**GROWTH MANAGEMENT PROGRAM** 

# LAND SUPPLY REPORT FOR GREATER ADELAIDE



Part 2: Urban Infill







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# I. INTRODUCTION

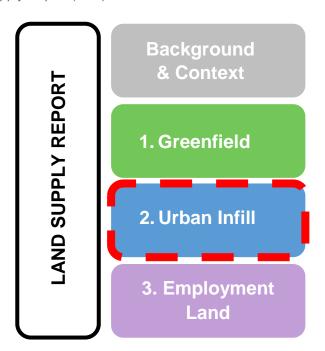
# 1.1 What is the Land Supply Report?

The Land Supply Report (LSR) for Greater Adelaide is a component of a broader Growth Management Program coordinated by the Planning and Land Use Services Directorate (PLUS) of the Attorney-General's Department (AGD). It has a 10-year time horizon from 2020 to 2030.

The LSR is an evidence based report which provides a single source of data around residential and employment land trends, land supply and estimated future demand for both a medium and high population growth scenario. This report will be regularly updated to ensure emerging market trends, demand preferences and economic conditions are captured.

The LSR is provided in four parts, with this report being Part 2 – Urban Infill (see Figure 1).

Figure 1: Land Supply Report (LSR) structure

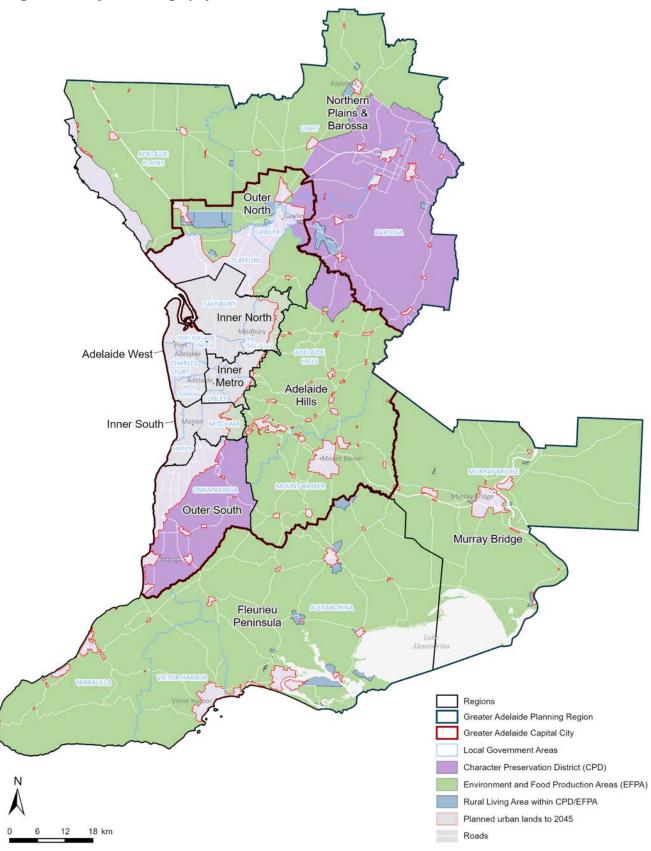


# 1.2 Study area

The LSR study area captures the Greater Adelaide Planning Region (GAPR), as shown in Figure 2. Given the geographical size of the study area and the diverse range of housing markets, population and employment characteristics, it has been divided into ten regions for the purpose of reporting and analysis.

Another important geographic area used within this report is the Greater Adelaide Capital City (GACC) region, which is defined by the Australian Bureau of Statistics (ABS), and also illustrated in Figure 2. This region represents the contiguous urban area and is widely used for national comparisons of capital city performance.

Figure 2: Study Area Geography



# 1.3 How will it be used?

The LSR will be used to provide background information and a point in time analysis of residential and employment development trends, land supply and future demand. This information will then be used to form an evidence base to determine the capacity of the land use planning system to provide an adequate supply of appropriate land to meet projected demand under both a medium and high growth scenario.

Figure 3 summarises how the report will be used by the State Planning Commission ('the Commission') and the Department. In particular, the report will provide base line data to help inform deliberations on rezoning proposals for residential and employment activities. Consequently, the LSR will need to be regularly reviewed and updated to keep pace with the evolving nature of land use planning and land use demands.

In regard to the supply of current and future residential and employment land, the LSR only considers the planned urban lands and strategic employment lands identified in *The 30 Year Plan for Greater Adelaide - 2017 Update* ('the Plan'), it does not predict supply beyond that identified in the Plan.

Figure 3: How the LSR will be used

# AND SUPPLY REPORT

Help to inform proposals to amend the Planning and Design Code through Code amendments.

Assist the development of the Regional Plan for Greater Adelaide

Inform the review of the Environment and Food Production Areas (EFPA) commencing in April 2021

Help inform the location and timing of strategic infrastructure

# 1.4 Key Assumptions for Greater Adelaide

The following is a brief overview of the key assumptions used to develop the land supply and demand analysis in the LSR. For further details refer to the Land Supply Report for Greater Adelaide - Background and Context document.

# Projected population growth 2020 to 2030

Despite some anticipated COVID-19 impacts on population growth in the short-term, this version of the LSR will continue to use the South Australian government's current medium and high growth projections to develop base case scenarios for the next 10 years. Table 1 summarises projected population growth for the ten regions of Greater Adelaide for the period between 2020 and 20301.

<sup>&</sup>lt;sup>1</sup> DPTI population projections, 2019

Table 1: Projected population growth 2020 to 2030

REGION	MEDIUM	HIGH
Outer North	26,900	36,700
Inner North	26,500	32,800
Adelaide West	21,700	33,700
Inner Metro	17,000	28,400
Inner South	14,700	16,400
Outer South	13,200	20,300
Adelaide Hills	6,400	8,500
GREATER ADELAIDE CAPITAL CITY (GACC)	126,400	176,800
Fleurieu Peninsula	7,100	9,300
Murray Bridge	2,300	3,600
Northern Plains & Barossa	3,200	5,400
PERI-URBAN AREA	12,600	18,300
TOTAL	139,000	195,100

The total estimated dwelling requirement for each region is summarised in Table 2. It represents the amount of new housing needed to meet the demand generated by population growth and underlying household formation trends. For example, under a medium growth scenario it is estimated approximately 64,000 dwellings will be required across Greater Adelaide over the next 10 years to accommodate a projected population increase of 139,000 people (Table 1).

Table 2: Total estimated dwelling requirement 2020 to 2030

REGION	MEDIUM	HIGH
Outer North	12,000	16,400
Inner North	12,000	14,000
Adelaide West	10,600	15,700
Inner Metro	8,300	13,600
Inner South	5,100	7,200
Outer South	6,100	8,900
Adelaide Hills	3,000	4,000
GREATER ADELAIDE CAPITAL CITY (GACC)	57,100	79,800
Fleurieu Peninsula	4,100	5,200
Murray Bridge	1,100	1,600
Northern Plains & Barossa	1,300	2,200
PERI-URBAN AREA	6,500	9,000
TOTAL	63,600	88,800

# **Development types**

The main development types are defined below.

## Greenfield

Greenfield land supply includes land that is currently zoned for residential use, and land identified for future urban development in *The 30-Year Plan for Greater Adelaide - 2017 Update*. This land is generally located on the metropolitan fringe or in townships (i.e. Mount Barker), as shown in Figure 5.

# **Township**

Townships are urban centres separated from the built up areas of Metropolitan Adelaide and distributed throughout the Environment and Food Production Areas (EFPA) (refer back to Figure 2). A number of the larger townships (e.g. Victor Harbor, Goolwa & Strathalbyn) have significant tracts of Greenfield land.

# **General Infill**

General infill (or minor infill) occurs within the established urban area of Metropolitan Adelaide and typically involves the demolition of older dwelling stock and/or the resubdivision of land parcels to accommodate new dwellings, often at higher densities.

# Strategic Infill

Significant residential development on land within the established urban area of Metropolitan Adelaide. Strategic infill development includes; major apartment developments in corridors and the Central Business District (CBD), the redevelopment of "brownfield" sites (i.e. Lightsview, Bowden, AAMI Stadium) and aged care developments.

#### Peri-urban

Peri-urban development refers to residential development beyond the extent of the established urban area of Metropolitan Adelaide and not within zoned Greenfield land or Townships, as shown in Figure 5.

# **Development trends**

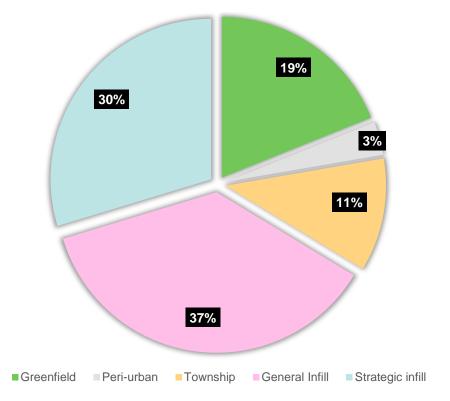
A key assumption used within the LSR is the proportion of dwellings built by development type, referred to as the 'development share'. Both a gross and net development share have been calculated to demonstrate the difference between the total number of dwellings built and the net dwelling increase (i.e. excludes dwellings built to replace demolitions).

The net dwelling increase is the best method for measuring the actual stock of dwellings available for residential occupancy and has been used to calculate the development shares used throughout the LSR.

Analysis of the net dwelling increase by development type between 2010 and 2020, as shown in Figure 4, reveals that:

- General infill development contributes 37% of the net dwelling increase across Greater Adelaide.
- A further 30% of the net dwelling increase came from strategic infill.
- Greenfield development contributed 19% of our dwelling stock.
- Townships contribute 11% with the majority of this considered as Greenfield development.

Figure 4: Net dwelling increase by development type, Greater Adelaide 2010 – June 2020





# 2. URBAN INFILL OVERVIEW

Urban infill development accounts for around two thirds of the annual net dwelling increase in Greater Adelaide. Given its dominance in the housing sector it is critical that we are cognisant of the key development trends, supply options and future demand in this sector.

This report analyses urban infill supply and demand for the key metropolitan regions of Greater Adelaide, namely:

- Inner North;
- Outer North;
- Adelaide West:
- Inner Metro:
- Inner South;
- Outer South; and
- Adelaide Hills (Mt. Barker).

The analysis does not include the townships within the Adelaide Hills, Fleurieu Peninsula, Murray Bridge and Northern Plains & Barossa Regions where urban infill is less prevalent.

Figure 5 shows the regions included in this analysis and the established urban area of Greater Adelaide in which urban infill occurs. Urban infill land supply across Greater Adelaide can be broadly divided into two distinct components:

- General Infill; and
- Strategic Infill.

# **General Infill Development**

- Occurs on residentially zoned land parcels within the established urban area of Greater Adelaide, as shown in Figure 5.
- Typically involves the demolition of older dwellings although in some areas the existing dwellings are retained and another dwelling constructed (re-subdivision).

To provide a more detailed analysis on the availability and 'readiness' of General Infill development opportunities, three categories have been created (Table 3). These categories are based on the Capital Value (CV) to Site Value (SV) ratio of established residential land parcels, and represent the short, medium and longer term potential for future redevelopment<sup>2</sup>.

Table 3: General Infill land status definitions

DEVELOPMENT STATUS	DEFINITION	
Short Term	Land satisfies relevant zone requirements for land division and has a CV/SV Ratio of less than or equal to 1.3.	
Medium Term	Land satisfies relevant zone requirements for land division and has a CV/SV Ratio greater than 1.3 and less than or equal to 1.8.	
Long Term	Land satisfies relevant zone requirements for land division and has a CV/SV Ratio of greater than 1.8.	

<sup>&</sup>lt;sup>2</sup> Land and housing | PlanSA

To create a more 'realistic' overview of available supply, discounts have been applied to the identified stock of developable land parcels. These discounts are designed to account for owners who do not intend to redevelop their land, or sites which are constrained by slope or vegetation, thus restricting development potential.

For the purpose of this report the following discounts have been applied:

- Short Term supply discounted by 60%;
- Medium Term supply discounted by 80%;
- Long Term supply is not considered to be available within the next 10 years.

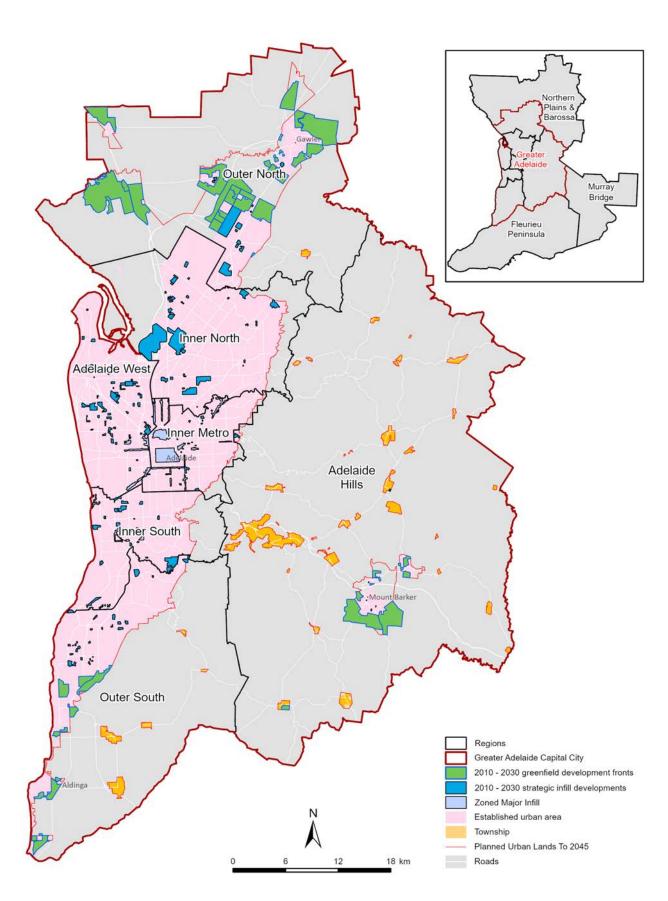
# **Strategic Infill Development**

- Residential development that occurs on land within the established urban area of Greater Adelaide, as shown in Figure 5.
- Development typically occurs at a higher density than general infill and results in a net dwelling increase of greater than 10 dwellings.
- Types of Strategic Infill include:
  - o CBD development
  - o Urban Corridor Zone development
  - o Strategic sites (i.e. Lightsview, AAMI Stadium, Bowden and areas such as Oaklands Park).

Strategic infill land supply comes from sites in the CBD, in locations zoned urban corridor and on large repurposed sites (often called brownfield sites). Development at these sites results in residential outcomes of more than 10 additional dwellings, often at a higher density than that achieved on general infill sites.

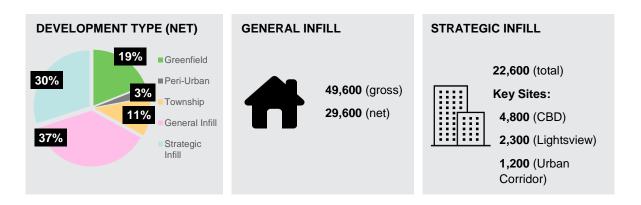
The Planning Development and Infrastructure Act (2016) offer new opportunities for land owners to initiate changes of zoning in areas captured by the city, within urban corridors and at strategic sites. Consequently the full residential potential from these sites can be more difficult to estimate in the medium to long term.

Figure 5: Urban Infill Geography





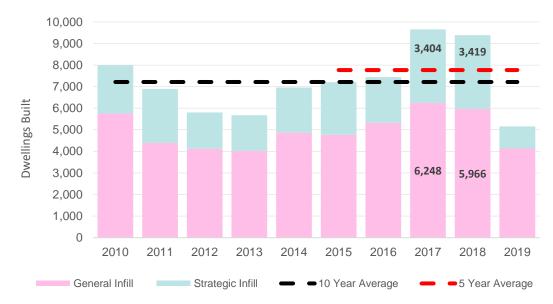
# 3. RECENT DEVELOPMENT TRENDS



Over a 10 year period from 2010-2019, the following broad urban infill development trends have emerged within the Greater Adelaide region:

- In terms of residential development, general infill has contributed around 37% of the net dwelling increase in Greater Adelaide. Although when measured in gross terms, general infill contributes around 50% of total dwelling construction.
- Strategic infill has contributed around 30% of the net dwelling increase In Greater Adelaide over the past 10 years.
- Urban infill development (general and strategic) produced a gross total 72,200 dwellings, however once demolitions were accounted for this resulted in a net gain of 52,200 dwellings.
- Gross urban infill dwelling construction peaked in 2017 and 2018, as illustrated in Figure 6, accounting for over 20% of total dwellings built over this period. This coincided with a surge in development within the Adelaide CBD, which produced 2,400 new dwellings in this two year period.
- Detached dwellings accounted for over 65% of total dwellings built, townhouses a further 9% with apartments and semi-detached dwellings accounting for a further 7% each.

Figure 6: Urban Infill Development by Type and Year, 2010-2019



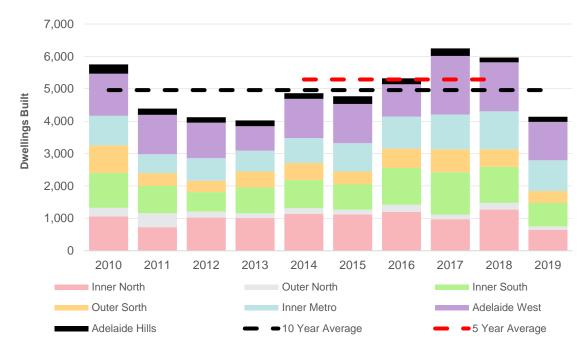
# 3.1 General Infill

Between 2010 and 2019, the following General Infill development trends were observed within the Greater Adelaide region:

## **Dwelling Construction:**

- A gross total 49,600 dwellings were constructed, representing 50% of total dwellings built within Greater Adelaide;
- Figure 7 shows the steady supply of dwellings produced within the Inner Metro, Inner North, Inner South and Adelaide West regions over this period.
- The Adelaide West region has been one of the most important contributors to General Infill and has provided around 25% of the dwellings built over the past 10 years.
- General infill development is much less significant in the Outer North.

Figure 7: General Infill Development by Region, 2010 to 2019



## Net Dwelling Increase:

- Between 2014 and 2020<sup>3</sup>, an average of 2,000 dwellings were demolished per year across Metropolitan Adelaide.
- Close to 30% of demolitions occurred within the Adelaide West region in suburbs such as Seaton and Woodville Gardens.
- General Infill development contributed a net dwelling increase of 29,600. This represented 37% of the total net dwelling increase within Greater Adelaide.
- The current CV/SV ratio of identified developable parcels is an important indicator of potential future supply. Over 75% of total demolitions occurred on sites with a CV/SV ratio of less than or equal to 1.3, as shown in Figure 8.
- It is also important to note that close to 70% of the dwellings demolished in the study period (between 2014 and 2020) were built between 1950 and 1969, see Figure 8.

<sup>&</sup>lt;sup>3</sup> AGD, General Infill Study, 2014-2020

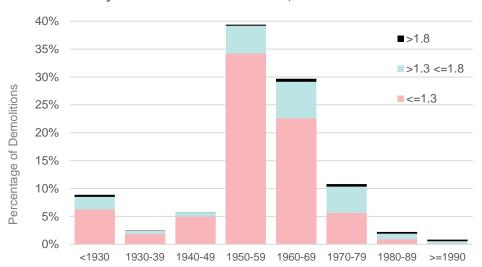


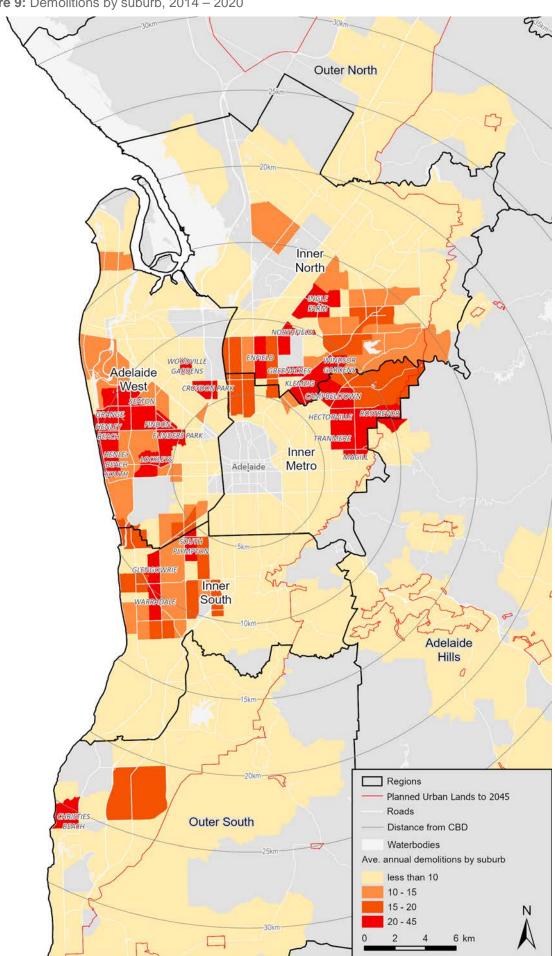
Figure 8: Demolitions by CV/SV Ratio and Year Built, 2014-2020

To provide some local context on the rate and scale of General Infill development within Greater Adelaide, the top 2 suburbs of each region (excluding Adelaide Hills) for gross dwellings built since 2010 are listed in Table 4. The table also displays the percentage of the current dwelling stock built since 2010. The average annual number of demolitions is also a key indicator of the propensity for minor infill development to occur in specific locations. This table should be read in conjunction with Figure 9, which illustrates the average annual number of demolitions by suburb.

Table 4: General Infill, Dwellings Built 2010 - June 2020

SUBURB (Region)	Gross Number of Dwellings Built	% of Current Stock Built Since 2010	Estimated Net Dwelling Increase (minus demolitions)	Average Annual Demolitions 2014-2020
Warradale (Inner South)	644	29%	314	33
Seacombe Gardens (Inner South)	486	42%	296	19
Christies Beach (Outer South)	656	29%	436	22
Morphett Vale (Outer South)	649	6%	489	16
Campbelltown (Inner Metro)	1,002	23%	552	45
Magill (Inner Metro)	695	16%	375	32
Seaton (Adelaide West)	828	14%	478	35
Henley Beach (Adelaide West)	478	16%	228	25
Ingle Farm (Inner North)	551	13%	241	31
Northfield (Inner North)	524	21%	294	23
Elizabeth East (Outer North)	112	5%	62	5
Elizabeth Downs (Outer North)	106	5%	66	4

Figure 9: Demolitions by suburb, 2014 – 2020



# 3.2 Strategic Infill

Strategic infill development has contributed 30% of Greater Adelaide's net dwelling increase from 2010-2019. Analysis of the volume of development at the regional level is illustrated in Figure 10.

Over the past 10 years the key points to note include:

- A total of 22,600 dwellings were constructed through various forms of strategic infill development.
- Over 35% of total strategic infill development was located within the Inner Metro region.
   Significant peaks in development were recorded in 2017 and 2018 resulting from numerous apartment building completions in the Adelaide CBD, as shown in Figure 10.
- 2019 saw the lowest annual dwelling increase from strategic infill over the 10 year period.
- The Inner North region has consistently been a major contributor of strategic infill
  development sites over this period due to key projects such as Mawson Lakes and more
  recently Lightsview.
- The Adelaide West region has also been a steady contributor with key projects including; St. Clair, Woodville West and West Lakes all driving growth.
- Strategic infill development in the Inner South includes development sites at Tonsley and Blackwood Park. Regeneration of Housing SA stock in Oaklands Park is also occurring within the region.
- A limited number of strategic infill sites are located within the Outer North region. This market is well serviced by numerous Greenfield development fronts (refer to Land Supply Report for Greater Adelaide, Part 1 – Greenfield).

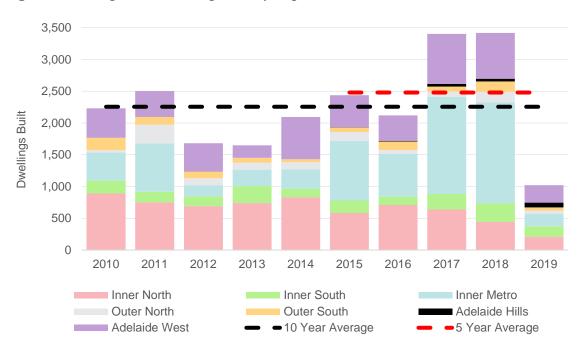


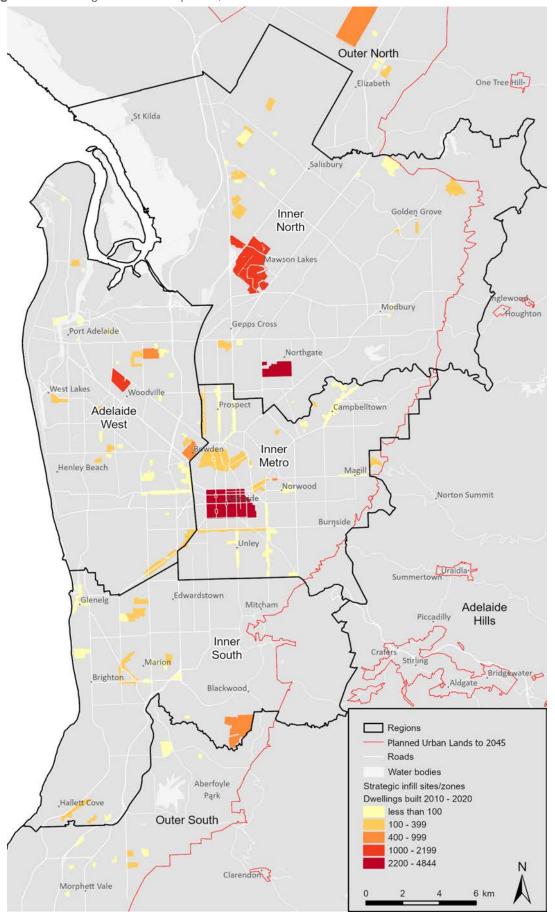
Figure 10: Strategic Infill - Dwellings Built by Region, 2010 - 2019

The main strategic infill development fronts within each region are summarised in Table 5, which also shows the conribution each of these has made to strategic infill over the last 10 years. The location of these key sites and other significant strategic sites are displayed in Figure 11.

Table 5: Top 10 Key Strategic Infill Developments, Dwellings Built 2010 - June 2020

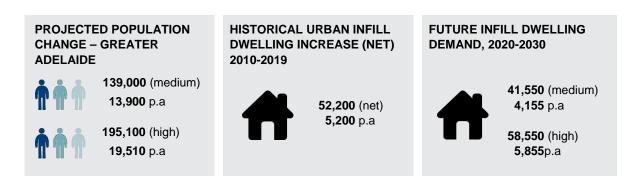
SUBURB (Region)	Dwellings Built	% of Greater Adelaide Strategic Infill Total	% of Strategic Infill Total by Region
Adelaide CBD (Inner Metro)	4,800	21%	70%
Lightsview (Inner North)	2,228	10%	34%
Mawson Lakes (Inner North)	1,693	8%	26%
Urban Corridor (Inner Metro / Adelaide West)	1,527	7%	22%
St Clair (Adelaide West)	1,077	6%	22%
Bowden (Adelaide West)	645	3%	13%
Playford Regeneration (Outer North)	475	2%	41%
Blackwood Park (Inner South)	469	2%	24%
AAMI Stadium (Adelaide West)	233	1%	5%
Tonsley (Inner South)	102	0.5%	5%

Figure 11: Strategic Infill Development, 2010-2020





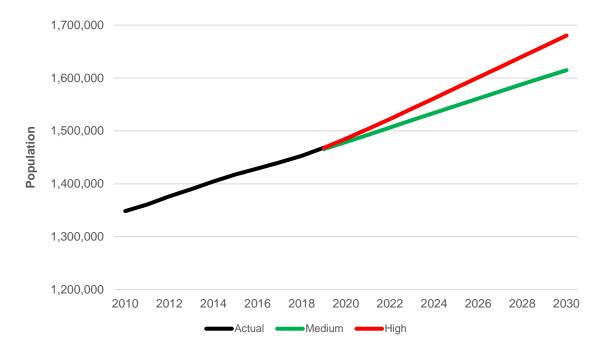
# 4. FUTURE DEMAND, 2020 - 2030



Historical and projected population growth (medium and high scenarios) for Greater Adelaide (2010 to 2030) is shown in Figure 12. The key points to note include:

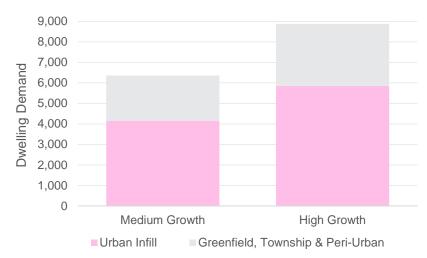
- Between 2010 and 2020 the region grew by 119,900 persons, at an average annual rate of 0.89%.
- Under a medium growth scenario the population is projected to increase by an estimated 139,000 persons at an average annual rate of 0.94%.
- Under a high growth scenario the population is projected to increase by an estimated 195,100 persons at an average annual rate of 1.3%.
- The difference between the two growth scenarios is 56,100 persons.
- The majority of South Australia's population growth occurs in the Greater Adelaide region.

**Figure 12:** Greater Adelaide Planning Region (GAPR) Actual and Projected Population Growth 2010 - 2030



Projected population growth (medium and high) and average household size<sup>4</sup> have been used to estimate the future dwelling demand for Greater Adelaide, this demand is shown in Figure 13. The share of future demand allocated to urban infill is assumed to be 70% for both growth scenarios over the next 10 years.

Figure 13: Projected annual dwelling demand to 2020-2030



Analysis of these dwelling estimates, as seen in Table 6 below, indicates that:

- Under a medium growth scenario demand for Urban Infill development is estimated to be 4,155 dwellings per annum.
- Under a high growth scenario demand for Urban Infill development is estimated to be 5,855 dwellings per annum.

Table 6: Estimated Urban Infill Dwelling Demand, 2020-2030

	MEDIUM GROWTH SCENARIO		HIGH GROW	TH SCENARIO	
REGION	Dwelling Demand (Total)	Dwelling Demand (Urban Infill)	Dwelling Demand (Total)	Dwelling Demand (Urban Infill)	
Outer North	12,000	2,200	16,400	3,000	
Inner North	12,000	12,000	14,000	14,000	
Adelaide West	10,600	10,600	15,700	15,700	
Inner Metro	8,300	8,300	13,600	13,600	
Inner South	5,100	5,100	7,200	7,200	
Outer South	6,100	3,100	8,900	4,700	
Adelaide Hills	3,000	250	4,000	350	
GREATER ADELAIDE CAPITAL CITY (GACC)	57,100	41,550	79,800	58,550	
Fleurieu Peninsula	4,100	-	5,200	-	
Murray Bridge	1,100	-	1,600	-	
Northern Plains & Barossa	1,300	-	2,200	-	
PERI-URBAN AREA	6,500	-	9,000	-	
TOTAL	63,600		88,700		

<sup>&</sup>lt;sup>4</sup> Average household size is calculated using the 2016 ABS Census data for each region.

# 5. GENERAL INFILL LAND SUPPLY

# IDENTIFIED DEVELOPABLE PARCELS (2020)



# THEORETICAL MAXIMUM DWELLING YIELD



REALISTIC DWELLING POTENTIAL (SHORT to MEDIUM TERM)



68,000 dwellings

Additional general infill allotments for residential development are generated by the demolition of existing dwellings and the re-subdivision of existing allotments (e.g. hammer head allotments). To estimate the stock of general infill development opportunities the following process is undertaken.

- Established residential allotments are considered against the relevant zoning requirements to identify sites that could be redeveloped to create additional allotments.
- Identified residential allotments are further assessed to ascertain the maximum number of new dwellings that could be built on these sites according to the planning policy that applies to each individual site.
- One of the key indicators of a site to be redeveloped is the value of the land relative to the value of the site improvements (i.e. dwelling) on the land. This type of assessment is referred to as a Capital Value (combined value of house and land) to Site Value (value of the land only), which is known as a CV/SV ratio.
- Land parcels with a current CV/SV of equal to or less than 1.3 are considered more likely to be developed in the short term. The dwelling potential of these parcels is calculated and is discounted by 60% to generate a realistic short term supply.
- The realistic medium term supply of dwellings from general infill is estimated by taking the maximum residential development potential of land parcels with a CV/SV of between 1.3 and 1.8, and then applying a discount of 80%.
- Long term supply considers allotments with a CV/SV of greater than 1.8 and is simply a statement of maximum re-development potential, it is assumed that this supply will not be available in the next ten years.

An analysis of General Infill land supply within Greater Adelaide, and its regions, is summarised in Figure 14 and Table 7. The key points to note include:

- There are a total of 168,600 developable parcels that satisfy relevant zoning requirements for land division, as summarised in the graphics above. Approximately 40% of these parcels have site characteristics which indicate they are more likely to be developed in the short term.
- The Inner North Region accounts for over 30% of the total supply of developable parcels within Greater Adelaide.
- The theoretical maximum dwelling potential from the developable parcels is a total of 273,900 dwellings (short, medium and long term estimated potential).
- The realistic short to medium term dwelling potential, after discounting, of the developable parcels is 68,200 dwellings.

Figure 14: Total Developable Parcels by Region

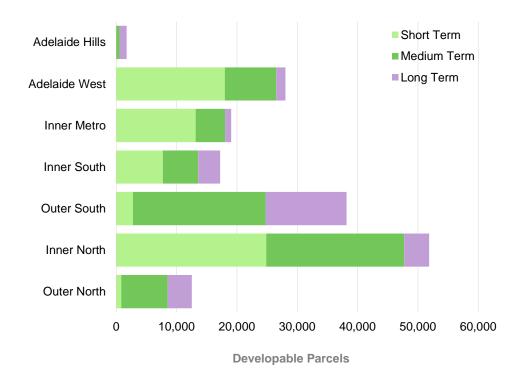


Table 7: General infill land supply by region, June 2020

REGION	DEVELOPABLE PARCELS	NET THEORETICAL MAX	REALISTIC (DISCOUNTED) POTENTIAL <sup>5</sup>
Outer North	12,520	26,980	4,434
CSV <=1.3	837	2,836	1,134
CSV >1.3 <=1.8	7,687	16,504	3,300
CSV >1.8	3,996	7,640	-
Inner North	51,870	97,835	28,285
CSV <=1.3	24,873	50,903	20,361
CSV >1.3 <=1.8	22,858	39,621	7,924
CSV >1.8	4,139	7,311	-
Outer South	38,190	61,998	9,563
CSV <=1.3	2,756	6,212	2,485
CSV >1.3 <=1.8	21,999	35,389	7,078
CSV >1.8	13,435	20,397	-
Inner South	17,220	22,652	5,683
CSV <=1.3	7,721	10,840	4,336
CSV >1.3 <=1.8	5,869	6,734	1,347
CSV >1.8	3,630	5,078	-
Inner Metro	19,058	26,226	8,798
CSV <=1.3	13,169	18,958	7,583
CSV >1.3 <=1.8	4,872	6,075	1,215
CSV >1.8	1,017	1,193	-
Adelaide West	28,041	34,220	11,100
CSV <=1.3	17,998	22,862	9,145
CSV >1.3 <=1.8	8,507	9,775	1,955
CSV >1.8	1,536	1,583	-
Adelaide Hills	1,725	3,964	359
CSV <=1.3	12	198	79
CSV >1.3 <=1.8	529	1,401	280
CSV >1.8	1,184	2,365	-
TOTAL	168,624	273,875	68,222

<sup>&</sup>lt;sup>5</sup> Parcels with a CSV Ratio of <=1.3 have been applied with a discount of 60%, this figure has then been carried across as 'realistic' supply. A discount of 80% has been applied to parcels with a CSV Ratio of >1.3 to <=1.8. Land parcels with a CSV Ratio greater than 1.8 have not been counted towards the realistic potential. This is based on analysis contained within the LSR which indicates these allotments are unlikely to be developed in the short to medium term.

Developable parcels are those which meet zoning criteria for land division. The theoretical maximum development potential from these parcels has then been discounted to create a 'realistic' overview of available supply. Applying these discounts, it is estimated there is a short to medium term potential<sup>6</sup> for an additional 68,200 allotments spread throughout the established urban area of Greater Adelaide. Some of the key suburbs by region for short to medium term potential are shown in Table 8.

 Table 8: General Infill land supply and potential by suburb, June 2020

SUBURB	DEVELOPABLE PARCELS	NET THEORETICAL MAXIMUM	REALISTIC (DISCOUNTED) NET INCREASE
(Region)	Allotments	Allotments	Dwellings
Somerton Park (Inner South)	737	963	317
Mitchell Park (Inner South)	463	620	232
Warradale (Inner South)	375	476	176
Campbelltown (Inner Metro)	1,631	2,356	806
Magill (Inner Metro)	1,423	1,800	586
Findon (Adelaide West)	1,069	1,178	403
Seaton (Adelaide West)	1,926	2,191	642
Parafield Gardens (Inner North)	2,771	4,173	1,061
Paralowie (Inner North)	1,994	2,994	686
Christies Beach (Outer South)	1,522	3,116	573
Morphett Vale (Outer South)	6,886	11,156	1,742
Elizabeth Park (Outer North)	991	2,134	388
Elizabeth East (Outer North)	1,256	2,673	469

<sup>&</sup>lt;sup>6</sup> For the purpose of this report the following discounts have been applied:

Short Term theoretical net maximum increase, discounted by 60%;

Medium Term theoretical net maximum increase, discounted by 80%;

Long Term supply is not considered to be available within the next 10 years.

# 5.1 Key General Infill regions

The following section provides analysis on available General Infill land supply within the subregions for Greater Adelaide, as follows:

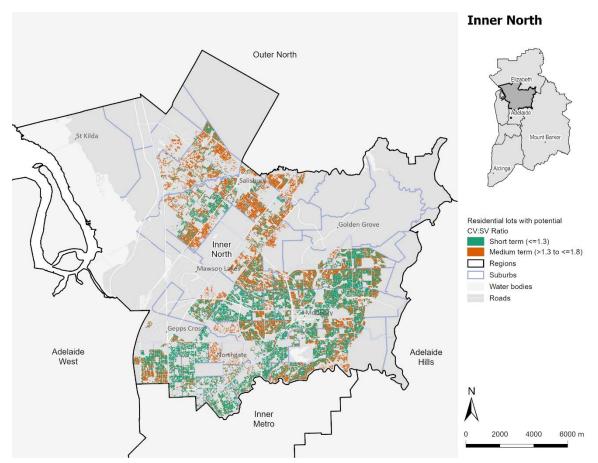
- Inner North
- Outer North
- Adelaide West
- Inner Metro
- Inner South
- Outer South

# Analysis of each region includes:

- A map, illustrating the extent of each region, and available zoned land supply for both the short to medium term as of June 2020; and
- A table summarising key measures, including the number of dwellings built since 2010, developable parcels available in the short to medium term, and estimated net dwelling potential based on June 2020 data; and
- Analysis of development trends, land supply and infrastructure;
- Net realistic dwelling increase which is the discounted rate of short and medium term potential by region (see footnote 5)

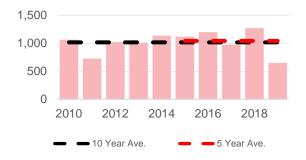


Figure 15: General Infill Land Supply, Inner North



Dwellings Built (General Infill)	10,200
Developable Parcels	47,700
Max Potential Net Dwelling Increase	90,500
Realistic Net Dwelling Increase	28,300
Ave. Annual Demolitions 2014-2020	470

#### **GENERAL INFILL DWELLINGS BUILT 2010-19**



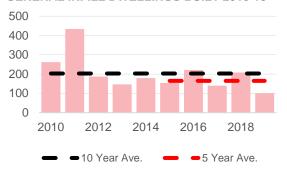
- The Inner North region has produced the second highest number of dwellings from general infill development over the last 10 years.
- There has been an average of 470 demolitions a year.
- Has the largest stock of developable parcels across the short to medium term, within Greater Adelaide.
- The potential supply is concentrated in suburbs such as Parafield Gardens, Ingle Farm and Highbury.
- The completion of the Northern Connector and the electrification of the Gawler rail line may drive additional demand in areas such as Salisbury.

**Outer North** Northern Plains & Barossa Lewisto Residential lots with potential Angle Vale Outer North CV:SV Ratio Short term (<=1.3) Medium term (>1.3 to <=1.8) Regions Suburbs Water bodies Roads Inner North Adelaide 2000 4000 6000 m

Figure 16: General Infill Land Supply, Outer North

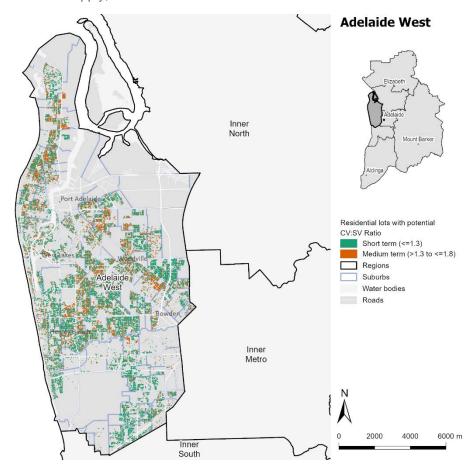
Dwellings Built (General Infill)	2,000
Developable Parcels Shown	8,500
Max Potential Net Dwelling Increase	19,300
Realistic Net Dwelling Increase	4,400
Ave. Annual Demolitions 2014-2020	30





- The lowest producing region for General Infill development over the last ten years, correlating with the lowest average rate of demolitions.
- Dwelling completions peaked in 2011 with over 400, however numbers have since stabilised.
- General infill makes up a small percentage of all development in this region.
- The completion of the Northern Connector and the electrification of the Gawler rail line may drive additional demand in areas such as Elizabeth in the longer term.

Figure 17: General Infill Land Supply, Adelaide West



Dwellings Built (General Infill)	12,300
Developable Parcels	26,500
Max Potential Net Dwelling Increase	32,600
Realistic Net Dwelling Increase	11,100
Ave. Annual Demolitions 2014-2020	630

# **GENERAL INFILL DWELLINGS BUILT 2010-19**



- The highest producing region for general infill development, correlating with the region having the highest average annual rate of demolitions.
- Development peaked in 2017 with over 1,800 dwelling completions.
- Seaton was the second highest producing suburb for General Infill development in Greater Adelaide with over 800 completions.
- The suburbs of Seaton and Fulham Gardens have the largest supply of identified developable land parcels in the region.

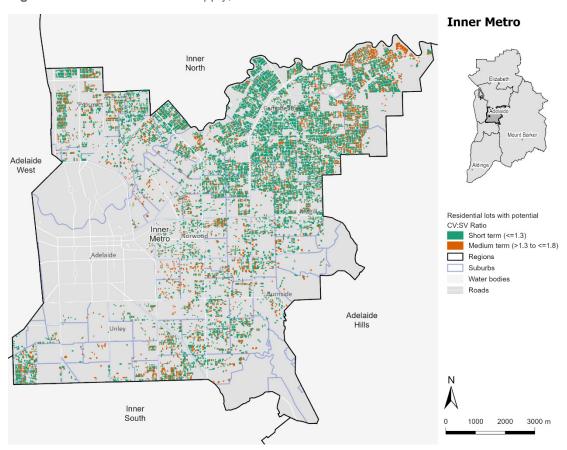
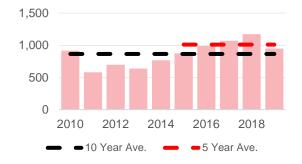


Figure 18: General Infill Land Supply, Inner Metro

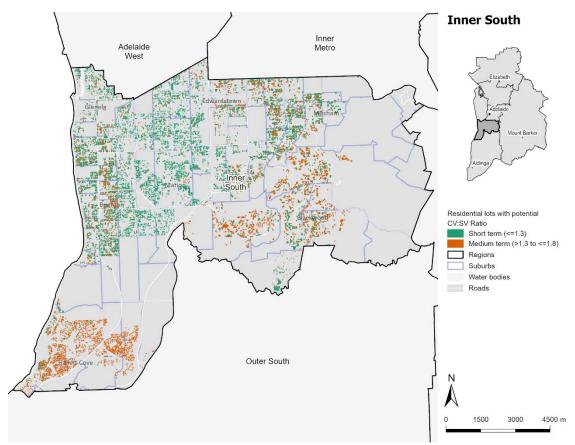
Dwellings Built (General Infill)	8,650
Developable Parcels	18,000
Max Potential Net Dwelling Increase	25,000
Realistic Net Dwelling Increase	8,800
Ave. Annual Demolitions 2014-2020	460

# **GENERAL INFILL DWELLINGS BUILT 2010-19**



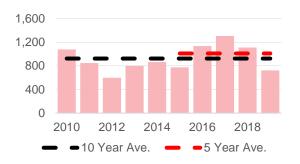
- General infill development potential is constrained in some parts of the region by zone policy.
- There are multiple Strategic Infill development fronts, including the CBD, Corridor Zones and strategic sites such as Glenside, which make a significant contribution to urban infill development.
- Campbelltown produced the highest number of dwellings from General Infill development within the Greater Adelaide region, with over 1,000 completions recorded.
- Campbelltown still has significant potential, along with areas such as Magill, Paradise and Rostrevor.
- It is noted recent policy changes increased the minimum allotment size reducing maximum dwelling potential for certain areas within the Campbelltown City Council.

Figure 19: General Infill Land Supply, Inner South



Dwellings Built (General Infill)	9,200
Developable Parcels	13,590
Max Potential Net Dwelling Increase	17,600
Realistic Net Dwelling Increase	5,700
Ave. Annual Demolitions 2014-2020	470

# **GENERAL INFILL DWELLINGS BUILT 2010-19**



- This region has produced the third largest amount of dwellings from General Infill development over the last ten years.
- Development peaked in 2017 with over 1,300 dwelling completions.
- The suburbs of Warradale and Glengowrie produced over 1,000 new dwellings over this period.
- Some suburbs located within the foothills are constrained by slope and vegetation.

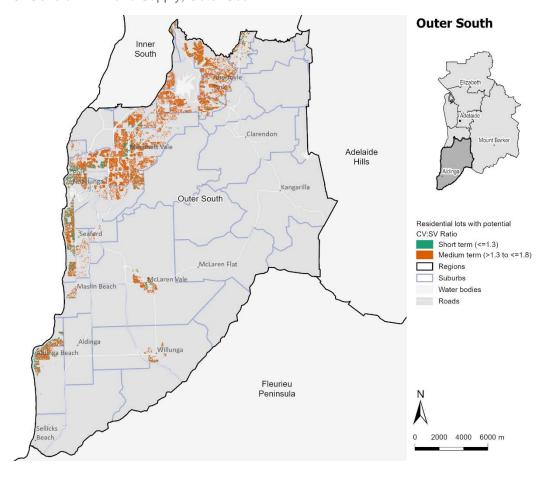
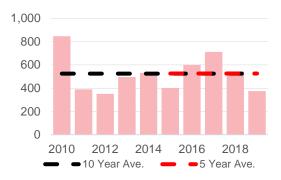


Figure 20: General Infill Land Supply, Outer South

Dwellings Built (General Infill)	5,200
Developable Parcels	24,800
Max Potential Net Dwelling Increase	41,600
Realistic Net Dwelling Increase	9,600
Ave. Annual Demolitions 2014-2020	120

#### **GENERAL INFILL DWELLINGS BUILT 2010-19**



- This region has the third highest number of developable parcels over the short to medium term.
- The majority of parcels have a CV/SV ratio >1.3 to <=1.8.</li>
- Development peaked in 2010 with over 800 dwelling completions.
- Future Urban Land at Aldinga is currently being rezoned to facilitate residential development. This may impact on some of the short term demand for General Infill within the region.
- The suburbs of Morphett Vale and Happy Valley have the largest supply of identified developable land parcels for General Infill





# 6. STRATEGIC INFILL LAND SUPPLY

Strategic infill land supply comes from sites in the CBD, in locations zoned Urban Corridor and on large repurposed sites (often called brownfield sites). Development at these sites results in residential outcomes of more than 10 additional dwellings, often at a higher density than that achieved on general infill sites.

This analysis uses three categories of strategic infill: CBD Development, Corridor Development (areas zoned urban corridor e.g. Churchill Road) and Strategic Sites (e.g. Bowden).

The Planning Development and Infrastructure Act (2016) offer new opportunities for land owners to initiate changes of zoning in areas captured by the city, within urban corridors and at strategic sites. Consequently the full residential potential from these sites can be difficult to estimate.

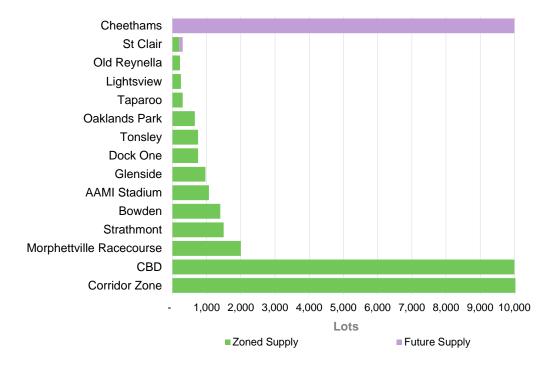
For the purposes of this report the following assumptions have been made:

- Strategic sites have the potential to supply up to 41,900 dwellings, based on the known development potential of current identified strategic sites over the short to medium term.
- The Urban Corridor zones have the potential to provide a dwelling yield of approximately 15,800 dwellings. This is based on the analysis of planning policy and recent development trends in the corridor zone projected out over the short to medium term.
- In the short to medium term it has been assumed that the potential additional residential growth in the CBD is approximately 10,000 dwellings. This category of development is more sensitive to changes in demand especially the number of overseas students studying at South Australian Universities. This figure will be monitored in further iterations of the LSR especially as the impact of COVID 19 vaccination program and the post pandemic recovery start to impact on population growth.

A stocktake of Strategic Infill land supply within the Greater Adelaide region was captured in June 2020, and is summarised in Figure 21 and Table 9. The key points from this analysis include:

- An estimated potential for the creation of an additional 67,700 residential dwellings, split across the three sub-categories of strategic infill identified in Section 2.
- Strategic sites are estimated to account for over 60% of this supply, which is dispersed across multiple development fronts, including Lightsview, Glenside and AAMI Stadium.
- The vast majority of strategic site supply is contained within the Inner North region. This
  includes land referred to as Cheethams, which is currently zoned Deferred Urban, and has
  an estimated potential for around 10,000 dwellings.
- CBD and Corridor Zone land supply is predominantly contained within the Inner Metro region. This supply is more 'fluid' when it comes to estimating potential with zoning and market conditions / trends heavily influencing supply.

Figure 21: Strategic Infill land supply by key development front



**Table 9:** Strategic Infill land supply by development front, June 2020

DEVELOPMENT FRONT		
Suburb (Region)	ZONED SUPPLY	FUTURE SUPPLY
Bowden (Adelaide West)	1,400	
AAMI Stadium (Adelaide West)	1,070	
Lightsview (Inner North)	250	
Dock One (Adelaide West)	750	
Fletchers Slip (Adelaide West)	500	
Taperoo (Adelaide West)	300	
Glenside (Inner Metro)	965	
St Clair (Adelaide West)	200	120
Le Cornu's Forestville (Inner Metro)	300	
Former Kaufland, Prospect (Inner Metro)	180	
Morphettville Racecourse (Inner South)	2,000	
Noarlunga Centre (Outer South)	1,150	
Urban Corridor Zones (Inner Metro / Adelaide West)	15,800*	
Adelaide CBD (Inner Metro)	10,000*	
Tonsley (Inner South)	750	
Oaklands Park (Inner South)	655	-
Cheethams (Inner North)		10,000
Strathmont (Inner North)	1,500	
Old Reynella Winery (Outer South)	219	
Woodville West (Adelaide West)	210	

# 6.1 Key Strategic Infill development fronts

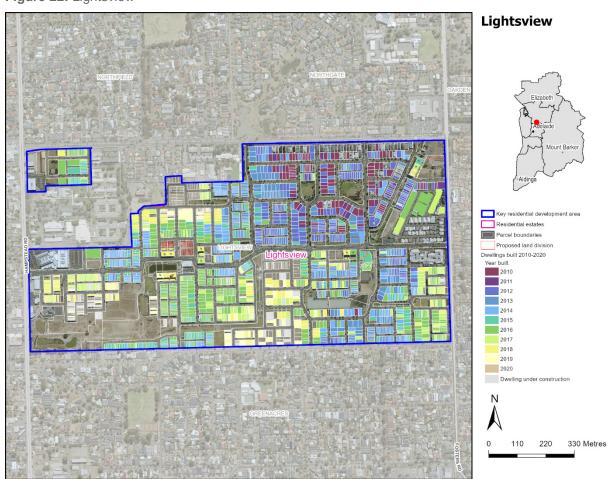
The following section provides analysis on the following key strategic infill precincts:

- Lightsview
- Glenside
- AAMI Stadium
- Bowden
- St. Clair
- Adelaide CBD
- Churchill Road, Urban Corridor Zone
- Strathmont
- Oaklands Green

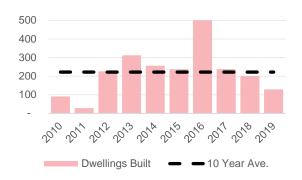
# Analysis of each precinct includes:

- A map, illustrating the full extent of each development front and its progression since 2010.
- A table summarising key measures, including total number of dwelling built to from 2010 to June 2020, a breakdown of available land supply and estimated remaining dwelling potential;
- Analysis of relevant development trends, site history, land supply and infrastructure.

Figure 22: Lightsview



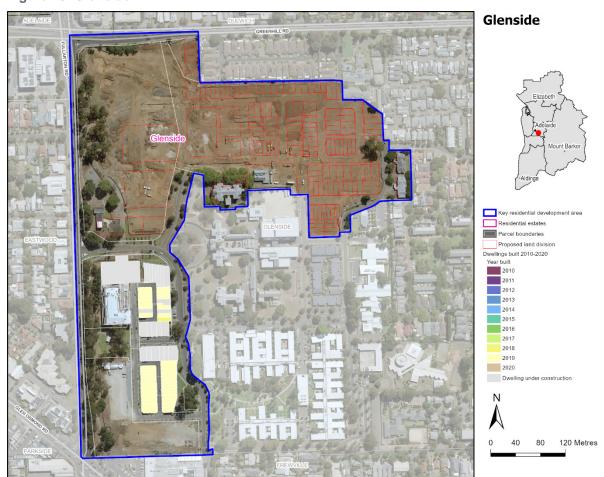
Year Commenced	2009
Estimated dwelling capacity	2,600
Dwellings built	2,343
Average dwellings built per annum	218
Remaining Potential Capacity	250



- Located within 10km of the CBD, Lightsview has produced the second largest amount of dwellings over the last ten years, behind the Adelaide CBD.
- Development peaked in 2016 with 500 dwelling completions.
- Lightsview has averaged over 200 dwelling completions since commencement in 2009.
- The development incorporates a diverse mixture of dwelling types, from detached, townhouses and apartments, which are located on a range of lot sizes.
- A range of non-residential land uses have been incorporated as part of the development including large public open space areas.
- The project is estimated to be completed by 2022<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> https://renewalsa.sa.gov.au/projects/lightsview/

Figure 23: Glenside

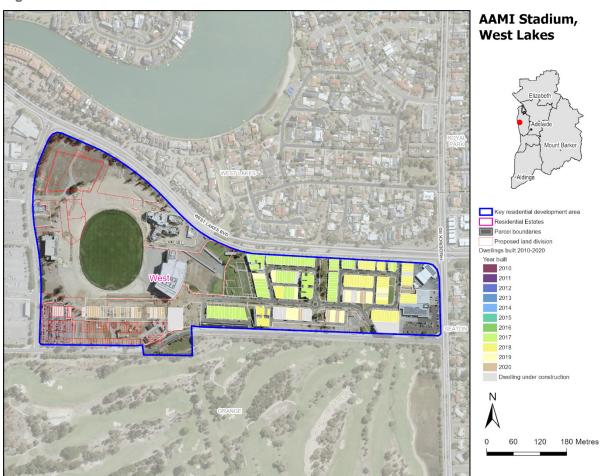


Year Commenced	2018
Estimated dwelling capacity	1,000
Dwellings built	40
Average dwellings built per annum	16
Remaining Potential Capacity	960

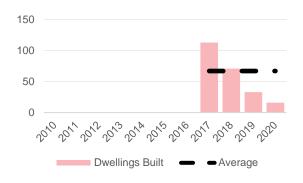


- Land was rezoned to facilitate development in late 2016.
- Works commenced on the first dwellings in 2018.
- This site comprises multiple State heritage items accommodating a range of non-residential land uses such as the SA Film Corporation.
- Development comprises a mixture of townhouses and apartments.
- The development is located 1km west of a Suburban Activity Centre, which comprises the Burnside Shopping Village, which is slated for significant redevelopment.

Figure 24: AAMI Stadium

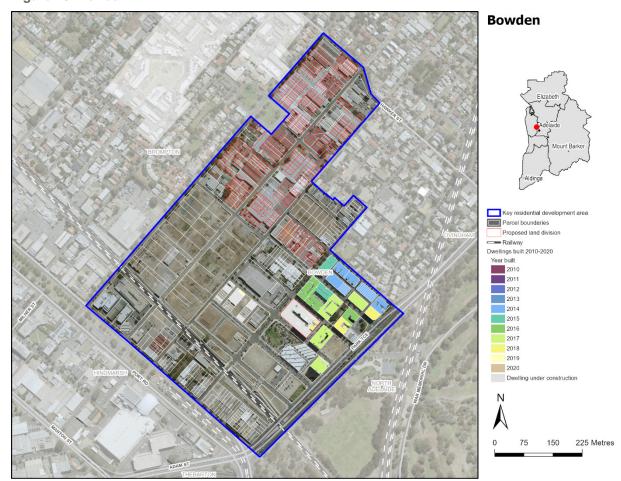


Year Commenced	2017
Estimated dwelling capacity	1,300
Dwellings built	233
Average dwellings built per annum	67
Remaining Potential Capacity	1,067



- AAMI Stadium was rezoned in late 2017 to facilitate residential development following the relocation of AFL games to Adelaide Oval in 2014.
- The development makes provision for a range of dwelling types, including townhouses, apartments and an aged care facility.
- The staged demolition works associated with the removal of the existing stadium are ongoing and open up additional development opportunities.
- The site sits directly adjacent an Urban Activity Centre (West Lakes), which also comprises a bus interchange providing direct connection to the City.

Figure 25: Bowden

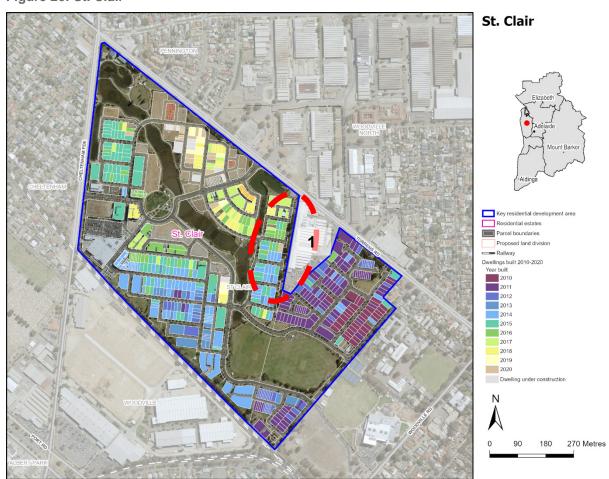


Year Commenced	2014
Estimated dwelling capacity	2,000
Dwellings built	622
Average dwellings built per annum	96
Remaining Potential Capacity	1,378



- Land was rezoned in late 2011, followed by subsequent Development Plan Amendments (DPAs) in 2012 and 2019, all of which facilitated further residential development.
- Project is being coordinated by Renewal SA.
- Bowden train station was lowered and upgraded in 2018.
- Bowden residents are also within walking distance to the tram network, providing a free service to the City.
- Development peaked in 2017 with close to 200 dwelling completions.
- Whilst development slowed in 2019, there are multiple apartment buildings currently under construction and due for completion this year.

Figure 26: St. Clair

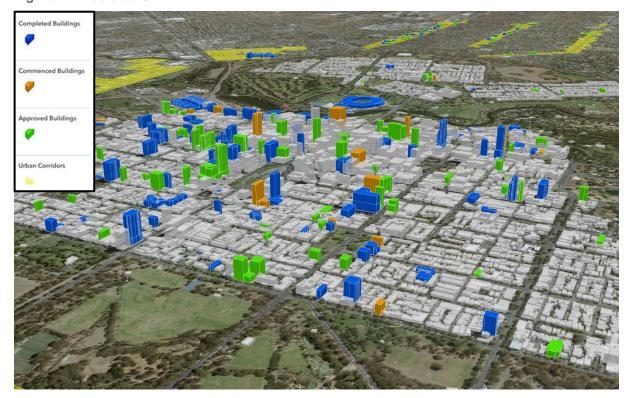


Year Commenced	2009
Estimated dwelling capacity	1,300
Dwellings built	1,079
Average dwellings built per annum	103
Remaining Potential Capacity	221



- The site was formerly known as the Cheltenham Park racecourse, and was rezoned in 2008 to facilitate mixed use residential development.
- The site is located within 1km of an Urban Activity Centre (Arndale Shopping Centre), however does comprise a Suburban Activity Centre which comprises a range of shops and other land uses.
- The site sits adjacent employment precincts to the north and south.
- The site is directly serviced by passenger rail and multiple bus services along Cheltenham Parade and Torrens Road
- Development peaked in 2014 and 2015 with over 200 dwellings completed in each year. This made it the second most productive strategic site development behind Lightsview.
- Land referred to as '1' on the corresponding precinct map was subject of the St Clair Residential DPA, which was approved in 2021. This could yield an additional 120-140 dwellings.

Figure 27: Adelaide CBD



Year Commenced	Continued
Estimated dwelling capacity	10,000+
Dwellings built	4,900
Average dwellings built per annum	490
Remaining Potential Capacity	-



- Development within the Capital City Zone has produced over 4,900 dwellings over the last 10 years.
- Over the past 5 years, student accommodation has been one of the key drivers which saw development peak in 2017 and 2018.
- Capital city development is typically more cyclical than other forms of strategic infill development. This is due to the specific market for city apartments and student accommodation, in conjunction with the longer lead times associated with development of high rise development.
- Current economic and international conditions, resulting from the COVID-19 pandemic are creating lower demand for new apartment construction, particularly student accommodation development given the restrictions in overseas migration.
- Estimating dwelling capacity in the CBD is more difficult than other forms of strategic infill given the capacity for this sector to incorporate height and density based on varying economic conditions.

Figure 28: Churchill Road, Urban Corridor

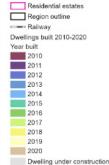
LAND SUPPLY REPORT FOR GREATER ADELAIDE



### Churchill Road



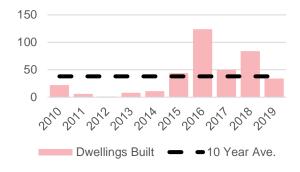
Key residential development area Proposed land division





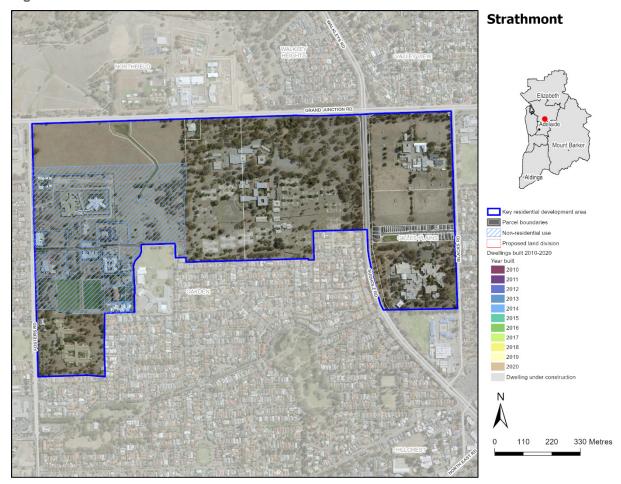
#### **KEY MEASURES**

Year Commenced	2013
Estimated dwelling capacity	-
Dwellings built	384
Average dwellings built per annum	64
Remaining Potential Capacity	-



- The Urban Corridor Zone was introduced on 31 October 2013, encouraging medium to high density residential development.
- The precinct is located within close proximity to the CBD and within 2km of major retail centres along Main North Road, Prospect Road and Churchill Road.
- The corridor is serviced by the Gawler passenger rail line to the west and multiple high frequency bus services along Churchill Road.
- Churchill Road has been one of the most productive corridor zones in terms of total dwellings built since 2013, with a total 384 completions.
- Dwelling construction peaked in 2016, and has been slowing since.
- This precinct includes the former Kaufland site, which was recently purchased by Renewal SA. This site will be subject of a redevelopment in the short to medium term.
- In 2017 changes were made to the policy in an effort to improve interface issues experienced with some of the initial developments after the 2013 rezoning.

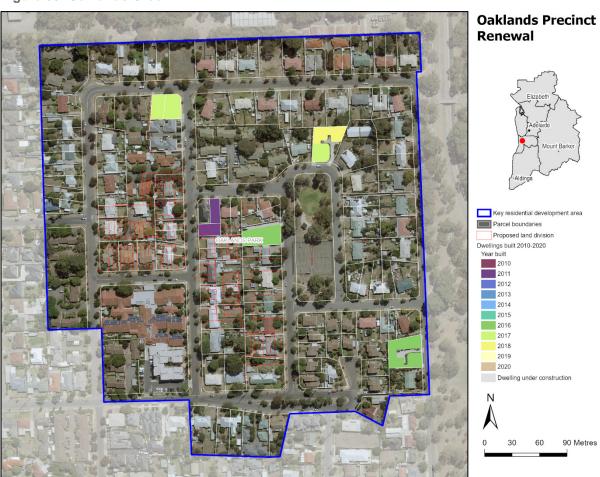
Figure 29: Strathmont



Year Commenced	-
Estimated dwelling capacity	1,500
Dwellings built	-
Average dwellings built per annum	-
Remaining Potential Capacity	1,500

- Subject site is over 50 hectares in area and located within 10kms from the CBD.
- Land is currently occupied by a range of land uses some of which have long term lease arrangements including TAFE SA and SAHMRI.
- The site is to be developed in conjunction with Renewal SA in three stages, as illustrated in the corresponding map.
- Stage 3 is considered a medium term prospect as existing lease arrangements and relocations would need to be worked through prior to commencement of any new development.
- Existing facilities, including James Nash House and the Adelaide City Football Club, will be retained.
- It is anticipated the first allotments will be ready for release by the time Lightsview is completed, which is currently estimated to be around 2022-2023.

Figure 30: Oaklands Green



Year Commenced	-
Estimated dwelling capacity	655
Dwellings built	-
Average dwellings built per annum	-
Remaining Potential Capacity	655

- Land was rezoned on 14 January 2021 to facilitate redevelopment and regeneration of an area predominantly made up of social housing stock.
- The precinct is located within 10kms of the CBD and within 2kms of the Marion Shopping Centre.
- 255 existing social housing dwellings will be demolished and replaced with 255 new social housing dwellings and 400 new private dwellings.
- Redevelopment will include a mixture of housing types, including apartments, which are targeted at providing a more diverse range dwellings and an affordable product.
- The first land division applications were lodged in early 2021, as seen in the corresponding map, with first residents envisaged to move in by the end of 2021.

# 7. SUMMARY

Urban Infill development is widespread within the established urban area of the Greater Adelaide Planning Region. This area is expansive, diverse and in some areas geographically challenging, making it difficult to accurately estimate and project forward future demand and supply.

As detailed throughout the report, Urban Infill development comprises both general and strategic infill sites.

General Infill land supply within the Greater Adelaide region can be summarised as follows:

- As of June 2020, General Infill land supply comprised:
  - o A total 168,600 zoned parcels which meet relevant requirements for land division.
  - Should all developable parcels be developed to their maximum potential under relevant zoning provisions, this would yield an additional 273,875 dwellings.
  - After discounting to create a more 'realistic' potential yield, it is estimated an additional 68,200 dwellings could be produced over the short to medium term.

Strategic Infill land supply within the Greater Adelaide region can be summarised as follows:

- As of June 2020, Strategic Infill land supply comprised:
  - An estimated potential supply of 67,700 allotments split across the three types of development, as follows:
    - An estimated 10,000 allotments within the CBD.
    - An estimated 15,800 allotments within Urban Corridor Zones
    - An estimated 41,900 from existing, proposed and future strategic sites.

### Future Growth Scenarios

Under a medium growth scenario it is estimated that Urban Infill development would need to deliver an additional 41,550 dwellings, which is lower than what has occurred over the last 10 years.

Under a high growth scenario it is estimated that Urban Infill development would need to deliver an additional 58,550 dwellings, a rate which is higher than what has occurred over the last 10 years.



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