

**OAKDEN AND GILLES PLAINS
STRUCTURE PLAN
HOUSING ASSESSMENT**

Prepared for:
Renewal SA

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1 - INTRODUCTION

1. Introduction

1.1. Purpose

Renewal SA engaged Holmes Dyer Pty Ltd, together with Arup and Alexander Symonds, to prepare the Oakden and Gilles Plains Structure Plan.

This assessment forms part of the investigations to inform the Structure Plan and a rezoning of the land at Oakden and Gilles Plains.

Much (but not all) of the land under investigation is under the control of the State Government, notably SA Health, Department of Human Services (DHS) and Department of Environment and Water (DEW). A significant portion of this land is now surplus to requirements and may be divested for development by others.

This study aims to provide an assessment of future housing need and makes recommendations to accommodate residential growth effectively within the Oakden and Gilles Plains Structure Plan.

1.2. Structure Plan Area

The Structure Plan area is located approximately 10 kilometres north-east of the Adelaide CBD, in the local government area of Port Adelaide Enfield. It is generally bound by Grand Junction Road to the north, Blacks Road to the east, Fosters Road to the west, and the interfacing residential area to the south, in the suburbs of Oakden (part of) and Gilles Plains (part of).

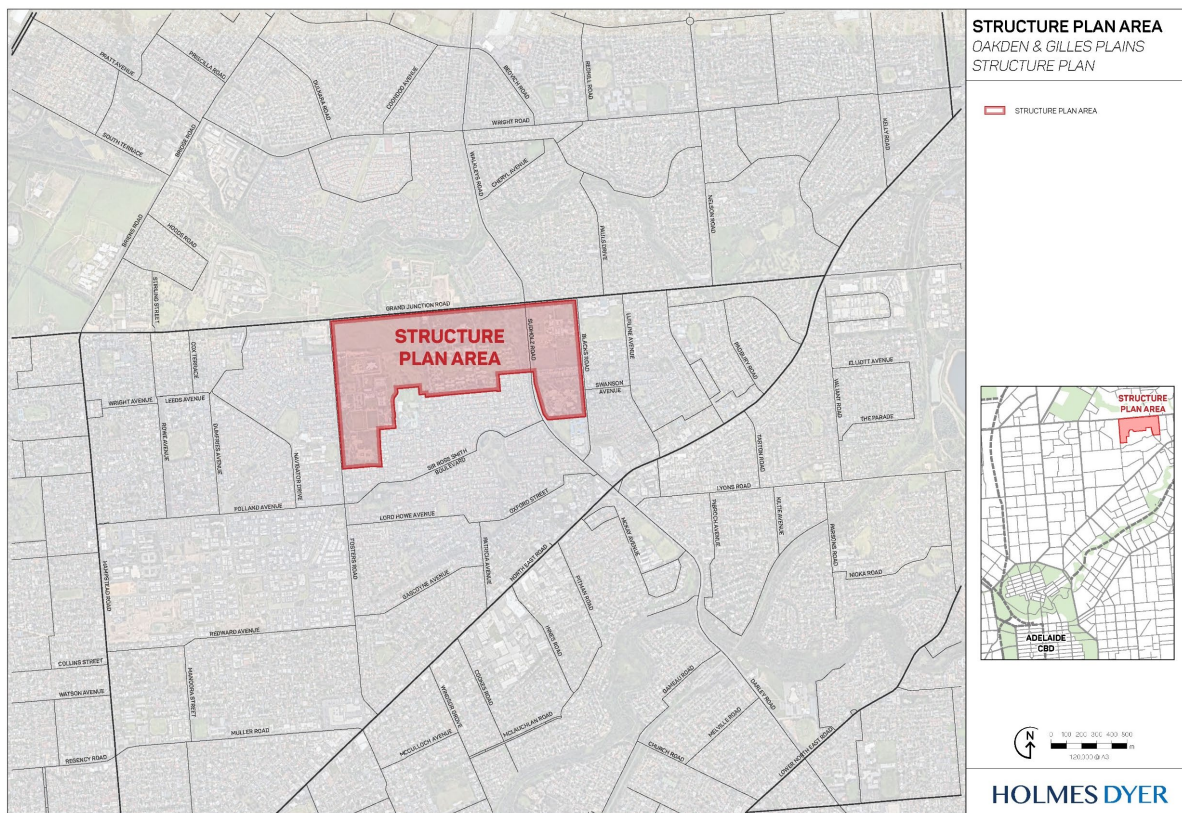
The Structure Plan area comprises approximately 110 hectares of land and represents one of the most significant infill development opportunities within the inner urban area.

It is expected that the area could support a new community of around 2,000 homes.

The land is currently zoned Residential, Mixed Use and District Centre in the City of Port Adelaide Development Plan (Consolidated 6 February 2018).

The Structure Plan area is shown in Figure 1 below.

Figure 1. Oakden and Gilles Plains Structure Plan Area



1.3. Report Structure

The investigation findings are reported in six main sections:

1. **Introduction:** outlines the context for this investigation.
2. **Housing Role and Function:** provides high level scene setting of the housing and planning drivers and key issues and considerations for the Structure Plan area.
3. **Population and Growth:** provides information about population and growth characteristics and implications for housing in the Structure Plan area.
4. **Housing Assessment:** assesses residential land and housing product to inform opportunities for the Structure Plan area.
5. **Structure Plan Opportunities:** identifies opportunities for housing in the Oakden and Gilles Plains Structure Plan area to inform the structure planning process.
6. **Conclusion:** provides an overall summary of the housing assessment.

2 – HOUSING ROLE AND FUNCTION

2. Housing Role and Function

2.1. Overview

A range of State Government and Port Adelaide Enfield Council strategic documents have informed this housing assessment for the Structure Plan area. This section provides a summary of drivers of change and key issues and considerations for the structure planning process.

2.2. Drivers of Change

The 30 Year Plan for Greater Adelaide Update 2017 (The 30 Year Plan) outlines how Adelaide should grow to become more **liveable, competitive and sustainable**. *The 30 Year Plan* supports a new urban form with an emphasis on revitalisation of existing urban areas and creating neighbourhoods that are: enjoyable places to live; improve access to public transport, community services, open space and employment; demonstrate good design; and are more compact, walkable communities.

This focus on creating great places to live is reinforced in the City of Port Adelaide Enfield, *City Plan 2030*, which seeks '*Place Making: A City where people love to be*' as one of five key outcomes. To test community perception and satisfaction with aspects of its City Plan, the City of Port Adelaide Enfield undertakes an annual community survey. In response to the 2018 survey, Council has identified as a priority, '*building a strong connection to place and equitable access and participation across the City*,' including '*connection to local places and neighbourhoods*.'

South Australia's **new planning system** under the *Planning, Development and Infrastructure Act 2016* (PDI Act) provides the statutory planning instruments to support delivery of key planning outcomes. At the highest order, **State Planning Policies** are now in place and will be given effect through the Planning and Design Code (which will ultimately replace Development Plans).

The Oakden and Gilles Plains Structure Plan is informed by the **Principles of Good Planning** under the PDI Act and seeks to apply State Planning Policies spatially to the Structure Plan area as the most contemporary policy available. This assessment has had regard to **State Planning Policy 6: Housing Supply and Diversity** and **State Planning Policy 5: Climate Change**.

2.3. Key Issues and Considerations

2.3.1. Residential Density

Fosters Road and Sudholz Road are identified in *The 30 Year Plan* as transit corridors, providing an opportunity to deliver a more compact urban form and increase population density in the Structure Plan area to support transit and increases in walking, cycling and public transport (while mitigating any impacts from noise and air emissions).

The 30 Year Plan provides guidance on average gross densities of development in transit corridor catchments of 35 dwellings per hectare. The bulk of new residential development envisaged is low rise to medium rise within activity centres and in urban renewal areas that support public transport use. Higher residential densities underpin economic viability and provide an opportunity to create neighbourhoods where there are enough people to support local shops, services, public transport and community facilities within walking distance.

Dwelling density guidelines contained in *The 30 Year Plan* are:

- Walking catchments to fixed line transit stations should generally be within 800m, and within 400m to high frequency bus stops. N.B. catchments of individual centres may vary depending on specific local context such as the geography and the diversity of services available.
- Gross densities within these catchments should look to increase in these locations to an average of dwellings per hectare, with net densities in the medium to high density range.
- Individual catchments may vary in their scope and density and their spatial application will be informed by local area planning.

2.3.2. Walkable Neighbourhoods

The 30 Year Plan calls for healthy, walkable neighbourhoods where people can afford to live, learn, work and play, that offer a wide range of services that can easily be reached on foot or by bicycle, including schools, health care, shops, parks, sports facilities and public transport. The Plan speaks to creating ‘streets for people’ so that streets are green and leafy ‘places’ to spend time as well as providing cycling and walking friendly ‘links.’ The concept of ‘link’ (fast, efficient and minimise travel time) and ‘place’ (encourage people to linger, stay longer and extend time spent in an area) is used to describe the dual function of streets. Walkable communities are intended to be vibrant places with opportunities for physical activity, connection with nature, social interaction, options for active travel and public transport use, and diverse housing options. The assessment of the Structure Plan area is that it is currently not walkable (noting the surrounding areas of Walkley Heights, Northgate and Oakden are also not particularly walkable). This indicates a strong need for non-residential land uses accessible on foot in the Structure Plan area.

2.3.3. Housing Choice

The suburbs comprising and surrounding the Structure Plan area are predominantly comprised of traditional separate houses with low proportions of flats and apartments.¹ The uptake of semi-detached, row, terrace and townhouses has increased overtime (7% in 2006 to 19% in 2016) and corresponds with a decline in traditional housing stock (89% in 2006 to 77% in 2016) indicating demand for a range of housing products. *The 30 Year Plan* identifies a ‘missing middle’ and calls for a broader range of affordable, universally designed homes to respond to changing housing needs. This creates opportunity for new (high-quality, innovatively designed, distinctive and diverse) housing products and building typologies in the Structure Plan area, including products for young people and young families¹, older persons, and diverse price points. *State Planning Policy 6: Housing Supply and Diversity* calls for an affordable, well-designed, sustainable and diverse range of housing types and tenures (including affordable rental accommodation and home ownership) that responds to population characteristics and growth. Affordable housing is actively sought by *State Planning Policy 6: Housing Supply and Diversity* with a minimum of 15% of new housing in significant developments that meet the criteria for affordable housing. This is consistent

¹ ABS Census Geography Northgate-Oakden-Gilles Plains SA2, 2006 to 2016

with the City of Port Adelaide Enfield's *Economic Development Strategy 2020* which seeks infill development that provides enough affordable housing to meet the needs of new home purchasers, younger residents and the growing migrant population.

2.3.4. Car Parking

The *30 Year Plan* seeks to create viable alternatives to the private vehicle which has seen a discount on minimum parking requirements for increased residential density development. Rates of car ownership in the Structure Plan area are expected to be like surrounding areas and, as such, setting off-street parking requirements for the Structure Plan area is a decision around what level of on-street parking is acceptable. On-street parking is a legitimate use of an expensive public asset which otherwise does not see much use in low density residential areas. If correctly managed, it can have benefits to walkability and road safety by narrowing the travelled way and lowering average vehicle speeds. Conversely, excessive demand for street parking can significantly impact residential access, create unnecessary congestion and increase traffic volumes through circulation in search of a space. The City of Port Adelaide Enfield has raised some concerns relating to on-street car parking in Lightsvue relative to the standard residential zone. There is an opportunity to provide regular on-street parking seeking to not exceed availability in the Structure Plan area.

2.3.5. Urban Heat Effects

Adapting to climate change is a key theme of *The 30 Year Plan*, *State Planning Policy 5: Climate Change*, Council's *Living Environment Strategy 2017-2022*, and underpins recent work through the *Adapt West* project. Those documents seek to create urban environments that are green (through urban green cover and infrastructure) with cooling benefits (such as retaining water in the landscape through water sensitive urban design), as well as using a more compact urban form, good design of public places, green industries and technologies, and active travel to build climate resilience. Urban heat mapping for Western Adelaide compares low, medium and high-density residential developments and recommends mitigation strategies for heat island effects as infill development and density across Greater Adelaide increases.

3 – POPULATION AND GROWTH

3. Population and Growth

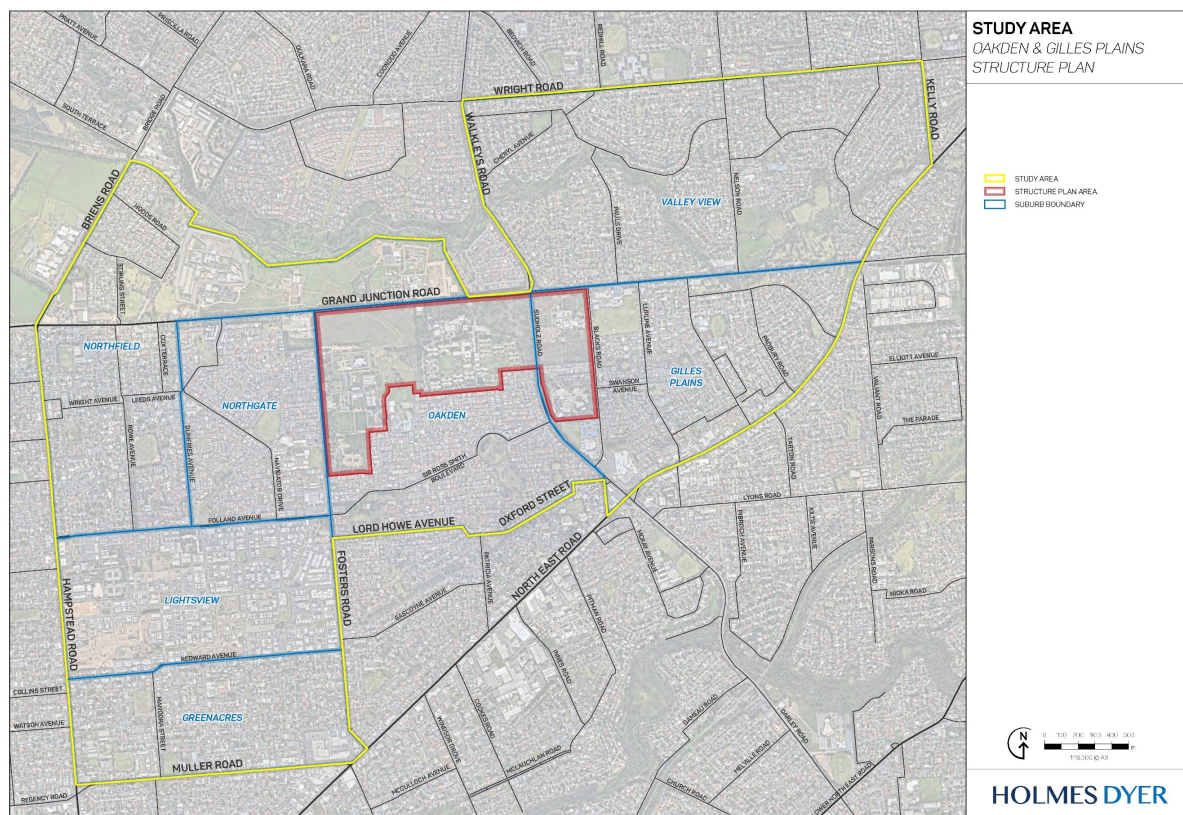
3.1. Overview

This section provides an assessment of population and household growth characteristics based on demographic data from the Australian Bureau of Statistics Census 2016, comparing Northgate-Oakden-Gilles Plains Statistical Area 2 (SA2) which is intended to represent a community that interacts together socially and economically, with Port Adelaide Enfield local government area (PAE LGA) and Greater Adelaide.

Northgate-Oakden-Gilles Plains SA2 includes the following suburbs as shown in Figure 2:

- Northfield;
- Northgate;
- Lightsview;
- Oakden;
- Valley View; and
- Gilles Plains.

Figure 2. Northgate-Oakden-Gilles Plains Statistical Area 2 (SA2)



The projected age profile for the Structure Plan area (refer to Section 3.3.2.1) draws on population projections by Statistical Local Area (SLA) as prepared by the Department of Planning, Transport and Infrastructure (DPTI).

3.2. Population Characteristics

In 2016, the Northgate-Oakden-Gilles Plains SA2 had a combined population of 24,592 persons representing approximately 20.3% of the local government area of Port Adelaide Enfield.

Table 1 below shows the population for Northgate-Oakden-Gilles Plains SA2 increased from 18,985 persons in 2006 to 24,592 persons in 2016 which is an increase of 5,607 persons. This represents an annual average population growth rate of approximately 2.9% per year.

Table 1. Total Population (Usual Residence), Northgate-Oakden-Gilles Plains SA2

Year	Persons
2006	18,985
2011	20,795
2016	24,592

Source: ABS Census, 2006 to 2016

This growth of the past decade provides a good indication of the ability of the market to absorb residential development within the Structure Plan area.

3.2.1. Age Profile

Table 2 below compares service age groups for Northgate-Oakden-Gilles Plains SA2, Port Adelaide Enfield (PAE) LGA and Greater Adelaide.

Table 2. Service Age Groups, SA2 compared with PAE LGA and Greater Adelaide, 2016

Service Age Groups	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
Babies and pre-schoolers (0 to 4)	7.0%	6.3%	5.9%
Primary schoolers (5 to 11)	7.9%	7.6%	8.2%
Secondary schoolers (12 to 17)	6.3%	6.1%	6.9%
Tertiary education and independence (18 to 24)	8.6%	9.1%	9.5%
Young workforce (25 to 34)	17.6%	16.6%	13.8%
Parents and homebuilders (35 to 49)	22.0%	20.8%	19.7%
Older workers and pre-retirees (50 to 59)	10.6%	12.7%	13.1%
Empty nesters and retirees (60 to 69)	9.7%	10.1%	11.1%
Seniors (70 to 84)	8.6%	8.2%	9.3%
Elderly aged (85 and over)	1.8%	2.6%	2.6%

Source: ABS Census, 2016

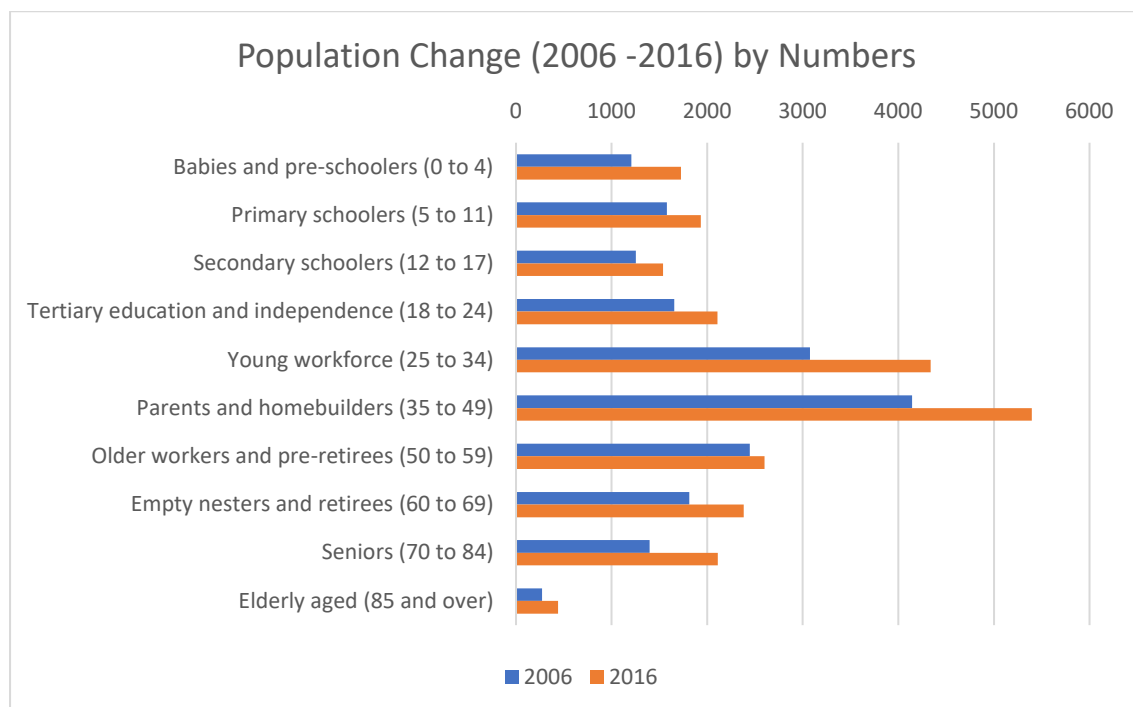
Table 2 indicates Northgate-Oakden-Gilles Plains SA2 is characterised by young and mature families with children:

- There is a higher proportion of population categorised as ‘Babies and pre-schoolers’ aged between birth and four years (7.0%) compared with PAE LGA (6.3%) and Greater Adelaide (5.9%) and a similar proportion of population categorised as ‘Primary schoolers’ (7.9%) compared with PAE LGA (7.6%) and Greater Adelaide (8.2%); and
- There is a higher proportion of population categorised as ‘Young workforce’ (17.6%) aged between 25 to 34 and ‘Parents and homebuilders’ (22.0%) aged between 35 to 49 compared with PAE LGA (16.6% and 20.8%) and Greater Adelaide (13.8% and 19.7%).

The young families’ segment of the study area is likely to be seeking entry into the housing market, is likely to be price sensitive and could be seeking a family home or unit. The mature family segment may be looking for housing to cater for a growing family and is likely to be attracted to locations providing ease of access to diverse employment, education, retail and recreation options.

Figure 3 below shows the change in selected service age groups for the SA2 between the 2006 and 2016 Census periods.

Figure 3. *Change in Selected Service Age Group for Northgate-Oakden-Gilles Plains SA2, 2006 to 2016*



Source: ABS Census, 2016

Figure 3 demonstrates that, although the population is categorised by young and mature families, there has also been a proportional increase in the population aged between 45 to 54 years of age and the population aged 65 to 74 years of age. This suggests that, in addition to family dwelling types, the Structure Plan area could consider the provision of dwelling types suitable for smaller or downsizing households.

3.2.2. Household Types

The table below compares household types and family composition for Northgate-Oakden-Gilles Plains SA2, PAE LGA and Greater Adelaide.

Table 3. Household Types - Family Composition, SA2 compared with PAE LGA and Greater Adelaide, 2016

Household Types and Family Composition	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
Average Household Size	2.5	2.4	2.5
Couple with no children	37.1%	35.8%	38.0%
Couple with children	44.3%	42.1%	43.2%
One parents families	16.6%	19.7%	17.0%
Other family	2.0%	2.4%	1.8%
Family households	71.1%	64.8%	68.7%
Single or (lone) person households	25.1%	30.4%	27.4%
Group households	3.8%	4.8%	3.9%

Source: ABS Census, 2016

The study area contains a higher proportion of 'Family households' (71.1%) compared with PAE (64.8%) and Greater Adelaide (68.7%) including a higher proportion of 'Couples with no children' and 'Couples with children.' There are fewer 'Single or lone person households' (25.1%) compared with PAE (30.4%) and Greater Adelaide (27.4%).

Household types for the study area reflect the younger age profile identified in Table 2 and further suggest a likely preference for family housing products.

3.2.3. Dwelling Types

Table 4 below compares dwelling types for Northgate-Oakden-Gilles Plains SA2, Port Adelaide Enfield LGA and Greater Adelaide.

Table 4. Dwelling Types, SA2 compared with PAE LGA and Greater Adelaide, 2016

Dwelling Types	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
Separate House	77%	69.3%	74.8%
Semi-detached, row, or terrace house, townhouse etc.	19%	22.2%	16.9%
Flat or apartment	4.0%	7.8%	7.8%
Other dwelling	0.0%	0.3%	0.3%

Source: ABS Census, 2016

Table 4 shows greater housing diversity is available within PAE LGA compared with Greater Adelaide.

The study area has the highest proportion of separate houses (77.5%) compared with PAE LGA (69.3%) and Greater Adelaide (74.8%).

Table 5 below shows dwelling types as a proportion of total dwellings for the SA2 since 2006.

Table 5. Dwelling types as a proportion of total dwellings 2006 – 2016, SA2

Dwelling Types	2006	2011	2016	Change 2006 – 2016 (%)
Separate House	89.0%	86%	77%	-12%
Semi-detached, row, or terrace house, townhouse etc.	7.0%	10%	19%	12%
Flat or apartment	4.0%	5%	4%	0%

Source: ABS Census, 2016

Despite the predominance of separate houses for the SA2 in 2016, ABS Census time series data for Northgate-Oakden-Gilles Plains reveals a 12% reduction in the proportion of this dwelling type between 2006 and 2016. Over the same period the SA2 recorded a 12% increase in the proportion of smaller dwelling types (semi-detached, row, or terrace house, townhouse). The delivery of greenfield and infill development within the SA2 over this period is likely to have influenced this proportional shift in dwelling types.

This trend suggests that there may be an increasing demand matched to the supply of smaller dwelling types for a range of household sizes.

3.2.4. Bedrooms per Dwelling

Table 6 below indicates that in Northgate-Oakden-Gilles Plains SA2 more than half of the housing stock (62.4%) is of 3-bedrooms followed by 4-bedrooms or more (20.2%) with a relatively small proportion of housing catering to smaller and lone person households.

Table 6. Number of Bedrooms, SA2 compared with PAE LGA and Greater Adelaide, 2016

Number of Bedrooms	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
None (includes bedsitters)	0.2%	0.3%	0.2%
1-bedroom	1.9%	3.9%	3.4%
2-bedrooms	13.6%	23.6%	19.3%
3-bedrooms	62.4%	54.5%	51.9%
4-bedrooms or more	20.2%	15.4%	23.2%
Number of bedrooms not stated	1.8%	2.2%	2.0%
Average number of bedrooms per dwelling	3.1	2.9	3

Source: ABS Census, 2016

Table 7 below shows the change in the number of bedrooms as a proportion of dwellings in the SA2 between 2011 and 2016.

Table 7. *Number of Bedrooms as a proportion of dwellings, SA2 2011 - 2016*

Number of Bedrooms	2011	2016	Change 2011 – 2016 (%)
None (includes bedsitters)	0.1%	0.2%	0.1%
1-bedroom	1.9%	1.9%	0.0%
2-bedrooms	12.0%	13.6%	1.6%
3-bedrooms	63.9%	62.4%	-1.5%
4-bedrooms or more	20.5%	20.2%	-0.3%
Number of bedrooms not stated	1.6%	1.8%	0.2%
Average number of bedrooms per dwelling	3.1	3.1	-

Source: ABS Census, 2016

Table 7 shows an increase in the proportion of 2-bedroom dwellings (1.6%) and an equivalent decrease in the proportion of 3-bedroom dwellings (-1.5%) between 2011 and 2016 Census periods. When considered in conjunction with the increasing housing diversity of the SA2 (Table 5), it suggests that there could be a trend towards more diverse dwelling types catering for family households. The increase in the proportion of 2-bedroom dwellings may also present as a niche for a likely market comprising couple households.

3.2.5. Tenure

Table 8 below refers to the proportion of dwellings in Northgate-Oakden-Gilles Plains SA2, Port Adelaide Enfield LGA and Greater Adelaide that are owned outright, under mortgage or rented.

Table 8. *Household Tenure, SA2 compared with PAE LGA and Greater Adelaide, 2016*

Household Tenure	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
Owned outright	25.4%	25.9%	30.7%
Owned with a mortgage	40.9%	33.8%	36.5%
Rented	30.4%	36.7%	28.9%
Other tenure type	1.1%	1.2%	1.6%
Tenure type not stated	2.1%	2.5%	2.3%

Source: ABS Census, 2016

Table 8 shows that at 2016 Northgate-Oakden-Gilles Plains SA2 had a significantly higher proportion of homes under mortgage (40.9%) compared with PAE LGA (33.8%) and Greater Adelaide (36.5%). This reflects the relatively young age profile and higher proportion of family households for the SA2.

This suggests that the study area could be an attractive option for couples and families seeking home ownership. Looking further into the nature of rental arrangements within the SA2 it is possible to identify the 30.4% (2,295) households renting:

- 32.3% (742) are managed as public housing; and

- 6% (136) are managed by housing co-operative/community housing provider.

Combined this indicates over 38% of rental properties within the SA2 are public or community housing.

In addition to public and community housing landlords, approximately 32% (738) households are under private rental with a real estate agent.

Housing SA rental data identifies 421 customers of private rental assistance are occupying properties within the SA2 as follows:

Table 9. *Housing SA Private Rental Assistance Customers within the SA2*

SA2 Suburb	Number of Customers
Oakden	60
Gilles Plains	101
Northgate	52
Northfield	104
Valley View	104
Total	421

Source: Housing SA

This suggests that the SA2 contains a population that may require support in order to access home ownership, including the provision of affordable housing within the Structure Plan area.

3.2.6. Median Household Income and Mortgage Repayments

Table 10 below compares median weekly household income and median monthly mortgage repayments for the Northgate-Oakden-Gilles Plains SA2, Port Adelaide Enfield LGA and Greater Adelaide. The table also considers the relative level of household mortgage stress by calculating the proportion of household income spent on mortgage repayments.

Table 10. *Median weekly household income and monthly mortgage repayments for Northgate- Oakden- Gilles Plains SA2 compared with Port Adelaide Enfield LGA and Greater Adelaide, 2016*

	Northgate – Oakden – Gilles Plains (SA2)	Port Adelaide Enfield (LGA)	Greater Adelaide
Median Weekly Household Income	\$1,296	\$1,141	\$1,265
Median Monthly Mortgage Repayments	\$1,600	\$1,560	\$1,517
Proportion of Income Spent on Mortgage	28.4%	31.5%	27.6%

Source: ABS Census, 2016

Table 10 shows that the SA2 had a higher median weekly household income (\$1,296) compared with PAE (\$1,141) and Greater Adelaide (\$1,265). This could reflect a higher proportion of double income couple and family households which, in turn, may support a greater capacity for the SA2 to carry a higher median monthly mortgage (\$1,600 at 28.4% of household income) compared with PAE LGA (\$1,560 at 31.5% of household income) and Greater Adelaide (\$1,517 at 27.6% of household income).

This suggests the Structure Plan area may attract households with a greater capacity to manage higher levels of mortgage debt within household income levels.

3.2.7. Cultural Diversity

Table 11 below compares country of birth for Northgate-Oakden-Gilles Plains SA2, Port Adelaide Enfield LGA and Greater Adelaide.

Table 11. *Top 5 overseas countries of birth by number of residents and proportion born overseas for Oakden SA2 compared with Port Adelaide Enfield LGA and Greater Adelaide, 2016*

Birthplace	Northgate – Oakden – Gilles Plains (SA2)		Port Adelaide Enfield (LGA)	Greater Adelaide
	No.	%	%	%
India	1,317	5.4%	4.7%	2.0%
England	926	3.8%	4.6%	7.4%
China (excluding SARs and Taiwan)	907	3.7%	2.4%	1.8%
Vietnam	361	1.5%	3.8%	1.1%
Philippines	345	1.4%	1.4%	0.8%

Source: ABS Census, 2016

Table 11 shows that the SA2 had a significantly higher proportion of population from India (5.4%) and China (3.7%) compared with PAE LGA (4.7% and 2.4%) and Greater Adelaide (2.0% and 1.8%). Time series data from the 2016 ABS Census indicates that the Indian born population increased by 1,158 persons between from 2006 to 2016 and over the same period the Chinese born population increased by 744 persons.

This suggests that the study area presents as an attractive housing option for recent overseas arrivals. Holmes Dyer has recently conducted studies into the housing preferences of recent arrival communities to middle metropolitan Adelaide. Key product and location preferences identifies through previous studies include:

- Migrant families are often larger and may be seeking dwellings that provide up to 4-bedroom homes to cater for families of up to five children.
- The number of bedrooms in a dwelling does not necessarily correlate with total dwelling size expectations; migrant families could be seeking four small bedrooms rather than two large bedrooms; the primary purpose being the separation of gender among the children.
- Migrant communities may often live in group households and as a result of pooling resources can enter home ownership at an accelerated rate. It is likely that recent arrivals recorded in the 2011 ABS Census could be the population seeking home ownership at the 2016 Census.
- Location is important. Access to schools, shops, transport and services for health and employment is viewed as essential to the success of accommodating new arrivals into established communities.

3.3. Population Projections

3.3.1. Projected Residential Development Densities and Yields

The delivery of housing in the Structure Plan area has been estimated using an anticipated housing density of 25 to 30 dwellings per hectare (noting guidance provided in *The 30 Year Plan for Greater Adelaide 2017 Update* is for average gross densities of development in transit corridor catchments of 25 to 35 dwellings per hectare).

Residential density varies across the Structure Plan area according to site characteristics including slope, tree cover and drainage requirements as well as likely market considerations impacting the ultimate yield.

Residential development yield is subsequently estimated across various precincts as shown in Figure 4 below.

Figure 4. Precinct Location Plan

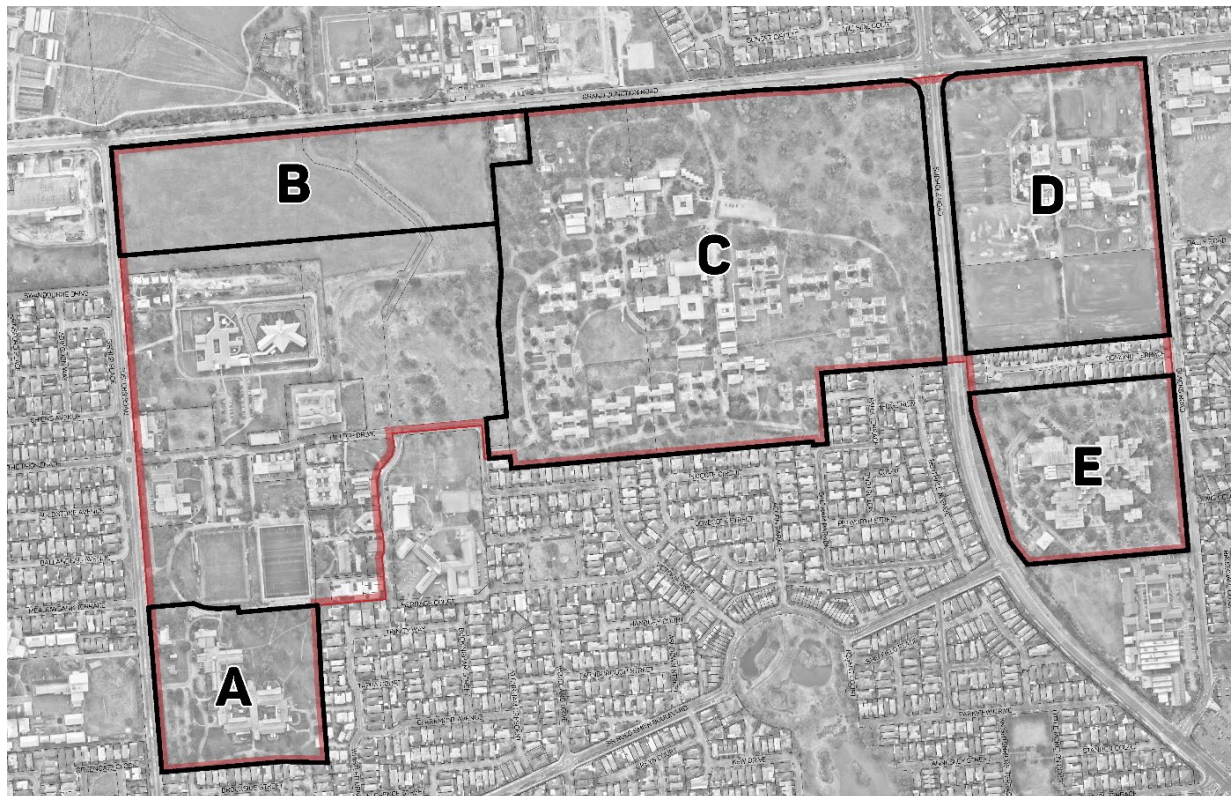


Table 12 below shows the estimated yield for the various precincts. The timing over which different land parcels can be brought to market will be determined by factors such as land ownership, existing use arrangements (such as lease or licence), and market demand. Precincts B and C are expected to be capable of being brought to market in the short to medium term providing capacity for approximately 1,240 new homes, while the total capacity for new homes in the Structure Plan area is estimated to be just under 2,000 dwellings at full residential development.

Table 12. *Yields for various precincts*

Precinct	Dwellings
Precinct A	200 Dwellings
Precinct B	240 Dwellings
Precinct C	1,000 Dwellings
Precinct D	350 Dwellings
Precinct E	200 Dwellings
Total	1,990 Dwellings

3.3.2. Projected Population for the Structure Plan Area

The 2016 ABS Census Data indicates that the average household size for Northgate-Oakden-Gilles Plains SA2 was 2.5. Based on average household size of more recent infill development in the SA2 (Lightsview average household size of 2.36), this assessment adopts an average household size for the Structure Plan area of 2.4. Based on the production of approximately 1,990 residential allotments (across the Structure Plan) and average household size of 2.4, it is estimated that the Structure Plan could potentially contribute approximately 4,776 persons to the existing population.

3.3.2.1. Projected Age Profile for Structure Plan

The DPTI 'Population Projections for South Australia Statistical Local Areas (SLA), 2011-31' (February 2016 release) forecasts the age structure of projected populations at five-year intervals to 2031 for defined Statistical Local Areas (SLAs). As shown in Figure 5, the Structure Plan area is located within the Port Adelaide Enfield – East SLA. This SLA provides is used as the statistical basis for projecting the future demographics for this housing assessment.

Figure 5. *Structure Plan Area within the Port Adelaide Enfield – East SLA*



Based on the age profile forecast for the Port Adelaide Enfield – East SLA, the Structure Plan area is likely to see proportionate population growth as broken down below:

- 1,500 (31.4%) persons under the age of 24;
- 2,086 (43.7%) persons between 25 to 54;
- 1,190 (24.9%) persons over the age of 55; and
- 546 (11.4%) persons over the age of 70.

This indicates that just over 75% of the projected population is expected to be under 55 years of age which supports a need for diverse housing products to cater for couple and young and mature family households, while maintaining options for the population to retire in place. These estimates are detailed in the Table 13 below.

Table 13. Projected population by 5-year age group for the Structure Plan area

Age Group	Port Adelaide Enfield East SLA 2031 Estimated Population		Structure Plan Estimated Population (persons)
	Number	%	
0-4	2,779	6.1%	290
5-9	2,758	6.0%	288
10-14	2,783	6.1%	290
15-19	2,902	6.3%	303
20-24	3,170	6.9%	330
25-29	3,514	7.7%	366
30-34	3,564	7.8%	372
35-39	3,398	7.4%	354
40-44	3,419	7.5%	356
45-49	3,319	7.2%	346
50-54	2,797	6.1%	292
55-59	2,328	5.1%	243
60-64	2,121	4.6%	221
65-69	1,727	3.8%	180
70-74	1,669	3.6%	174
75-79	1,359	3.0%	142
80-84	1,152	2.5%	120
85+	1,057	2.3%	110
TOTAL	45,816	100%	4,776

Source: ABS Census Data (DPTI), 2016

4 – HOUSING ANALYSIS

4. Housing Analysis

The following analysis has been conducted using RP Data for residential dwelling, vacant lots and flats/units for the period 2016 to 2018.

The following suburbs have been identified for comparison:

- Oakden;
- Walkley Heights;
- Gilles Plains;
- Northgate; and
- Lightsview.

These suburbs have been chosen because they each contain major urban development projects from the 1990's to 2000's (Oakden, Walkley Heights, Gilles Plains and Northgate) and Lightsview over the last decade.

4.1. Allotment Production

Oakden, Walkley Heights, Gilles Plains, Northgate and Lightsview have delivered vacant allotments over a long timeframe and a variety of economic and market conditions, causing variations in the rates of allotment production. Generally, lot product has been around 100-200 lots per year.

Lightsview represents a strong indication of the likely levels of future activity in so far as it delivers a mix of housing typologies, not all of which are based upon separate allotments (i.e. apartments) and thus represents a likely representation of future development in the Structure Plan area. Within this context, recent lot production of Lightsview is in the order of 80-100 lots per year, with further and increasing delivery of apartments expanding production levels to a total of 100-200 dwellings per annum. Land and housing supplies in Lightsview are likely to be exhausted in the next 3-4 years. With the broad hectare sales process, subdivision design, planning approval process, infrastructure delivery and allotment/dwelling sales likely to take 2-3 years for any new land development, the timing is ideal for the release of surplus Government landholdings to meet the market as Lightsview winds down.

4.2. Market Demand

4.2.1. Vacant Land Sales

Table 14 below provides an overview of vacant land sales, median sale prices and allotment sizes for the period 2016 to 2018.

Table 14. Vacant land sales activity for the suburbs of Oakden, Walkley Heights, Gilles Plains, Northgate and Lightsview, 2016 to 2018

Year	No. of Sales	Median Value (\$k)	Median Allotment Size (m ²)	Indicative Price per m ²
Oakden				
2016	0	-	-	-
2017	0	-	-	-
2018	0	-	-	-
0				
Walkley Heights				
2016	2	\$235,000	490 m ²	\$480
2017	0	-	-	-
2018	0	-	-	-
2				
Gilles Plains				
2016	6	240,000	410 m ²	\$585
2017	17	201,500	338 m ²	\$596
2018	21	228,000	356 m ²	\$640
44				
Northgate				
2016	0	-	-	-
2017	0	-	-	-
2018	0	-	-	-
0				
Lightsview				
2016	78	\$160,500	171 m ²	\$939
2017	83	\$179,000	165 m ²	\$1,085
2018	97	\$157,000	151 m ²	\$1,040
258				

Source: RP Data, 2019

The following observations can be made from Table 14:

- It is clear that for Oakden, Walkley Heights and Northgate, limited to no vacant land transactions have occurred which suggests that these suburbs are fully developed, and land supply is almost exhausted.
- Land supply is concentrated in the suburb of Lightsview as the data indicates a gradual increase of land supply (delivering on average 86 allotments per year since 2016) reflective of the recent subdivision and infill development.

- Lightsview is delivering a diverse range of allotment sizes – from smaller products (around 55m²) to larger premium housing products and apartment sites (around 900m²). Most lot sales are for allotment less than 200m².

It is evident that current sales activity within the area appears to be heavily influenced by the Lightsview development.

The Structure Plan area presents one of the few remaining areas of land still to be rezoned and developed for residential purposes. Thus, it represents a highly desirable future residential development opportunity with considerable potential for product diversity.

4.2.1.1. Lightsview Development

4.2.1.1.1. Vacant Lot Sizes

Table 15. Vacant land sales by allotment size for Lightsview, 2016 to 2018

Allotment Size (m ²)	2016	2017	2018
<151	28	28	38
151 – 250	30	17	34
251 - 350	12	14	10
351 – 450	4	8	5
451 -550	3	5	8
551 – 650	-	1	-
651 – 800	1	9	2
801 - 1000	-	1	-
>1000	-	-	-

Source: RP Data, 2019

4.2.1.1.2. Developed Allotment Mix

The Lightsview development is projected to contain more than 3,000 residential allotments. Table 16 below summarises some of the allotment configuration and product typologies²:

² Source: DAC Agenda Item 3.2 Land Division 1 into 371 – Northgate Joint Venture – DA 040/276/13

Table 16. *Examples of allotment configuration and product typologies in Lightsview*

Housing Type	Width (m)	Approximate Area (m ²)
Urban Garage	9.1	73
Terraces	4.4	121
	4.8	129
	5.5	151
	6	165
	6.2	170
	7.8/8.0	220
City Terrace	12.7	133
Loft 3.8	3.8	105
Lifestyle 10	10	275
Executive 12.5	12.5	343
Premium 15+	15+	412+
Apartments	24.5+	735+

Table 16 shows that the Lightsview development is delivering a range of allotments of varying sizes, in particular small lot, terrace and townhouse products with allotments less than 200m² and frontages of 10m or less. Small scale apartments (14 units over 4 levels) are an increasingly significant component of recent development and sales activity. Apartments include 1, 2 and 3-bedroom options with 2-bedroom units being the predominant apartment format (this is discussed further in Section 4.2.3.)

4.2.2. House Sale Activity

Table 17 provides an overview of house sales, median sale prices and allotment sizes for the period 2016 to 2018.

Table 17. House sales activity for the suburbs of Oakden, Walkley Heights, Gilles Plains, Northgate and Lightsview, 2016 to 2018

Year	No. of Sales	Median Value (\$k)	Median Allotment Size (m ²)	Indicative Price per m ²
Oakden				
2016	47	\$430,000	400	\$1,075
2017	47	\$436,000	372	\$1,172
2018	45	\$447,000	375	\$1,192
139				
Walkley Heights				
2016	38	\$517,626	477	\$1,085
2017	38	\$537,500	540	\$995
2018	33	\$538,000	540	\$996
109				
Gilles Plains				
2016	84	\$360,000	400	\$900
2017	83	\$357,000	449	\$795
2018	76	\$385,875	460	\$839
243				
Northgate				
2016	40	\$566,500	450	\$1,259
2017	43	\$570,000	475	\$1,200
2018	38	\$562,000	450	\$1,249
121				
Lightsview				
2016	135	\$341,000	152	\$2,243
2017	186	\$363,000	165	\$2,200
2018	118	\$437,500	165	\$2,652
439				

Source: RP Data, 2019

Table 17 provides insight into the current housing market affecting the delivery of housing products within the Structure Plan area, including:

- By 2016 Oakden and Walkley Heights had concluded developing and between 2016 to 2018 both were consistently achieving between 38 – 47 sales per annum. These sales are likely to represent existing housing stock and, as such, provide the competitive price point for delivery of new build dwellings within the Structure Plan area.
- Housing products on the market in Oakden and Walkley Heights are consistently achieving higher price points than Lightsview. Oakden and Walkley Heights consistently exhibit lower sales volumes, higher price points, and larger product types compared to Lightsview. This could be an indication of a tight market for larger ‘family homes’ within close access to a range of services and facilities.

- Although Lightsview consistently achieved lower median sales price points between 2016 - 2018, it is typically providing greater housing diversity to the market each year, and subsequently delivering more affordable products at a greater return to the developer per square metre.

There is potential for the Structure Plan area to achieve a greater rate of sales at a greater price per square metre rate than traditional developments through delivery of more diverse housing products suited to young and mature families with capacity to pay, and lower income households having difficulty transitioning from rental to home ownership.

4.2.3. Flats and Units Activity

Table 18 below provides an overview of flats and unit sales, median sale prices and allotment sizes for the period 2016 to 2018.

Table 18. *Flats and Units activity for the suburbs of Oakden, Walkley Heights, Gilles Plains, Northgate and Lightsview, 2016 to 2018*

Year	No. of Sales	Median Value (\$k)	Median no. of Bedrooms
Oakden			
2016	7	\$378,000	3
2017	4	\$354,975	3
2018	2	\$387,750	3
13			
Walkley Heights			
2016	1	\$371,500	3
2017	2	\$353,750	3
2018	0	-	-
3			
Gilles Plains			
2016	6	385,000	3
2017	10	331,500	3
2018	10	457,300	3
26			
Northgate			
2016	7	\$395,000	3
2017	2	\$405,000	3
2018	6	\$400,500	3
15			
Lightsview			
2016	66	\$325,500	3
2017	50	\$365,000	3
2018	65	\$329,000	2
181			

Source: RP Data, 2019

Table 18 provides insight into the current market for flats and units affecting the delivery of similar products within the Structure Plan Area, including:

- By 2016 Oakden and Walkley Heights had concluded developing and between 2016 to 2018 both were consistently achieving under 10 sales of flats or units per annum. These sales are likely to represent existing stock and, as such, provide the competitive price point for delivery of new build flats and units within the Structure Plan area.
- Although Lightsview consistently achieved lower median sales price points between 2016 and 2018, it is typically delivering products at a far greater density and therefore offering a smaller product type that may not otherwise be possible within Oakden and Walkley Heights, at a comparable price point, facilitated by more immediate access to transport, recreation, retail and education services and facilities.

This suggests units and flats could be delivered as part of a mixed-use outcome within the Structure Plan area and in doing so provide affordable dwelling options for smaller household types while still achieving greater return on investment per bedroom.

4.3. Existing Housing and Product Typology

The residential mix of Oakden, Walkley Heights, Gilles Plains and Northgate is typically dominated by traditional low density, single storey detached family homes and, in some areas, double unit Housing Trust housing. Traditional single storey allotments typically range between 500m² and 800m².

Whilst these suburbs contain some older housing, it appears that there has been some regeneration of existing housing stock and evidence of 'one into two' development. These allotments typically range between 250m² to 400m².

Of note, smaller housing products such as townhouses/row dwellings (community titled) can be found within some parts of the Oakden area. These dwellings are typically located fronting reserves comprising of 6 or 7 dwellings, each with a site area of c. 180m² and a frontage of c. 6m.

In addition, new medium density developments are increasing within the area, as demonstrated by examples within the Lightsview development. Many of these allotments involve boundary to boundary constructions whether or not they are detached or attached housing forms. The typical detached dwelling allotment within the area can range from 170m² to 500m² while typical row or 3-storey detached terrace house allotments can range from 55m² to 240m². Of note, 4-storey apartment buildings are now being developed in Lightsview.

The City of Port Adelaide Enfield *Economic Development Strategy 2020* reported the Council was seeing increased development applications in areas like Lightsview and other infill developments where dwelling size is smaller.

Photographs demonstrating housing currently being delivered within Oakden, Walkley Heights and Northgate and Lightsview are shown in Figure 6 below.

Figure 6. Existing residential housing within Oakden, Walkley Heights, Gilles Plains, Northgate and Lightsview



Oakden



Oakden



Oakden



Oakden



Oakden



Walkley Heights

HOLMES DYER



Walkley Heights



Walkley Heights



Gilles Plains



Gilles Plains



Gilles Plains



Gilles Plains

HOLMES DYER



Gilles Plains



Gilles Plains



Northgate



Northgate



Northgate



Northgate

HOLMES DYER



Northgate



Northgate



Lightsview



Lightsview



Lightsview



Lightsview



Lightsview



Lightsview

5 – STRUCTURE PLAN OPPORTUNITIES

5. Structure Plan Opportunities

5.1. Overview

This section identifies opportunities for housing in the Oakden and Gilles Plains Structure Plan area to inform the structure planning process.

5.2. Diverse Housing

The Structure Plan area offers a significant urban renewal opportunity to deliver diverse residential and mixed-use developments in a number of locations that would meet both latent market demand and effectively compete with supply from existing housing stock.

5.2.1. Family and Culturally Diverse Housing

In terms of housing needs, it is anticipated that the preferred form of housing will be the traditional single storey or double storey detached housing of 3 or more bedrooms reflective of the most dominant household type (families with children) within the area. Allotments of 375m² - 600m² would be ideal for a diverse range of households such as families with children or extended families from a range of cultural backgrounds, although an affordable alternative would be to explore smaller lots of less than 375m² but still containing 3 or 4-bedrooms.

5.2.2. Smaller Housing Formats and Affordable Housing

Demographic forecasts identify an increasing demand for smaller medium and higher density housing formats, including 1 and 2-bedroom dwellings, as more lone and two person households are expected, but also as a large cohort of younger people are expected to move into the 'homebuilder' age bracket within the next few years. As evident in Lightsview, small lot housing on allotments between 55m² and 170m² as well as 1, 2 and 3-bedroom apartments are being delivered in response to decreasing household sizes, an ageing population and affordability requirements. These dwellings have been widely accepted by a variety of purchasers and households due to the quality, affordable price and location to services, open space, employment, education and public transport.

Opportunities exist for the Structure Plan area to explore a range of smaller higher density housing product types such as apartments, row/ terrace housing and small lot detached housing. The delivery of these housing forms should be of high quality and be located in proximity to open spaces or public transport and services. The key to success of any apartment living in a suburban setting such as this, will be the ability to, firstly, deliver a living environment that is so attractive that occupants are willing to forego the perceived benefits of a detached house and, secondly, construction costs must be competitive with alternative housing options.

5.2.3. Housing for the Aged

The growth in the aged population, both relatively and absolutely, across metropolitan Adelaide, coupled with the relatively good connectivity of the Structure Plan area to public transport and other services and the ability of the future development of the Structure Plan Area to increase connectivity through the extension of bus services and provision of local services and facilities, all suggest that the locality has potential as a location for independent retirement living and for supported living options. Further, the growth in family-based households in the area is

often a strong incentive for ‘grandparents’ to also relocate to the area, hence downsized housing, retirement living and, ultimately, supported living choices, can all be expected to have a place within the Structure Plan area.

5.2.4. Mixed Use and Non-residential Development

Parallel investigations undertaken by Holmes Dyer for Employment Lands and Social Infrastructure have identified the need for a range of local services such as retailing, community and recreation facilities, minor commercial spaces, a child care centre and similar uses within the Structure Plan area in order to serve the expanding local population. The growth in apartment living and/or the development of retirement living options provide the opportunity to deliver some mixed-use outcomes where ground floor areas are committed to such uses as cafes, general stores, offices, medical rooms, child care etc.

Any activity centre within the Structure Plan area should seek to integrate residential and non-residential land uses to provide for greater accessibility and vibrancy.

5.3. Design Framework

5.3.1. Housing

The delivery of additional housing, in particular, higher density housing within the Structure Plan area will be directly influenced by the amenity offer (such as shops and services), quality of public realm and open space, transport infrastructure and the quality of housing design. Most importantly, the Structure Plan area provides a significant opportunity to incorporate a diverse range of high-quality design outcomes to enable streetscape/open space activation and walkable neighbourhoods.

The following design objectives are appropriate to the delivery of housing within the Structure Plan area:

- A wide range of housing typologies and densities should be contemplated;
- Where the subject land immediately abuts existing residences, regard should be had for a transition in density along those interfaces;
- Traditional housing, small lot housing, medium density housing forms, including apartments, all forms of retirement living and aged care, as well as affordable housing choices should be considered appropriate;
- Higher density housing should be encouraged in locations close to public realm, the open space network, key transport routes or activity nodes;
- Housing can be developed close to street frontages and include zero setbacks to side and/or rear boundaries, but should be complemented by high quality street environments;
- Building heights need not be constrained, other than in direct proximity of existing housing (outside the Structure Plan area), in which case building heights should be limited to two storeys;
- Other than in direct proximity of existing housing, siting, setback, site coverage and private open space should not be constrained provided the overall built form and design quality meet key qualitative standards. This can be addressed via the use of strict standards for permitted forms of development

(future Deemed to Satisfy criteria) and the provision of outcome-based merit criteria (future Performance Outcomes);

- Where located immediately adjacent to existing housing (outside the Structure Plan area), a minimum setback of 5 metres should be provided;
- Taller buildings (greater than 3 storeys) should demonstrate suitable management of interfaces with adjacent residential development (outside the Structure Plan area); and
- Car parking to serve residential development needs to be adequate to meet likely demands and may include the embedding of additional public or shared car parking within road reserves.

5.3.2. Public Realm

Provision of a suitable design framework for the treatment of streetscapes, public realm and the interface between the public and private realms is important in the delivery of attractive, desirable and safe residential communities.

It is extremely difficult to mandate good design outcomes. To be that prescriptive risks stifling new and alternative ideas for delivery of good public realm outcomes. Further, delivery of many desirable outcomes extends beyond the purview of mechanisms available to planning authorities to be imposed upon development proposals. Notwithstanding these limitations, the following streetscape, public realm, and public realm interface objectives are identified for the Structure Plan area:

5.3.2.1. Family Private Allotments (Public Realm Interface)

- Encourage housing to the public realm and connect with the streetscape via:
 - » Windows, entrances and private open space (i.e. balconies) facing the street to facilitate passive surveillance;
 - » Landscaping and greenery to add to the character of the street and to promote active and lively pathways/streets; and
 - » Encouraging open or low front fencing/gardens to facilitate social interaction.
- Ensure the timely delivery of site landscaping to all publicly visible areas if an allotment as part of any dwelling approval.
- Seek consistency and management of fencing products as part of any dwelling approval.
- Encourage the incorporation of visual interest in the built form through a combination of:
 - » Layering of different colours, materials and textures;
 - » The use of interesting roof forms, including skillion, mono-pitched and curved metal deck roofs;
 - » The use of natural materials, including timber, natural stone, glass and steel; and
 - » Creation of light and shade through the use of over-hangs, articulation, recesses and canopies.
- Require panel doors or similar for prominent garages and generally require garages to be set back behind the main façade of a dwelling.

- Require careful siting of air conditioning units, antennae, satellite dishes, water tanks, garden sheds etc to avoid visibility from public spaces.

5.3.2.2. Streetscape and Public Realm

- Encourage the planting of appropriate tree species not less than every 15 metres along a road frontage within a land division. In particular, ensuring the creation of deep root planting opportunities within road reserves.
- Species selection should acknowledge suitability for local conditions and should seek to deliver 'avenue' planting along streets, notably upright species that allow the establishment of a single clear truck to at least 2 metres above ground level for safety, surveillance and aesthetics.
- Reserve planting may include parkland type settings and/or recreation of endemic habitat environments.
- Pedestrian paths should generally be provided on both sides of a roadway and provide linkages to key attractions or facilities.
- Creation of attractive and welcoming streetscapes via the use of materials and detailing to define walking and cycling routes and assist in way finding.
- Provide facilities for comfort and convenience to encourage social interaction through the locating of seats and shelters along footpaths and in well-connected areas.
- Seek the creation of landscaped parks which provide a range of uses for residents, including active and passive recreation areas, seating and picnic areas, playgrounds, vegetation and habitat corridors and ornamental parks for visual interest.
- Seek the delivery of public parks in close proximity to residents, ideally within 300 metres of all residents.
- Acknowledge the role and value of smaller parks as the 'backyard alternative' for medium density residential development.
- Consider the opportunity to create a larger public space suitable for informal sports activities.
- Recognise the dual use capabilities of stormwater detention areas and design for their recreational use.
- Acknowledge the role of enhanced streetscapes, plazas and walkways as important elements in the creation of urban environments.
- Encourage direct access to and overlooking of reserves by residential development, ensuring such residences create a front aspect to those reserves, through orientation of entries, fenestration, balconies and verandahs, through the use of visually permeable fencing and through the creation of direct pedestrian access points between the reserves and the residences.
- Recognise the advantage of receiving highly developed, high quality landscaped spaces in lieu of large underdeveloped spaces.
- Encourage water capture and reuse on parks and streetscapes to improve landscape attractiveness and promote vegetation growth. Where water reuse is not possible, encourage appropriate species choice to deliver attractive but drought tolerant landscape outcomes.

5.3.2.3. Greening and Cooling

The Adapt West project³ provides a series of recommendations for mitigating heat island effects in infill development. Based on those recommendations, the following could be considered for the Structure Plan area:

- Seek to maintain and preferably increase the amount of green space and tree cover across the Structure Plan area to provide cooling benefits.
- Green infrastructure such as trees, grass and raingardens should be used alongside or to shade bitumen covered surfaces such as major and minor roads, bikeways and footpaths.
- Consideration should be given to irrigation (including opportunities for stormwater and recycled water) of green infrastructure to maximise its cooling effect.
- Where feasible the carriageway for main roads could be narrowed, stormwater treatment devices installed, and road pavement changed to lighter coloured materials.
- Guidelines could be developed for material selection for buildings and public realm such as use of light coloured roofs and use of substrates such as artificial turf and rubber soft-fall offset through the use of shade sails (or similar).
- Dwellings and built form designed with a strong focus on quality, dwelling comfort and liveability.

³ Western Adelaide Urban Heat Mapping Project Report, August 2017, prepared by Seed Consulting Services, in association with Airborne Research Australia and EnDev Geographic for AdaptWest

5 - CONCLUSION

6. Conclusion

The investigations contained in this Housing Assessment has been prepared to inform the Structure Plan and rezoning process being prepared for land at Oakden and Gillies Plains.

In summary, a number of considerations have been highlighted:

- Northgate-Oakden-Gilles Plains SA2 is characterised by young and mature families with children. The young families' segment of the catchment is likely to be seeking entry into the housing market, is likely to be price sensitive and could be seeking a family home or unit. The mature family segment may be looking for housing to cater for a growing family and is likely to be attracted to locations providing ease of access to diverse employment, education, retail and recreation options.
- Although the population is categorised by young and mature families, there has also been a proportional increase in the population aged between 45 – 54 years of age and the population aged 65 – 74 years of age. This suggests that, in addition to family dwelling types, the Structure Plan area could consider the provision of dwelling types suitable for smaller or downsizing households.
- Despite the predominance of separate houses for Northgate-Oakden-Gilles Plains SA2, 2016 ABS Census time series data for the area reveals a 12% reduction in the proportion of this dwelling type between 2006 and 2016. Over the same period the SA2 recorded a 12% increase in the proportion of smaller dwelling types (semi-detached, row, or terrace house, townhouse). The delivery of greenfield and infill development within the SA2 over this period is likely to have influenced this proportional shift in dwelling types. This trend suggests that there may be an increasing demand matched to the supply of smaller dwelling types for a range of household sizes.
- More than half of the housing stock (62.4%) within the Northgate-Oakden-Gilles Plains SA2 is 3-bedrooms followed by 4-bedrooms or more (20.2%) with a relatively small proportion of housing catering to smaller and lone person households. ABS time series data shows an increase in the proportion of 2-bedroom dwellings (1.6%) and an equivalent decrease in the proportion of 3-bedroom dwellings (-1.5%) between 2011 and 2016 Census periods. When considered in conjunction with the increasing housing diversity of the SA2 it suggests that there could be a trend towards more diverse dwelling types catering for family households. The increase in the proportion of 2-bedroom dwellings may also present as a niche market comprising couple households.
- The study area had a significantly higher proportion of homes under mortgage (40.9%) compared with PAE LGA (33.8%) and Greater Adelaide (36.5%). This reflects the relatively young age profile and higher proportion of family households for the SA2 and suggests that the study area could be an attractive option for couples and families seeking home ownership.
- Of the 30.4% (2,295) households renting:
 - » Over 38% of households are either public or community housing stock; and
 - » Approximately 421 Housing SA customers are receiving private rental assistance.

This suggests that the SA2 contains a population that may require support in order to access home ownership, including the provision of affordable housing within the Structure Plan area.

- The study area exhibited a higher median weekly household income (\$1,296) compared with PAE LGA (\$1,141) and Greater Adelaide (\$1,265) and a greater capacity to carry a higher median monthly mortgage (\$1,600 at 28.4% of household income) compared with PAE LGA (\$1,560 at 31.5% of household income) and Greater Adelaide (\$1,517 at 27.6% of household income). This suggests the Structure Plan area may attract households with a greater capacity to manage higher levels of mortgage debt within household income levels.
- The study area has a significantly higher proportion of population from India (5.4%) and China (3.7%) compared with PAE LGA (4.7% and 2.4%) and Greater Adelaide (2.0% and 1.8%). Time series data from the 2016 ABS Census indicates that the Indian born population increased by 1,158 persons between from 2006 to 2016 and over the same period the Chinese born population increased by 744 persons. This market is likely to be seeking dwelling suitable for large or extended families with ease of access to transport and services.
- Based on the production of approximately 1,990 residential allotments (across the Structure Plan) and the average household size of 2.4, it is estimated that the Structure Plan could potentially contribute approximately 4,776 persons to the existing population. Just over 75% of the projected population is expected to be under 55 years of age which supports a need for diverse housing products to cater for couple and young and mature family households, while maintaining options for the population to retire in place.
- There is potential for the Structure Plan area to achieve a greater rate of sales at a greater price per square metre through delivery of more diverse housing products suited to young and mature families with capacity to pay, and lower income households having difficulty transitioning from rental to home ownership. Units and flats could be delivered as part of a mixed-use outcome within the Structure Plan Area and in doing so provide affordable dwelling options for smaller household types while still achieving greater return on investment per bedroom.
- The preferred form of housing is likely to be the traditional single storey or double storey detached dwelling of 3 or more bedrooms, reflective of the needs of the most dominant household type (families with children) within the area. Allotments of 375m² - 600m² would be ideal to meet the needs of a diverse range of households, such as families with children or larger families from culturally diverse backgrounds, although more affordable alternatives are likely to be required, including lots of less than 375m² but still containing 3 or 4-bedrooms.
- Small lot housing on allotments between 55m² and 170m² is being delivered in response to decreasing household sizes, an aging population and affordability requirements. Opportunities exist for the Structure Plan area to explore a range of smaller higher density housing product types such as apartments and row/ terrace housing; and

- The Structure Plan area provides a significant opportunity to incorporate a diverse range of high-quality design outcomes to enable streetscape/open space activation and walkable neighbourhoods. Public open space will be a critical element in any development of more intensive housing forms.

6 - REFERENCES

7. References

- *AdaptWest Western Adelaide Region Climate Change Adaptation Plan, 11 October 2016, prepared by URPS in association with Seed Consulting Services, and AECOM for AdaptWest.*
- *Annual Community Survey, 2017 and 2018, City of Port Adelaide Enfield.*
- *Australian Bureau of Statistics, Census data, 2006 to 2016.*
- *City Plan 2030, City of Port Adelaide Enfield.*
- *Living Environment Strategy 2017-2022, City of Port Adelaide Enfield.*
- *Oakden and Gilles Plains Structure Plan, Employment Lands Assessment, April 2019, prepared by Holmes Dyer Pty Ltd.*
- *Oakden and Gilles Plains Structure Plan, Social Infrastructure Assessment, April 2019, prepared by Holmes Dyer Pty Ltd.*
- *Oakden and Gilles Plains Structure Plan, Technical Studies, May 2019, prepared by Arup.*
- *RP data, Core Logic.*
- *State Planning Policies for South Australia, 31 January 2019, prepared by the State Planning Commission on behalf of the Minister for Planning, Government of South Australia 2019.*
- *The 30 Year Plan for Greater Adelaide 2017 Update, Department of Transport, Planning and Infrastructure, Government of South Australia.*
- *Western Adelaide Urban Heat Mapping Project Report, August 2017, prepared by Seed Consulting Services, in association with Airborne Research Australia and EnDev Geographic for AdaptWest.*