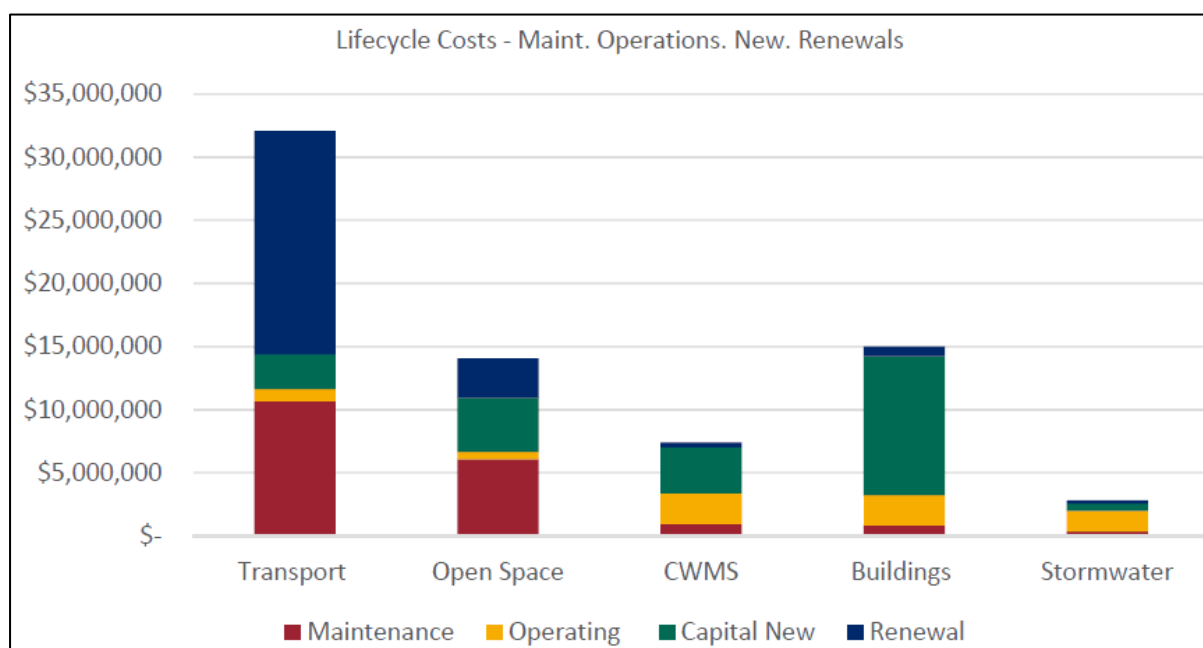
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<sup>37</sup> [northernadelaideplains.com.au/about-the-cluster](http://northernadelaideplains.com.au/about-the-cluster)

## Council Assets

Council is responsible for assets with a total asset replacement cost of approximately \$140M. These comprise:

- Transport – roads, footpaths, kerb & channel, traffic control devices, bridges
- Stormwater
- Community Wastewater Management Systems (CWMS) at Mallala and Middle Beach
- Buildings
- Open Space – shelters, play equipment, seating etc



Operational and maintenance costs for the next 10 years are forecast<sup>38</sup> at around \$2.7M/annum. Capital outlay which includes renewals and new/upgrades are forecast at around \$4.5M/annum.

Council operates prudentially with respect to recurring revenue it receives, notably annual rate. It does this through annual review of the 10 year asset plan, annual business planning and careful operational delivery. Actively seeking funding and partnerships enables, for example, capital enhancements to be delivered through grants or by developers through contributions.

Population growth and increasing demand and use of CWMS assets will affect their useful life and will increase Council's maintenance and renewal program. A review needs to be undertaken to determine capacity to accommodate future demand from zoned residential land, including in existing townships where such land is not connected to CWMS. Growth from unzoned land will depend on timing and scale of rezoning.

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<sup>38</sup> Numbers are summarised from the draft Asset Strategic Plan accessed mid-2021. Refer to the document for detail.

Council has limited funding capacity to increase capital works consequent on urban growth. Be it CWMS, sport and recreation, footpaths, roads, community spaces or offices.

Council will work with State and Australian Governments, and community, business and development partners to realise necessary social and economic infrastructure.

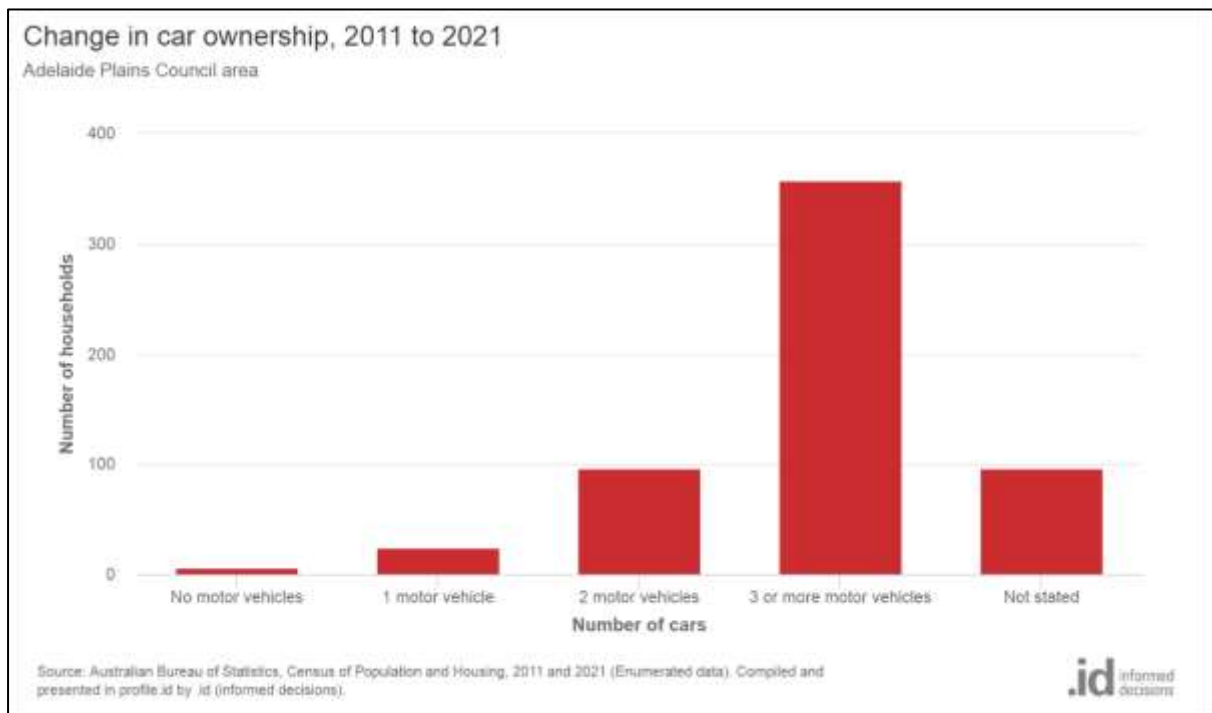


## Transport

### *Car/Bus/Community Transport*

Being a functioning agricultural district with growing urban development, car ownership is high. Options<sup>39</sup> include a Council monthly bus to Gawler/Elizabeth, the Mid North Community Passenger network, and coach services. Major towns are not serviced by public transport.

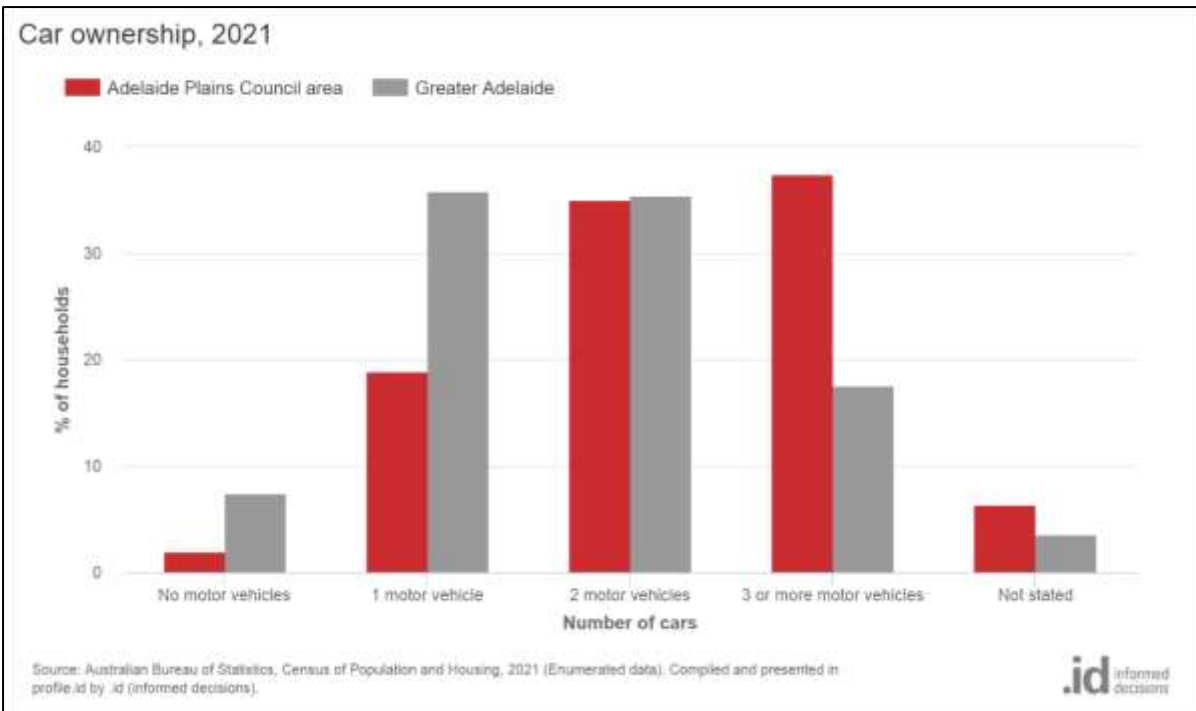
Analysis of car ownership in 2016 indicates 70% of households had access to two or more motor vehicles, compared to 50% in Greater Adelaide. This signifies a reliance on private transport for existing residents to access work, services, education, shopping or leisure purposes within the district or regionally.



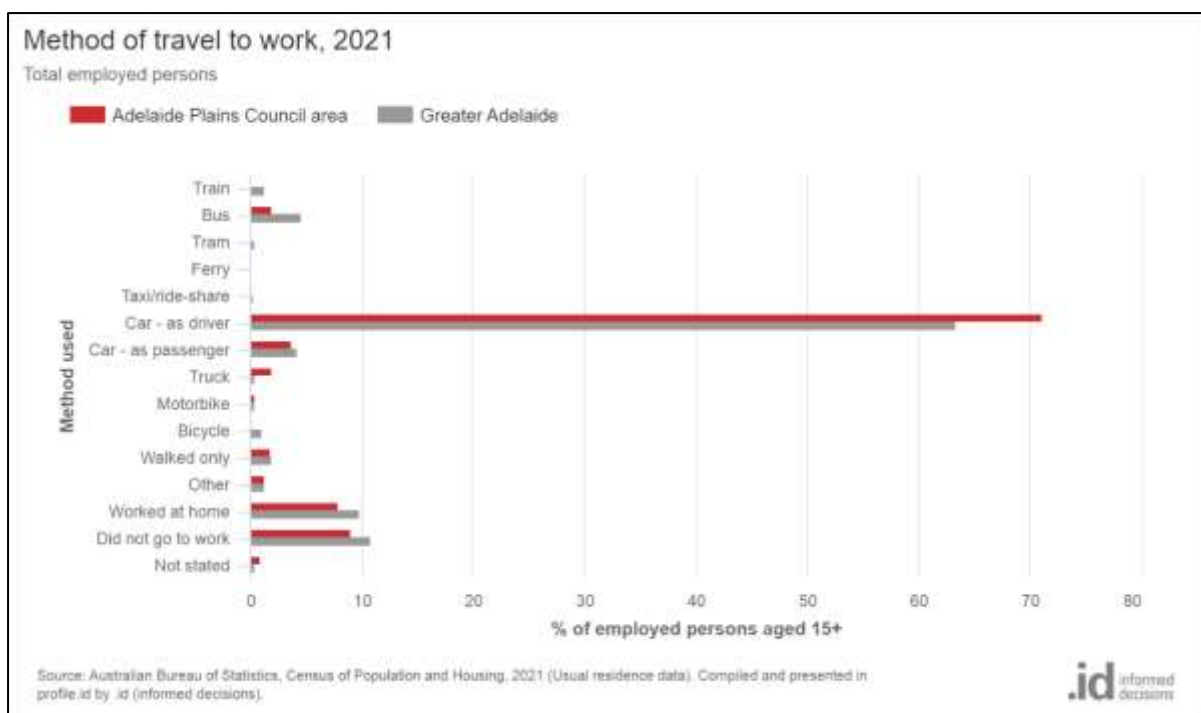
*Across Adelaide Plains, parallel with household growth has been growth in 2 and 3 vehicle households*

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<sup>39</sup> [apc.sa.gov.au/council-services/community/transport](http://apc.sa.gov.au/council-services/community/transport)



*Compared to Greater Adelaide, Adelaide Plains has a higher proportion of households with 3 or more vehicles*



In 2021<sup>40</sup>, 75% of people travelled to work in a private car, 2% took public transport and 1.9% rode a bike or walked. 7.9% worked at home, a higher rate than Greater Adelaide and possibly arising from many farms and horticultural businesses also being where residents live. These statistics signify a reliance on private transport

<sup>40</sup> [apc.sa.gov.au/our-council/community-profile](http://apc.sa.gov.au/our-council/community-profile)

for existing residents to access work, services, education, shopping or leisure purposes within the district or regionally.

Advocating for improved public transport, and exploring regional community passenger network and community bus is a Lighthouse Project in the Regional Public Health Plan.



### *Road and Rail Network*

Transport is based on a road network that caters for private vehicles, trucks, cyclists, pedestrians and buses. The train line provides national freight and passenger services, and provides for some local freight in Mallala. The line is managed by the Australian Rail Track Corporation.

The Council area currently has 181 km of sealed and 541 km of sheeted roads, with the remainder being unsealed.



Image – State maintained roads carry between 500 and 20,000 vehicles per day  
*Electric Vehicles*

Electric vehicles, including trucks and bikes, are emerging at commercially available rates, underpinning take up. The State Government is incentivising EV charging stations<sup>41</sup> across South Australia. Whilst electric cars and ebikes are readily available, etrucks are now emerging, benefitting business. Electric vehicles primary benefit is reduced carbon output and lower traffic noise.



Image – etrucks are emerging lowering carbon and traffic noise

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<sup>41</sup> [treasury.sa.gov.au/Growing-South-Australia/incentives-for-electric-vehicles](https://treasury.sa.gov.au/Growing-South-Australia/incentives-for-electric-vehicles)

### *Walking/Cycling/Equine*

As the towns grow, planning for walking/cycling networks is important to enable wellbeing benefits as well as options for greater numbers of residents to move locally and to nearby work. Ebikes make nearby work in agricultural areas accessible in shorter time. Research<sup>42</sup> affirms the wellbeing and economic benefits of exercising more than 150 minutes/week. Equine movement is principally recreationally within Lewiston but with further planning, expanded trails could exist. Planning for these modes also enables recreation and tourism outcomes

Population and agribusiness growth means a significant increase in stress on the road network, especially given the lack of public transport and distances involved for work, services, education, shopping, leisure and freight.

Growth will increase some services in towns, in particular Two Wells, recognising that online services/shopping – particularly post COVID – has grown.

Growth will necessitate spending on roads accompanied by lobbying for the introduction of public transport services and augmented community transport. The business cases of traffic bypasses will need investigation, particularly at Two Wells noting residential growth of the town proper.

Increasing walking, cycling and equine infrastructure presents options for residents for better wellbeing and with ebikes, readier access to nearby agribusiness work or leisure.

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<sup>42</sup> [orsr.sa.gov.au/\\_\\_data/assets/pdf\\_file/0009/430569/ACTIVE-LIVES-HIGHLIGHTS.pdf](https://orsr.sa.gov.au/__data/assets/pdf_file/0009/430569/ACTIVE-LIVES-HIGHLIGHTS.pdf)



## Environment

### *Natural Resource Management*

Natural resources management is about striking a balance between preserving our natural environment and allowing natural assets to be used to generate income or to be used by the community for enjoyment and recreation.

Adelaide Plains Council is located within the Northern and Yorke Landscape Board region which extends for 38,500 square kilometres and encompasses the Yorke Peninsula, significant areas of Spencer Gulf and Gulf St Vincent, the southern Flinders Ranges, parts of the Rangelands, the Mid North, the northern Mount Lofty Ranges, the Barossa and northern Adelaide Plains

The Landscape Board recognises that many individuals and organisations share an interest in sustainable management of the region's landscapes and that managing our landscapes is about working together to ensure that the needs of the community, industries and the environment are balanced in a way that is sustainable.

With this balance in mind, the Board's vision<sup>43</sup> for region's landscapes is that they are 'a healthy, living landscape meeting the social, environmental, economic and cultural needs of the community, and ensuring the rights and wellbeing of future generations'.

As growth continues in the Council area, impacts on natural resources and landscapes will be a key consideration for all stakeholders. This includes existing landscapes, native vegetation, and additional greening.



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<sup>43</sup> [landscape.sa.gov.au/ny/about-us/our-regions-plan](https://landscape.sa.gov.au/ny/about-us/our-regions-plan)



### *Fire and Flood Hazards*

Fire and flood hazards, be it from Gawler and Light Rivers, or the coast, have influenced the development of Adelaide Plains in the past.

Arising from the Emergency Management Act 2004, the framework for hazards is around risk reduction, incident operations and recovery.

Planning for growth involves considering reducing the risk from hazards as growth occurs.



Based on investigations involving emergency services, the statutory planning system establishes policy to enable development provided sited and designed with regard to hazard risk.

A new Planning and Design Code was introduced in 2021.

Planning and Land Use Services (SA Government) are undertaking investigations and Amendments to the Planning and Design Code with respect to the hazard of fire and flood risk associated with Gawler and Light Rivers. These are SA wide investigations.

Ongoing investigations are underway with respect to managing flood risk by the Gawler River Flood Management Authority. With grant funding, at Two Wells, Council is installing a levee to the east and south of town to reduce the hazard impact associated with Gawler River.

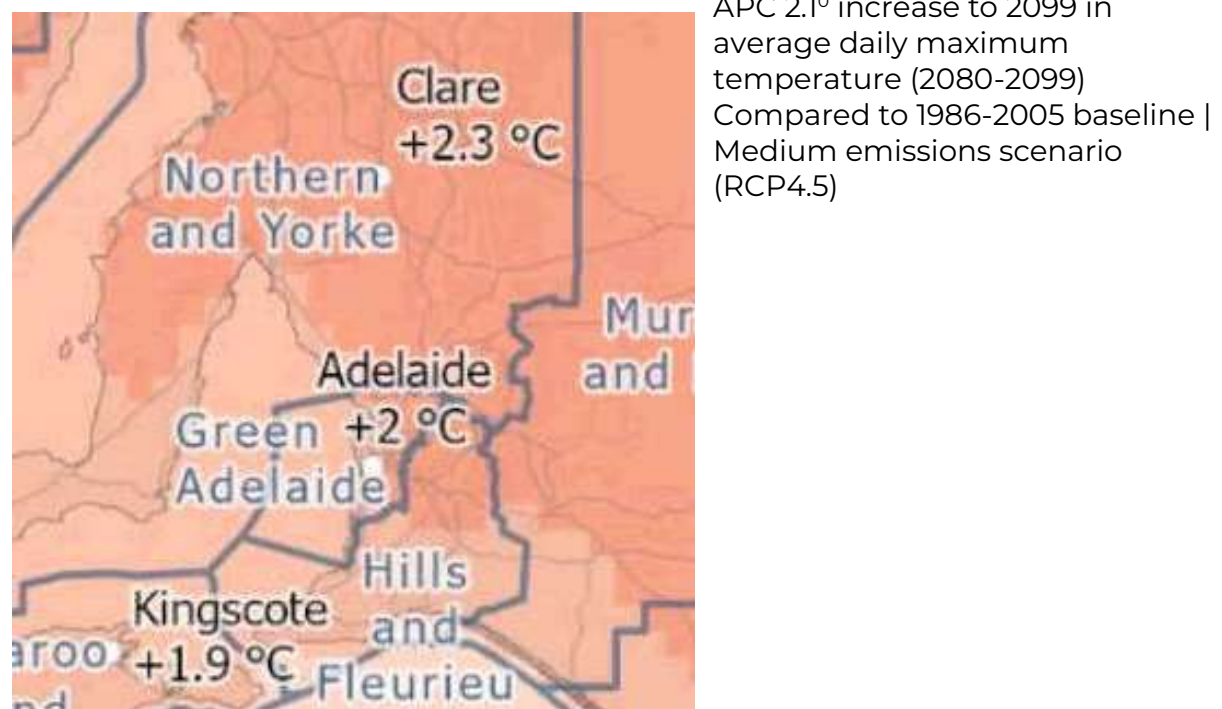
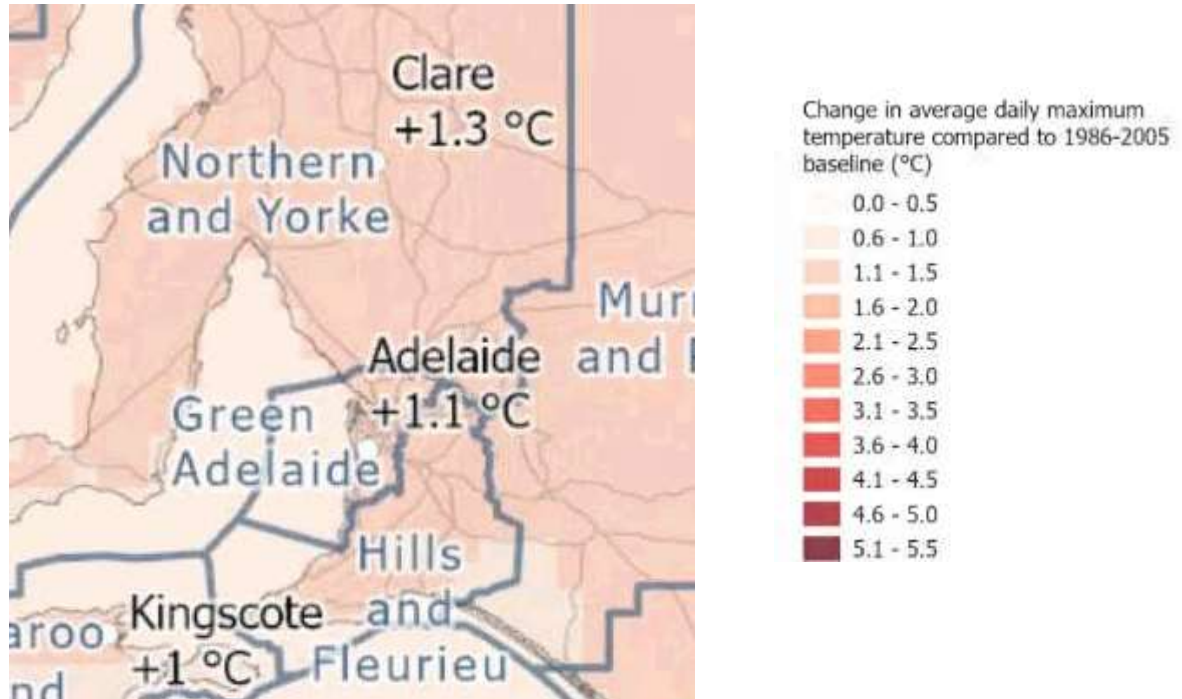
Regarding coastal inundation, past studies are informing contemporary Community Emergency Management Plans for each settlement. Past studies identify particular hazards at Middle Beach.

Better planning for flood and fire hazards improves investment potential as providing clarity about the rules by which development can and cannot occur.

Climate Forecasts to 2100

Department of Environment and Water 2022<sup>44</sup> analysis project increasing average temperatures, more days over 40 degrees, and lessening rainfall.

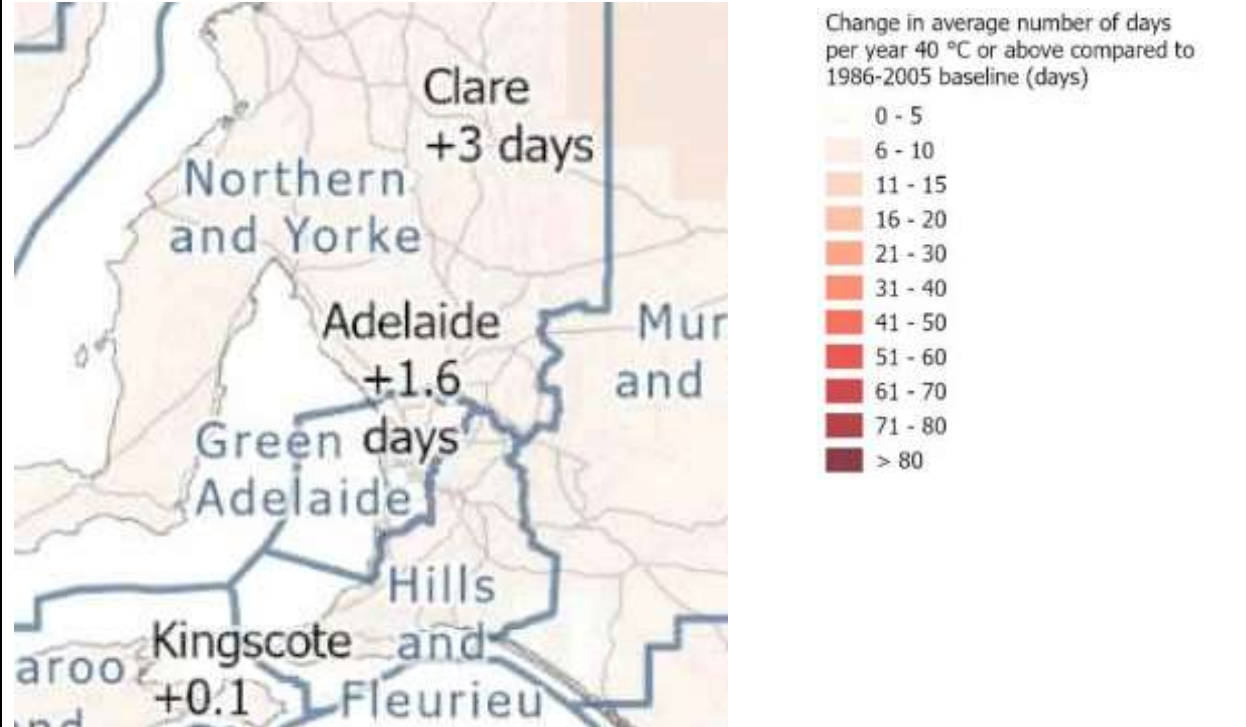
APC 1.2° increase to 2039 in average daily maximum temperature (2020-2039)  
Compared to 1986-2005 baseline | Medium emissions scenario (RCP4.5)



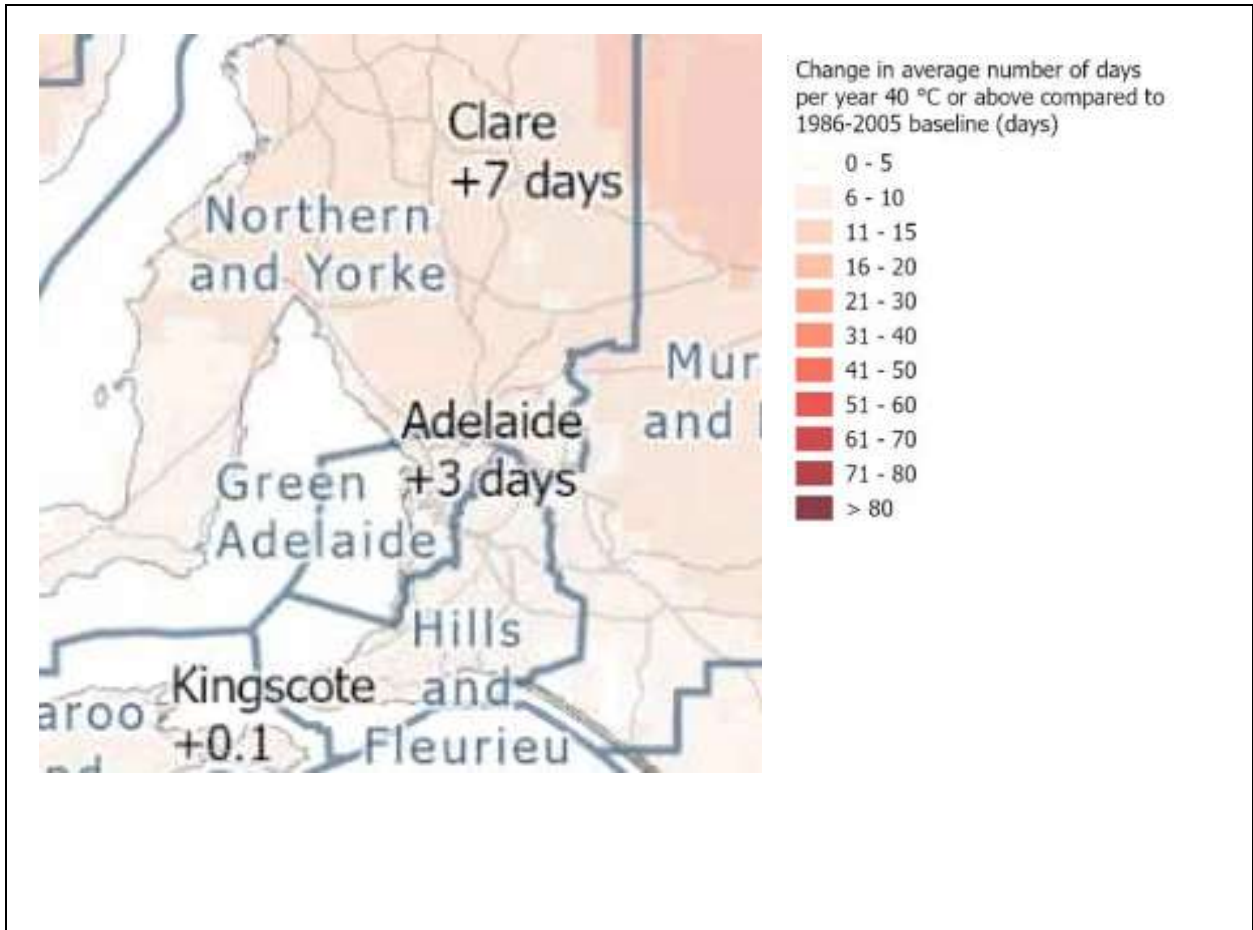
<sup>44</sup> [environment.sa.gov.au/topics/climate-change/climate-science-knowledge-resources/latest-climate-projections-for-sa](https://environment.sa.gov.au/topics/climate-change/climate-science-knowledge-resources/latest-climate-projections-for-sa)



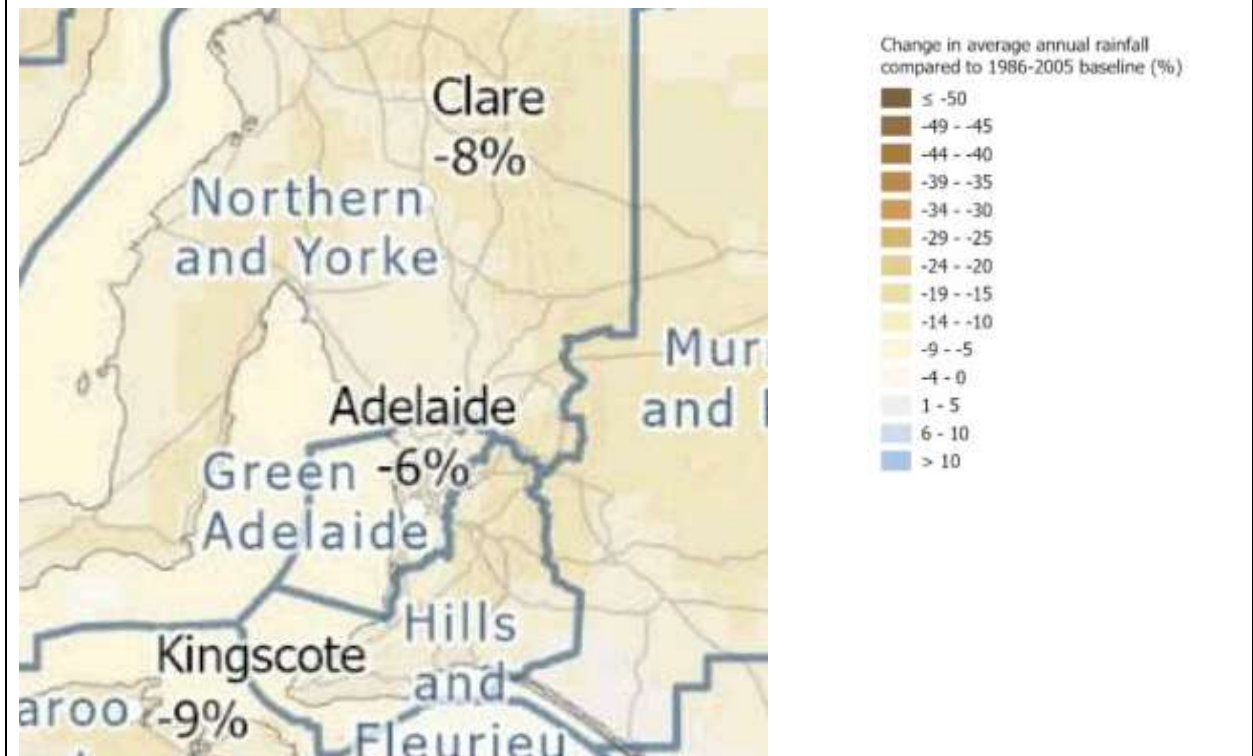
APC 1.6 increase in average number of days per year 40 °C or above (2020-2039) Compared to 1986-2005 baseline | Medium emissions scenario (RCP4.5)



APC 4 increase in average number of days per year 40 °C or above (2080-2099) Compared to 1986-2005 baseline | Medium emissions scenario (RCP4.5)



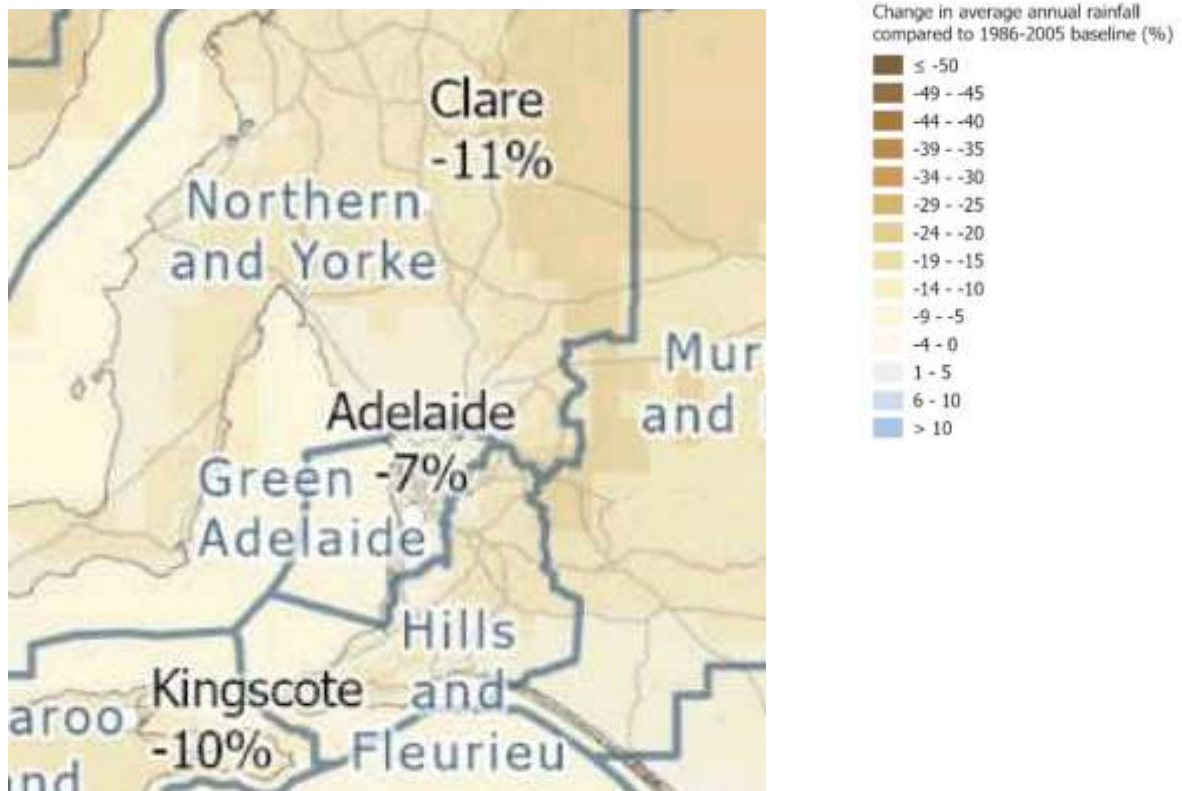
APC 7% decrease to 2039 in average annual rainfall (2020-2039)  
 Compared to 1986-2005 baseline | Medium emissions scenario (RCP4.5)



APC 9% decrease in average annual rainfall (2080-2099)



Compared to 1986-2005 baseline | Medium emissions scenario (RCP4.5)



### Heritage

Adelaide Plains forms part of Kaurna Country. European settlement commenced as part of the European settlement of South Australia from 1836. Two Wells, Mallala, and Dublin are established towns, with coastal settlements at Parham, Webb Beach, Thompsons Beach, and Middle Beach. Extensive rural living and animal husbandry is at Lewiston. Other settlements include Windsor, Lower Light, Redbanks, Fischer, Barabba, Port Gawler, and Wild Horse Plains.

Identifying and conserving places of heritage value bring benefits economically, socially and environmentally.

A Heritage Australia 2010 study<sup>45</sup> concluded:

- Although some participants in the market may tend to shy away from heritage listed property, they wrongly perceive that such properties have inherent economic and restrictive problems, whereas there is a distinct and lucrative value added market that can be accessed.
- That conservation can and does create employment. There are costs associated with conservation but these are more than offset by the economic, social and psychological benefits. Precinct and area

<sup>45</sup> Heritage Australia: A review of Australian Material regarding the economic and social benefits of heritage property' - P Wills and C Eves for the NSW Heritage Office, March 2010

conservation helps people maintain their socio-cultural identity which would more than likely be lost through large scale demolition and redevelopment.

- Conservation does sometimes appear in the short term to come at a cost, but the long term benefits to the owner of the property and the community as a whole outweigh this cost. When carried out properly the heritage listing of a stand-alone or isolated properties can benefit the owner as well as those in the immediate vicinity

A 2005 report<sup>46</sup> by the Allen Consulting Group assessed several Australian studies which collectively demonstrated that property values are either neutrally or positively impacted by a heritage listing.

A national survey undertaken in the 2005 report revealed that 93% of the community see heritage as forming part of Australia's identity and that heritage places are important to protect. The survey also found that 80% strongly agreed or agreed that the historic houses in my area are an important part of the area's character and identity.

In 1983, a Heritage Survey of the Lower North included the District Council of Mallala<sup>47</sup>. From that, 11 places are formally recognised as being of State Heritage value.

There are no local heritage listed places in Adelaide Plains. Legislation enabling local heritage listing was introduced in 1991. A heritage review commenced in 2021, with consultants undertaking assessments regarding statutory criteria.

There are no items of National, Commonwealth or World Heritage in Adelaide Plains.

Identifying and conserving Adelaide Plains heritage is important for the social and economic value represented. Recent work progressing heritage recognition should be completed. In time, further studies undertaken.

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<sup>46</sup> Valuing the priceless: The value of Historic Heritage in Australia (research report 2), Allen Consulting Group for the Heritage Chairs and Officials of Australia and New Zealand, 2005

<sup>47</sup> [environment.sa.gov.au/topics/heritage/sa-heritage-register/heritage-surveys](http://environment.sa.gov.au/topics/heritage/sa-heritage-register/heritage-surveys)



## Projected Urban Growth Rate 2021 - 2041

South Australia is a small economy impacted by global economic trends. SA has historically had low growth per annum. Noting ongoing Commonwealth interest to foster and balance growth across Australia, it is not expected SA's rate of growth on a national basis will differ markedly from the past.

One of COVID's impacts is to reduce Australia's long term population growth<sup>48</sup>.

Pre COVID, Australia was expected to have 33.3M in 2041. Post COVID, Australia is expected to have 31.5M in 2041. In 2041, there be 111,000 fewer South Australians. idconsulting state 'If you're planning over a 15-year+ horizon, the story is simple: fewer dwellings are forecast to be built in all regions, but most significantly in the inner city and growth areas'.

This projection about Adelaide Plains – including as a growth areas - is on the basis of South Australia continuing to experience low steady economic growth.

Two Wells/Lewiston is part of Adelaide's North Region<sup>49</sup>. The North Region is the fastest growing region in SA, with significant industrial and horticultural areas. The area has extensive options for development including Two Wells, Riverlea, Roseworthy, Angle Vale and Playford. The age structure for this region reflects a large 'young' and 'older' working-age cohort with a substantial 0-14 age cohort.

### 3.3 Adelaide - North Region (SA4)

Including Elizabeth, Salisbury, Modbury, Enfield, Mawson Lakes, Gawler, Virginia, Two Wells and Roseworthy

#### Region Summary

The Adelaide - North region consists of Salisbury, Playford, Tea Tree Gully and Gawler councils, the eastern portion of Port Adelaide Enfield council, and small parts of the Adelaide Plains, Light and Barossa councils adjacent to Playford and Gawler.

The area has significant industrial precincts and also substantial horticulture areas. It is the fastest growing region in the state and at the 2016 census, the population was 429,924.

Gawler is the largest town with a population of 26,472.

This region has extensive options for future development particularly around Playford, Buckland Park, Gawler, Two Wells, Angle Vale and Roseworthy.



<sup>48</sup> Demographic Delays – How Closed Borders will Impact the Future Demand for Services, idinformeddecisions, May 2021

<sup>49</sup> Population Projections for South Australia and Regionals, 2016 – 41 Government of South Australia

Two Wells/Lewiston are part of the Adelaide North Region

Growth in Adelaide Plains will be impacted by nearby urban growth, such as in Playford and Light. Major estates like Roseworthy and Riverlea will accommodate their share of growth, and will impact the rate of completion of major estates as well as minor infill in Adelaide Plains.

Similarly, the rate by which employment in the northern food bowl grows will impact the rate of growth.

That said, the comparatively high rate in 2020 and 2021 appears consequent on various factors coinciding:

- Release of serviced land in Liberty
- Completion of infrastructure (including the Catholic secondary)
- Opening of the northern connector
- Commonwealth Covid related stimulus allowed for new housing
- Upgrades of community infrastructure, such as Two Wells main street and the Town Square
- The increased capability to work from home

Two Wells is an established community and township which prospective home builders immediately experience rather than waiting for these to be established. It is recognised that current retail offerings and social services will not adequately provide for the volume of forecast residential population.

One risk is that the COVID stimulus has brought forward demand that may in a few years see a slowing of the rate. Council's role to plan and upgrade infrastructure as well as deliver a range of services to enable liveable communities will continue to be critical to underpin investment confidence, be it a homebuilder or business.

Potential growth rates based around annual population increases over the next 20 years are outlined below:

Population (Council Area)	2021	2041	Average % increase/PA
<b>Average Increase / Annum</b>			
250	9655 ABS	14441	2%
300		15441	2.25%
350		16441	2.5%
400		17441	2.75%
450		18441	3%
2013 Two Wells DPA 'up to 9700 more residents' over 20 to 30 years		18200	3.8%

If planned residential growth occurs as forecast, Two Wells will grow from around 2555 in 2016 to around 10,500 in 2041. Two Wells goes from being the 41<sup>st</sup> to around the 12<sup>th</sup> largest town in South Australia.

Two Wells – from SA's 41st to 12th largest town in 20 years			
		2016	2041
1.	Adelaide	1.165M	
			(Mt Barker Council 56,000)
			(Riverlea is aimed for 30,000, maybe later than 2041)
2.	Gawler	26,472	
3.	Mt Gambier	26,148	
4.	Whyalla	21,501	
5.	Murray Bridge	16,804	
6.	Mt Barker Council	17,365	
7.	Victor Harbour	15,265	
8.	Crafers- Bridgewater	15,125	
9.	Pt Pirie	15,343	
10.	Pt Lincoln	14,088	
11.	Pt Augusta	12,896	
			Two Wells 10,500
12.	Goolwa	7,717	
13.	Nuriootpa		
14.	Strathalbyn		
15.	Naracoorte		
16.	Nairne		
17.	Millicent		
18.	Renmark		
19.	Kadina		
20.	Tanunda		
21.	Moonta		
22.	Berri		
23.	Wallaroo		
24.	Loxton		
25.	Roxby Downs		
26.	Clare		
27.	McLaren Vale		
28.	Angle Vale		
29.	Bordertown		
30.	Kapunda		
31.	Mannum		
32.	Hahndorf		
33.	Williamstown		
34.	Ceduna		
35.	Willunga		
36.	Lobethal		
37.	Freeling		

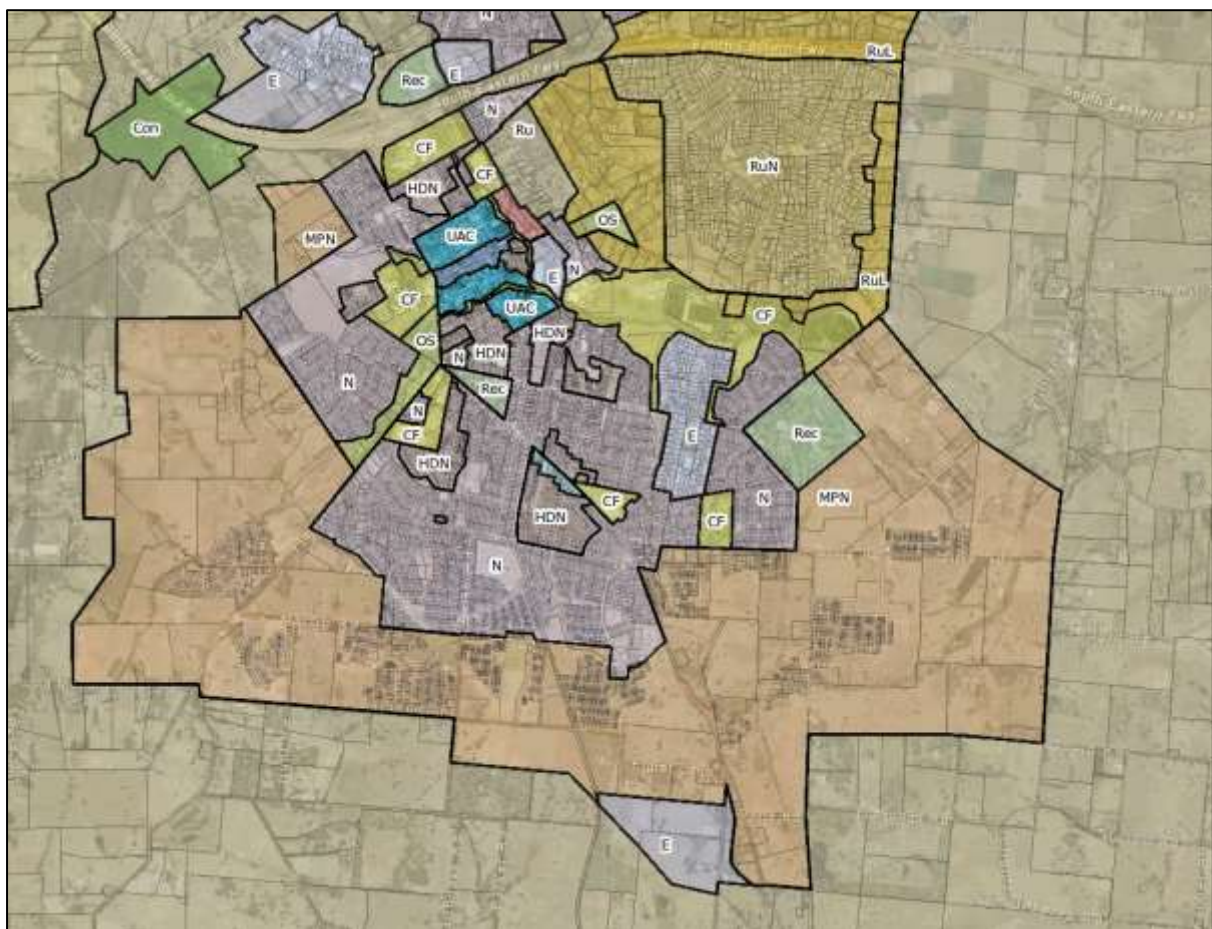
38.	Angaston	2044	
39.	Barmera	1935	
40.	Crystal Brook	1935	
41.	Two Wells	1926	
42.	Normanville	1906	

## Comparing Two Wells and Mt Barker

The town of Mount Barker has and continues to experience significant urban growth. Rezoning enabling growth at Two Wells and Mt Barker townships occurred after 2011.

Comparing both based on ABS and population forecasts indicates the significant scale and rate of growth that may be impacting Two Wells in coming years as well as giving some context to that potential growth.

2011 - 2036	Mt Barker / Wistow <sup>50</sup>	Two Wells <sup>51</sup>
Population Growth	21,928 4.26%PA	6,500 5.55%PA
2036	33,883	8,800
2021	18,401	2,743
2016	14,025	2,510
2011	11,955	2,280



*Land Zoned around Mt Barker is Enabling Further Urban Growth*

<sup>50</sup> Based on Mt Barker and Wistow, and Mt Barker Growth Area [profile.id.com.au/mount-barker](https://profile.id.com.au/mount-barker)

<sup>51</sup> [profile.id.com.au/adelaide-plains](https://profile.id.com.au/adelaide-plains) and staff analysis of envisaged land division at Two Wells

## Options for Future Planned Urban Growth

Council is aware of the ongoing challenge of planning for urban growth along with agricultural based business. Opening up land for new development will increase supply and impact the market as well as place more demand on services and infrastructure.

This is a consideration around what the need for land is, which land to rezone, and the timing of rezoning and land release. Other factors in planning for growth and whether to rezone further land include already available zoned and serviced land, value of land for primary production, flood risk, and the benefit to each town economically, socially and environmentally.

Regarding Two Wells and Dublin, in 2019 Council provided in-principle support to the Hicks Group Ltd and Leinad Land Developments (Dublin) Pty Ltd to advocate for boundary change to the Environment and Food Production Area (EFPA). There has been no change to the EFPA that would allow the rezoning of further residential land to date.

Mallala has zoned land yet to be developed. Likewise, there are land parcels in Rural Living Zones as yet to be developed, and the Deferred Urban land is a consideration.

A clear vision is needed to guide future planned urban growth.

Vision needs to be informed by investigations relevant to the context of each township that has regard to economic, social and environmental considerations.

This includes future potential urban growth at Two Wells and Dublin noting Council's support for progressing two rezoning objectives. Recognising growth planned at Two Wells and Mallala, Dublin's service role in the north west and proximity to substantial areas of the Bird Sanctuary and coast, considering Dublin's future is timely.

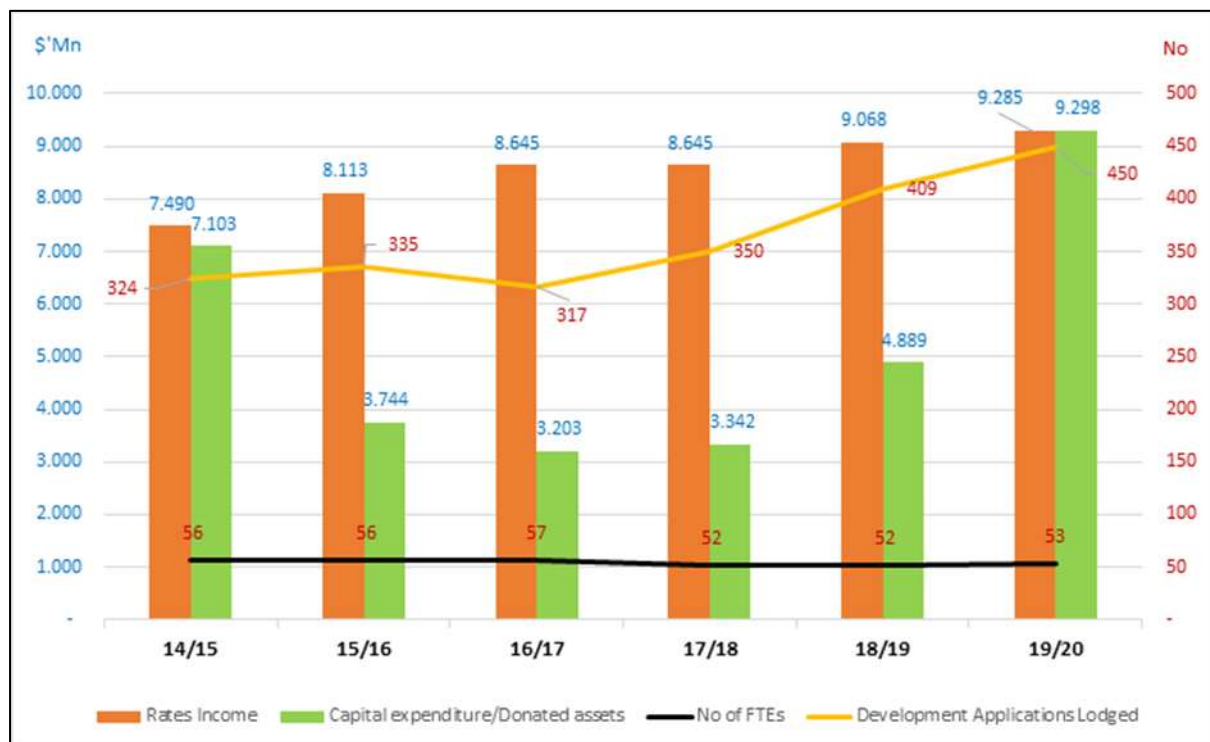


## Local Government Impacts

Councils are faced with the need to balance service levels within financial constraints while meeting the expectations of the community. Councils must discharge their legal obligations as determined by several Acts of Parliament relative to the role of Local Government. Consequently responsible financial management and in particular, appropriate rates levels are necessary to provide the financial resources to meet those expectations and obligations. This is increasingly difficult in a growth environment when budgets are challenged by multiple needs, emerging community expectations and significant expenditure mandated by various legislative obligations.

It is widely acknowledged that Local Government is under significant pressure to provide ongoing and improved levels of service delivery while taking on additional responsibilities which were the traditional role of State and Federal Governments.

As a consequence Council is beginning to experience an awareness of the difficulty in meeting ongoing community expectations for service within existing organisation structures and financial constraints. The ability to maintain quality service delivery while at the same time manage expanded service role expectations and facility demand is an important challenge to address.



Rapid urban growth will place infrastructure, community services and assets under increasing pressure. Urban growth will place all areas of Councils services under increased strain and demand for services and infrastructure upgrades,

outside mandate infrastructure maintenance, will increase exponentially in coming years.

To address this pressure, Council needs a coordinated approach to managing and facilitating growth and the provision of necessary infrastructure and services that leads to liveable and economic towns and districts.

### **Attachment A - 30 YEAR PLAN FOR GREATER ADELAIDE**

Adelaide Plain's is part of Greater Adelaide and the targets and policies of the 30 Year Plan for Greater Adelaide<sup>52</sup> are to guide how growth of Adelaide Plains is to occur into the future.

This also means the State Planning Commission (custodians of the 30 Year Plan), and other entities such as Infrastructure SA, and all State Government agencies and departments, are interested in how Adelaide Plains is to grow..

The following tables sections analyse targets and policies for relevance to Adelaide Plains.

#### *Targets*

Targets		APC Relevance
Containing our urban footprint and protecting our resources	90% of all new housing in Outer Greater Adelaide will be built in established townships and designated urban development areas	Urban growth to be planned for
More ways to get around	60% of all new housing in metropolitan Adelaide (includes Two Wells and Lewiston) will be built within close proximity to current and proposed fixed line (rail, tram, O-Bahn and bus) and high frequency bus routes by 2045	Public transport to be advocated about and planned for.
Getting active	Increase the share of work trips made by active transport modes by residents of Inner, Middle and Outer Adelaide by 30% by 2045	Active transport to be fostered

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<sup>52</sup> [livingadelaide.sa.gov.au/](http://livingadelaide.sa.gov.au/)

Walkable neighbourhoods	Increase the percentage of residents living in walkable neighbourhoods in .. Outer Metropolitan* Adelaide by 25% by 2045	“
A green liveable city	Urban green cover is increased by 20% in metropolitan Adelaide by 2045	Greening to be fostered
Greater housing choice	Increase housing choice by 25% to meet changing household needs in Greater Adelaide by 2045	Increased housing options to be planned for

*Policies – Transit Corridors, Growth Areas and Activity Centres*

Policies	APC Relevance
P9 Develop activity centres as vibrant places by focusing on mixed-use activity, main streets and public realm improvements.	Centres to be reinforced
P10 Allow for low-impact employment activities in residential areas, such as small-scale shops, offices and restaurants, where interface issues can be appropriately managed.	Provided for in SA Planning system and Planning and Design Code
P11 Ensure new urban fringe growth occurs only within designated urban areas and township boundaries and outside the Environment and Food Production Areas, as shown on Map 3.	Plan for growth
P12 Ensure, where possible, that new growth areas on the metropolitan Adelaide fringe and in townships are connected to, and make efficient use of, existing infrastructure, thereby discouraging “leapfrog” urban development.	Growth is to reinforce townships

*Policies – Design Quality*

Policies	APC Relevance
P25. Encourage urban renewal projects that take an all-inclusive approach to development by including streetscapes, public realm, public art and infrastructure that supports the community and responds to climate change.	Need to plan for integrated growth
P26. Develop and promote a distinctive and innovative range of building typologies for residential housing which responds to metropolitan Adelaide’s changing housing needs, reflects its character and climate, and provides a diversity of price points.	Provided for in SA Planning system and Planning and Design Code
P27. Provide for transitions between higher density and multi-storey, mixed-use developments in activity centres, corridors and existing detached housing precincts.	Provided for in SA Planning system and Planning and Design Code
P28. Promote permeable, safe, attractive, accessible and connected movement networks (streets, paths, trails and greenways) in new growth areas and infill redevelopment areas that incorporate green infrastructure.	Include as part of intended walking and cycling plans

P29. Encourage development that positively contributes to the public realm by ensuring compatibility with its surrounding context and provides active interfaces with streets and public open spaces.	Provided for in SA Planning system and Planning and Design Code
P30. Support the characteristics and identities of different neighbourhoods, suburbs and precincts by ensuring development considers context, location and place.	Provided for in SA Planning system and Planning and Design Code

*Policies – Heritage*

Policies	APC Relevance
P33. Recognise the value that communities place on heritage and ensure that new development is implemented sensitively and respectfully.	Provided for in SA Planning system and Planning and Design Code
P34. Ensure heritage places and areas of heritage value are appropriately identified and their conservation promoted.	Work underway. More work needed
P35. Encourage the innovative and sustainable reuse of heritage places and older building stock in a way that encourages activity and entices people to visit.	Provided for in SA Planning system and Planning and Design Code

*Policies – Housing Mix, Affordability and Competitiveness*

Policies	APC Relevance
P36. Increase housing supply near jobs, services and public transport to improve affordability and provide opportunities for people to reduce their transport costs.	Foster employment in proximity to housing
P37. Facilitate a diverse range of housing types and tenures (including affordable housing) through increased policy flexibility in residential and mixed-use areas, including: <ul style="list-style-type: none"> <li>• ancillary dwellings such as granny flats, laneway and mews housing</li> <li>• dependent accommodation such as nursing homes</li> <li>• assisted living accommodation</li> <li>• aged-specific accommodation such as retirement villages</li> <li>• small lot housing types</li> <li>• in-fill housing and renewal opportunities.</li> </ul>	Need to monitor housing choice provision. Part provided for in SA Planning system and Planning and Design Code

P39. Promote universal and adaptable housing principles in new housing stock to support changing needs over a lifetime, including the needs of those who are less mobile.	Need to monitor universal design in housing. Part provided for in SA Planning system and Planning and Design Code
P40. Use government-owned land and large underdeveloped or vacant sites as catalysts for stimulating higher density development and innovative building forms.	Relevant at Two Wells
P42. Provide for the integration of affordable housing with other housing to help build social capital.	Provided for in SA Planning system and Planning and Design Code
P43. Increase the supply of affordable housing through the provision of 15 per cent affordable housing in all new significant developments. These developments include surplus and residential government land projects; declared major developments and projects; and rezoned land that increases dwelling yield (including all new growth areas).	Need to monitor. Part provided for in SA Planning system and Planning and Design Code  Provided for in SA Planning system and Planning and Design Code
P44. Enable and encourage the provision of affordable housing through linking incentives, including the benefits of re-zoning such as planning policy bonuses or concessions to new affordable housing supply.	Consider in rezoning
P45. Promote affordable housing in well located areas close to public transport and which offers a housing mix (type and tenure) and quality built form that is well integrated into the community.	Consider in rezoning
P46. Ensure an adequate land supply is available to accommodate housing and employment growth over the longer term (at least a 15 year supply).	Need to monitor supply

*Policies – Health, Wellbeing and Inclusion*

Policies	APC Relevance
P47. Plan future suburbs and regenerate and renew existing ones to be healthy neighbourhoods that include: <ul style="list-style-type: none"> <li>• diverse housing options that support affordability</li> </ul>	Relevant for all townships and settlements, including future growth



<ul style="list-style-type: none"> <li>• access to local shops, community services and facilities</li> <li>• access to fresh food and a range of food services</li> <li>• safe cycling and pedestrian friendly streets that are tree-lined for comfort and amenity</li> <li>• diverse areas of quality public open space (including local parks, community gardens and playgrounds)</li> <li>• sporting and recreation facilities</li> <li>• walkable connections to public transport and community infrastructure.</li> </ul>	
P48. Create greenways in transit corridors, along major watercourse linear parks, the coast and other strategic locations to provide walking and cycling linkages.	Consider in trails strategy and walking cycling plans
P49. Encourage more trees (including productive trees) and water sensitive urban landscaping in the private and public realm, reinforcing neighbourhood character and creating cooler, shady and walkable neighbourhoods and access to nature.	Fostering greening and canopy needed
P50. Provide diverse areas of quality public open space in neighbourhoods (especially in higher density areas) such as local parks, community gardens, playgrounds, greenways and sporting facilities to encourage active lifestyles and support access to nature within our urban environment.	Monitor. Build on 2016 open space studies. Need a planned approach to open space, building on 2016 studies
P51. Facilitate and support the value of local ownership by supporting communities and businesses to help shape and look after their local open spaces and streetscapes.	Foster via engaging on plans and in there delivery. Part of council operations
P52. Support a diverse range of cultural initiatives, such as public art, to stimulate the revitalisation of communities and social cohesion.	Need to foster.
P53. Encourage the integration of green infrastructure in the public and private realms to support positive physical, mental and social health outcomes.	Fostering greening and canopy needed
P54. Prioritise Planning and Development Fund grants for improved access to quality public realm (such as playgrounds, linear paths and new open space purchases) at strategic locations.	Consider in actions.

*Policies – The economy and jobs*

Policies	APC Relevance
P55. Promote certainty to undertake development while at the same time providing scope for innovation.	Panning for growth fosters certainty
P56. Ensure there are suitable land supplies for the retail, commercial and industrial sectors.	Need to monitor land supply
Primary Production	APC Relevance
P57. Maintain and protect primary production and tourism assets in the Environment and Food Production Areas, while allowing for appropriate value-adding activities to increase investment opportunities (Refer to Map 5).	Need to monitor
P58. Ensure that the Environment and Food Production Areas, Character Preservation Districts and planning policies work in an integrated way to: <ul style="list-style-type: none"> <li>· protect key primary production assets and opportunities</li> <li>· facilitate local operating and investment conditions that support primary production and related agri-business development</li> <li>· enable timely business adjustment and climate change adaptation by primary producers.</li> </ul>	Need to monitor.  Council made a submission to the EFPA review in 2021
P59. Enable major new primary production and agri-business development across the Northern Adelaide and Barossa regions and in the Mount Barker-Murray Bridge corridor and prevent ad hoc land use changes that may compromise those investments.	Need to monitor.
P60. Ensure land use planning in and around the Virginia horticulture district aligns with projects for industry growth and revitalisation anticipated by the Northern Economic Plan.	Context
P62. Manage the interface between townships and adjacent primary production activities and areas of nature protection.	Provided for in SA Planning system and Planning and Design Code.
Tourism	APC Relevance
P63. Provide for sustainable tourism development across Greater Adelaide by: <ul style="list-style-type: none"> <li>· protecting, enhancing and promoting the qualities that attract tourism and are of value to the whole community</li> </ul>	Council's TED seeks to foster

<ul style="list-style-type: none"> <li>• providing appropriate support infrastructure for tourism</li> <li>• facilitating sustainably designed tourism accommodation in suitable locations</li> <li>• facilitating tourism-related developments such as restaurants, specialty retail accommodation and other value adding activities.</li> </ul>	
<b>Mining and resources</b>	<b>APC Relevance</b>
<p>P64. Protect existing mineral resource operations by:</p> <ul style="list-style-type: none"> <li>• preserving adequate separation distances between mining activities, housing and other incompatible development</li> <li>• ensuring buffers are contained within mine sites wherever possible</li> <li>• mitigating potential interface issues</li> <li>• maintaining access to freight networks.</li> </ul>	Limited mining in APC
<p>P65. Identify and protect the high pressure gas pipelines and other key infrastructure services.</p>	Provided for in SA Planning system and Planning and Design Code.
<b>Manufacturing Defence</b>	<b>How GSAP aligns</b>
<p>P68. Focus business clusters and manufacturing hubs around key transport infrastructure such as road, air, rail, sea terminals and intermodal facilities to maximise the economic benefits of export infrastructure.</p>	Important to continue to foster employment consolidation near towns
<b>Green Industries</b>	<b>How GSAP aligns</b>
<p>P70. Ensure planning controls for employment lands are flexible to allow new green technologies and industries to emerge and grow.</p>	Provided for in SA Planning system and Planning and Design Code.
<p>P71. Encourage the establishment and expansion of medium and large scale renewable energy generation within the region.</p>	“
<p>P72. Encourage the development of large scale habitat restoration and conservation projects to increase environmental and primary production values and add to local economies and employment opportunities.</p>	Need to foster
<b>Employment Land</b>	<b>APC Relevance</b>
<p>P73. Provide sufficient strategic employment land options with direct access to major freight routes to support activities that require separation from housing and other sensitive land uses.</p>	Foster employment plans near freight routes

*Policies – Transport*

Policies	APC Relevance
P74. Ensure development does not adversely impact the transport function of freight and/or major traffic routes and maintains access to markets (Refer to Map 7).	Provided for in SA Planning system and Planning and Design Code.
P75. Increase the number of neighbourhoods, main streets and activity centres where place is given greater priority than vehicle movement by adopting a 'link and place' approach.	Action included in walking cycling plans
P76. Improve the amenity and safety of public transport stops, stations and interchanges by improving their connections to adjacent development and encouraging mixed-use development and housing diversity in close proximity.	Action included in walking cycling plans
P77. Ensure that new housing (and other sensitive land uses) permitted in locations adjacent to airports and under flight paths or near major transport routes (road, rail and tram) mitigates the impact of noise and air emissions.	Provided for in SA Planning system and Planning and Design Code.
P78. Improve, prioritise and extend walking and cycling infrastructure by providing safe, universally accessible and convenient connections to activity centres, open space and public transport (see Map 8).	Walking cycling plans and trail networks planned
P79. Encourage car share schemes and public electric car charge points in transit corridors, activity centres and higher density neighbourhoods through incentives.	Action included for Two Wells
P80. Reduce car parking requirements in mixed-use areas near high frequency public transit services to encourage the use of alternative transport modes.	Provided for in SA Planning system and Planning and Design Code.
P81. Protect current and future road and rail for strategic requirements, such as ensuring adequate access to ports and other major facilities (see Map 7).	Provided for in SA Planning system and Planning and Design Code.

*Policies – Infrastructure*

Policies	APC Relevance
P82. Coordinate and link strategic infrastructure across Greater Adelaide to ensure it meets the needs of a growing population with a changing demographic profile and supports a more productive economy.	Important to integrate land use and infrastructure planning
P83. Define and protect strategic infrastructure sites and corridors from inappropriate development to ensure the continued functionality of the services they provide.	Provided for in SA Planning system and Planning and Design Code.
P84. Protect major economic infrastructure such as airports, ports and intermodals from encroachment by incompatible development and facilitate further economic activity in these locations (See Map 7).	Provided for in SA Planning system and Planning and Design Code.
P85. Provide for adequate buffer zones around water and waste treatment plants and identify complementary activities that generate economic or community benefits that can occur in these areas (See Map 9).	Provided for in SA Planning system and Planning and Design Code.
P86. Ensure that new urban infill and fringe and township development are aligned with the provision of appropriate community and green infrastructure, including: <ul style="list-style-type: none"> <li>• walking and cycling paths and facilities</li> <li>• local stormwater and flood management including water sensitive urban design</li> <li>• public open space</li> <li>• sports facilities</li> <li>• street trees</li> <li>• community facilities, such as child care centres, schools, community hubs and libraries.</li> </ul>	Important to plan as part of growth
P87. Encourage early provision of community infrastructure in fringe and township growth areas to assist in creating a sense of belonging and building community wellbeing.	Important to plan the timely provision of needed infrastructure
P88. Design and locate community infrastructure to ensure safe, inclusive and convenient access for communities and individuals of all demographic groups and levels of ability.	Actions included around the need and spatial location. Detailed design needs more work.
P89. Integrate and co-locate different community infrastructure and services in community hubs to maximise their use and enhance their economic feasibility.	Need a planned approach to social infrastructure in growth areas

*Policies – Biodiversity*

Policies	APC Relevance
<p>P90. Delineate and maintain areas with significant environmental values to protect landscape health; conserve biodiversity; and improve development certainty and transparency (represented in Map 10). This includes:</p> <ul style="list-style-type: none"> <li>• Nature Protection Areas: These are largely undeveloped areas that retain significant environmental values recognised through existing legislation. This includes protected public lands (such as conservation and marine parks), private protected lands (such as Heritage Agreements), and areas of native vegetation and listed wetlands. These areas should be protected from development unless specific exemptions apply.</li> <li>• Complementary Developed Landscapes: These are substantially modified farming landscapes where existing land uses and significant environmental values, different from those in Nature Protection Areas, co-exist in a way that provides mutual benefits. The generally open and undeveloped nature of these landscapes should be maintained through appropriate zoning to support continuation of the primary production systems that create environmental niches for target species.</li> </ul>	<p>Consider 30YP areas in more detail.</p> <p>Conservation areas provided for in SA Planning system and Planning and Design Code.</p>
<p>P91. Protect coastal features and biodiversity including:</p> <ul style="list-style-type: none"> <li>• habitats that are highly sensitive to the direct impacts of development</li> <li>• important geological and/or natural features of scientific, educational or cultural importance</li> <li>• landscapes of very high scenic quality.</li> </ul>	<p>Provided for in SA Planning system and Planning and Design Code.</p>

*Policies – Open Space, Sport and Recreation*

Policies	APC Relevance
<p>P98. Provide for a Greater Adelaide open space framework that builds on the Metropolitan Open Space System (MOSS) to create quality open space across the region. The open space will feature urban forests and parks, watercourse and coastal linear parks, trails, greenways, shared use paths and green</p>	<p>Build on 2016 Open Space studies</p>



buffers, and sustainable recreation and sporting facilities (See Map 11).	
<p>P99. Ensure quality open space is within walking distance of all neighbourhoods to:</p> <ul style="list-style-type: none"> <li>• link, integrate and protect biodiversity assets and natural habitats</li> <li>• provide linkages to encourage walking and cycling to local activities, local activity centres and regional centres</li> <li>• be multi-functional, multiuse (including the shared use of strategically located school facilities) and able to accommodate changing use over time</li> <li>• incorporate the principles of Crime Prevention Through Environmental Design for safety and amenity</li> <li>• contain appropriate and low maintenance species and locate trees to maximise shade</li> <li>• encourage unstructured recreation opportunities such as the provision of a variety of paths and children's play equipment</li> <li>• foster a connection to the natural environment through the provision of nature play spaces and urban forest opportunities.</li> </ul>	Build on 2016 Open Space studies
P100. Ensure that the Planning and Development Fund is strategically aligned to public realm and open space projects which support the implementation of Greater Adelaide's new urban form.	Part of implementing
P102. Strategically locate sports and recreational facilities to cater for community needs.	Build on 2016 Open Space studies
P103. Ensure that public open space is adequately greened and irrigated (where appropriate) to act as a natural cooling system to reduce heat island effects in urban areas.	Foster greening and canopy

### *Policies – Climate Change*

Policies	APC Relevance
<p>P105. Deliver a more compact urban form to:</p> <ul style="list-style-type: none"> <li>• protect valuable primary production land</li> <li>• reinforce the Hills Face Zone, character preservation districts and Environment and Food Production Areas</li> <li>• conserve areas of nature protection areas</li> <li>• safeguard the Mount Lofty Ranges Watershed</li> </ul>	Plan growth to conserve agricultural and conservation land.

<ul style="list-style-type: none"> <li>• reduce vehicle travel and associated greenhouse gas emissions.</li> </ul>	
P106. Protect key coastal areas where critical infrastructure is at risk from sea level rise, coastal erosion and storm surges, and ensure new coastal development incorporates appropriate adaptation measures.	Continue hazard planning
P107. Increase the proportion of low-rise, medium-density apartments and attached dwellings to support carbon-efficient living.	Foster increased housing options
P108. Promote green infrastructure (including green roofs, vertical gardens and water sensitive design) in higher density and mixed-use developments to assist with urban cooling, reduce building energy use and improve biodiversity.	Foster greening and canopy
P109. Support a zero waste culture by reducing the waste footprint of new development.	Foster waste reduction in development, including related to Council waste operations
P111. Create a more liveable urban environment through establishing a network of greenways, bicycle boulevards, tree-lined streets and open spaces, which will have a cooling effect on nearby neighbourhoods and buildings.	Foster greening and canopy in townships open spaces and walk/cycle ways
P112. Provide the opportunity for neighbourhood-level alternative energy supplies, which may include embedded and distributed renewable energy, co-generation and smart grid/green grid technology.	Provided for in SA Planning system and Planning and Design Code.
P113. Promote energy efficiency, the use of renewable energy sources and neighbourhood level alternative energy supplies and storage in new developments to reduce energy costs and carbon footprint.	Needs more work.  Part provided for in SA Planning system and Planning and Design Code.
P114. Encourage the provision of electric vehicle charging points in new higher-density developments, large public and private car parks, activity centres and employment lands.	Potential with Two Wells growth

### *Policies – Water*

Policies	APC Relevance
P115. Incorporate water-sensitive urban design in new developments to manage water quality, water quantity and water use efficiency and to support public stormwater systems.	Provided for in SA Planning system and Planning and Design Code.

### *Policies – Emergency Management and Hazard Avoidance*

Policies	APC Relevance
P118. Minimise risk to people, property and the environment from exposure to hazards (including bushfire, terrestrial and coastal flooding, erosion, dune drift and acid sulphate soils) by designing and planning for development in accordance with a risk hierarchy of: <ul style="list-style-type: none"> <li>• avoidance</li> <li>• adaptation</li> <li>• protection.</li> </ul>	Continue hazard planning
P119. Improve the integration of disaster risk reduction and hazard avoidance policies and land use planning.	Continue hazard planning associated with fire, flood and coast.
P121. Ensure risk posed by known or potential contamination of sites is adequately managed to enable appropriate development and safe use of land.	Provided for in SA Planning system and Planning and Design Code.
P122. Mitigate the impact of extreme heat events by designing development to create cooler communities through the use of green infrastructure.	Foster greening and canopy