SGS Economics & Planning

HOUSING MARKET ANALYSIS - FINAL REPORT

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Prepared for
Camden Council

Independent insight.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

This Housing Market Analysis Report provides the evidence-base for the preparation of a Local Housing Strategy for Camden Council. Camden Local Government Area (LGA) is located approximately 60 kilometres from the Sydney Central Business District and covers a total land area of 206 square kilometres. Between 2016 to 2017, the population of Camden LGA grew by 8.4%, double the growth of City of Sydney at 4% and Parramatta at 3.6% (ABS, 2018). By 2021, the population is forecast to be 107,444 people and by 2036 to grow to 219,465 people.

Recent development

The number of dwellings in the Camden LGA has increased significantly over the last 20 years, with dwellings built between 1996 and 2016 outnumbering those that the LGA contained in 1996. The Greater Sydney Region Plan and the Western City District Plan have identified a housing supply target of 11,800 dwellings over the next 5 years for the Camden LGA. Longer-term dwelling targets are not provided, but the LGA is expected to continue to have significant growth rates.

Camden's current housing

Detached dwellings continue to be the dominant housing type in Camden LGA. Semi-detached and attached dwellings comprised only 7% of all dwellings in 2016, with moderate growth in the number of these dwellings from a low base. The dominance of separate houses is reflected in all settlement areas and the proportion of apartments or semi-detached dwellings is substantially lower than Greater Sydney or the Western City District.

Dwelling size in the Camden LGA is larger than the average dwelling in the Western City District of Greater Sydney with on average 3.7 bedrooms per dwelling compared to 3.3 for the Western City District and 3.0 for Greater Sydney. This larger than average dwelling size also reflects the preponderance of detached dwellings compared to Greater Sydney. Future proposed higher density development in Leppington and Oran Park may counteract this trend, however it is still expected that in 2036 higher density dwellings will comprise a small proportion of total dwellings.

In the Camden LGA, demand appears to be driven mainly by younger families and couples living in houses owned with a mortgage, with a low number of group households. However, while this is the largest demographic group within Camden's new suburbs, new houses in land-release areas are also home to a wide variety of other household types.

Overall, Camden LGA exhibits a lack of housing diversity. Increasing housing diversity is important to allow for people ageing in place, lone person households and changed living arrangements to accommodate life transitions. It is anticipated that demand for smaller dwellings may increase as current land-release areas become more established, the population ages and household circumstances change.

Housing tenure in the Camden LGA is typically dwellings owned with a mortgage with a lower proportion of dwellings owned outright or rented compared to the Greater Sydney average. Only 1.25% of total dwelling stock in the Camden LGA is social housing. Vacancy rates for dwellings in Camden LGA are lower than Greater Sydney, consistent with the demographic profile of the LGA which contains a high proportion of families, who are typically less mobile than other household types.

Dwelling prices and affordability

On average, median dwelling prices in the Camden LGA are lower than median prices in Sydney. Over the past five years from 2013-2018 vacant residential land prices have increased. This rise has seen the median price per sqm in the Camden LGA more than double from $490 in 2013 to $1,055 in 2018. Simultaneously the average size of new residential allotments in Camden has been steadily decreasing. Between 2013-2018, house prices increased rapidly, rising between 39% in the New Urban North area to 97% in the Rural Living area with increases of between 50-60% in Camden's centres and established suburbs. House prices show signs of having reached a peak in 2017 and decreased from 2017-2018, in common with other parts of Sydney.

Analysis of prices for different dwelling types in land release areas shows that while townhouses and other attached dwellings are cheaper on average than new separate houses, the cheapest separate houses are competitively priced with townhouses. This is a result of the very small lots on which separate houses are being built (in some cases less than 300sqm), and the business efficiencies associated with the house and land package housing delivery model. As a result, the permissibility of separate houses on very small lots is reducing the viability of genuine medium density housing products in land-release areas.

Housing affordability is reflected by the proportion of households in mortgage stress or paying more than 30% of household income on mortgage repayments. Mortgage stress is observed to be highest in the rural-living area, potentially attributable to higher house prices. However higher than average incomes in this area may offset vulnerability to a rise in mortgage rates. The new urban areas of the LGA also have high levels of mortgage stress. Higher repayments in the new urban areas are likely to be a result of the recent development of these areas combined with the rise in house prices between 2006-2016. As young families in these areas age, their incomes are likely to increase, reducing rates of mortgage stress.

Rental affordability is based upon the proportion of rental dwellings in each postcode affordable to a household with a given income. For households with incomes below the median income, including single income families and single parents, most rental housing within the Camden LGA would be unaffordable. This is exacerbated by the relative lack of housing diversity. The Rental Affordability Index utilised by SGS shows that for these groups, all of Camden LGA is unaffordable, severely unaffordable or extremely unaffordable.

Housing demand

Analysis of future housing demand indicates sustained demand for separate houses with population growth also increasing demand for attached dwellings and smaller, more affordable dwellings including flats, units or apartments.

Three housing demand scenarios were used to consider future housing demand:

- Lower density: Housing preference based on trends in historical census data. This scenario is influenced by what kinds of housing were built in the past and may
- Medium density: Housing preferences modified to reflect a greater preference for medium and higher density dwellings compared to those currently experienced in the Camden LGA.
- Higher density: Housing preferences modified to reflect a significantly increased preference for medium and high-density dwellings similar to expressed preferences in LGAs with greater transport connectivity and more established housing. This scenario shows how housing preferences could change in the future in the Camden LGA if planning policy requires

Current planning policy encourages higher densities and more medium density dwellings in land-release areas, which is continued would alter the housing mix in the Camden LGA. As the lower density scenario is influenced by what kinds of dwellings were built in the past, it may under-estimate demand for medium density dwellings. Conversely the higher-density

scenario is intended to be an aspirational scenario which would require even greater housing density and improvements in transport infrastructure connectivity to realise .

SGS's housing demand model shows that based upon population projections and past trends in household type and size, there will be demand for 76,626 dwellings in the Camden LGA in 2036. The following table shows the forecast housing demand for additional dwellings of different types between 2016-2036 based on the three density scenarios.

FORECAST DEMAND FOR ADDITIONAL HOUSING IN THE CAMDEN LGA BETWEEN 2016-2036

Housing density scenario	Separate houses	Attached dwellings	Flats and apartments	Total
Lower density	45,700	3,335	517	49,552
Medium density	40,878	7,120	1,730	49,552
Higher density	37,439	8,892	3,397	49,552

Under all scenarios, separate houses will still be dominant in 2036, however under the medium density scenario around 4,820 less separate houses will be needed and under the higher density scenario around 8,260 less separate dwellings will be required. It is expected that the average annual growth rates for the number of apartments will be greater than the average annual growth rates for either attached dwellings or separate houses. However, the overall number of apartments that would be built in the lower and medium density scenarios is still small compared to total housing demand.

The demand for social and affordable housing in the Camden LGA has also been modelled, with households classified as needing social or affordable housing if they are in moderate or severe rental stress, if they are homeless, or if they reside in social housing. The resulting demand is shown in the table below. There will be a large increase in demand for social and affordable housing between 2016-2036, driven by population growth. There is only a small current supply of social and affordable housing in the LGA of 417 dwellings, with no publicly released plans to increase this number.

FORECAST DEMAND FOR SOCIAL AND AFFORDABLE, BY HOUSEHOLD TYPE

Household Type	2016	2026	2036	Change
Couple family with children	547	994	1,470	924
One parent family	644	1,208	1,909	1,265
Families with children (sub-total)	*1191*	*2202*	*3379*	*2189*
Couple family with no children	374	693	1,071	697
Other family	37	56	94	56
Group household	77	134	201	124
Lone person household	652	1,286	2,178	1,526
Total	**2,331**	**4,372**	**6,923**	**4,592**

Source: DPE Household Forecasts 2016, SGS Economics and Planning 2018

Housing capacity

Housing capacity based on existing planning controls, recent housing supply trends and analysis of future land release precincts shows that total dwelling capacity within the Camden LGA is significantly greater than the 2016-2021 dwelling target for Camden in the Western City District Plan of 11,800 dwellings. Most of the capacity is in future release precincts where

separate houses and attached dwellings would be expected to be the main form of housing delivered. There is some capacity for shop-top housing in existing centres.

The following table outlines capacity for additional dwellings in Camden LGA based on the three development scenarios. Greater density in future land-release precincts is assumed in the medium and higher density scenarios than the lower density scenario. Capacity in Camden's existing suburbs is based on existing planning controls, and so unchanged in the different scenarios.

CAPACITY FOR ADDITIONAL DWELLINGS IN THE CAMDEN LGA UNDER EXISTING PLANNING CONTROLS AND IN FUTURE LAND-RELEASE PRECINCTS

Housing capacity Scenario	Future Urban	New Urban North and New Urban South	Camden, Narellan, Established Suburbs and Rural Living	Total
Lower density	48,425	12,455	4,837	70,131
Medium density	77,953	12,455	4,837	95,261
Higher Density	87,506	12,455	4,837	109,222

Alignment of capacity and demand

The remaining housing capacity in the LGA in 2036 under each of the development scenarios is shown in the table below. This shows how housing capacity compares to the total quantm of demand.

Under the low-density scenario, it is expected there would be limited land remaining available in 2036, while under the medium and higher density scenario, capacity for up to 51,462 and 65,423 additional dwellings respectively would remain. A greater remaining housing capacity would mean that less land would need to be released in future release areas. This would mean that more land would be available to respond to any strategic opportunities created by the Badgerys Creek Aerotropolis, which would not be expected to be a substantial centre until 2036 or later.

Overall, these findings show that there is sufficient capacity to accommodate dwelling targets and forecast growth. However, there will need to be a continued focus in policy on increasing dwelling diversity to accommodate changing population needs and on improving transport connectivity. This would encourage preferences for more medium and higher density dwellings, increasing housing density and leaving more land available for development in 2036 without requiring the development of the LGA's rural lands.

REMAINING HOUSING CAPACITY IN THE CAMDEN LGA IN 2036 UNDER EACH HOUSING DENSITY SCENRIO

Scenario	Separate houses and attached dwellings	Flats and apartments	Total
Lower density	17,801	8,515	26,332
Medium density	44,156	7,306	51,462
Higher density	59,779	5,644	65,423

1. INTRODUCTION

This chapter provides an overview of the report and context for the subsequent modelling, analysis and recommendations.

1.1 Camden Council

The Camden Local Government Area (LGA) is located in the south west of Sydney, approximately 60 kilometres from the Sydney Central Business District. The LGA covers a total land area of 206 square kilometres and is bounded by Liverpool City Council in the north, Campbelltown City Council in the east, and Wollondilly Shire Council in the south and west.

Camden LGA is defined by its unique history, rural backdrop with many opportunities presented by urban development and population growth. As a rapidly growing area containing a mix of agricultural land, country towns and villages, new residential areas, rapid commercial and industrial development and in the context of a planned new major airport – the Western Sydney Airport, the Camden LGA offers unique opportunities for investment with Sydney's leading population growth rate of 5.2% over the next 20 years. The population forecast for 2021 is 107,444 and is forecasted to grow to 219,465 by 2036.

In 2016 – 2017, the population of Camden LGA grew by 8.4%, double the growth of City of Sydney at 4% and Parramatta at 3.6% (ABS, 2018). Camden LGA is providing a significant number of dwellings to accommodate for this growth. From 2013 – 2017, development applications in the Camden LGA grew by 57% (from 1,183 to 1,793). A large portion of these approvals relate to residential development.1

There are a number of major projects that have the potential to have a significant impact on how Camden LGA will develop in the future including the Western Sydney Airport, South West Rail Link extension, North South Rail and the Outer Sydney Orbital. Further, Council anticipates that the NSW Government will exhibit a draft South West Growth Area Land Use and Infrastructure Implementation Plan (LUIIP) in 2019, which will provide a vision for how the South West Growth Area will develop in the future. These projects will have a direct impact on how the residential areas of Camden LGA will develop, especially in terms of the intensity of residential development around emerging transport nodes.

The Western City District Plan identifies the need for councils to prepare a Local Housing Strategy to inform the comprehensive review of the Local Environmental Plan (LEP) which will include the preparation of a Local Strategic Planning Statement (LSPS). As Camden Council is one of the fastest growing councils in Greater Sydney, it has a significant part to play in the provision of future housing supply for the Greater Sydney Metropolitan Region.

1.2 Study area

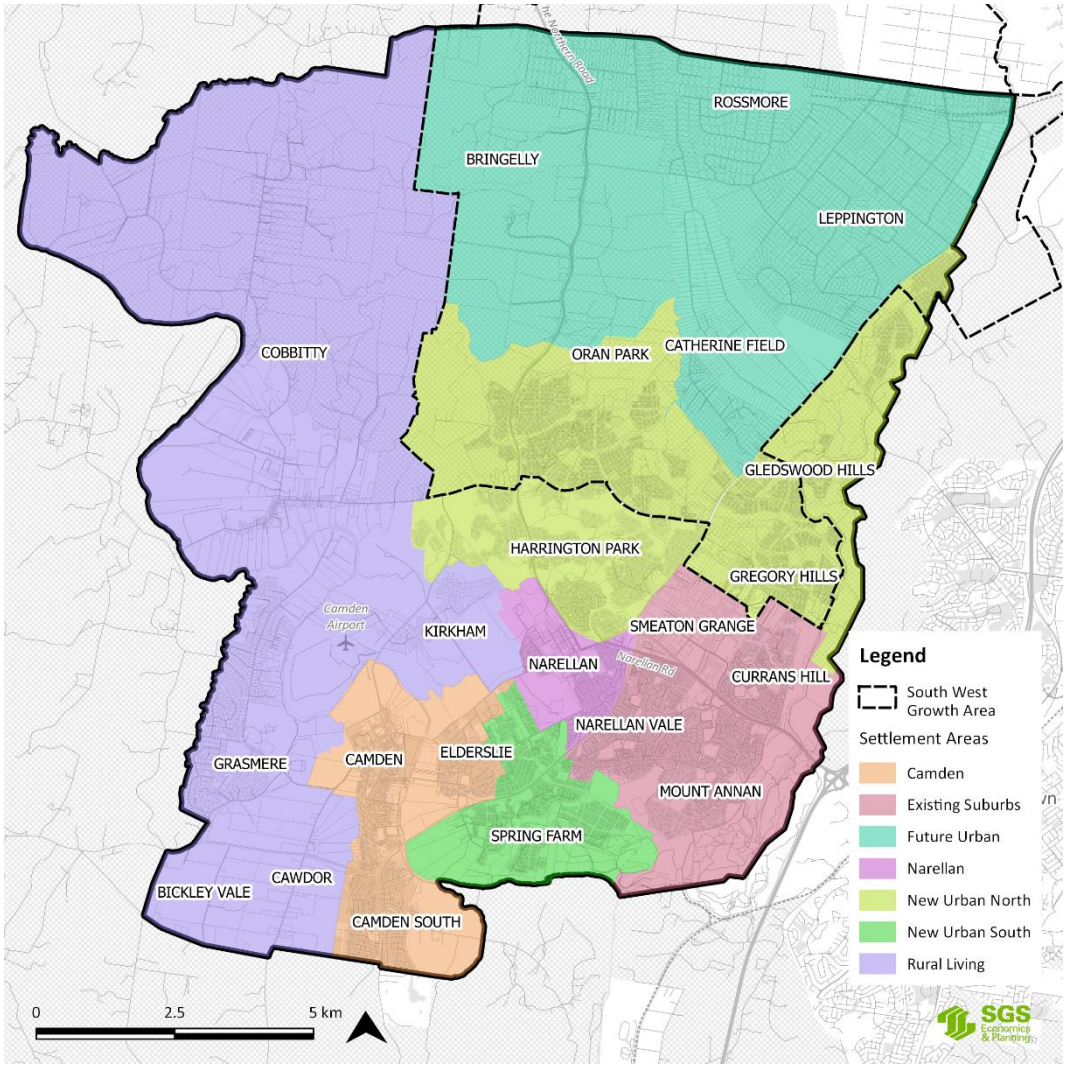
The study area is the entire Camden LGA.

Residential land within Camden LGA falls within two categories for planning controls. Land subject to Camden Local Environmental Plan 2010 and land within the South West Growth Area subject to the provisions of the State Environment Planning Policy (Sydney Region Growth Centres) 2006.

1.3 Settlement areas

The analysis of housing issues has been conducted using a series of settlement areas in different parts of the LGA, which are shown in Figure 1. These settlement areas correspond to areas in the LGA with a different housing age, character and residential submarkets. The settlement areas are shown in the following map and discussed in more detail below.

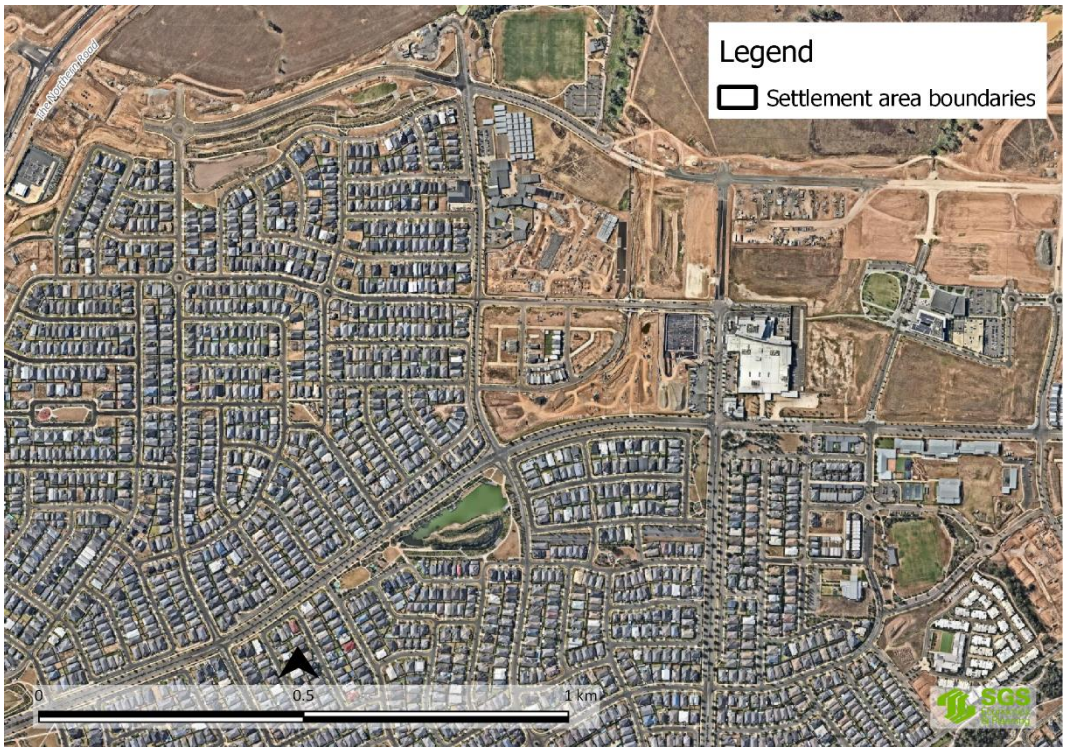
FIGURE 1: SETTLEMENT AREAS USED IN THE ANALYSIS OF HOUSING ISSUES IN THE CAMDEN LGA



New Urban North and New Urban South Areas

The New Urban North and New Urban South areas are predominantly occupied by new land-release suburban development. This is progressively being developed mainly into detached housing, with relatively large houses on small lots with high site coverage. The New Urban North area also contains Harrington Park, which has large amounts of open space and larger lot sizes.

FIGURE 2: ORAN PARK IN THE NEW URBAN NORTH AREA



Source: Google Maps, 2019.

FIGURE 3: THE NEW URBAN SOUTH AREA AND SURROUNDING SUBURBS

Source: Google Maps, 2019.

Existing Suburbs

The established suburbs of Mount Annan, Narellan Vale and Currans Hill[1] are included in the Existing Suburbs settlement area. These suburbs are mostly developed with little space for new subdivisions. Housing is of a suburban character, with a curvilinear street layout.

FIGURE 4: PART OF MOUNT ANANN IN THE EXISTING SUBURBS SETTLEMENT AREA

Source: Google Maps, 2019.

Camden and Narellan Town Centres

The Camden settlement area contains the Camden Town Centre and the surrounding suburbs of Elderslie, Camden and Camden South. Camden Town Centre is the original centre in the Camden LGA and predates more recent suburban development.

The Narellan settlement area contains the Narellan centre and surrounds, located in the suburb of Narellan. Narellan contains a large shopping centre, a smaller amount of other retail and an adjacent industrial area.

The housing surrounding the Camden and Narellan centres are older than other suburbs in the Camden LGA, with a more linear street layout, smaller houses and generally larger lots.

[1] The industrial suburb of Smeaton Grange is also located in this area but does not form part of this housing market analysis.

FIGURE 5: NARELLAN TOWN CENTRE

Source: Google Maps, 2019.

FIGURE 6: CAMDEN TOWN CENTRE AND SURROUNDING SUBURBS

Source: Google Maps, 2019.

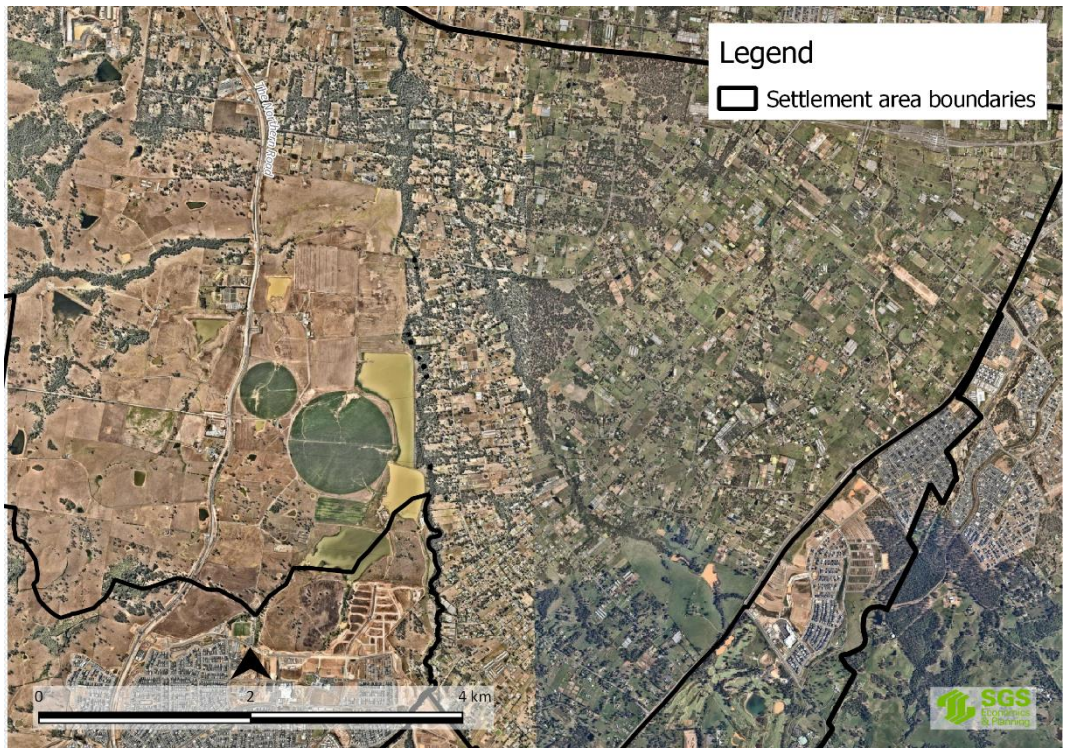
Rural Living Area

The Rural Living area contains rural uses and large-lot residential uses. It is not planned to be released for more intensive urban development.

Future Urban Area

The Future Urban area currently remains rural or rural residential in use, but is planned to contain suburban development in the future.

FIGURE 7: FUTURE URBAN AREA



Source: Google Maps, 2019.

1.4 Scope of report

This Housing Market Analysis Report provides the evidence-base for the preparation of a Local Housing Strategy for Camden Council.

The Camden Housing Market Analysis will form an important input for the Camden Local Strategic Planning Statement and Housing Strategy. The production of a housing strategy is a requirement of the *Western City District Plan.* Together with the Local Strategic Planning Statement, the Housing Strategy will form the basis for strategic planning for housing in the LGA to accommodate the significant population growth.

1.5 Report structure

The remainder of this report is structured as follows:

Section 2	Strategic Context
Section 3	Housing Profile
Section 4	Housing Market
Section 5	Housing Demand
Section 6	Housing Capacity
Section 7	Development Scenarios
Section 8	Opportunities and Constraints

1.6 Concurrent studies

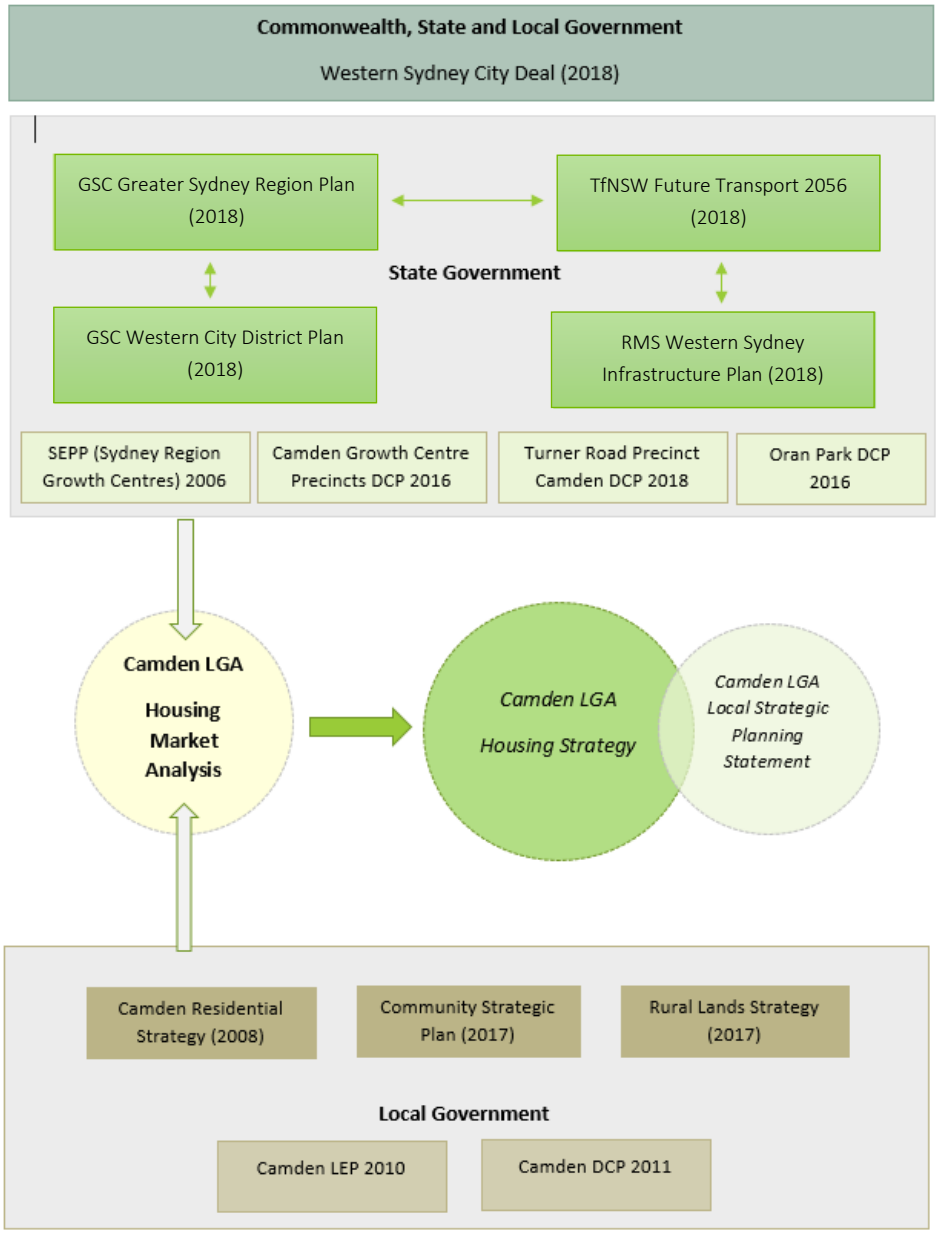
Other studies running concurrently in alignment with this study include the Camden Centres Study and the Camden Demographics Study.

2. STRATEGIC CONTEXT

This chapter reviews the strategic policy context related to Camden Local Government Area.

Figure 8 below outlines the policy context for Camden LGA and the interaction between Commonwealth, State and Local Government strategic planning and key strategic policy and statutory documents.

FIGURE 8: RELATIONSHIP BETWEEN THE STRATEGIC AND STATUTORY PLANNING CONTEXT AND CURRENT STUDY



Source: SGS, 2019

2.1 State and district policy

Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (GSRP) is a metropolitan strategy that responds to the current and future planning challenges of the Greater Sydney region produced by the Greater Sydney Commission (GSC).

The aim of the GSRP is to transform Greater Sydney into a metropolis of three cities: the Western Parkland City, Central River City and the Eastern Harbour City over the next 40-year period. This vision will be progressed via a series of priorities and actions centred on the themes of infrastructure and collaboration, liveability, productivity and sustainability.

Directions to improve liveability in Greater Sydney include:

- Building **a city for people** where social and cultural networks improve individual and community health outcomes
- Providing **housing in the city** that meets changing demographics and housing affordability challenges and provides greater housing choice.
- Creating **a city of great places** that includes delivery of safe, inclusive and walkable mixed-use areas.

The Housing the City directive is supported by two objectives:

Objective 10: Greater Housing Supply identifies that 725,000 additional homes will be needed by 2036 to meet population demand projections, including the need for a range of housing types, tenures and price points to cater for the different needs of the community.

Housing supply targets for the Western City District for 0-5 housing supply is the provision of 39,850 homes (2016-2021) and the 20-year strategic housing supply target is 184,500 homes (2016-2036).

The GSRP states that councils are to work with the Greater Sydney Commission (GSC) and State agencies to come to an agreed 6-10 year housing target for the local government areas. Councils must also identify specific attributes, such as proximity to transport interchanges and local centres that make the area suitable for housing supply beyond 10 years and also support the development of more walkable neighbourhoods.

As designated by the GSRP, the key tool for councils to investigate and plan for housing supply, greater housing diversity and infrastructure delivery is through the development of housing strategies. These strategies need to address the 0-5 and 6-10 year housing targets, as well as the 20-year strategic targets.

Housing strategies are to be given effect through Local Environmental Plans (LEPs) and are to be aligned with community strategic planning and also inform council infrastructure and service investment. Development of the housing strategies should respond to projected housing need, diversity of housing type, market preference, be aligned with State and local government infrastructure provision, manage potential displacement of communities, improve local amenity, include engagement with the community and provide opportunities for greater efficiency in waste, water, and energy management. A place-based planning approach is supported to produce high-quality urban outcomes.

The two key actions for councils under this objective are to prepare the housing strategies and develop 6-10 year housing targets.

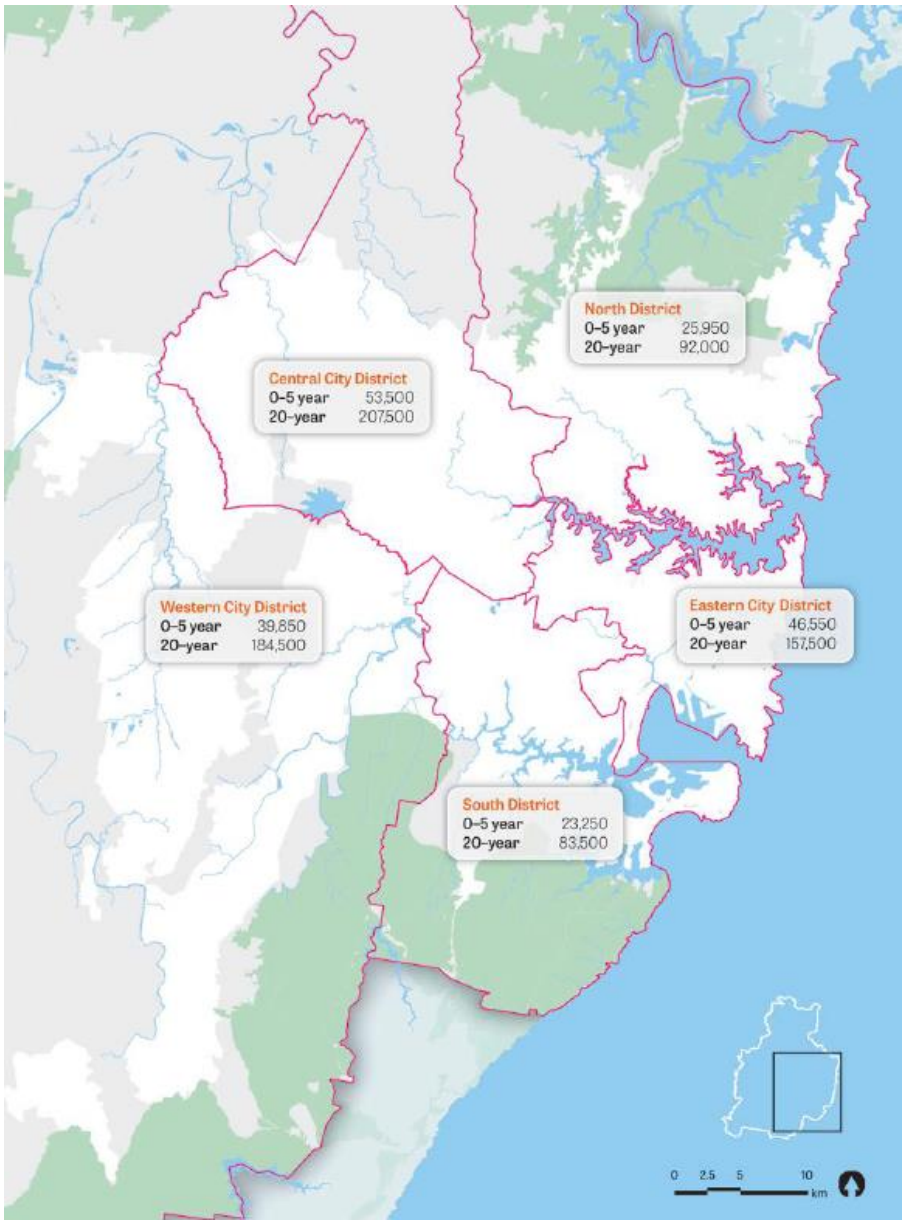
Objective 11: Housing is more diverse and affordable. The objective aims to improve the range of housing choices, including affordable rental housing that reduces the need for people to require social housing.

Strategies and actions for the GSC and State agencies include preparation and implementation of an Affordable Rental Housing Target Scheme. This will be a mechanism to deliver additional supply of affordable housing for very low to low income households in Greater Sydney.

In Greater Sydney, the GSRP acknowledges targets within the range of 5-10 per cent of new residential floor space are viable and should be tailored to the local area.

For moderate-income households, the GSC, NSW Department of Planning and Environment (DPE) and Landcom will investigate ways to facilitate greater housing diversity via innovative purchase and rental models.

FIGURE 9: HOUSING TARGETS 2016-2036



Source: GSRP, 2018, p. 63

Western City District Plan (2018)

The Western City District Plan (WCDP) is a 20-year plan to manage growth and help achieve the 40-year vision of the GSRP with the development of a greater choice of jobs, transport and services aligned to growth in the Western City District.

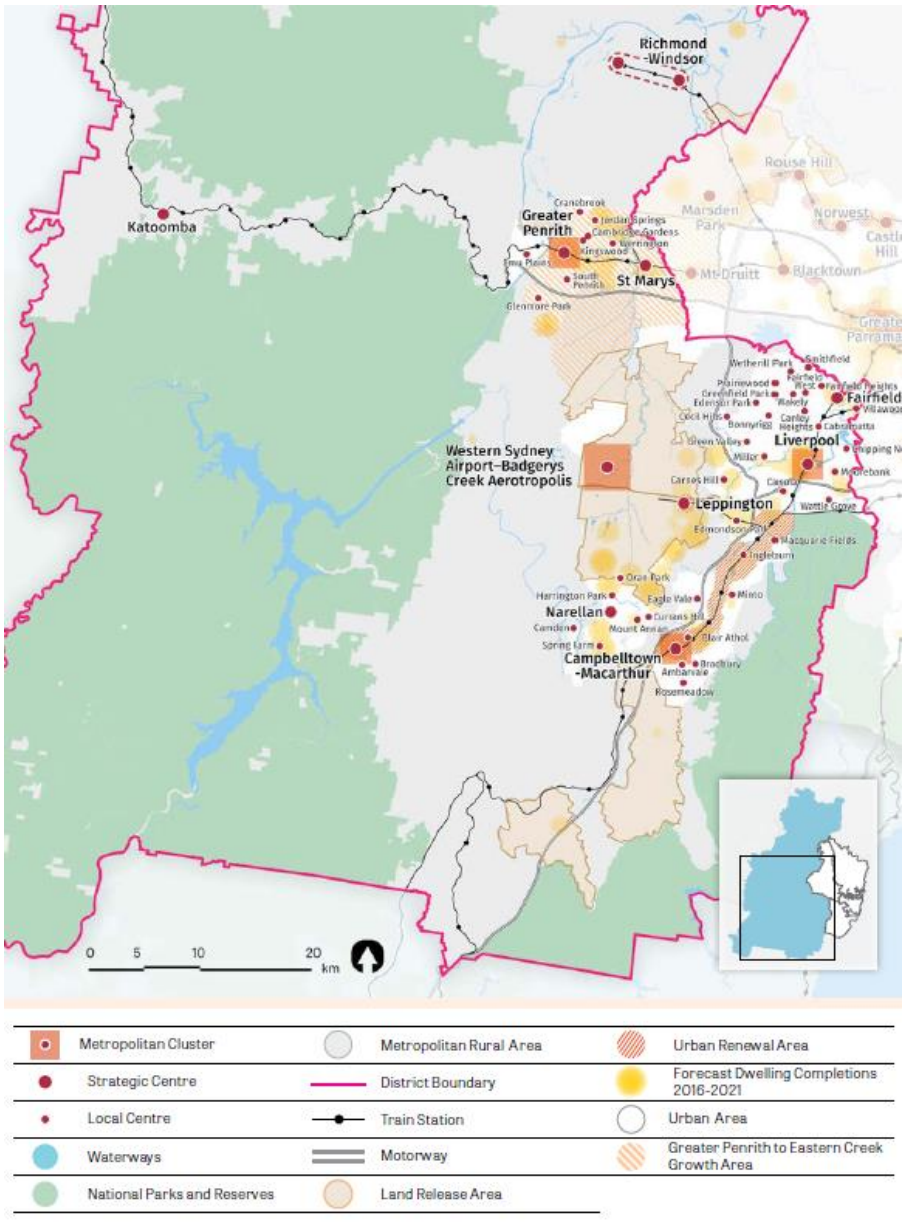
Under the direction for Housing the City, Planning Priority W5 supports provision of housing supply, choice and affordability, with access to jobs, services and public transport.

The WCDP identifies a housing supply target for 0-5 years of 11,800 for the Camden LGA.

Planning Priority W5 identifies the actions for Camden Council as:

- Preparation of local housing strategies that deliver five-year, 6-10 year and 20-year housing targets, and also meet the requirements of Objective 10: Greater Housing Supply of the GSRP, as described above.
- Council involvement with planning authorities for the preparation of Affordable Rental Housing Target Schemes following development of implementation arrangements.

FIGURE 10: WESTERN CITY DISTRICT FUTURE HOUSING SUPPLY



Source: WCDP, 2018, p. 43

Future Transport 2056 (2018)

Transport for NSW has released the Future Transport Strategy 2056 to achieve a 40-year vision for the NSW transport system.

The vision is built on six outcomes:

1. Customer focus
2. Successful places
3. A strong economy
4. Safety and performance
5. Accessible services
6. Sustainability

Transport planning and infrastructure investment is focused around the GSC's three cities concept where people can access jobs, education and services within 30 minutes by public or active transport, as contained in the GSRP.

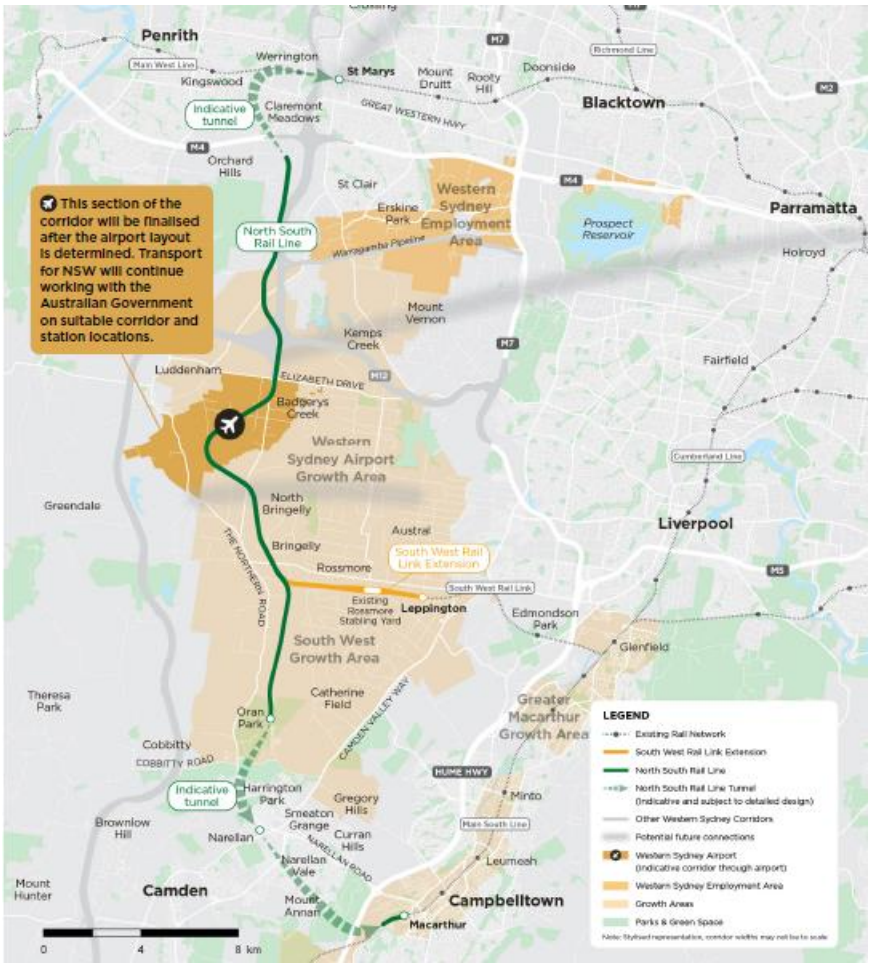
For the Western Parkland City, Transport for NSW is investigating a North-South Rail Line from St Marys through the Western Sydney Airport-Badgerys Creek Aerotropolis towards Oran Park, Narellan and Macarthur. Tunnel sections have been identified between Oran Park and the Main South Line near Macarthur to reduce impact on existing communities and preserve vegetation[2].

Greater east-west connections to the Central River City are also being investigated with a South West Rail Link Extension corridor from Leppington Station to North Bringelly that will connect to the North South Rail Line.

This transport infrastructure will have a significant impact on land use in Camden LGA by increasing accessibility to employment opportunities locally at the Western Sydney Aerotropolis but also beyond, via greater rail connections to other parts of Sydney. This will make living in the Camden LGA more attractive and put greater pressure on the availability of dwellings and services in the LGA. The investigation of the North South Rail Link and Outer Sydney Orbital by Transport for NSW are estimated to progress over the next 10 to 20 years and beyond. Given these extensive timeframes, it is expected housing development will occur in alignment.

[2] Transport for NSW, 2019, https://www.transport.nsw.gov.au/corridors/nsrl-swrl, date accessed: 04/02/2019

FIGURE 11: NORTH SOUTH RAIL LINE AND SOUTH WEST RAIL LINK EXTENSION CORRIDOR LOCATION



Source: Transport for NSW, https://www.transport.nsw.gov.au/corridors/nsrl-swrl, date accessed: 04/02/2019

TABLE 1: FUTURE TRANSPORT PROJECTS IN CLOSE PROXIMITY TO CAMDEN LGA

TfNSW Initiative Type	Project
Greater Sydney Committed Initiatives (0-10 years)	North-South Rail Link investigation: St Marys to Badgery's Creek Aerotropolis
	Western Sydney Infrastructure Plan including the new M12
Greater Sydney Initiatives for Investigation (0-10 years)	North-South Rail Link: Western Sydney Airport to Macarthur
	Leppington to Western Sydney Airport Rail Link
Greater Sydney Visionary Initiatives for Investigation (20+ years)	Outer Sydney Orbital: Western Sydney Airport to Hume Motorway

Source: Future Transport, 2018, pp. 102-109

Western Sydney Infrastructure Plan (2018)

The Roads & Maritime Services Western Sydney Infrastructure Plan is a jointly funded $3.6 billion road investment program for Western Sydney by the Australian and NSW governments.

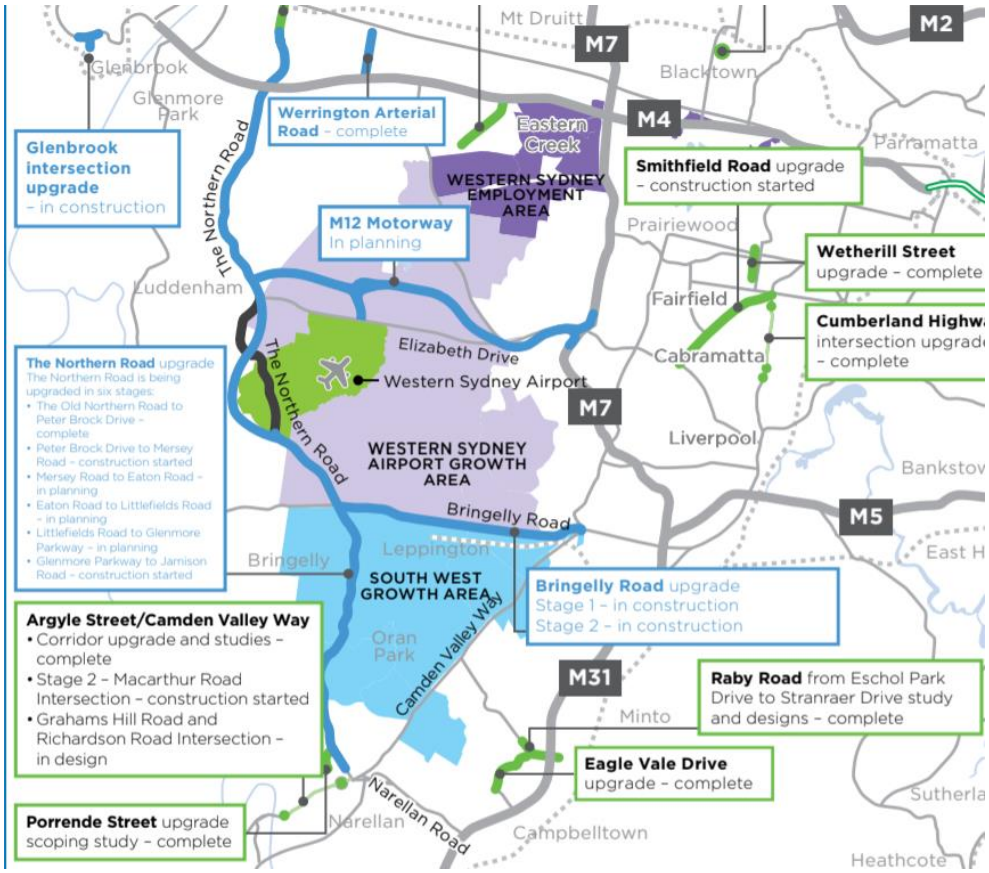
Major road upgrades are earmarked for the area due to:

- Projected population growth
- Supporting integrated transport solutions for Western Sydney
- Leveraging benefits from the Western Sydney Airport.

Major road projects within the Camden LGA include the Northern Road upgrade (in six stages) and Bringelly Road upgrade (stages one and two). Local road projects completed include Eagle Vale Drive upgrade; Raby Road study and design; Porrende Street scoping study; and the Argyle Street/Camden Valley Way corridor upgrade and studies.

Road improvements will increase accessibility to and from Camden LGA to employment opportunities and therefore, is likely to increase the attractiveness of living in Camden LGA and increase demand for housing availability in the LGA.

FIGURE 12: WESTERN SYDNEY INFRASTRUCTURE PLAN



Source: https://www.rms.nsw.gov.au/documents/projects/sydney-west/infrastructure-plan/western-sydney-infrastructure-plan-map.pdf, date accessed: 04/02/2019

Western Sydney City Deal (2018)

The Western Sydney City Deal is a partnership agreement between three tiers of government, including Camden Council, to deliver an agreed set of commitments for Western Sydney, therefore supporting the development of opportunities in education, business and employment for the area.

Key commitments include improving the connectivity of the Western Parkland City through delivery of the North South Rail Link from St Marys, through the Western Sydney Airport and Aerotropolis, via Camden, to Macarthur; the creation of 200,000 new jobs in a range of industries with development of the Western Sydney Airport and Aerotropolis at Badgerys Creek; an innovative approach to the planning for and delivery of housing that balances growth and maintenance of local character with the formal establishment of the Western Parkland City Planning Partnership between the NSW Government and local councils.

A $30 million housing package will be created to support a planning system that delivers new housing, improves housing affordability, achieves high quality, built form and design standards and reduces administrative red tape.

The Western Sydney City Deal will help progress the development of dwelling, employment and local services in the Camden LGA, increasing the attractiveness and accessibility of the area.

Statutory controls

There are several statutory planning instruments which control development in the Camden LGA but for which the NSW Government and NSW Minister for Planning are the responsible authority. These instruments contain indicative layouts and design standards for development precincts within the South-West Growth Area. They include:

- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- Camden Council Growth Centre Precincts Development Control Plan
- Oran Park Development Control Plan
- Turner Road Precinct Development Control Plan

The contents of these plans and indicative layouts of land-release development areas are discussed in Appendix A.

Development outcomes in land release precincts are also heavily influenced by the contents of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (the Codes SEPP). Complying development codes provide an alternative development pathway to a development application for detached dwellings. Approval for development of these dwellings is not subject to planning assessment, and the standards in the Codes SEPP are often less strict than those in development control plans determined by councils. The Codes SEPP has been expanded to allow medium-density low-rise development to be approved as complying development, although these provisions do not yet apply to the Camden LGA.

2.2 Local policy

Camden Residential Strategy (2008)

The Camden Council Residential Strategy is to assist the preparation of residential development controls that aim to balance the provision of greater housing choice in the Local Government Area (LGA).

Issues identified that the Council faced included State Government directives, housing affordability, housing demographic change with an increase of older persons, continued population growth, reduced lot size, increased traffic congestion, pressure on infrastructure and a transition from an agricultural based economy to a service and retail based economy.

The proposed model for residential development change included directives to:

- Ensure housing stock meets the needs of residents
- Ensure a greater distribution of diverse housing
- Complete fine grain planning to ensure controls suit local context
- Improve local character
- Housing types could include rear loaded dwellings and studios over garages, terraces, apartment and granny flat development
- Potential renewal opportunities could include areas of lower quality housing stock, high amenity locations with open space and natural assets and places with high access to transport, retail and community facilities, and sites with dual frontages.

The Strategy aims to protect local qualities of the LGA as it transitions from a predominantly rural LGA to a more residential and urban area over the course of a thirty-year period.

Community Strategic Plan (2017)

The Camden Council Community Strategy Plan has an overarching vision that supports development of a sustainable Camden LGA by 2040.

The vision will be achieved through six directions that include:

1. Managing growth
2. Producing a healthy urban and natural environment
3. Supporting a prosperous economy
4. Developing effective and sustainable transport
5. Supporting an enriched and connected community
6. Providing strong local leadership.

In managing growth in the LGA, Council supports the retention of local character (rural setting, country town feel) that is balanced with housing growth. This is encapsulated in two key objectives:

1.1 Urban development is managed effectively that balances growth and development and environmental protection
1.2 Rural land is adequately administered (maintained and protected).

Ensuring a prosperous economy for the community acknowledges access to housing as a key factor.

Household size, density, diversity, affordability and the provision of supporting infrastructure are all identified as challenges for Council in relation to urban development for the LGA.

Future growth in housing in Camden LGA will have to ensure it meets the vision of the local community in protecting the environment and retaining local character.

Rural Lands Strategy (2017)

Due to increasing urban development impacts in Camden LGA, the Rural Lands Strategy 2017 seeks to guide decision making on land use planning for rural zoned land and land adjacent to this zone.

The Rural Lands Strategy 2017 applies to land in Camden LGA but excludes land in the South West Growth Area. This is with the exception of the action to investigate the potential introduction of appropriate zones within the South West Growth Area to provide a buffer between rural land use and urban development.

Development of land in the South West Growth Area will reduce the total rural land area to one third of Camden LGA.

Key planning principles include:

- Protect Camden's remaining rural lands
- Retain Camden's valued scenic and cultural landscapes which includes retaining important views into and out of Camden Town and Cobbitty Village.
- Provide certainty and avoid rural land fragmentation to ensure agricultural productivity through land use planning controls.
- Minimise and manage rural land use conflict to ensure there are sufficient buffers between incompatible land uses, where rural activity is poorly managed or where new residents are not accustomed to the types of rural activities conducted in the new location.
- Enhance Camden LGA's rural economy
- Minimise unplanned non-agricultural development, in particular discouraging urban development in the metropolitan rural area.
- Maximise opportunities for relocation of rural enterprises displaced by the South West Growth Area, given RU4 small lot primary production land will no longer exist in the LGA due to the Growth Area and RU1 primary production will be reduced significantly.

Actions in the Strategy relevant to housing include the following:

- Investigate the potential introduction of appropriate zones within the South West Growth Area to provide a rural-urban buffer.
- Retain existing 40-hectare minimum lot size for rural land to avoid further land ownership fragmentation.
- Prepare educational material for the community about farming impacts and conflict.
- Monitor the implementation of the criteria for planning proposals seeking rezoning of rural land (excluding the Growth Area).

Statutory controls

There are several statutory planning instruments which control development in the Camden LGA for which Camden Council are the responsible authority. These instruments contain indicative layouts and design standards for development precincts outside the South-West Growth Area. They include:

- Camden Local Environmental Plan 2010
- Camden Development Control Plan 2011

The contents of these plans and indicative layouts of land-release development areas are discussed in Appendix A.

2.3 Summary of findings

A number of significant transport infrastructure projects have the potential to increase accessibility to Western Sydney and the Camden LGA in the future, including development of the North South Rail Link, the South West Rail Link Extension from Leppington, the Western Sydney Airport and major road upgrades. Development of the Badgerys Creek Aerotropolis will also increase employment opportunities in the area. The Camden LGA, therefore, is likely to experience population, dwelling and employment growth due to its increased accessibility and attractiveness as a place to live and work.

Coupled with this growth, the Western City District Plan has identified that Camden LGA has a housing supply target of 11,800 dwellings for 0-5 years. Council must also prepare a Local Housing Strategy that delivers five year, 6-10 year and 20 year housing targets.

In developing a new housing strategy for the LGA, a review of local council strategic and statutory planning documents has identified a need to protect the valued character and qualities of Camden LGA; a need to ensure a diversity of housing types are planned for existing and new residents; and that new developments are planned in an orderly integrated and sustainable manner that is supported by requisite infrastructure and contributes to the social, environmental and economic livelihood of Camden LGA.

A large portion of the South West Growth Area falls within the Camden LGA; therefore a number of different statutory documents apply to different precincts in the LGA to guide development.

3. HOUSING PROFILE

This chapter provides the contextual basis for analysing housing in the LGA by examining data on housing supply, demand, typology and affordability.

3.1 Housing supply

Types of dwellings

In this report, dwellings are categorised into four categories defined by the Australian Bureau of Statistics and used in the census and other statistics. These categories are discussed below, and the number of dwellings of each type in the Camden LGA is shown in Table 2. Photos of different kinds of dwellings in the Camden LGA are shown in Figure 13.

Detached dwellings

Most dwellings in the Camden LGA are detached dwellings. These are separate houses which are generally located on their own lot of land. Multiple separate dwellings on a single lot of land would also be classified as detached dwellings, although this is much less common. This type of development is referred to as dwelling houses in statutory planning instruments.

Attached dwellings

Semi-detached or attached dwellings share at least one wall with another dwelling. This includes attached dual occupancies, terraced development and most villa development (referred to as multi-dwelling housing in statutory planning instruments). Attached dwelling development is often discussed as medium-density development as dwellings can be delivered on much smaller parcels of land than separate houses. Dwellings can be Torrens-titled, community-titled or strata titled, with the style of subdivision typically depending on how common walls are constructed and the amount of common property.

Apartments

Flats or apartments consist of multiple dwellings in a single building, typically with each dwelling having common horizontal and vertical walls with other dwellings. Apartments may be located in large developments or above shops, referred to as shop-top housing in statutory planning instruments, or in a building with only residential uses, referred to as residential flat buildings in statutory planning instruments. Apartments are currently very uncommon in the Camden LGA.

Other dwellings

Other dwellings include:

- Caravans,
- Cabins and houseboats,
- Improvised homes, tents or sleepers outside, and
- Houses or flats attached to a shop or office

FIGURE 13: EXAMPLES OF DIFFERENT KINDS OF DWELLINGS IN THE CAMDEN LGA

(a) Detached dwellings in a land release development

(b) Attached dual occupancies

(c) Terraced housing in a land release development

Diverse dwelling types in land-release developments

The classification of dwelling types is usually intended to provide an indication of dwelling size and structure as well as the density at which people live. Separate dwellings are generally the least dense, followed by attached dwellings and then apartments. Having a mix of dwelling types is cited in strategic planning as important to provide a mix of dwelling sizes and prices.

However, in land-release development areas such as Camden the usefulness of the strict categorisation of dwellings into separate houses, attached dwellings and apartments breaks down. In particular, due to the design of housing in land-release developments, this categorisation does not always provide a good indication of dwelling density.

Detached housing in the Camden LGA is provided in land-release developments on lots of a variety of sizes. This detached housing also has a variety of designs, some of which resembles attached housing more closely than it does separate houses on large lots with large landscaped setbacks. Some examples of such houses are shown in Figure 14. Detached houses delivered on smaller lots are more affordable than dwellings on larger lots and so compete for the market segment more typically served by attached dwellings.

While detached dwellings in Camden sometimes resemble townhouses in design, there are also townhouses which have been built recently that resemble more typical detached dwellings in size. These townhouses and dual occupancies may have four bedrooms and parking spaces for at least two cars. This style of dwelling responds to market preferences in the Camden LGA for larger dwellings and for multiple car spaces (reflecting the difficulty of travelling by public transport to a range of dispersed destinations). Such townhouses may be a lower-density form of housing than detached dwellings on very small lots, particularly when

the need for land to be devoted to rear lanes to provide vehicular access to townhouses is considered.

FIGURE 14: DETACHED DWELLINGS FILLING A SIMILAR MARKET SEGMENT TO ATTACHED DWELLINGS IN LAND-RELEASE AREAS

(a)

(b)

(c)

(A), (B) small detached dwellings in Elderslie and Gregory Hills, (C) two-storey detached dwellings which resemble attached dwellings in Spring Farm.

Existing stock

The number of dwellings in the Camden LGA has increased significantly over the last 20 years, with dwellings built between 1996 and 2016 outnumbering those that the LGA contained in 1996 (see Table 2 and Table 3). Of the dwellings built between 1996 and 2006 and between 2006 and 2016, nearly all were detached houses with a much smaller number of semi-detached or attached dwellings. While growth in semi-detached and attached dwelling outpaced that in detached houses, this was from a low base, and semi-detached and attached dwellings continue to form a minor part of the dwelling mix in the Camden LGA.

TABLE 2:NUMBER OF DWELLINGS IN CAMDEN LGA IN 1996, 2006 AND 2016 AND THE PROPORTION OF DWELLINGS OF EACH TYPE IN EACH YEAR

Year	Separate House	Semi-detached or attached	Flat or Apartment	Other	Total
1996	9,607	566	294	193	10,660
%	90	5	3	2	100
2006	15,826	597	299	129	16,851
%	94	4	2	1	100
2016	23,844	1,547	207	75	25,673
%	93	6	1	0	100

Source: ABS Census 1996, 2006, 2016

TABLE 3: CHANGE IN DWELLINGS IN CAMDEN LGA BETWEEN 1996-2016

Period		Separate House	Semi-detached or attached	Flat or Apartment	Other	Total
1996-2006	Change	6,219	31	5	-64	6,191
	% Change	65%	5%	2%	-33%	58%
2006-2016	Change	8,018	950	-92	-54	8,822
	% Change	51%	159%	-31%	-42%	52%
1996-2016	Change	14,237	981	-87	-118	15,013
	% Change	148%	173%	-30%	-61%	141%

Source: ABS Census 1996, 2006, 2016

The ABS Census recorded small decreases in the number of flats and apartments in the Camden LGA between 2006-2016. In those areas in the LGA in which these decreases occurred, there were unusually large increases in the number of attached dwellings. This suggests that no dwellings were removed but rather that dwellings which were previously counted as flats and apartments were reclassified as attached dwellings in later censuses.

Dwelling Type

The dominance of separate houses in the Camden LGA applies to each of the settlement areas (see Table 4). In every area the proportions of dwellings which are apartments or semi-detached are substantially lower than in either Greater Sydney or the Western City District, while the proportion of separate houses is much higher.

The Future Urban and New Urban North areas had the highest proportion of detached houses, followed closely by the established suburbs and then New Urban South. The

proportion of attached dwellings in New Urban South is substantially higher than in New Urban North (9% vs 2%). This is discussed in more detail in Section 8.1.

Nearly all housing in the New Urban areas was developed in the last 20 years, and the very high proportion of separate houses in these areas and in the Established Suburbs, composed of former release areas, reflects the dominance of detached housing in land release areas.

TABLE 4: PROPORTION OF DWELLINGS OF EACH TYPE IN CAMDEN AND GREATER SYDNEY

	% Separate Houses	% Semi-detached or attached	% Flat or apartment	% Other
Camden	85%	10%	4%	2%
Narellan	89%	11%	0%	0%
Established Suburbs	94%	5%	0%	0%
New Urban North	98%	2%	0%	0%
New Urban South	91%	9%	0%	0%
Future Urban	98%	1%	0%	1%
Rural Living	84%	13%	2%	0%
Camden LGA	92%	6%	1%	0%
Western City District	80%	11%	8%	1%
Greater Sydney	54%	14%	31%	1%

Source: ABS Census 2016

Note that due to the rounding of percentages in this table, some rows do not add to 100%

Social Housing

There are a small number of public housing dwellings in the Camden LGA. The 2016 Census recorded 344 dwellings rented from a state housing authority, 1.25% of the LGA's total dwelling stock. These dwellings are distributed in several suburbs and consist of only a small proportion of the total stock in any one suburb, as shown in Table 5. Public housing dwellings are located predominately in the LGA's centres and established suburbs, with very few dwellings elsewhere.

TABLE 5: SUBURBS WITH MORE THAN 20 DWELLINGS RENTED FROM A STATE HOUSING AUTHORITY, 2016

Suburb	Camden	Elderslie	Narellan	Mount Annan	Currans Hill	Grasmere
Number of public housing dwellings	79	70	45	44	41	23
% of total dwellings	5.7%	3.3%	3.3%	1.2%	2.3%	3.4%

Source: ABS Census 2016

In addition to public housing dwellings, the 2016 census recorded 55 dwellings rented from a housing co-operative, community or church group. Dwellings rented from a housing co-operative, community or church group are likely to be priced at an affordable rent. These constitute 0.2% of the dwellings in the LGA.

The number of public housing dwellings has increased by a small amount in Camden between 2006-2016. The number of dwellings rented from a housing co-operative, community or church group increased but remained very small in absolute numbers (see Table 6). While the number of dwellings rented from a public housing authority or a community or church group increased by 46 from 2006-2016, the high growth rate of other dwellings in the LGA meant that the proportion of all dwellings in the LGA in these categories decreased from 2006-2016 from 2.1% to 1.5%.

TABLE 6: CHANGE IN THE NUMBER OF PUBLIC HOUSING DWELLINGS AND DWELLINGS RENTED FROM A HOUSING CO-OPERATIVE, COMMUNITY OR CHURCH GROUP BETWEEN 2006-2016

Landlord type	Public Housing	Housing co-operative, community or church group	Total	% of LGA Dwellings
2006	316	38	354	2.1%
2011	328	60	388	2.0%
2016	344	56	400	1.5%
Change 2006-2016	28	18	46	-0.5%

Source: ABS Census 2006, 2011, 2016

Dwelling Size

The average dwelling in the Camden LGA is larger than the average dwelling in the Western City District or Greater Sydney, with an average of 3.7 bedrooms per dwelling in Camden compared to 3.3 in the Western City District and 3.0 in Greater Sydney (see Table 7). This reflects the preponderance of detached dwellings in Camden LGA, which have 3.8 bedrooms on average compared to 2.6 for attached dwellings and 2.0 for the LGA's small number of flats and apartments. The large average dwelling size in Camden also reflects the size of detached dwellings, with separate houses larger in every part of Camden LGA than in Greater Sydney, except for those in and around the centres of Camden and Narellan.

While the average attached dwelling in the Camden LGA is a similar size to the average attached dwelling in the Western City District or Greater Sydney, the size of these dwellings varies across the LGA. Attached dwellings are larger in the New Urban parts of the Camden LGA than in the other parts of the LGA or Greater Sydney. The number of attached dwellings in these areas has increased recently, as shown in Table 2.

The large size of attached dwellings in land release areas suggests they are being constructed as an alternative to detached housing which, as they are only slightly smaller, will serve similar market segments. This will increase the dwelling diversity in the LGA if the number of attached dwellings continues to increase but may leave a gap in the housing market for households seeking a smaller dwelling with one or two bedrooms. While there may be limited market depth for small dwellings in land-release developments currently, the demand for smaller dwellings is likely to be higher in the future as these areas become more established, the population ages and household circumstances change.

The largest dwelling sizes on average in the Camden LGA are found in the New Urban North and New Urban South areas as well as the established suburbs. As more dwellings are built in land release area in the future, the average size of dwellings across the LGA is likely to increase if current development patterns continue. High density development is proposed at Leppington and Oran Park Town Centre which could counteract this trend somewhat. However, due to the scale of development proposed in the Camden LGA these high-density areas will likely comprise a small portion of the total number of dwellings built in land-release areas.

TABLE 7: AVERAGE NUMBER OF BEDROOMS FOR DIFFERENT KINDS OF DWELLINGS IN CAMDEN LGA AND GREATER SYDNEY, 2016.

Cells coloured green represent lower average numbers of bedrooms, while cells coloured red represent higher than average numbers of bedrooms.

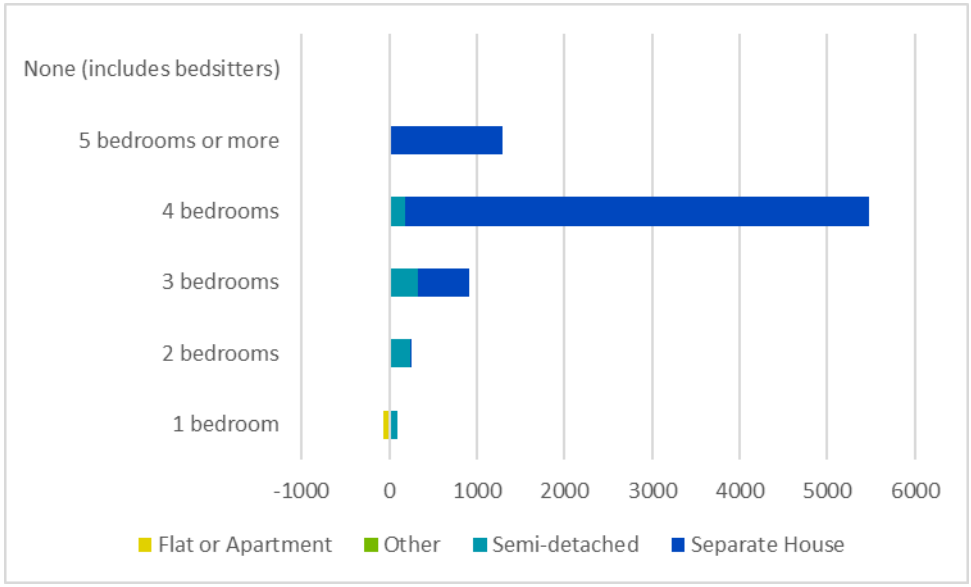
	Separate Houses	Semi-detached or attached	Flat or apartment	Other	Average
Camden	3.5	2.0	1.8	1.2	3.3
Established Suburbs	3.8	2.9			3.7
Future Urban	3.6	3.6		2.0	3.6
Narellan	3.5	2.6	3.0		3.4
New Urban North	4.0	3.4	2.0		4.0
New Urban South	3.8	3.2			3.8
Rural Living	4.0	1.9	2.2		3.7
Camden LGA	3.8	2.6	2.0	1.7	3.7
Western City District	3.5	2.7	2.0	2.3	3.3
Greater Sydney	3.6	2.8	1.9	2.2	3.0

Source: ABS Census 2016

Between 2006 and 2016 most dwellings constructed in the Camden LGA had four bedrooms, with five bedrooms the next most common size (see Figure 15). This trend was especially prevalent for detached dwellings, with 92% of the increase in detached dwellings between 2006-2016 coming from houses with four or five bedrooms. By contrast, newly built attached dwellings had a range of sizes from one bedroom to four bedrooms, with three bedrooms the most common size.

There were nearly no one bedroom dwellings constructed in the LGA between 2006-2016. The ABS census recorded a small decrease in one-bedroom apartments in the LGA between 2006-2016. As with the decrease in flats and apartments highlighted above, this is likely to be due to a reclassification of dwellings, or an error in classification in the 2006 census.

FIGURE 15: CHANGE IN THE NUMBER OF DWELLINGS BY NUMBER OF BEDROOMS CAMDEN LGA 2006-2016



Source: ABS Census 2006, 2016

Medium density dwelling approvals

The number of medium density dwellings approved in the Camden LGA between 2011-2018 is shown in Table 8. The number of approvals issued increased markedly between 2011-2018. This increase reflects the general improvement in the property market, and an increasing demand for medium density dwellings.

Most approvals for every type of dwelling were in land-release areas. This indicates that while demand for medium density dwellings increased between 2011-2018, most of this demand is not being met by redevelopment of existing housing in the established areas in Camden. Rather, an increasing amount of vacant lots in land-release areas are being developed for dual occupancies and attached dwellings, and some secondary dwellings are being built along with houses on vacant lots.

Between 2011-2018 there were 72 dwellings approved in the form of a dual occupancy or attached dwelling, combined with a secondary dwelling. This form of development would allow a buyer to purchase a medium density dwelling with a secondary dwelling on the same lot. Alternatively, the front and rear dwellings may be sold separately. This form of development increases dwelling diversity in the LGA and if not sold separately could be adapted over time to allow for changing living arrangements.

TABLE 8: MEDIUM DENSITY DWELLING APPROVALS AND THE PROPORTION IN LAND-RELEASE AREAS IN THE CAMDEN LGA, 2011-2018

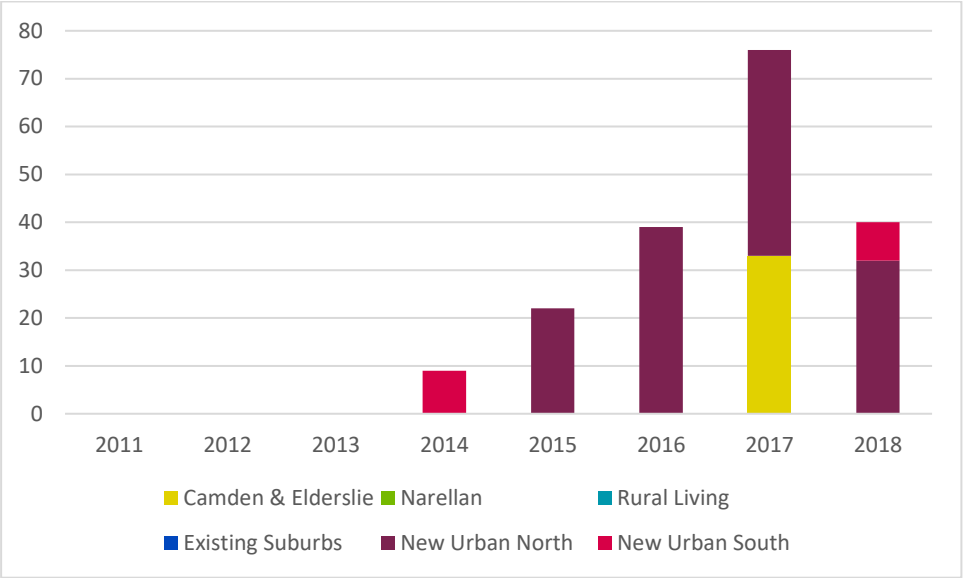
Dwelling Type		2011	2012	2013	2014	2015	2016	2017	2018	Total
Secondary dwelling	Number	1	12	24	24	60	84	83	105	393
	% Land-release	*100%*	*100%*	*96%*	*71%*	*67%*	*73%*	*88%*	*85%*	*80%*
Attached dwelling	Number	0	0	0	9	4	3	76	32	124
	% Land-release	-	-	-	*100%*	*100%*	*100%*	*57%*	*100%*	*73%*
Attached dwelling & secondary dwelling	Number	0	0	0	0	22	38	0	0	60
	% Land-release	-	-	-	-	*100%*	*100%*	-	-	*100%*
Dual occupancy	Number	3	4	4	11	40	107	192	175	536
	% Land-release	*33%*	*50%*	*75%*	*82%*	*80%*	*97%*	*95%*	*89%*	*91%*
Dual occupancy & secondary dwelling	Number	0	0	4	0	0	0	8	0	12
	% Land-release	-	-	*100%*	-	-	-	*100%*	-	*100%*
Manor house	Number	0	0	0	0	0	0	8	0	8
	% Land-release	-	-	-	-	-	-	*100%*	-	*100%*
Seniors housing	Number	0	0	0	0	19	0	100	0	119
	% Land-release	-	-	-	-	*0%*	-	*100%*	-	*84%*
Total	Number	4	16	32	44	145	232	467	312	1252
	% Land-release	*50%*	*88%*	*94%*	*80%*	*68%*	*89%*	*89%*	*88%*	*86%*

Source: SGS 2019, DA data supplied by Camden Council

Attached dwellings

The number and location of attached dwellings approved in the Camden LGA between 2011-2018 is shown in Figure 16. There are only a few development applications of this type approved per year, with all but one in the New Urban North or New Urban South area. Nonetheless, the number of these dwellings approved has increased markedly over the time period.

FIGURE 16: NUMBER OF ATTACHED DWELLINGS APPROVED IN THE CAMDEN LGA, 2011-2018



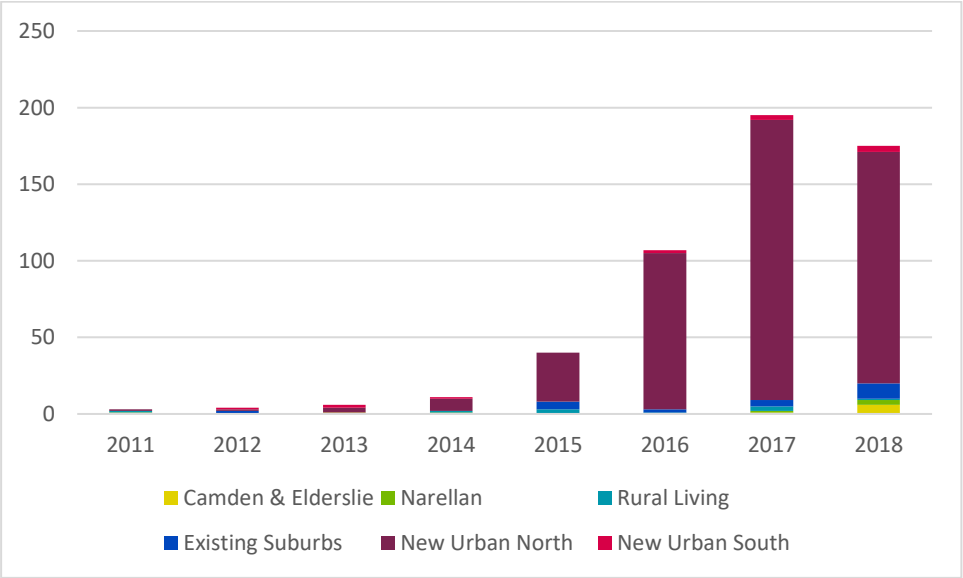
Source: SGS 2019, DA data supplied by Camden Council

Dual Occupancies

The number and location of dual occupancies approved in the Camden LGA between 2011-2018 is shown in Figure 17. There were very few approvals for this kind of dwelling between 2011-2014, followed by a substantial increase to 195 in 2017 and then a slight decrease to 175 in 2018.

Some approvals were for infill development in established areas, with 10 approvals for the Existing Suburbs settlement area and 6 for Camden & Elderslie in 2018. However, the majority of approvals were for the New Urban South (4%) and New Urban North (89%) areas and only 80 dual occupancy dwellings were approved in the established parts of the Camden LGA over the time period. At this rate, infill development of dual occupancies will make little difference to overall dwelling diversity in the Camden LGA over the next 20 years. Additionally, there are usually some dwelling approvals which do not proceed to construction.

FIGURE 17: NUMBER OF DUAL OCCUPANCIES APPROVED IN THE CAMDEN LGA, 2011-2018



Source: SGS 2019, DA data supplied by Camden Council

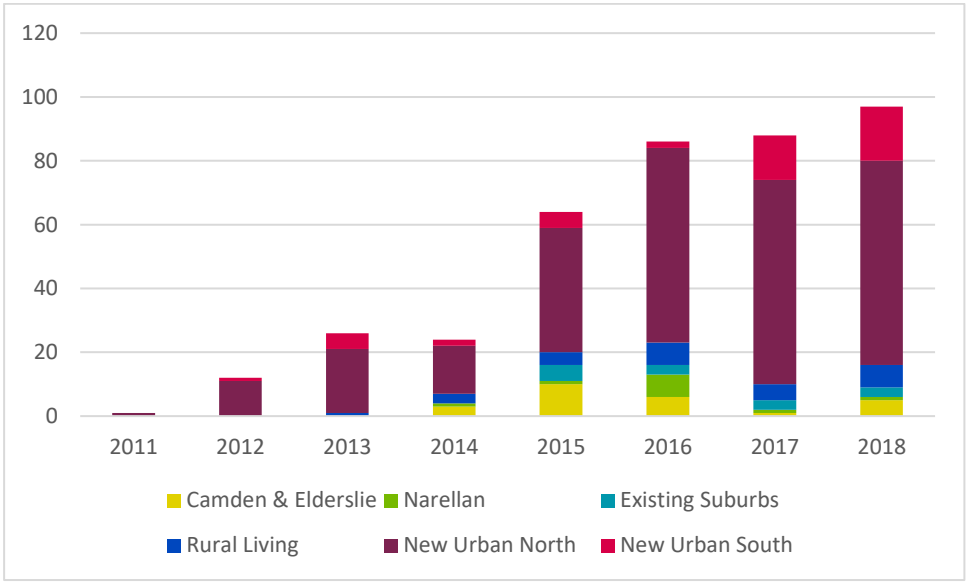
Secondary Dwellings

The number and location of secondary dwellings approved in the Camden LGA between 2011-2018 is shown in Figure 18. The number of dwellings approved, increased continuously throughout this time period from approximately 20 per year in 2012-2014 to 97 in 2018.

Infill development of secondary dwellings could occur within the private open space on an existing lot, while infill construction of dual occupancies and attached dwellings would require complete redevelopment of the lot. This is reflected in the greater diversity of settlement areas in which these dwellings were proposed than those for attached dwellings or dual occupancies. However, most approvals were in the New Urban North (69%) or New Urban South (12%) areas.

Between 2011-2018, 77 secondary dwellings were approved outside of the New Urban North and New Urban South Areas. As some of these approvals are likely to not be progressed to construction, this represents proposed development of secondary dwellings on a relatively low proportion of the lots in the Camden LGA containing separate houses.

FIGURE 18: NUMBER OF SECONDARY DWELLINGS APPROVED IN THE CAMDEN LGA, 2011-2018



Source: SGS 2019, DA data supplied by Camden Council

3.2 Factors driving housing demand

The rapid population growth in the Camden LGA is caused by continuing new land release development. As shown in Section 3.1, land release development to date has been dominated by separate houses with high numbers of bedrooms, with a relatively low level of dwelling diversity when compared to Greater Sydney and the Western City District.

There are several demographic factors which drive the demand for large detached houses in land-release areas and which will inform likely housing demand and the need for housing diversity in the future:

- Household type and composition, with couples with a family significantly over-represented within new suburbs in the LGA
- Housing occupancy and suitability, with a relatively large number of people per dwelling in the LGA, particularly the new urban areas
- Housing tenure, with a high proportion of dwellings owned with a mortgage and a low proportion owned outright or rented, particularly in new urban areas
- Household vacancy rates, which are lower than the Greater Sydney average.

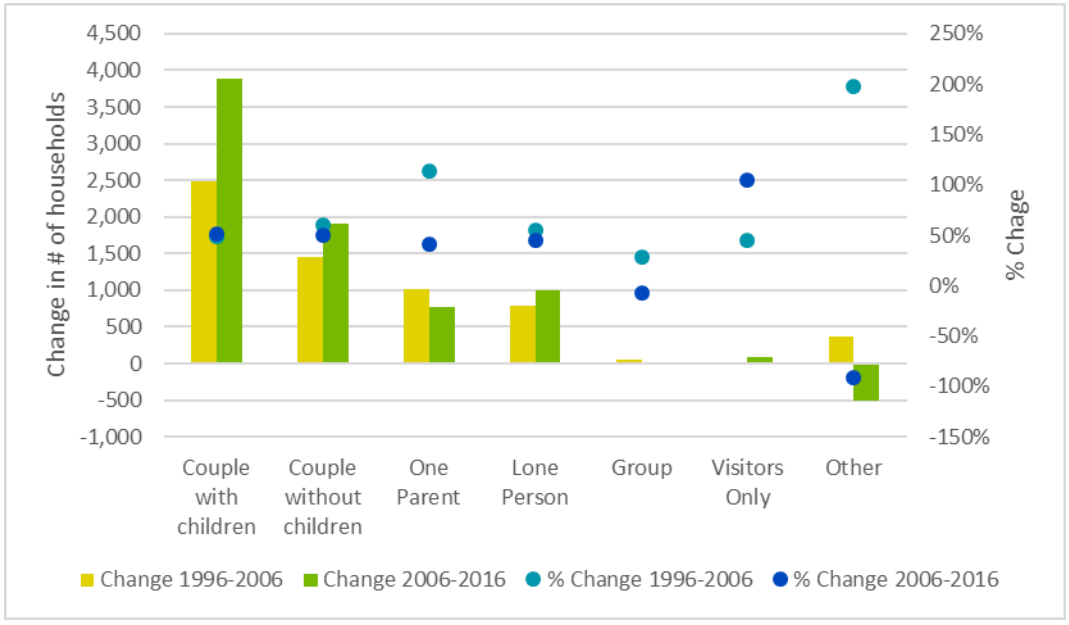
These factors will be explored in this section, but together provide an illustration of demand for new housing in Camden LGA being mainly driven by a typical land release housing demographic composed primarily of younger families and couples living in large houses owned with a mortgage. However, while other household types and tenures are under-represented, they do occur throughout the Camden LGA and the lack of housing diversity may not be catering to them, particularly if household circumstances change and people need to move to a smaller dwelling. While household occupancy in the Camden LGA is high compared to Greater Sydney, most households live in dwellings with more bedrooms than would be required.

Household Types

Between 1996 and 2006, and 2006 and 2016, couples with children have increased more than any other household type in the Camden LGA (see Figure 19). This is consistent with the dominance of this household type in the newly built parts of the LGA shown in Figure 20. There were smaller increases in couples without children, lone persons and one parent households.

Some of the increase in one parent and lone parent households is likely to have come from changing circumstances of existing residents of the LGA. However, migration data discussed below shows that some households of this type also moved to Camden LGA from other LGAs between 2006-2016. The relative affordability of the Camden LGA compared to LGAs closer to the Sydney CBD may be a factor in this migration.

FIGURE 19: CHANGE IN HOUSEHOLD TYPE IN THE CAMDEN LGA BETWEEN 1996-2006 AND 2006-2016



Source: ABS Census 1996, 2006, 2016

Couple families with children are the most common household type across the Camden LGA and are more prevalent than in Greater Sydney (see Figure 20). The proportion of these households is particularly high in the New Urban North Area and in the established suburbs, where they comprise more than half of all households (54% and 52% respectively). The high proportion of couple with children households is consistent with the traditional image of people moving to land-release areas to buy a large house in which to raise a family.

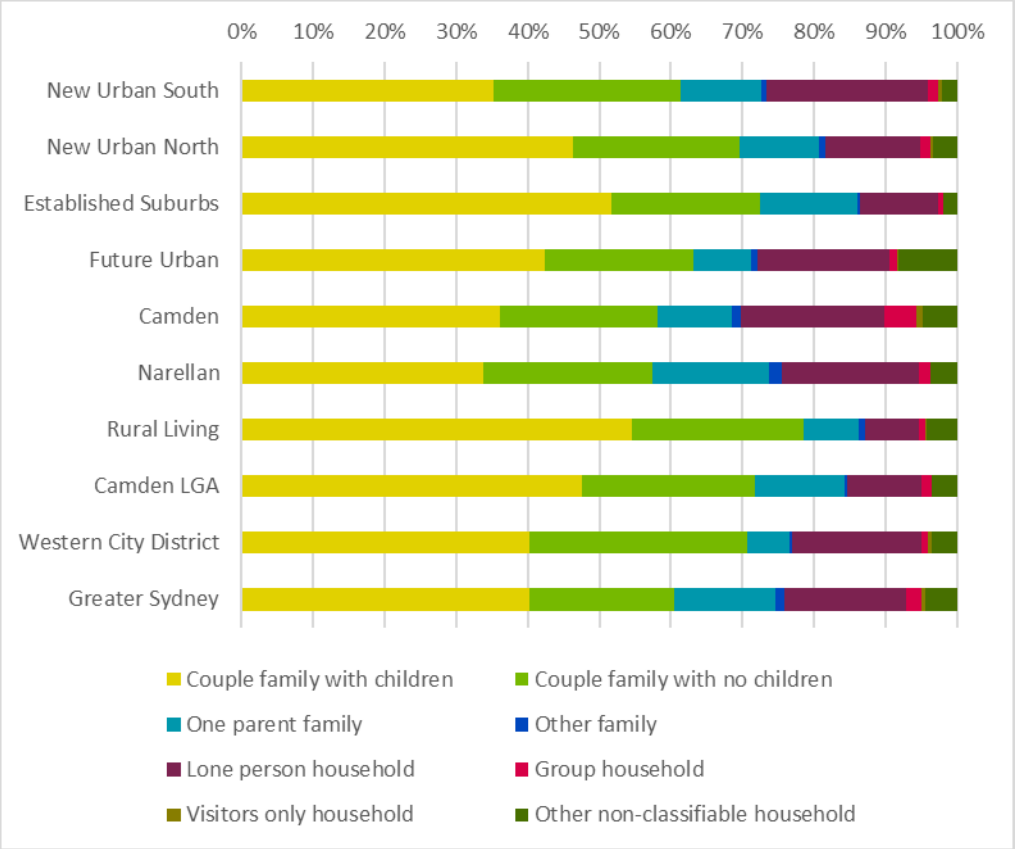
Couples with no children are the next most common household type in both Camden LGA and in Greater Sydney. In the more recently developed parts of Camden LGA, the age profile of couples with no children is much younger than the Greater Sydney average (for example 58%

of people in couple with no children households in Oran Park are under 40 compared to 34% in Greater Sydney). It is likely that many of these households will have children in the future.

One parent households and lone person households make up smaller proportions of the Camden LGA. Lone person households are significantly underrepresented in newly developed areas such as New Urban North, in which they make up 7.4% of households. This is relatively low, which is likely to be related to both lower demand for housing in these areas from lone person households and to the lack of housing diversity in land-release developments, which does not cater to lone-person households. The presence of some of these households in land-release areas indicates a potential market for smaller dwelling types to cater to downsizers and other lone person households.

Group households are also under-represented across Camden LGA in comparison with Greater Sydney, likely reflecting a low number of university students in share-houses due to the lack of proximity to a university.

FIGURE 20: PROPORTION OF HOUSEHOLD TYPES WITHIN CAMDEN LGA AND GREATER SYDNEY IN 2016



Source: ABS Census 2016

Migration

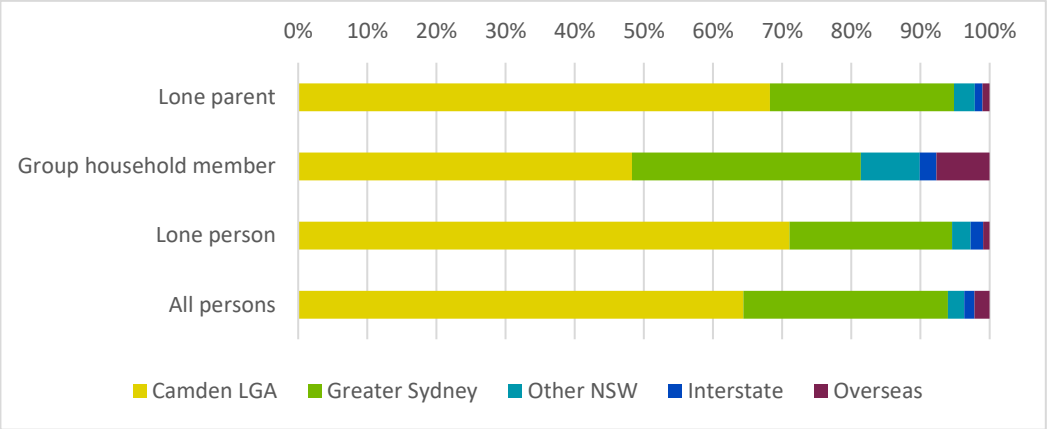
Compared with Greater Sydney, a greater proportion of households in the Camden LGA changed address between 2011-2016 (54% in the Camden LGA vs 48% in Greater Sydney). The higher mobility in Camden in part reflects its rapid growth rate, with the number of dwellings in the LGA increasing by 35% between 2011-2016.

The place of residence in 2011 for certain household types who lived in the Camden LGA in 2016, is shown in Figure 21. It is not possible to determine place of residence in 2011 for each of the household types discussed above, but Figure 21 does show that the migration profile for lone parent and lone person households are not substantially different from the overall migration profile for the LGA. For lone parents, 68% of people who lived in Camden in 2016 had also lived in Camden in 2011, with between 27% moving from elsewhere in Greater

Sydney, 3% from elsewhere in NSW and 1% each moving from interstate and overseas. For all residents of the Camden LGA, most (64%) lived in the LGA in 2011, with 30% moving from elsewhere in Greater Sydney, only 2% each from elsewhere in NSW and overseas and 1% from interstate.

The migration profiles are slightly different for group household members, who are much more likely to move from overseas (5% of people) or from parts of NSW outside Greater Sydney (6%) and much less likely to have lived in Camden in 2011 (33%).

FIGURE 21: PLACE OF RESIDENCE IN 2011 FOR PEOPLE LIVING IN THE CAMDEN LGA IN 2016



Source: ABS Census 2016

The LGAs in which the most people who lived in Camden in 2016 had lived in in 2011 are shown in Table 9. Besides Camden, the most common places of residence in 2011 adjoin the Camden LGA. LGAs which are not in the top four but which also have high numbers of people moving to Camden between 2011-2016 include Fairfield, Canterbury-Bankstown and Penrith. This indicates that the most common previous places of residence for people moving to Camden are nearby, and that otherwise people are moving to Camden from the parts of South-West Sydney which are closer to the Sydney CBD. This profile does not differ dramatically for lone parents, lone persons or group household members.

TABLE 9: THE FOUR MOST COMMON LGAS OF RESIDENCE IN 2011 FOR PEOPLE LIVING IN THE CAMDEN LGA IN 2016

Household Type	Most common		2nd most common		3rd most common		4th most common	
	LGA	Number of people	LGA	Number of people	LGA	Number of people	LGA	Number of people
Lone Parents	Camden	2018	Campbell-town	238	Liverpool	201	Wollondilly	128
Lone persons	Camden	2280	Campbell-town	183	Liverpool	137	Wollondilly	92
Group household members	Camden	363	Campbell-town	79	Wollondilly	40	Liverpool	25
All persons	Camden	43,543	Campbell-town	5,857	Liverpool	4,857	Wollondilly	1,894

Source: ABS Census 2016

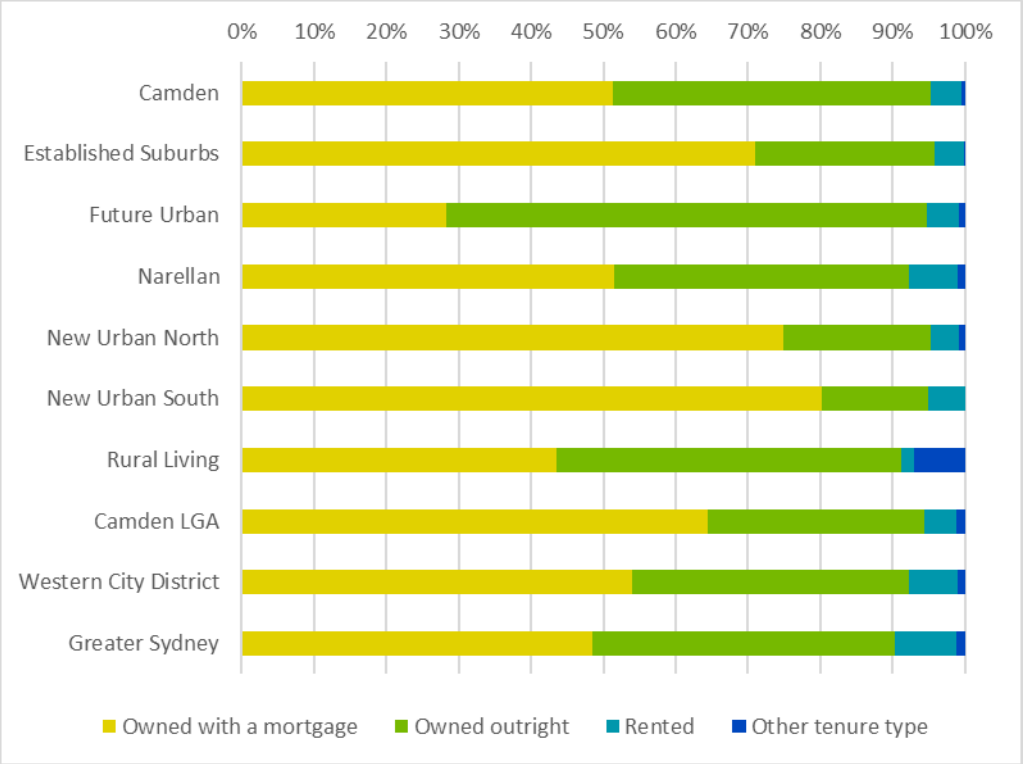
Housing tenure

A significantly greater proportion of dwellings are owned with a mortgage in Camden LGA than in Greater Sydney (64% vs 49%), while a lower proportion of dwellings are owned

outright or rented (30% vs 42% and 4% vs 8% respectively). This trend is particularly pronounced in New Urban North and South settlement areas which were developed recently, in which the proportion of dwellings owned with a mortgage is almost twice the Greater Sydney average (75% in the New Urban North and 80% in the New Urban South). The level of home ownership is lowest in the rural parts of the LGA, with older suburban parts of the Council falling between these areas.

This pattern of housing tenure is consistent with the land release housing development model in which land, or house and land packages are sold to prospective home owners, who purchase the homes with a mortgage. As the rate of land release development in the LGA is very high, this leads to a high proportion of homes owned with a mortgage. Older parts of the Council area have a lower proportion of mortgaged homes and a higher proportion of outright ownership.

FIGURE 22: HOUSEHOLD TENURE IN CAMDEN LGA AND GREATER SYDNEY IN 2016



Source: ABS Census 2016

Housing occupancy and suitability

Household occupancy in the Camden LGA is higher than the greater Sydney average, in part due to the high proportion of detached houses, which generally house more people than attached dwellings or apartments. The average number of people per detached dwelling in the Camden LGA is similar to that in the Western City District and Greater Sydney, although this occupancy is higher in the New Urban North, Future Urban and Established Suburbs areas (see Table 10). Occupancy of detached dwellings is lowest in the centres of Camden and Narellan and the surrounds.

Overall occupancy changed only minimally in the Camden LGA between 2006 and 2016, however there were larger changes for some dwelling types in some settlement areas. Occupancy in detached dwellings increased slightly between 2006-2016 in the LGA but decreased in the New Urban South area.

Average occupancy in attached dwellings across the LGA increased by 0.35 between 2006 and 2016, suggesting that some larger households are choosing to live in attached dwellings instead of detached houses. Attached dwellings may provide a more affordable housing option for these households than detached dwellings. This trend is present, although less pronounced, in Greater Sydney, but not in the Western City District.

Occupancy of attached dwellings is particularly high in the New Urban South area and also increased significantly in the Established Suburbs (an increase of 0.33) and Narellan, although there were few attached dwellings in Narellan in 2006.

TABLE 10: AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD IN EACH DWELLING TYPE IN CAMDEN LGA, THE WESTERN CITY DISTRICT AND GREATER SYDNEY IN 2006 AND 2016.

Higher occupancy rates are coloured red while lower rates are coloured green.

	Separate House		Attached Dwelling		Flat or Apartment	
	2006	2016	2006	2016	2006	2016
Camden	2.75	2.80 (+0.05)	1.43	1.38 (-0.05)	1.29	1.33 (0.04)
Narellan	2.85	2.84 (-0.01)	1.00	1.73 (+0.73)		
Established Suburbs	3.22	3.24 (+0.02)	1.98	2.31 (+0.33)		
Future Urban	3.31	3.28 (-0.03)		1.00		
New Urban North	3.37	3.33 (-0.04)		2.15		1.23
New Urban South	3.21	3.07 (-0.14)		2.64		
Rural Living	3.30	3.22 (-0.08)	1.34	1.30 (-0.04)		1.23
Camden LGA	3.12	3.18 (+0.06)	1.69	2.04 (+0.35)	1.33	1.37 (+0.04)
Western City District	3.11	3.17 (+0.06)	2.50	2.49 (-0.01)	2.04	2.17 (+0.13)
Greater Sydney	3.07	3.19 (+0.12)	2.43	2.65 (+0.22)	1.88	2.14 (+0.28)

Source: ABS Census 2006, 2016

While average housing occupancy is greater in the Camden LGA than in Greater Sydney, there are still some small households in each part of the LGA, as shown in Figure 20. In addition, while the average number of people per household in the New Urban North Area is 3.33, this is lower than the number of bedrooms delivered in new houses, which is mostly four or five (see Section 3.1). For this reason, there are many dwellings in which there are more bedrooms than are required to house the members of the household.

Housing suitability is a measure of the appropriateness of the number of bedrooms in a dwelling for its occupants and is shown for the Camden LGA in Figure 23. Suitability is calculated by the ABS based upon household composition and dwellings size based upon the following assumptions[3]:

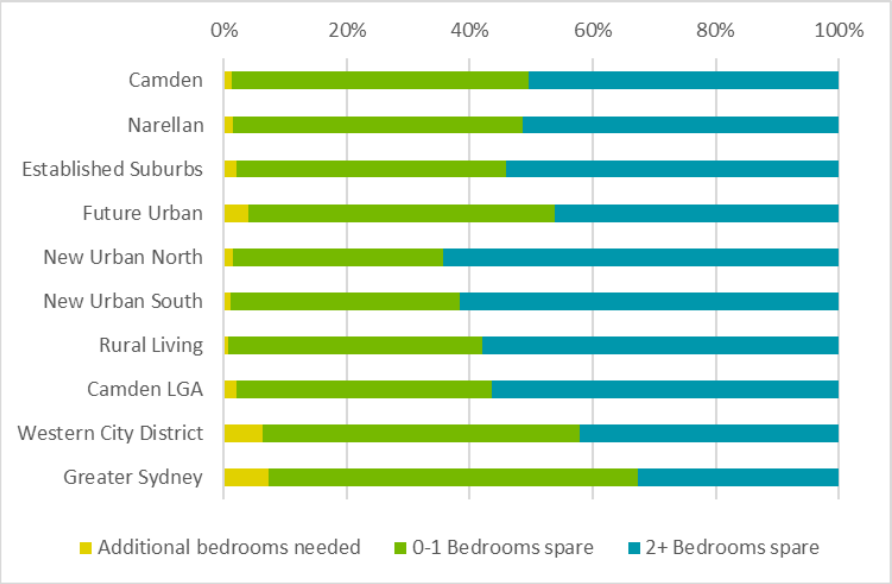
- There should be no more than two persons per bedroom
- Children less than five years of age of different sexes may share a bedroom
- Children less than 18 years of age and of the same sex may share a bedroom

[3] ABS 2017, *2900.0 – Census of Population and Housing: Understanding the Census and Census Data, Australia, 2016*

- There should be one bedroom for every household member 18 years and over and per couple
- A lone person household may occupy a bed-sitter or studio dwelling

In the Camden LGA there are almost no dwellings in which additional bedrooms would be required to house the occupants, while in comparison 7% of dwellings in Greater Sydney meet this criterion. Most dwellings in Camden LGA have an additional two or more bedrooms than required, while 59.9% of dwellings Greater Sydney have zero- or one-bedrooms spare. The proportion of dwellings with two or more spare bedrooms is largest in the new urban parts of the Camden LGA despite the high occupancy rate in these places, reflecting that these areas have the largest average house size (see Figure 23).

FIGURE 23: NUMBER OF BEDROOMS SPARE OR NEEDED IN CAMDEN LGA AND IN GREATER SYDNEY IN 2016



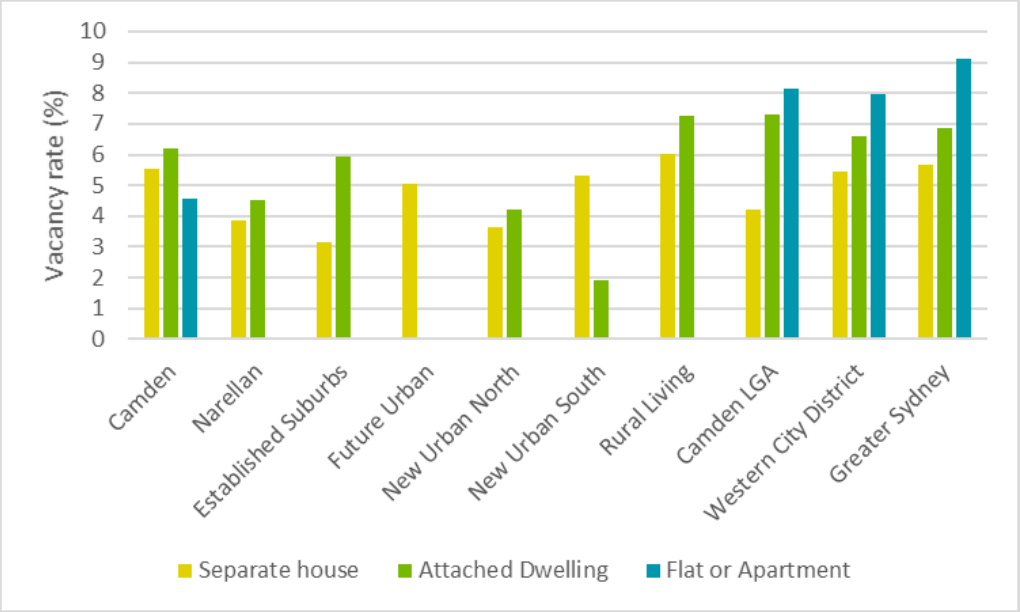
Source: ABS Census 2016

Vacancy rates

Vacancy rates for dwellings in Camden LGA are on average lower than those in Greater Sydney (see Figure 24). Most dwellings in the LGA are separate houses, which have a vacancy rate on average of 5.4% compared to an average of 7.3% for separate houses in Greater Sydney. This is consistent with the demographic profile of the LGA, which contains a high proportion of families, who are typically less mobile than other household types. The new urban areas have particularly low vacancy rates and high proportions of family households with the highest proportion of houses owned with mortgages.

Vacancy rates for attached dwellings in Camden LGA are similar to those in other parts of Greater Sydney but are considerably lower in the New Urban South Area. Vacancy rates are required to calculate dwelling demand given a forecast increase in household numbers. As vacancy rates are lower in the LGA than in Greater Sydney, slightly less dwellings will need to be built to house a given number of households than the average across Greater Sydney.

FIGURE 24: VACANCY RATES FOR DWELLINGS IN CAMDEN LGA AND GREATER SYDNEY IN 2016



Source: ABS Census 2016

4. HOUSING MARKET

This chapter provides a discussion of how dwelling prices and the demand for different housing types across the LGA could influence future housing needs.

4.1 Dwelling prices

Median prices in the Camden LGA for both strata and non-strata dwellings are lower than median prices for Greater Sydney, as shown in Table 11. Median non-strata dwelling prices in the Camden LGA are greater than those in the Western City District, while strata prices are greater. The difference is in part likely due to strata dwellings in Camden being predominately townhouses and similar medium-density dwelling types, while the median strata price in the Western City District is more influenced by apartment prices.

TABLE 11: MEDIAN DWELLING PRICES IN 2018 IN THE CAMDEN LGA, WESTERN CITY DISTRICT AND GREATER SYDNEY

	Camden LGA	Western City District	Greater Sydney*
Median non-strata dwelling price 2018 ($)	732,500	710,000	1,008,000
Median strata dwelling price 2018 ($)	578,500	490,000	830,000

Source:

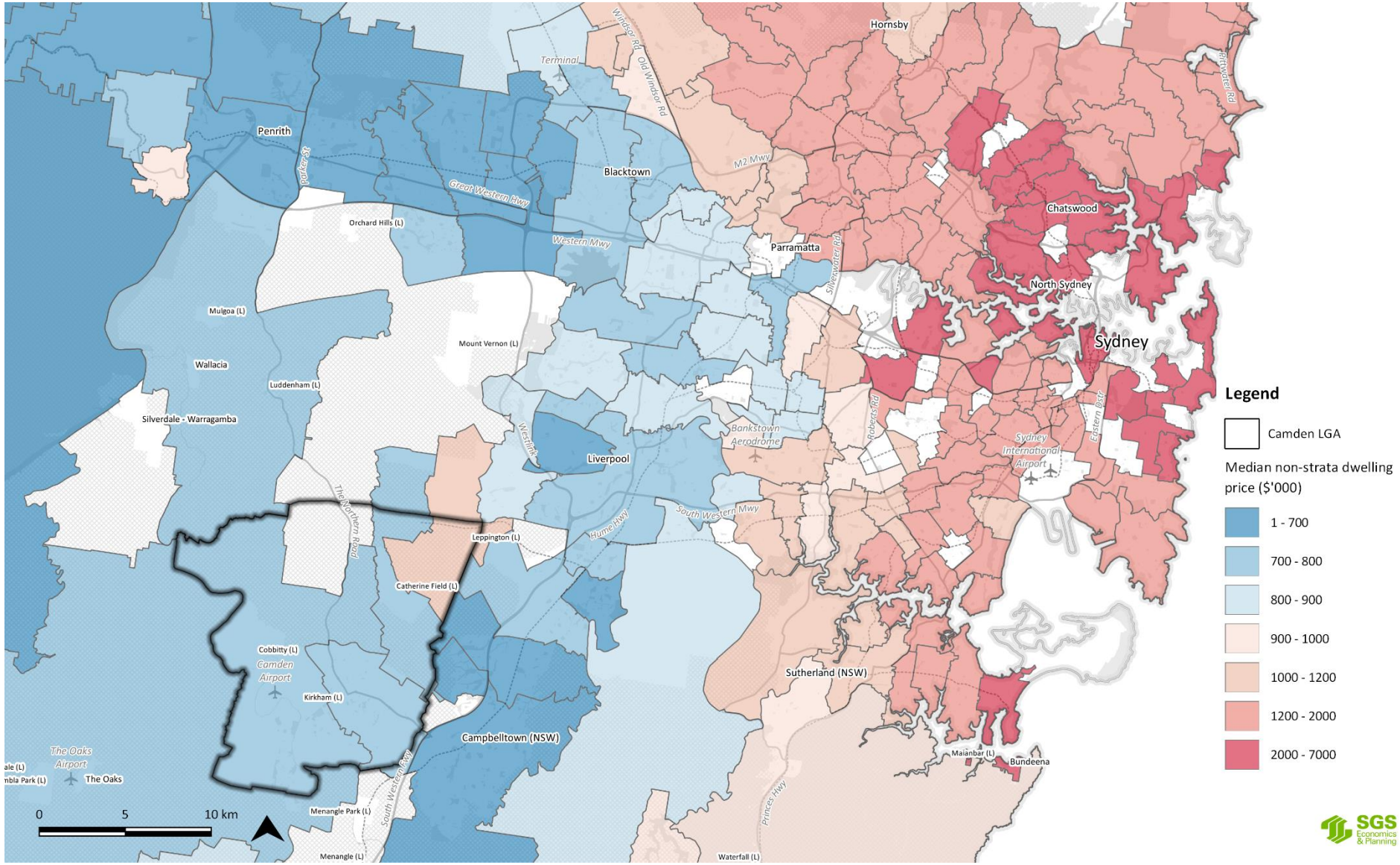
* Note median prices shown for Greater Sydney are for the September 2018 quarter, while prices for the Camden LGA and Western City District are for the whole year of 2018

The Camden LGA contains a range of types of dwellings which may serve different sub-markets. While new separate houses in land release areas and houses in the established parts of Camden are both part of the broader Sydney housing market, and so are likely to follow the same broad patterns, there are differences in the housing market in different areas. Dwelling prices in different settlement areas is discussed in more depth below.

Median separate house prices across Greater Sydney in the September Quarter in 2018 are shown in Figure 25. While average non-strata dwelling prices in the Camden LGA are lower than the average price across Greater Sydney, they are higher than those in parts of the surrounding LGAs. Dwelling prices are lower in most of the Penrith LGA and in parts of the Campbelltown and Liverpool LGAs (see Figure 25). This may be due in part to the prominent social housing populations and low socio-economic status in those areas, depressing dwelling prices.

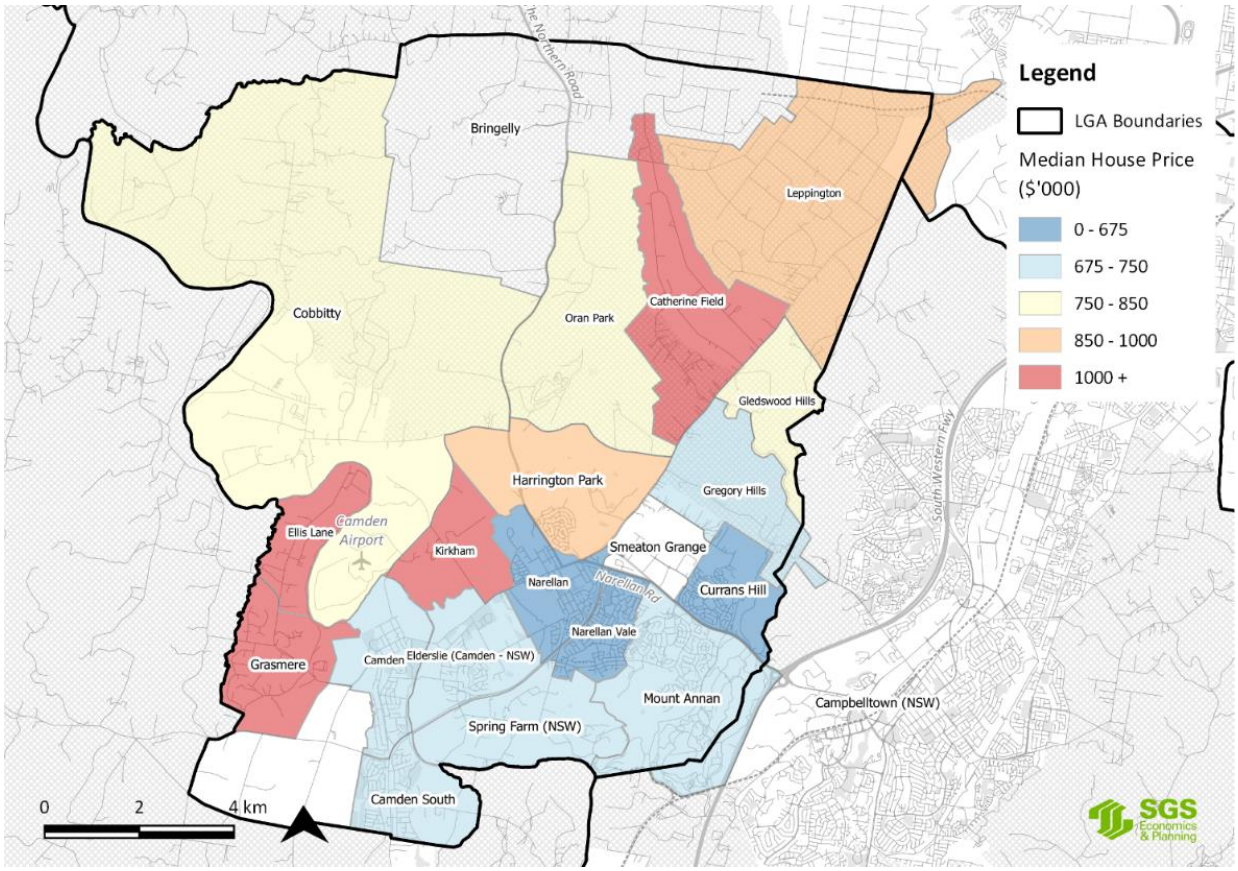
Dwelling prices in the Camden LGA are generally lower than those in the parts of Sydney closer to the Sydney CBD. This is consistent with the typical perception of the Camden LGA housing market that it consists predominately of new greenfield dwellings, the demand for which is driven by people moving from places closer to the CBD in search of lower house prices. House prices in the parts of Sydney closer to the CBD also increased more between 2013-2018 than those in the Camden LGA and surrounds.

FIGURE 25: MEDIAN PRICES FOR NON-STRATA DWELLINGS IN POSTCODES ACROSS GREATER SYDNEY IN THE SEPTEMBER 2018 QUARTER.



Source: NSW Department of Families and Community Services 2018, *Rent and Sales Report*

FIGURE 26: MEDIAN DWELLING PRICE IN EACH SUBURB IN CAMDEN LGA, CALCULATED ON A ROLLING 12 MONTH AVERAGE TO OCTOBER 2018



Land release land prices

The change in the price per square metre of vacant residential lots in Camden over time is shown in Figure 27. The price for vacant residential land in the Camden LGA has increased as dwelling prices have increased sharply in the rest of Sydney between 2013-2018. This rise has seen the median price per sqm in the Camden LGA more than double from $490 in 2013 to $1,055 in 2018. At the same time, the range of prices paid for sites has increased, reflecting in part increased diversity of the housing product being delivered in land-release precincts.

Prior to the rise from 2013 onwards, the price per unit area of vacant residential sites in Camden did not rise significantly between 2004-2013.

Partly in response to rises in the price of land, the average size of new residential allotments in Camden has been steadily decreasing. This decrease in shown in Figure 28, and is visible in both the decreasing median and top and bottom of the range of land sizes being delivered in Camden. However, while land prices per unit area were relatively stable between 2004-2013, site area has been decreasing since at least 2004 and possibly longer (comprehensive data before 2004 is

HOW TO READ BOX AND WHISKER PLOTS

The price data for vacant residential land in the Camden LGA in Figure 27 - Figure 29, and the prices for different kinds of dwellings in Figure 30, are shown in box and whisker plots.

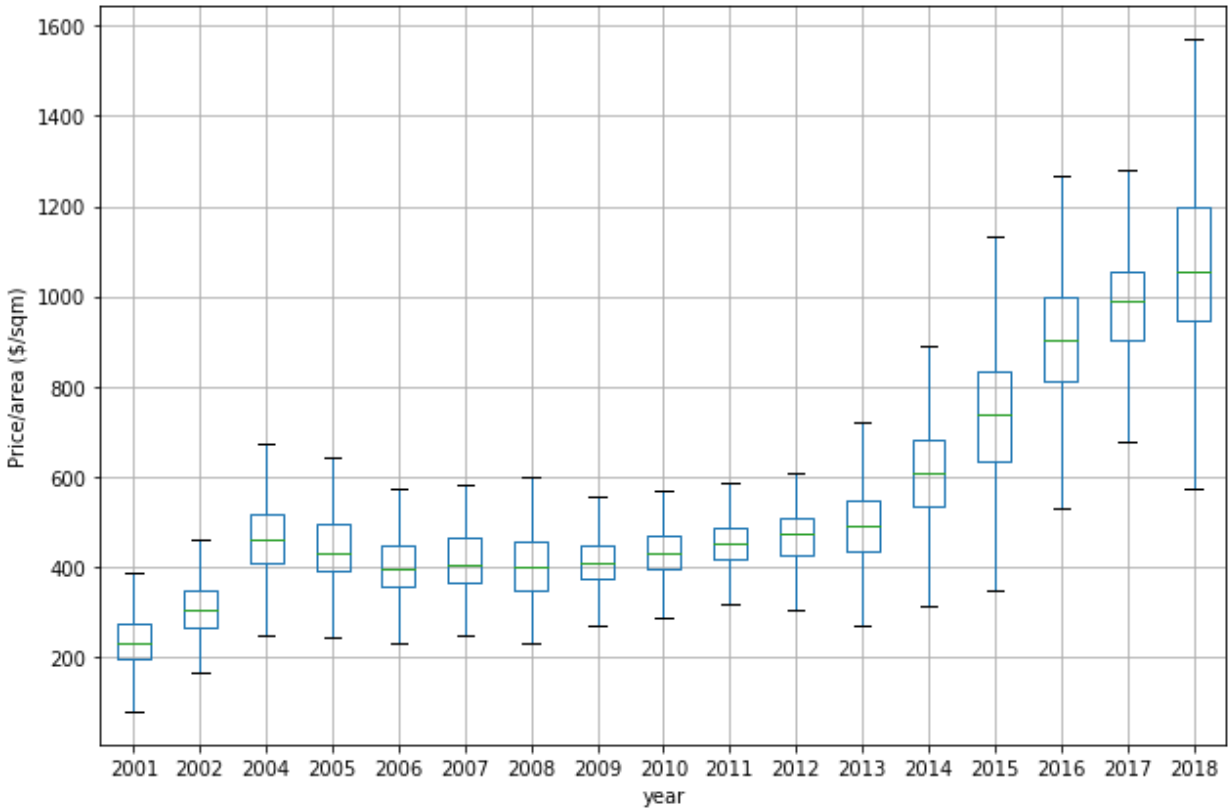
The line in the middle of each box shows the median value.

The box covers the area between the 25th and 75th percentiles. This is the area in which the middle half of vales lie.

The whiskers show the range in which data outside the middle 50% lies. The top and bottom of these whiskers show the most extreme values, excluding any distant outliers.

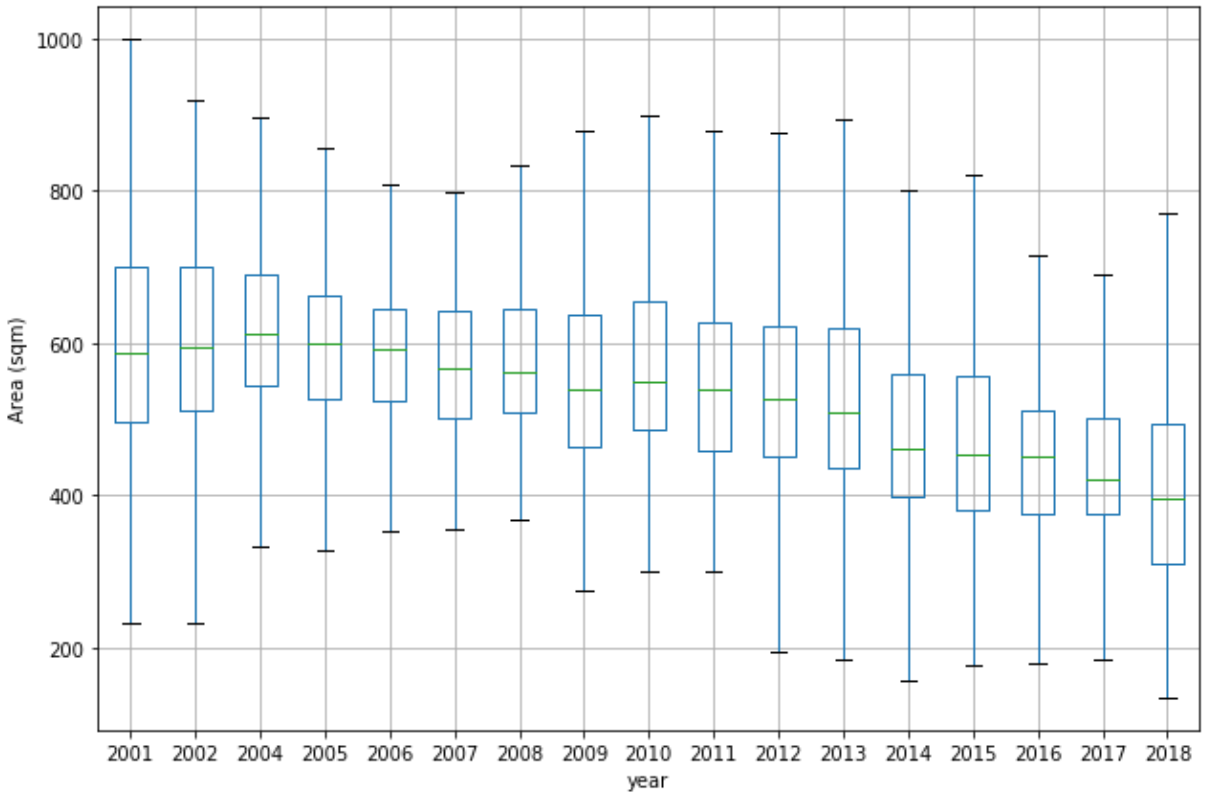
not available). The decrease in site area accelerated between 2013-2018 and some of this may be attributable to the increase in land price. However, as the start of this decline started before 2013, it cannot be attributed entirely to a demand for greater dwelling affordability.

FIGURE 27: LAND PRICE PER SQUARE METRE FOR VACANT RESIDENTIAL ALLOTMENTS IN THE CAMDEN LGA BETWEEN 2001-2018



Source: SGS 2018, Property NSW *Bulk Property Sales*

FIGURE 28: SITE AREA FOR VACANT RESIDENTIAL ALLOTMENTS SOLD IN THE CAMDEN LGA BETWEEN 2001-2018



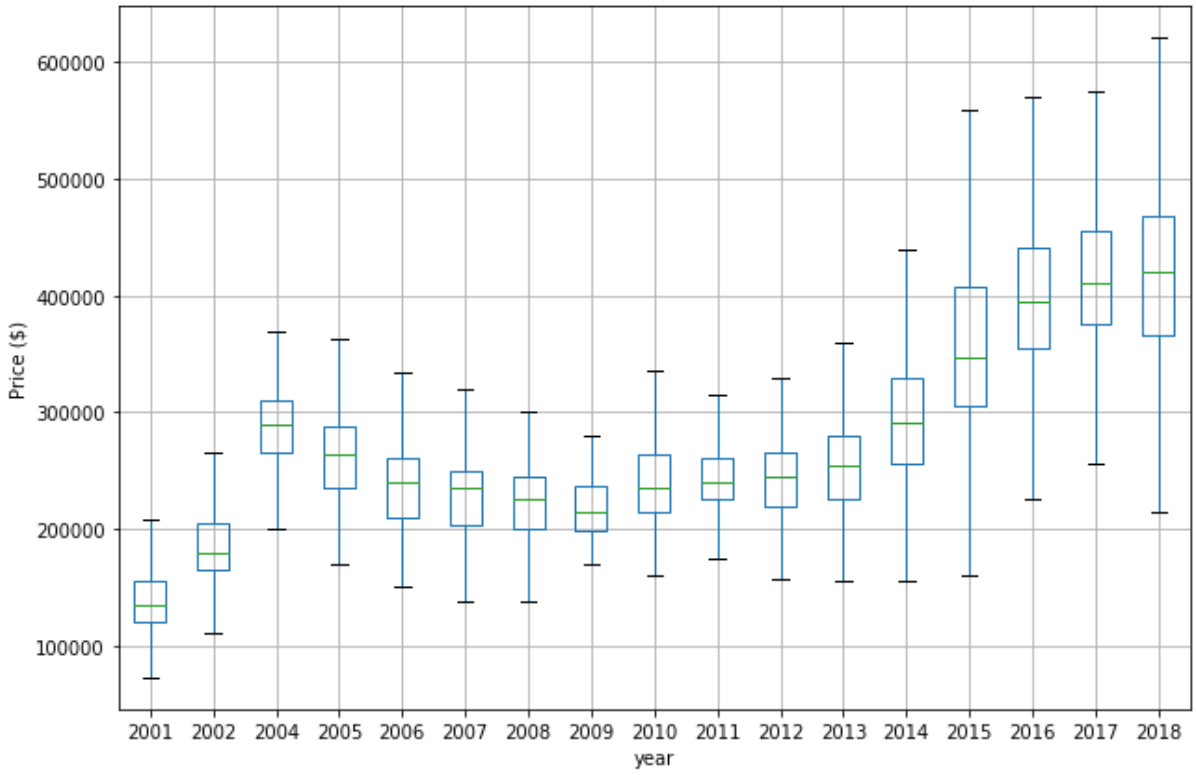
Source: SGS 2018, Property NSW *Bulk Property Sales*

Between 2004-2018, the median lot size in Camden has gone from around 600sqm to around 400sqm, with many sites now being delivered which are substantially smaller. While the delivery of some small sites illustrates a greater dwelling diversity in land release areas, the size of standard lots for detached dwellings has also decreased. This can be seen in the design of newer release areas across Sydney and Melbourne, which have relatively small lots occupied by large single storey houses. This has implications for the sustainability and urban design of these precincts.

The large reduction in the site area of new residential allotments which has occurred recently has not been great enough to offset the increase in land prices per square metre shown in Figure 27. This is shown in the price of vacant residential allotments, which is shown in Figure 29. This price essentially mirrors the price per square metre, with a peak in 2004 before a slight reduction in prices, a period of stability until around 2013 and then a rapid increase in prices, from a median of $255,000 in 2013 to a median of $425,000 in 2018.

While changes in prices for land around Camden have been close to mirroring movements in the price per sqm, these values diverge slightly between 2016-2018. During this period the price per sqm continued to increase, while the price of new allotments levelled off slightly as the area of these allotments decreased. This may indicate that an affordability ceiling had been reached and that an increase in the price of new lots much above $400,000 would be sufficiently unaffordable to impact on market demand.

FIGURE 29: PRICE FOR VACANT RESIDENTIAL ALLOTMENTS IN THE CAMDEN LGA BETWEEN 2001-2018



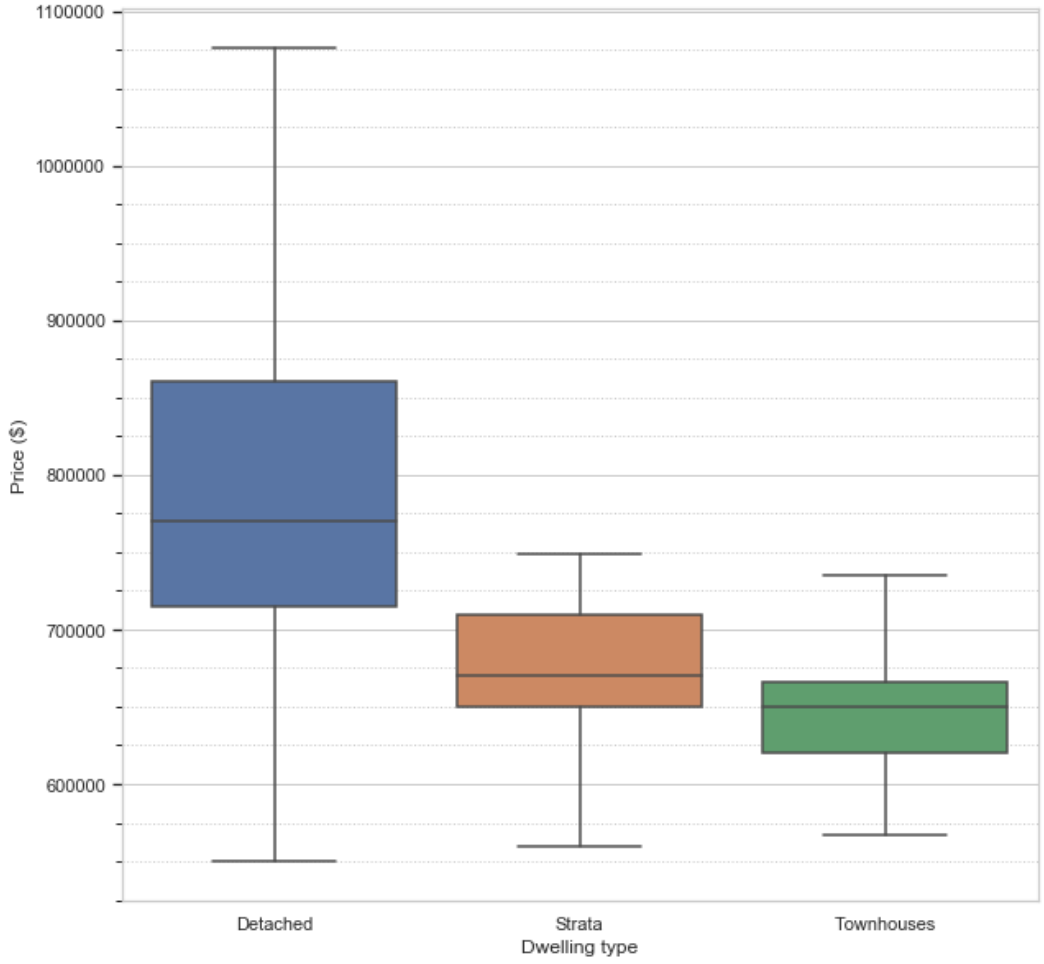
Source: SGS 2018, Property NSW *Bulk Property Sales*

Attached dwelling prices in new urban areas

The approximate distribution of prices for detached dwellings, strata-titled dwellings and townhouses in land release developments in shown in Figure 30. Most detached dwellings sold for between approximately $715,000-$865,000. Strata-titled dwellings, which are generally dual occupancies or large multi-dwelling housing-style developments, generally sold for between $650,000-$710,000. Townhouses, which are usually smaller than strata-title dwellings or detached dwellings, generally sold for $620,000-$670,000.

The average prices of detached dwellings, strata dwellings and townhouses have clear differences from each other and so serve different market segments. However, there was a much greater range of sale prices in the top 25% and bottom 25% of prices for each dwelling type, shown by the 'whiskers' in Figure 30. Some detached dwellings were sold for less than $600,000, which is below the price for an average townhouse.

FIGURE 30: THE DISTRIBUTION OF PRICES FOR TYPES OF DWELLINGS IN NEW URBAN AREAS IN 2017 AND 2018



Source: SGS 2018, Property NSW *Bulk Property Sales*

Examples of the price trade-offs between detached houses and townhouses in land-release developments in the Camden LGA are shown in Table 12. While advertised sale prices may differ from final sale prices, advertised prices are readily available for a variety of dwelling types and provide an indication of price expectations. Consistent with the bulk sales data presented in Figure 30, entry-level detached dwellings on small lots (300 sqm or less) are competitively priced with townhouses.

The entry level detached dwellings are generally located towards the fringe of their suburbs while townhouses are generally near the centre (some are opposite the Oran Park Town Centre) or proximate to parkland. This provides a potential competitive advantage of townhouses over detached dwellings, however townhouses are unlikely to be competitive unless they are significantly better located.

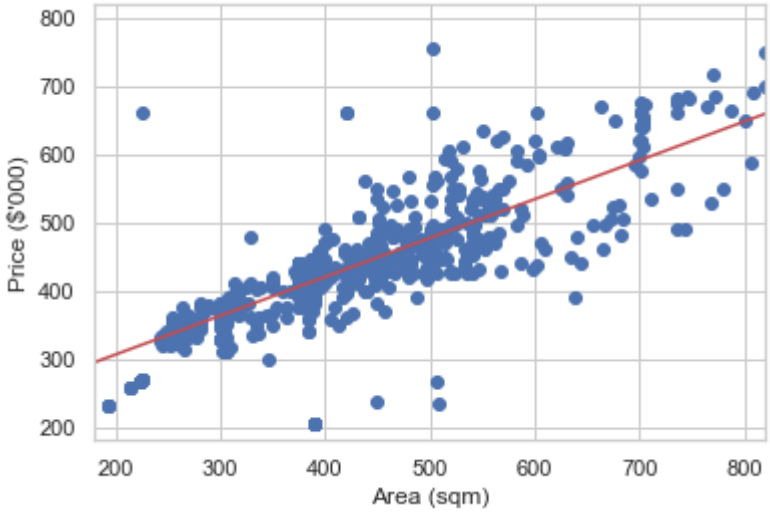
TABLE 12: ADVERTISED SALE PRICES FOR DETACHED HOUSE AND LAND PACKAGES AND TOWNHOUSES IN LAND-RELEASE DEVELOPMENTS

Address	Land Area (sqm)	Bedrooms	Parking Spaces	Advertised Price
Detached Houses				
Lot 344 Village Cct, Oran Park	250	3	1	$559,900
Lot 7018 Drover St Oran Park	300	3	1	$609,900
Lo9t 1401 Romney St Elderslie	359	3	1	$685,000
15 Richard Loop Oran Park	375	5	2	$679,000 – $719,000
Townhouses				
6 Laura St Oran Park	196	3	2	$599,900
59 McNeill Cct Oran Park	Not reported	2	2	$599,900
121/44 McNeill Cct Oran Park	223	3	2	$659,900
57 Central Avenue Oran PArk	195	3	2	$699,000

Source: Domain.com.au 2019

The price for house and land packages in land-release developments is determined by the price for the land and the price for the package house. The relationship between land area and price for vacant land in the Camden LGA is shown in Figure 31. There is a clear linear relationship between the two, with some variation reflecting factors such as lot location. A line of best fit to the data shows that vacant land costs around $190,000 plus $570 per square metre of land area.

FIGURE 31: LAND PRICE AND AREA FOR VACANT RESIDENTIAL LOTS IN LAND RELEASE DEVELOPMENTS, 2018



Source: SGS 2019, NSW *Bulk Property Sales*

On this basis, land area is an important determining factor for final sale price, but price differences due to small changes in land area would not be sufficient to compensate for large differences in construction costs. A 450sqm lot would cost around $100,000 more than a

275sqm lot, while constructing a much larger house on the 450sqm lot compared to the 250sqm lot may add $50,000-$100,000 to the final price. However, the difference in land price for a 225sqm terrace lot compared to a 275sqm small detached housing lot would be only around $28,500. The increases in development costs associated with terrace construction instead of project house construction, including loss of economies of scale and increased holding costs for land, could remove this price difference. In addition, a greater amount of common driveway space to provide rear vehicle access to townhouses would need to be factored into the land price.

Prices in settlement areas

The sales prices of detached dwellings increased in Camden at the same time as vacant land and dwellings in Greater Sydney. This is shown in Figure 32, which shows the median price for a detached dwelling in each settlement area in the Camden LGA between 2001-2018, except for the New Urban North settlement area.

The median dwelling prices in each settlement area in 2018 are shown in Table 13. The prices are not highly different in each area containing suburban development, varying between $665,000-$750,000. Prices are considerable higher in the Rural Living and Future Urban settlement areas. As the land uses in these two areas are similar, it is likely that land prices in the Future Urban area are influenced by the future development potential of the land.

House prices in the New Urban North precinct are higher than in the established parts of the LGA. Part of the cause for this is likely the premium paid for a new house and the large house sizes in land-release development. However, lot sizes in the New Urban North and New Urban South areas are smaller than in the established parts of the LGA.

Strata dwelling prices are generally much lower than non-strata prices and so are likely to be more affordable for those with lower incomes. Strata dwellings comprise a very small proportion of dwellings in the New Urban North area, but this area has the highest median strata price. There are considerably more strata dwellings in the New Urban South area, and the median price for these dwellings is $81,500 less than the strata median in the New Urban North area.

TABLE 13: MEDIAN DWELLING PRICES FOR EACH SETTLEMENT AREA IN 2018

Settlement Area	Camden	Narellan	New Urban South	New Urban North	Established Suburbs	Rural Living	Future Urban
Median non-strata dwelling price 2018	720,000	665,000	704,000	750,000	692,000	1,617,500	3,630,000
Median strata dwelling price 2018	493,500	650,000	583,500	665,000	555,000		

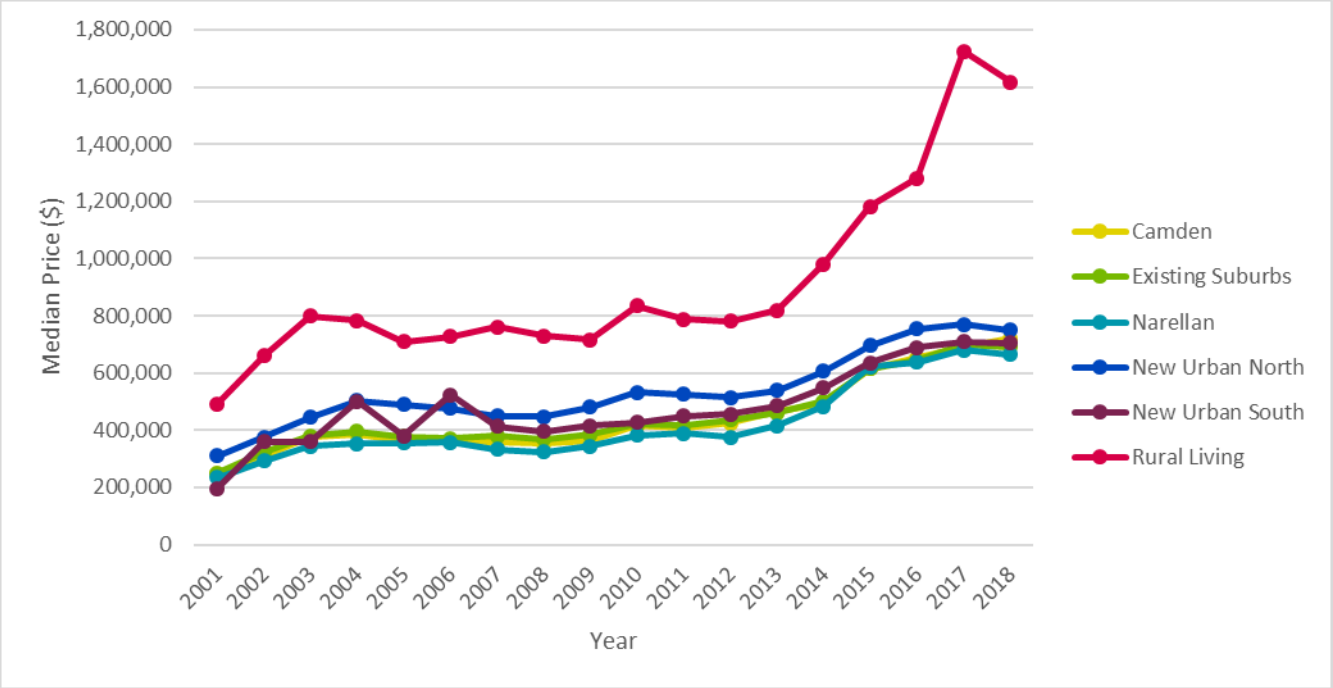
Source: SGS 2019, *NSW Bulk Property Sales Information*

Separate house prices in every suburb in each settlement area increase between 2001-2018, and each followed a broadly similar pattern to that of prices shown in Figure 29. Prices rose between 2001-2004 and then were relatively constant until 2013, with modest increases of between 5% and 20% in different settlement areas during this period with the largest increases in Camden, the Existing Suburbs and Narellan. Following 2013, house prices increased rapidly, rising between 39% in the New Urban North area to 97% in the Rural Living area with increases of between 50-60% in Camden's centres and established suburbs. House prices show signs of having reached a peak in 2017 and decreased from 2017-2018, in common with other parts of Sydney.

The order of median prices in different settlement areas has been relatively unchanged since 2001. The Rural Living area has consistently had the highest prices and increased the most between 2013-18 followed by a sharp fall from 2017-18. The New Urban North area has consistently had the next highest median price, which in the past was likely due to the high

prices of dwellings in the Harrington Park estate. Narellan has had the lowest median price since 2001, while the prices in the Established Suburbs, Camden and New Urban South have been similar to each other.

FIGURE 32: THE MEDIAN PRICE FOR NON-STRATA DWELLINGS IN EACH SETTLEMENT AREA BETWEEN 2001-2018



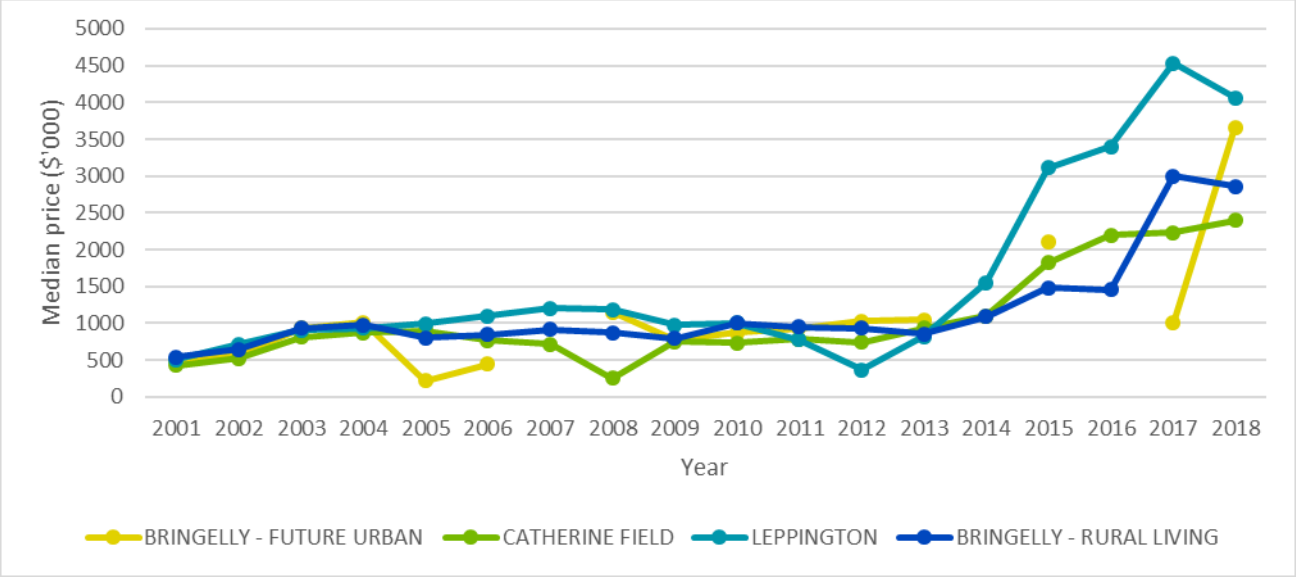
Source: SGS 2018, *NSW Bulk Property Sales*

Land prices in the Future Urban settlement area

The median prices for dwellings or land in the future urban settlement area as well as of the remainder of Bringelly, are shown in Figure 33. Some of these suburbs have few sales and so data is not available for every year, and there is some variability in the median price in any given year (for example, the median price in Leppington was very low in 2012, possibly indicating the sale of several small land parcels).

Despite the lack of available data, there is a clear increase in the median sales price in these areas recently. The increase in sales prices over the period shown has outpaced that in other parts of the LGA, with prices for sites with an area greater than 2,000 sqm in this settlement area going from a median of $799,950 between 2004-2010 to $2,922,038 in 2018.

FIGURE 33: DWELLING AND LAND PRICES IN SUBURBS IN THE FUTURE URBAN SETTLEMENT AREA IN CAMDEN LGA, AND IN BRINGELLY BETWEEN 2001-2018



Source: SGS 2018, *NSW Bulk Property Sales*

Dwelling rents

Median dwelling rents in the Camden LGA are shown in Table 14. While there are substantially more flats and units which are rented in Greater Sydney than houses, houses comprise almost all the rental properties in Camden LGA, with similar although much smaller numbers of townhouses and flats and units. This reflects the dominance of houses in the Camden LGA dwelling mix.

The median rent for a house in Camden LGA is slightly lower than the median rent for Greater Sydney, although the proportional difference between the two is less than for median dwelling prices. In contrast to Greater Sydney, the rent for townhouses and apartments is markedly lower than that for houses, which may reflect the large average house size in the Camden LGA compared to Greater Sydney. Rents have increased more slowly in the Camden LGA between 2013-2018 than the Greater Sydney average.

TABLE 14:MEDIAN DWELLING RENTS AND NUMBER OF RENTAL DWELLINGS (INDICATED BY NUMBER OF BONDS LODGED) IN CAMDEN LGA AND GREATER SYDNEY

Area	Dwelling Type	2018 September Quarter		Change 2013-2018 (%)
		Median Weekly Rent ($)	Number of bonds	
Camden LGA	House	520	4943	9.5%
	Townhouse	440	243	
	Flat/Unit	350	280	0.8%
Greater Sydney	House	550	146219	16.3%
	Townhouse	560	43306	
	Flat/Unit	540	248720	14.6%

Source: NSW Department of Family & Community Services 2013, 2018, *Rent Tables*

4.2 Dwelling affordability

Dwelling price affordability

The affordability or otherwise of house prices can by shown by the proportion of households in mortgage stress, defined as paying more than 30% of household income on mortgage repayments. Mortgage stress rates vary across the Camden LGA between 10.7% in Narellan and 28.2% in the Rural Living Area (see Table 15).

Mortgage stress in the Camden LGA is highest in the rural-living area (see Table 15). This is likely attributable to the high house prices and resulting high mortgage repayments in this area, although they also have the highest incomes in the LGA. Despite the high level of mortgage repayments as a proportion of income, these areas are likely to be less vulnerable to a rise in mortgage rates than areas with lower average incomes, as disposable incomes are still higher as an absolute amount.

The new urban areas of the LGA also have high levels of mortgage stress, with 24.7% of households in mortgage stress in New Urban North and 16.1% in mortgage stress in New Urban South. Higher repayments in the new urban areas are likely to be a result of the recent development of these areas combined with the rise in house prices between 2006-2016. As young families in these areas age, their incomes are likely to increase, reducing rates of mortgage stress.

The very high proportion of family households in new urban areas and the young demographic is likely to mean that households have less disposable income than those in some other parts of the LGA despite relatively high incomes. Households are thus vulnerable to economic shocks, reductions in household income or increases in interest rates. At the same time, new urban areas have the highest proportions of households with mortgages, and so housing and vulnerability are widespread across the population.

TABLE 15: LEVEL OF MORTGAGE STRESS IN DIFFERENT PARTS OF CAMDEN LGA IN 2016.

Area	Approximate % of mortgaged households in mortgage stress*	Median weekly household income category (mortgaged households)	Median monthly mortgage repayment category
New Urban North	24.7%	$2,500-$2,999	$2,600-$2,900
New Urban South	16.1%	$2,000-$2,499	$2,400-$2,599
Future Urban	31.4%	$2,500-$2,999	$2,600-$2,999
Established Suburbs	13.6%	$2,500-$2,999	$2,000-$2,199
Camden	12.6%	$2,500-$2,999	$2,000-$2,199
Narellan	10.7%	$2,000-$2,499	$2,000-$2,199
Rural Living	28.2%	$3,000-$3,499	$3,000-$3,999

Source: ABS Census 2016

*A household is defined as experiencing mortgage stress if they pay more than 30% of their income on their mortgage.

Rental affordability

Rental Stress

Rental stress rates provide some indication of relative rental affordability in an area. A household is defined as in rental stress if they are paying more than 30% of their income on their rent. The rental stress rates in each settlement area in the Camden LGA in 2016 are shown in Table 16. The number of households in rental stress and with low incomes is an input into the affordable housing demand figure calculated in Section 5.3.

Rental stress is between 20-30% in each settlement area and is highest in the Established Suburbs settlement area. Rental stress rates are lowest in the New Urban North and New Urban South areas.

Both rents and incomes are significantly higher in the Rural Living settlement area than the other settlement areas, although every other area except Narellan recorded median rent in the $450-$549 category in the 2016 census. The median income category and rental amount category in Narellan were lower than in the other parts of the LGA.

TABLE 16: LEVEL OF RENTAL STRESS IN DIFFERENT PARTS OF CAMDEN LGA IN 2016.

Area	Approximate % of renting households in rental stress*	Median weekly household income category (mortgaged households)	Median monthly mortgage repayment category
New Urban North	20.5%	$2,500-$2,999	$450-$549
New Urban South	23.4%	$2,500-$2,999	$450-$549
Future Urban	-**	$2,500-$2,999	$450-$549
Established Suburbs	29.7%	$2,500-$2,999	$450-$549
Camden	25.7%	$2,500-$2,999	$450-$549
Narellan	26.8%	$2,000-$2,499	$425-$449
Rural Living	25.5%	$3,500-$3,999	$550-$649

Source: ABS Census 2016

*A household is defined as experiencing rental stress if they pay more than 30% of their income on their rent.

** - The number of renting households in each part of the future urban area is too small to allow this calculation to take place

Rental affordability index

Rental affordability levels in the Camden LGA are based upon the SGS Rental Affordability Index as shown in Figure 34 and Figure 35. This index is based upon the proportion of rental dwellings in each postcode that would be affordable to a household with a given income.

Figure 34 shows the rental affordability index for households with an income of $105,000 yearly, which is close to the median yearly household income for the Camden LGA as reported in the 2016 census. This index shows that for a household on the average income for the Camden LGA (which is approximately $105,000 per annum), rental housing in most of the LGA is moderately unaffordable. Affordability in the 2567 postcode which covers much of the established suburbs is acceptable.

Bringelly is identified as extremely unaffordable, however there are very few rental dwellings in this area (only 126 rental bonds are currently held) and there is minimal turnover for dwellings. For this reason, identification as extremely unaffordable may reflect the unreliability of data available for this small rental market.

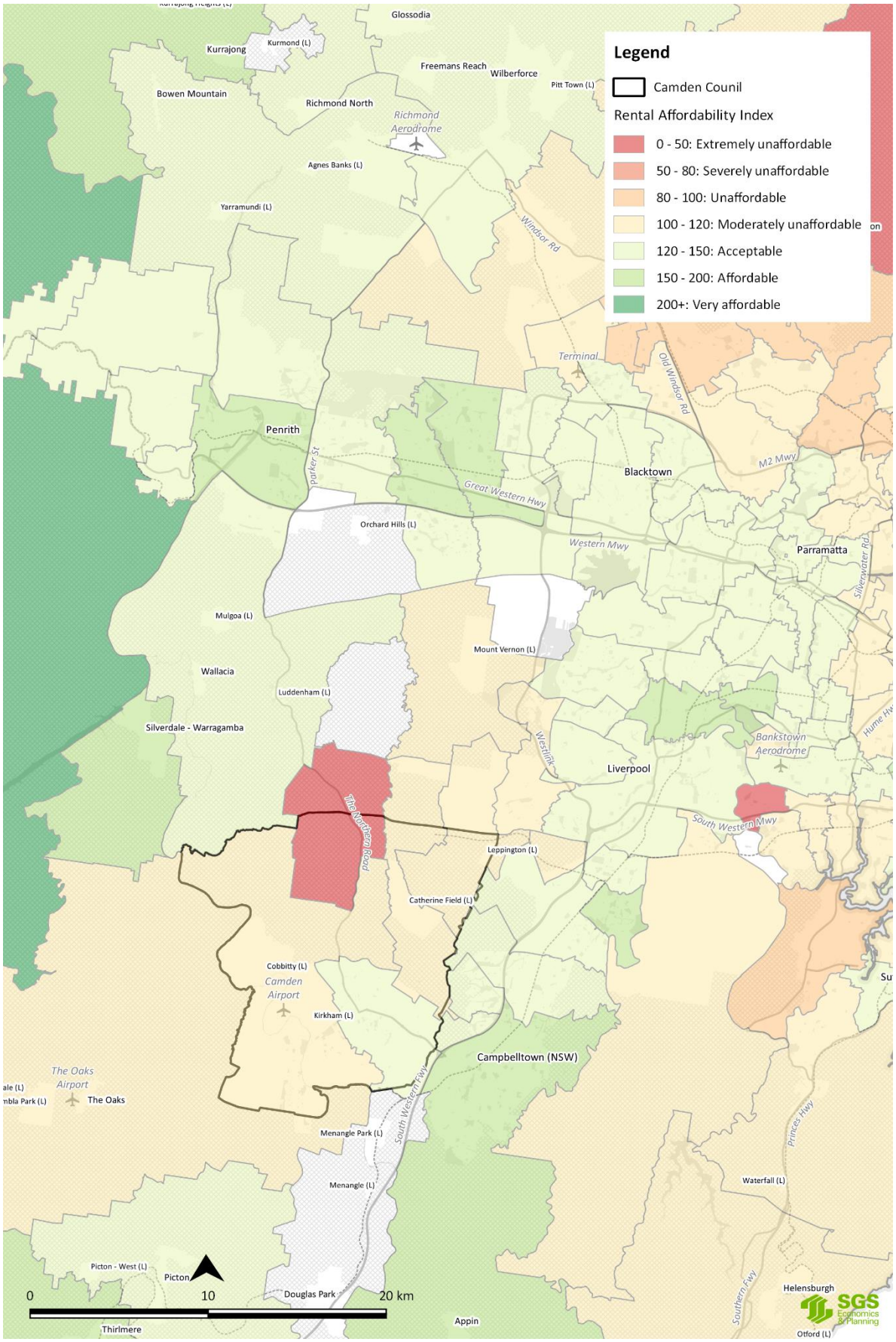
For households with incomes below the median income, including single income families and single parents, most rental housing would be unaffordable. This would be exacerbated by the relative lack of housing diversity in the Camden LGA illustrated in Section 3.1. Anecdotal evidence suggests that these household types may be utilising secondary dwellings[4] as more affordable housing options.

Figure 34 shows the rental affordability index for households with a yearly income of $75,000. This is close to the median income as reported in the 2016 census of single parent households, a household type who need dwellings of a reasonable size but who have a reduced income when compared to the median household. This index shows that all of the Camden LGA is unaffordable, severely unaffordable or extremely unaffordable.

[4] i.e. Granny flats or 'Fonzie' flats

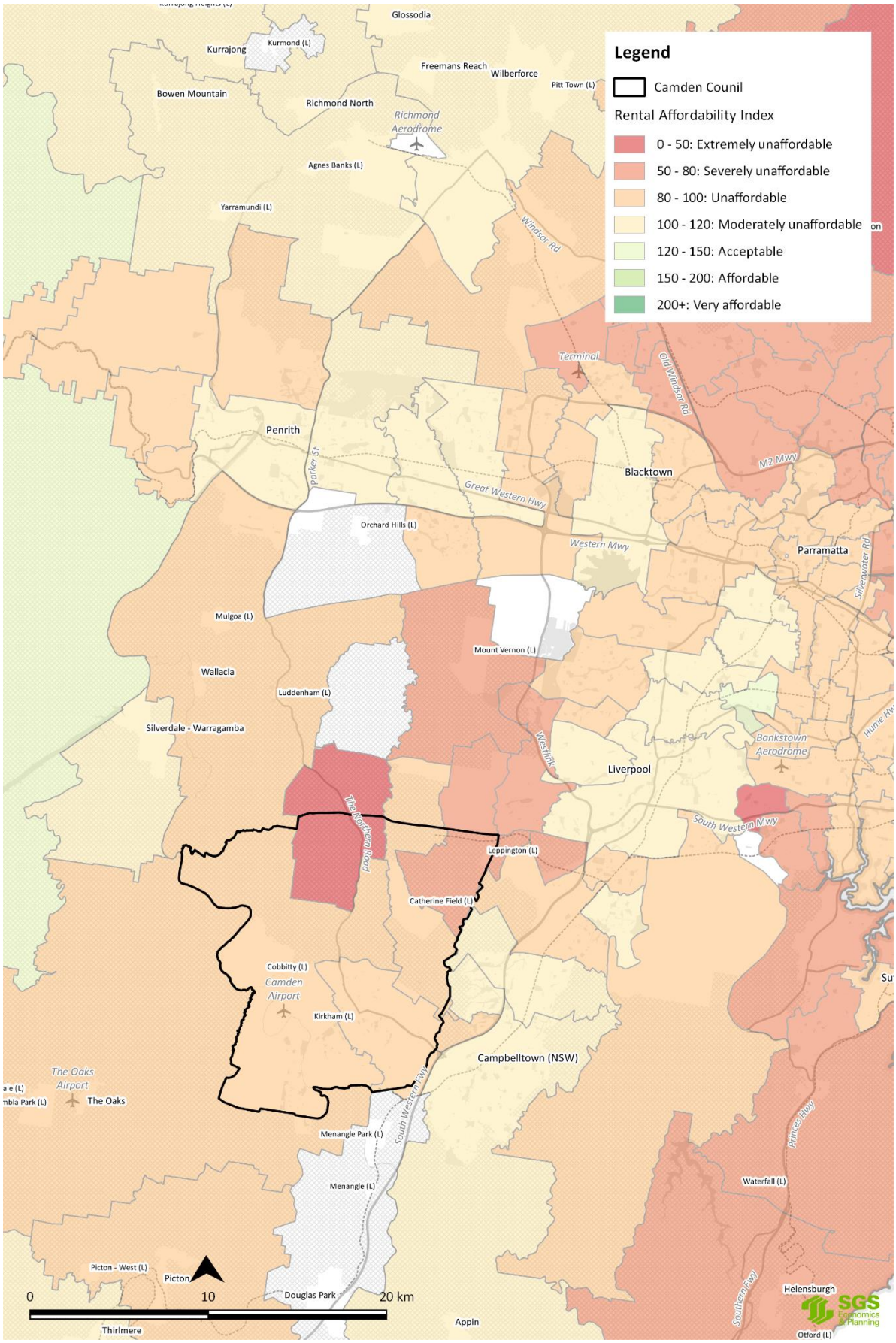
The rents in many of the areas surrounding the Camden LGA are more affordable than those in the Camden LGA. In particular, rents are more affordable in Campbelltown, Liverpool, Penrith, Fairfield and Blacktown along the railway lines. These places have high numbers of older apartments which are relatively affordable. In some cases they also contain houses which are relatively affordable.

FIGURE 34: SGS RENTAL AFFORDABILITY INDEX FOR HOUSEHOLDS WITH A YEARLY INCOME OF $105,000, CLOSE TO THE MEDIAN YEARLY INCOME FOR HOUSEHOLDS IN THE CAMDEN LGA



Source: SGS 2018, *Rental Affordability Index*

FIGURE 35: SGS RENTAL AFFORDABILITY INDEX FOR HOUSEHOLDS WITH A YEARLY INCOME OF $75,000, CLOSE TO THE MEDIAN YEARLY INCOME FOR SINGLE PARENT HOUSEHOLDS IN THE CAMDEN LGA



Source: SGS 2018, *Rental Affordability Index*

4.3 Real estate market consultation

Three developers and four real estate agents were contacted. Responses were received from all four real estate agents and two developers.

The respondents were asked four questions aimed at identifying changing demand for housing in the Camden LGA. The real estate respondents were asked the following questions, as listed below:

1. *Who is moving to Camden and buying dwellings (what kinds of households etc)?*
2. *Have there been any recent shifts in housing preferences, demand and demographics (families, couples, lone households, intergenerational?*
3. *Is there a market for more varied housing products?*
4. *Do you think there will be any changes to the housing - market or demand in Camden in the future?*

The developers were asked a set of slightly different questions as listed below:

1. *How is demand changing with regards to detached housing?*
2. *Is there a market for more varied housing products? This includes terraces, smaller houses and apartments?*
3. *What are the barriers to delivering a greater dwelling mix?*
4. *Is there a market for apartments next to, or in new centres as well?*

Summary of results

Consultation with housing experts (real estate agents and developers) presented anecdotal evidence in support of several trends in Camden in relation to housing demand. With regards to future trends, housing experts expect demand will largely be driven by infrastructure investment and increased development in Western Sydney. Particularly as Badgerys Creek and the new airport come online and stimulate the number of employment and business opportunities.

The evidence strongly suggested that there was an underlying demand and preference for detached housing, as the household structures are mainly characterised by families. Furthermore, it was suggested that families made up 70 per cent of the demand in the new growth corridor.

A growing demand for a wider range of housing typologies was expressed. For example, it was noted that there was a growing demand for dual occupancies and attached dwellings such as terrace houses. Such typologies were considered affordable options to a broad range of households. For lone or single households, a rise in the number of granny flats or secondary dwellings has been observed.

Two of the real estate experts described Camden as multi-cultural and associated this quality with an increased demand for intergenerational living options such as dwellings with two master bedrooms.

Overall, increasing demand for medium density was considered largely concentrated in centres where there was access to amenity such as shops and transport. Locations within Camden experiencing an increase in multi-unit dwellings or medium density housing included Oran Park Town Centre and Narellan Town Centre.

In terms of who is moving into Camden, responses were mixed. While some suggested a shift towards first home buyers unable to afford to purchase in and around the city, others suggested this demand had declined due to the introduction of more stringent controls on home loans. Some agents have witnessed an increase in the number of retirees relocating from the city.

Barriers to delivering a greater dwelling mix was touched on briefly by one of the experts who referenced restrictive planning controls. However, most experts interviewed considered the limited dwelling mix to be driven largely by the demand for detached housing.

5. HOUSING DEMAND

This chapter contains an analysis of the future housing needs of the Camden LGA based upon past housing and demographic trends as well as population forecasts. It also considers the future demand for affordable housing and the amount of housing that could be accommodated under current planning controls.

5.1 Future housing demand

This section presents projected population growth in the Camden LGA as forecast by the NSW Department of Planning and Environment (DPE). This is based upon trends of which household types live in the Camden LGA, how many people are in each household and what dwelling types these households live in. SGS has forecast the number of households of each type in the Camden LGA and what dwellings will be required to house this population.

Housing demand method

The analysis in this section draws a upon a range of datasets, including population growth, age, family and household type. These core demographic components combine to help build a picture of the people who occupy housing in Camden now, what kinds of people have been moving into the LGA as the population grows, and how that may change into the future.

Demand for different dwelling type shifts throughout an individual's lifespan, due to income levels, the structure of the household they live in and preferences. To that end, changing demographics and the changing relationship between household types and dwelling types described will impact upon future housing choices.

Housing policy in the Camden LGA favours greater dwelling diversity than has been built in the past. This policy assumes that more people will choose to live in medium density housing as a result of greater amenity and infrastructure availability in the area and a greater supply of this housing type. This would not change the forecasts of number of households produced by the *Housing Demand Model*, but would change the kind of dwellings these households would live in. To reflect this, alternative housing demand scenarios have been created which are discussed below. Three housing demand scenarios have been considered:

- Low density scenario: Housing preference is calculated based on trends in historical census data. This illustrates the housing outcome if past policy trends were continued
- Medium density scenario: Housing preferences have been modified to reflect a preference for medium and higher density dwellings slightly greater than in any part of the Camden LGA at the moment
- Higher density scenario: Housing preferences have been modified to reflect a significantly increased preference for medium and high-density dwellings which is more like expressed preferences in the Hills Shire LGA. This would reflect substantial increases in transport infrastructure.

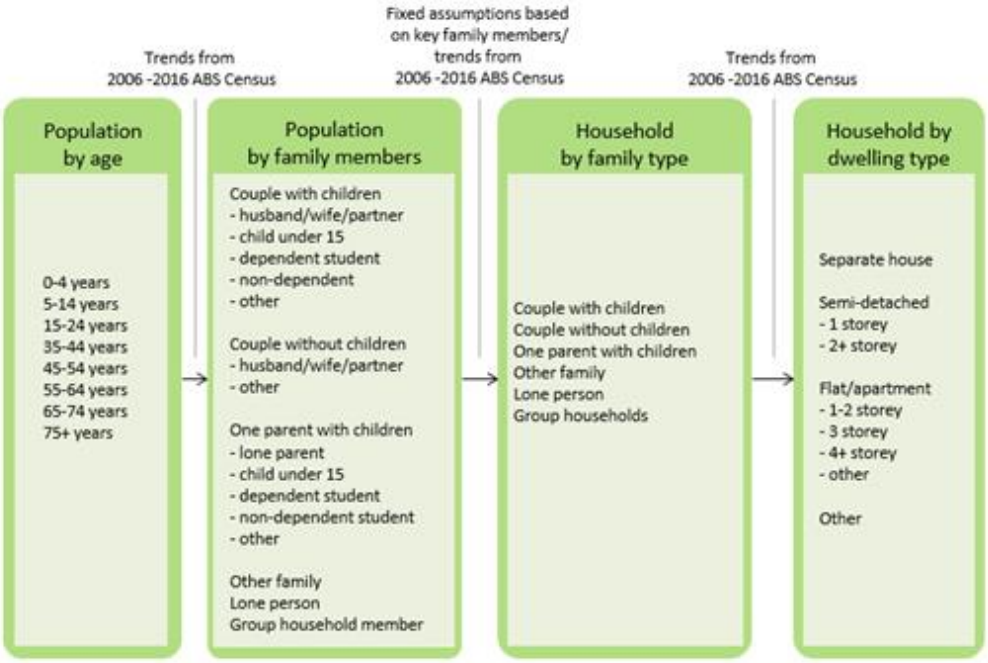
SGS has applied its in-house *Housing Demand Model* to disaggregate the total dwelling forecast into a growth forecast by dwelling type to produce the low-density scenario. The methodology behind the model is shown in Figure 36. The model also produces outputs for household type and size, including demand by number of bedrooms. Variations to potential housing preferences by 2036 have been used to produce medium and higher density scenarios.

The starting point for this model is a population projection by age. Such projections are produced by the DPE and by forecast.id for the Camden LGA. Historically observed

demographic trends are used to convert this projection into a forecast by household type. Trends in observed housing preferences then allow the household type projection to be converted to a forecast by dwelling type and size.

As the model is based upon population projections and past demographic trends, it reflects the policy assumptions inherent in the population projection and the kinds of housing that have been delivered in the past. If population projections are revised, the likely housing demand will change.

FIGURE 36 SGS HOUSING DEMAND MODEL METHOD

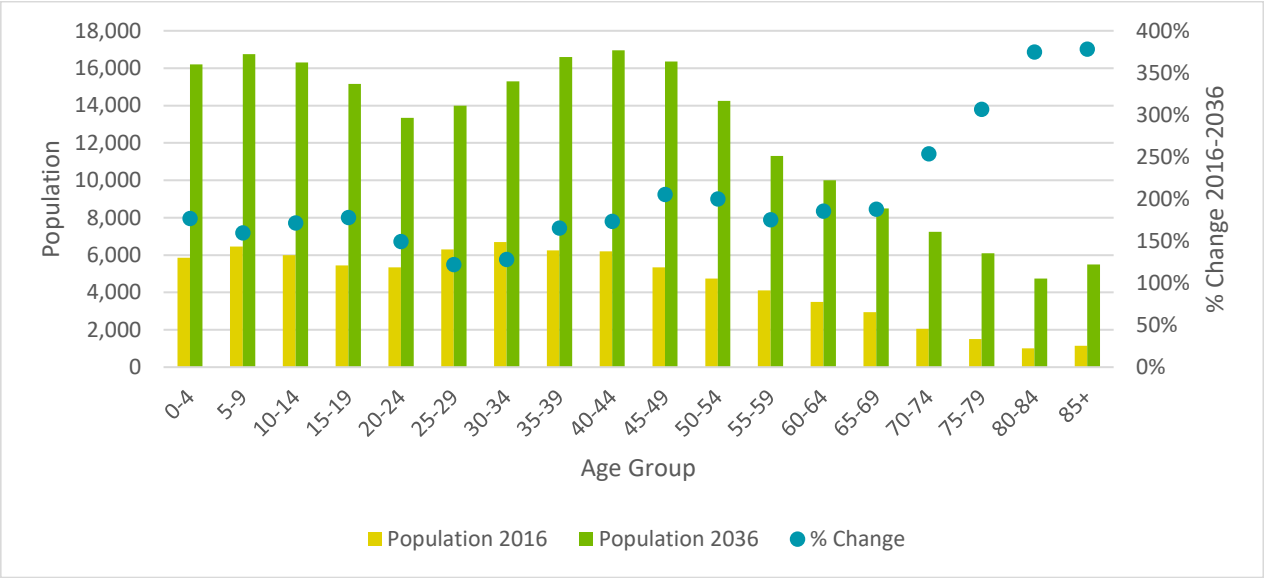


Source: SGS Economics and Planning

Forecast population growth

Forecast population growth for the Camden LGA from 2016-2036 as calculated by the NSW DPE is shown in Figure 37. Between the years 2016 – 2036 Camden is forecast to see an increase of up to 143,650 people. There will be a substantial increase in the 35 – 44 and 45 – 54 age cohorts as well as for children and young people aged 0 – 14. There is also a notable percentage change across cohorts aged 55 and over as the population ages. This will create a need for adaptable housing suitable for people downsizing.

FIGURE 37: FORECAST POPULATION GROWTH IN THE CAMDEN LGA



Source: SGS Economics and Planning 2019, DPE *NSW Population Projections*

Trends in expressed housing preferences

Expressed housing type preferences can be determined based upon what proportion of each household type in the Camden LGA lives in each type of dwelling. This is shown in Figure 38, along with the change in this variable between 2011-2016. Expressed preferences will be affected by the availability, affordability and suitability of dwellings within the LGA as well as by what kinds of dwellings people want to live in.

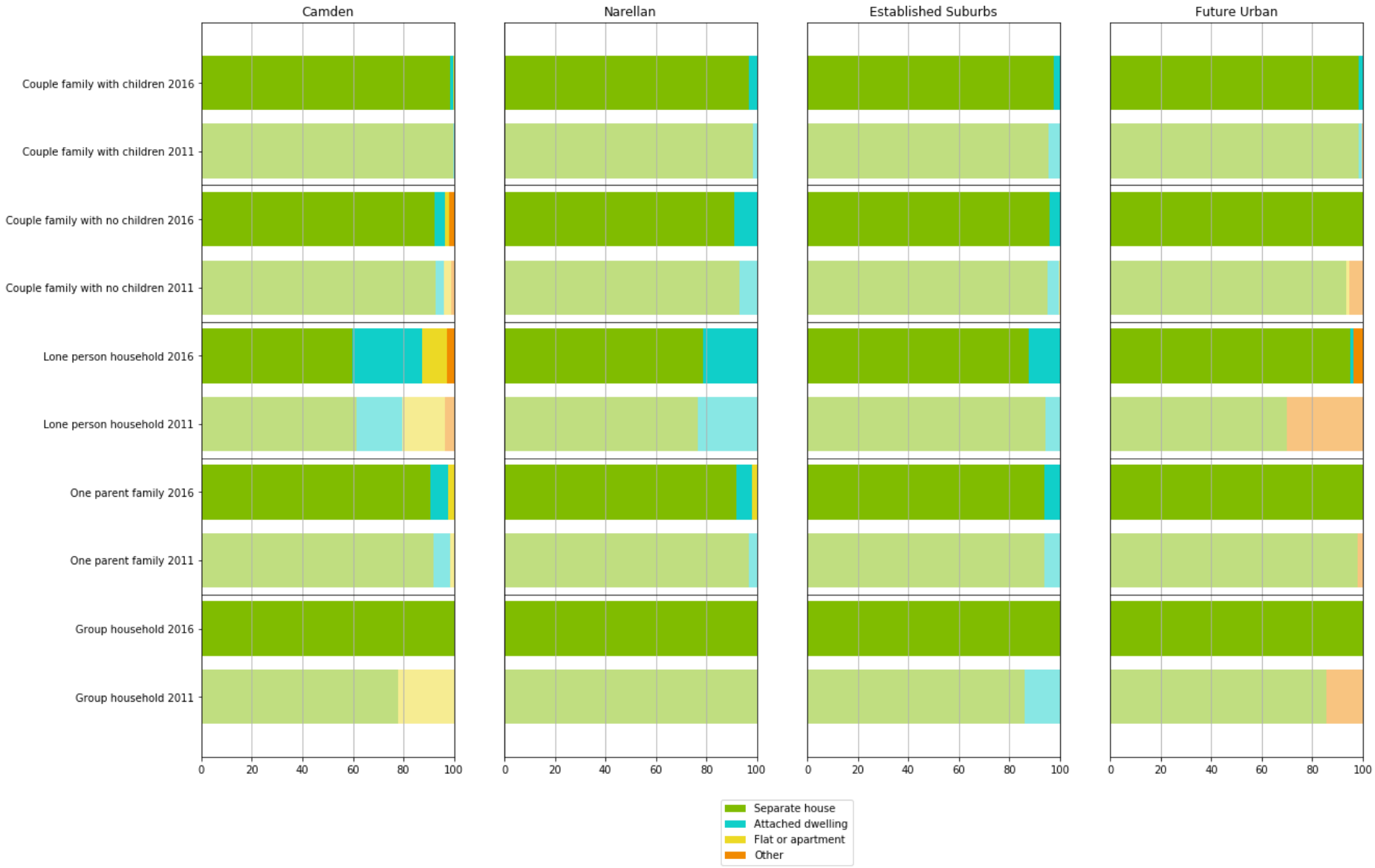
Across the Camden LGA, most household types live predominately in detached dwellings. Lone person households have the highest rates of occupancy of attached dwellings and flats or apartments, particularly in centres and the rural areas, although they comprise only a small proportion of the LGA population.

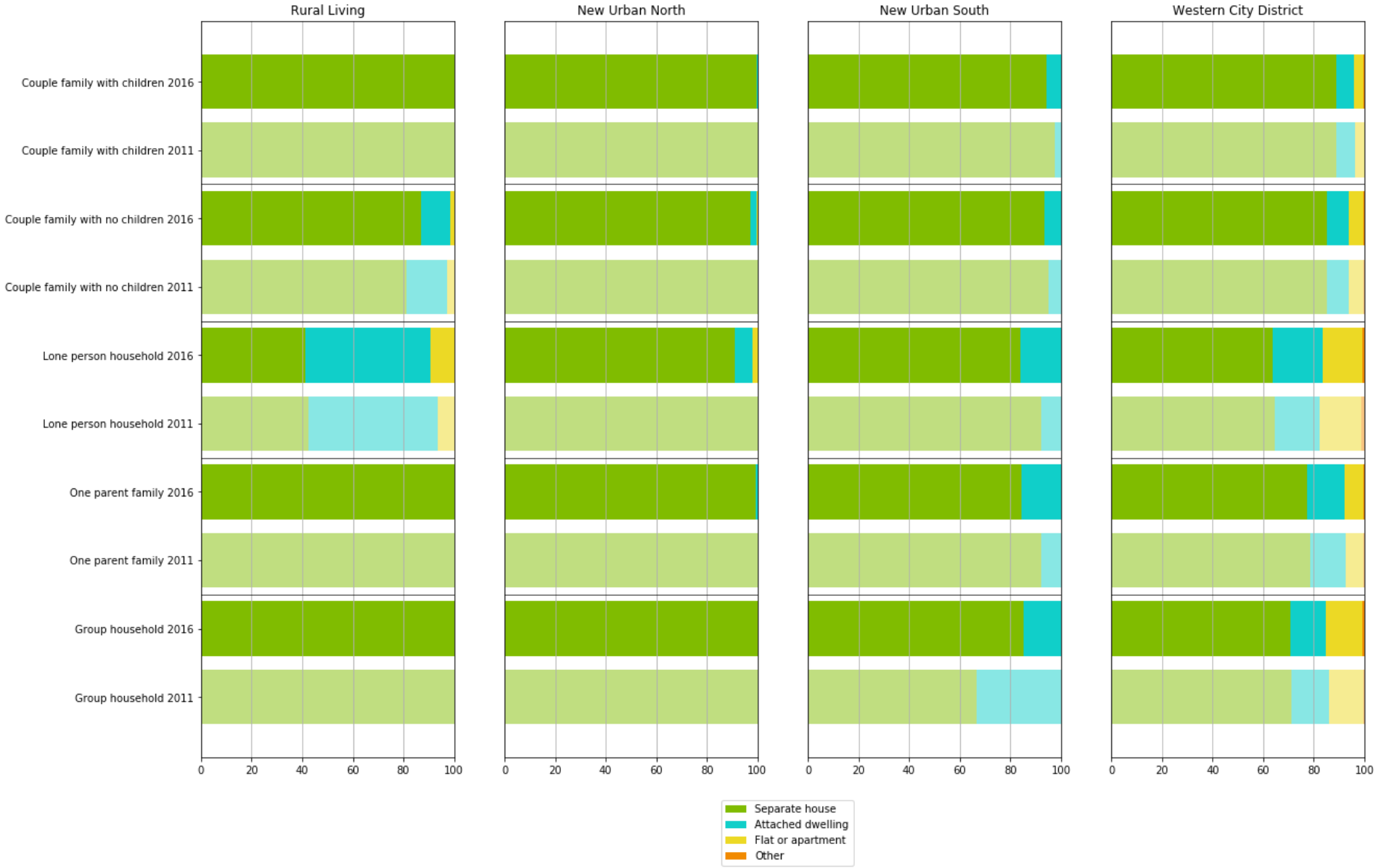
Between 2011 and 2016 there was an increase in the proportion of each household type in attached dwellings. This corresponds with the higher growth rate of these dwellings compared to detached dwellings in the LGA shown in Section 3.1. There was little change in housing occupancy patterns for couples with children, the most common household type in the LGA, with a small increase in the proportion of couples with children living in attached dwellings in Narellan and the New Urban South area.

There is a significant difference in expressed housing preferences between the New Urban South, New Urban North and Established Suburbs settlement areas. Consistent with the higher proportion of attached dwellings in the New Urban South area as shown in Figure 38, there are relatively high proportions of each household type, except couples with children living in attached dwellings in this area. This proportion increased for most household types between 2011-2016. This is notable given that the New Urban South is a new land-release area yet differs to the New Urban North, the other land-release area. This difference illustrates that there is a market for attached dwellings for certain household types in land-release areas.

While current housing occupancy provides an indication of housing preference, it also reflects what type of housing is available and affordable. Many small households live in separate houses but may choose attached dwellings or apartments as a more affordable option if more of these smaller dwelling types were available. This would also allow older people whose families no longer live in their homes to downsize.

FIGURE 38: PROPORTION OF HOUSEHOLD TYPE BY DWELLING TYPE BASED ON EACH SETTLEMENT AREA IN CAMDEN LGA 2011 AND 2016





Source: ABS Census 2006, 2016

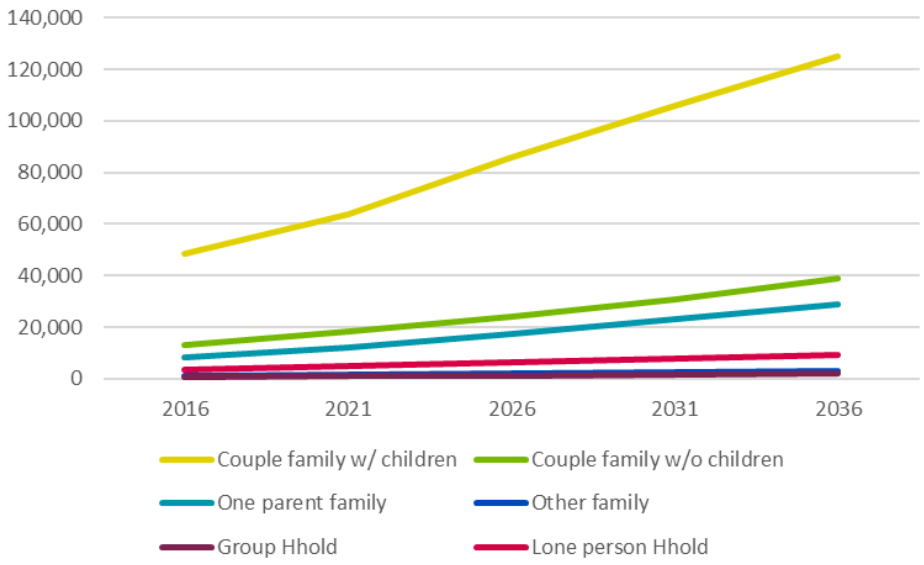
5.2 Lower density demand scenario

Forecast population by household type

Figure 39 presents forecast population by household type. The largest forecast growth is for couple families with children, an increase of 76,829 people between 2016 and 2036 (4.88 per cent per annum).

Couple families without children are also forecast to have moderate growth of 25,779 people over the same time period (5.61 per cent per annum). This is also true of single parent families, with a growth of 20,373 people (6.35 per cent per annum).

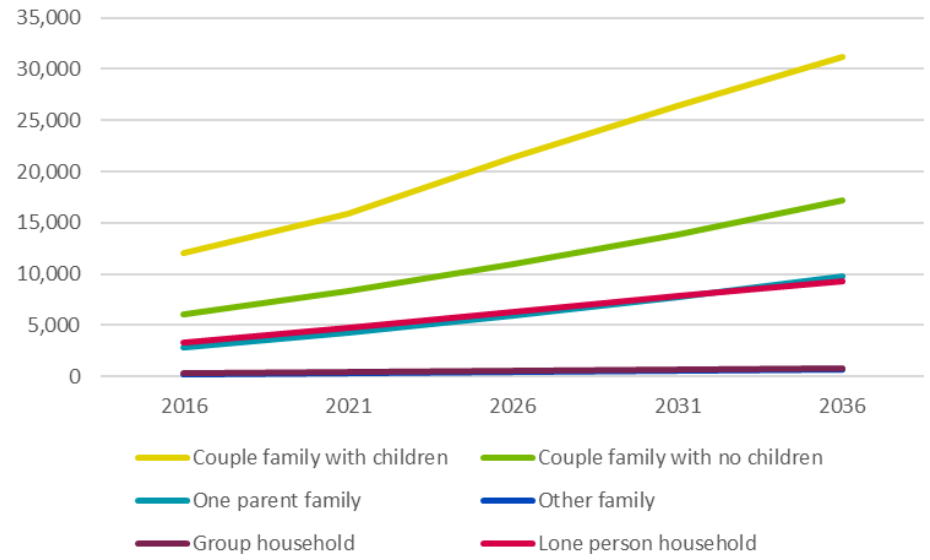
FIGURE 39: POPULATION BY HOUSEHOLD TYPE



Source: ABS Census, 2016. SGS Economics and Planning, 2019.

Figure 40 presents households by family type and shows a corresponding increase in the number of couple families with children households, with an increase of 19,185 between 2016 and 2036 (4.89 per cent per annum).

FIGURE 40: HOUSEHOLDS BY FAMILY TYPE



Source: ABS Census, 2016. SGS Economics and Planning, 2019.

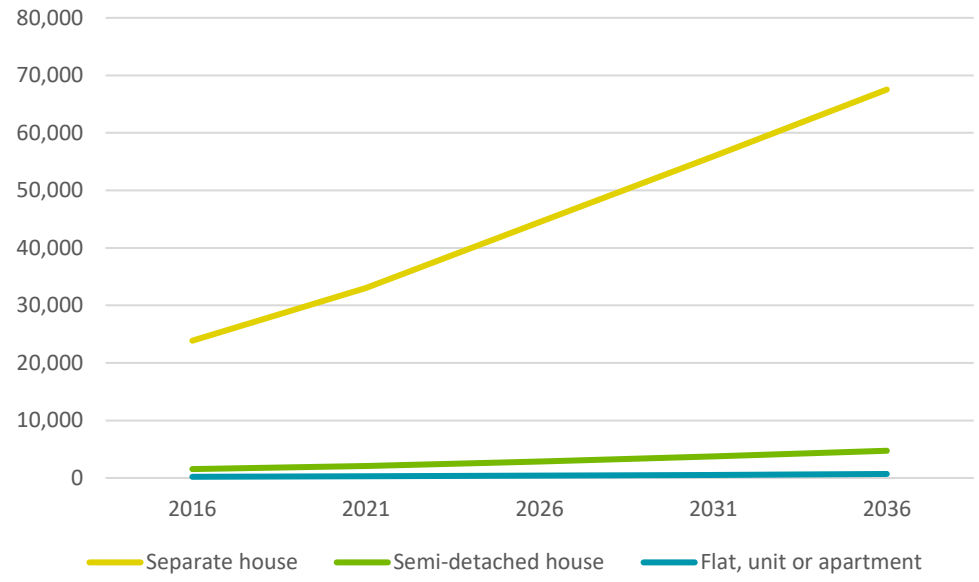
Lower density dwelling demand scenario

As shown in Figure 41 and Table 17, 76,626 dwellings are estimated to be required by 2036, an increase of 49,625 from 2016 (5.4% growth per annum). Most of these dwellings are forecast to be separate houses (an increase of 45,697 dwellings), with increases in demand for 3,335 semi-detached dwellings and 517 apartments.

Flats, units and apartments are forecast to have the strongest growth rate of the dwelling types, at 6.2 per cent per annum, but this is not markedly higher than the overall dwellings growth rate (5.4% per annum).

The analysis suggests that based upon past trends, the strong demand for separate houses will be sustained but population growth will also increase demand for semi-detached and smaller more affordable dwellings such as flats, units or apartments.

FIGURE 41: LOWER-DENSITY DWELLING DEMAND



Source: ABS Census, 2016. SGS Economics and Planning, 2019.

TABLE 17: SUMMARY FORECAST OF DWELLING REQUIREJMENTS BY DWELLING TYPE IN THE LOWER-DENITY SCENARIO

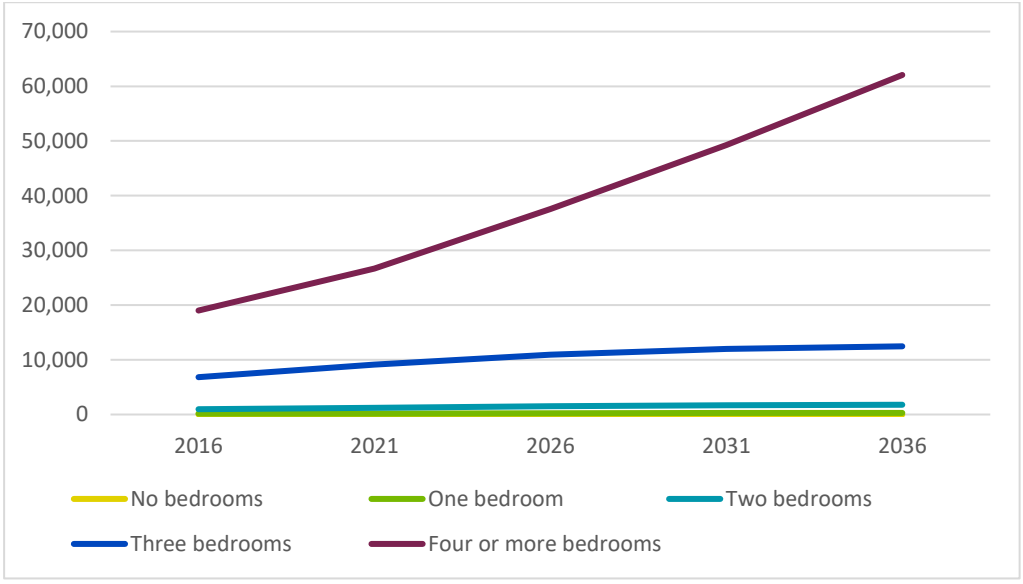
CAMDEN LGA	2016	2021	2026	2031	2036	Change 2016-36	Average annual growth rate 2016-36
Separate house	24,981	34,567	46,591	58,486	70,678	45,697	5.3%
Semi-detached house	1,624	2,181	3,019	3,905	4,959	3,335	5.7%
Flat, unit or apartment	219	330	447	573	736	517	6.2%
Other dwelling	177	203	227	242	253	76	1.8%
Total Private Dwellings	**27,001**	**37,281**	**50,284**	**63,205**	**76,626**	**49,625**	**5.4%**

Source: ABS Census, 2016. SGS Economics and Planning, 2019.

The forecast demand for dwellings by number of bedrooms is presented in Figure 42 and Table 18 as an indication of how dwelling sizes would change in the lower-density scenario. This forecast is produced on the assumption that recent trends in how many bedrooms there in dwellings occupied by various household types will continue. No explicit assumptions about the number of bedrooms needed to house a given number of people have been made, so this projection reflects trends in housing choices and dwelling size in the LGA rather than any changed policy scenario.

The largest growth in demand is forecast for four or more bedroom dwellings. Three-bedroom dwellings also have a large demand forecast. Few one or two bedroom dwellings would be required under this scenario.

FIGURE 42: DWELLINGS BY NUMBER OF BEDROOMS



Source: ABS Census, 2016. SGS Economics and Planning, 2019.

TABLE 18: SUMMARY FORECAST OF DWELLING REQUIREJMENTS BY NUMBER OF BEDROOMS IN THE LOWER-DENITY SCENARIO

CAMDEN LGA	2016	2021	2026	2031	2036	Change 2016-36	Average annual growth rate 2016-36
No bedrooms	22	17	19	19	17	-4	-1.1%
One bedroom	174	194	231	261	294	120	2.7%
Two bedrooms	972	1,247	1,508	1,678	1,784	813	3.1%
Three bedrooms	6,828	9,133	10,937	12,010	12,464	5,637	3.1%
Four or more bedrooms	19,006	26,691	37,589	49,237	62,066	43,060	6.1%
Total Private Dwellings	**27,001**	**37,281**	**50,284**	**63,205**	**76,626**	**49,625**	**5.4%**

Source: ABS Census, 2016. SGS Economics and Planning, 2019.

5.3 Medium and higher density housing demand scenarios

An alternative housing demand scenario was created by SGS from the household type forecast by modifying housing preferences for each household type. Two alternative housing demand scenarios were created:

- A medium density scenario, with housing preferences modified to reflect a preference for medium and higher density dwellings slightly greater than in any part of the Camden LGA at the moment.
- A high-density scenario, with housing preferences modified to reflect a significantly increased preference for medium and high-density dwellings

While there is currently a lack of dwelling diversity in most of the Camden LGA, the higher proportions of medium density housing in the New Urban South area indicate that there is a demand for these types of dwellings. Decreasing affordability of dwellings recently is also likely to increase the demand for medium density dwellings.

Land-release policy precedents

An indication of the possible dwelling mix in future land-release precincts in the Camden LGA is provided by current planning policy in the form of the planned dwelling mix in already released precincts and precincts under planning. This is shown in Table 19. If these proportions were replicated across the Camden LGA, the overall proportion of detached dwellings, attached dwellings and apartments would be expected to mimic these splits, which would require a change in housing preferences.

TABLE 19: PROPORTIONS OF DWELLINGS AT DIFFERENT DENSITIES IN LAND RELEASE PRECINCTS

Precinct	Year planning finalised	Environmental Living	Low density	Medium density	High density
Oran Park	2009	0%	59%	32%	9%
Leppington Stage 1	2015	2%	70%	29%	0%
Lowes Creek	Currently in planning	2%	67%	25%	6%
Marsden Park North*	Currently in planning	0%	85%	14%	0%
Vineyard Stage 1*	Currently in planning	2%	74%	24%	0%

* Note that these precincts are in the North-West Growth area and outside of the Camden LGA, but nonetheless provide additional examples of current NSW Government policy regarding dwelling density and diversity in land-release development

New release precincts are generally planned at greater densities than past release precincts, with significantly greater proportions of medium density planned than currently existing in the Camden LGA. However, much of the land intended for medium density in precincts which have been released, such as Oran Park, has been developed for detached dwellings, some on small lots, with occasional terraced developments. In this way housing density targets may be met or exceeded in planned medium density areas even if most of the housing delivered is separate houses. The dwelling density proportions shown in Table 19 thus cannot be directly reproduced to create modified housing preference scenarios, but rather provide a guide for how housing density in release precincts may increase in the future compared with the past.

Housing preference benchmarks

It is possible to determine what the demand in Camden could look like under changes in housing development patterns and housing preferences by considering housing preferences in more established LGAs. Both Liverpool LGA and Penrith LGA are also in the Western City District and contain major town centres, established suburbs and land-release housing development. If the housing in Camden becomes more diverse and the North-South rail line is built, it is likely that expressed housing preferences will come to resemble those in Liverpool and Penrith more than the current expressed preferences in the Camden LGA.

If the North-South Rail Line is constructed in the future and the Badgerys Creek Aerotropolis develops, the attractiveness of Camden LGA for medium and high-density development will change. In particular major centres along the railway line, including Oran Park and Narellan, would be expected to become much higher density. However, Western Sydney Airport is not expected to open until 2026, and significant development around it, including completion of the North-South Rail Line to the Camden LGA would not take place until sometime later. Significant changes in the attractiveness of medium and higher-density housing as a result of this change would therefore not be expected until towards 2036.

Table 20 shows the expressed dwelling preferences in the New Urban South area, the Camden LGA and the benchmark LGAs of The Hills and Penrith. These LGAs provide an illustration of what housing in the Camden LGA could look like under a step-change in housing demand and transport connectivity. Overall dwelling proportions under each scenario are shown in Figure 43.

Penrith has significantly greater transport connectivity than the Camden LGA through the Western Rail Line and the M4 Motorway, but like Camden much of the growth in Penrith is occurring in greenfield development. The Hills also hosts substantial amounts of greenfield development, although it has a much greater amount of medium and higher density development than Camden and is connected to Parramatta by rapid buses and to the Sydney CBD by the just-completed North-West Metro.

Housing preferences under the higher density scenario have been estimated to mimic the current expressed housing preferences in the Hills Shire, with some variation to reflect the Camden LGA context. Preferences in the medium density scenario sit between the higher density scenario and the current expressed preferences in the New Urban South Area, which is the part of the Camden LGA with the largest amount of medium density housing.

TABLE 20: PROPORTION OF HOUSEHOLD TYPE LIVING IN EACH DWELLING TYPE IN CAMDEN LGA AND BENCHMARK LGAS USED TO PRODUCE AN ADJUSTED HOUSING DEMAND SCENARIO

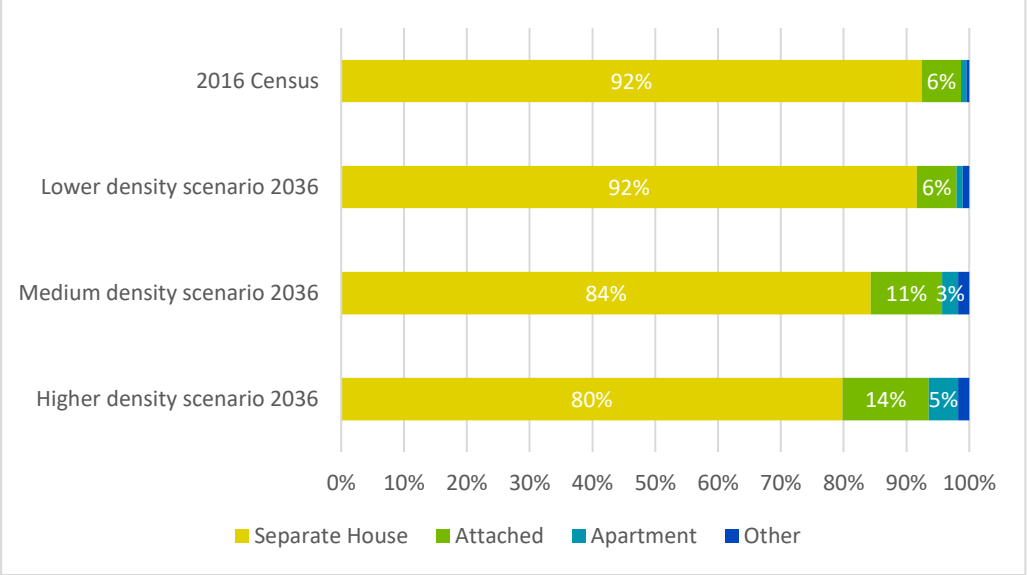
Household Type	Dwelling Type	Penrith LGA	The Hills LGA	Camden LGA	New Urban South	Lower density scenario (2036)	Medium density scenario (2036)	Higher density scenario (2036)
Couple family with Children	Separate House	92%	89%	98%	94%	*95%*	*92%*	*90%*
	Attached Dwelling	6%	9%	2%	6%	*4%*	*6%*	*9%*
	Flat or Apartment	2%	2%	0%	0%	*0%*	*2%*	*1%*
Couple family without Children	Separate House	86%	82%	94%	93%	*97%*	*86%*	*80%*
	Attached Dwelling	9%	12%	5%	7%	*3%*	*9%*	*13%*
	Flat or Apartment	4%	6%	1%	0%	*0%*	*4%*	*7%*
Lone person household	Separate House	60%	62%	75%	84%	*91%*	*60%*	*60%*
	Attached Dwelling	22%	22%	19%	16%	*6%*	*22%*	*25%*
	Flat or Apartment	16%	15%	4%	0%	*2%*	*16%*	*15%*
One parent Family	Separate House	78%	77%	92%	85%	*91%*	*78%*	*75%*
	Attached Dwelling	15%	16%	7%	15%	*9%*	*15%*	*20%*
	Flat or Apartment	6%	7%	1%	0%	*0%*	*6%*	*5%*
Group Household	Separate House	68%	72%	90%	85%	*93%*	*68%*	*70%*
	Attached Dwelling	18%	15%	9%	15%	*6%*	*18%*	*20%*
	Flat or Apartment	13%	11%	0%	0%	*1%*	*13%*	*10%*
Other family	Separate House	76%	64%	92%	100%	*85%*	*76%*	*75%*
	Attached Dwelling	14%	21%	6%	0%	*8%*	*14%*	*20%*
	Flat or Apartment	8%	15%	0%	0%	*5%*	*8%*	*5%*

Source: SGS 2019, ABS Census 2016

The overall dwelling mix in the Camden LGA under each of the demand scenarios is shown in Figure 43, as well as the dwelling mix in 2016. The proportions of separate houses in each scenario of between 80%-92% are greater than the proportion of dwellings planned in low density areas in recent planning for land-release precincts, as shown in Table 19. This reflects that even if similar planning policies were pursued in all future precincts as have been contemplated for Lowes Creek, some development in the medium density area is likely to be separate houses, but on smaller lots.

As noted in Section 3.1, the breakdown of housing into separate houses, attached dwellings and apartments as a measure of density is not as accurate in the Camden LGA as in other parts of Greater Sydney. Some separate houses in the Camden LGA are on lots of similar sizes to lots for larger townhouses, and there are some separate houses which resemble townhouses in design but are not attached.

FIGURE 43: CURRENT DWELLING MIX IN CAMDEN LGA AND 2036 DWELLING PROPORTIONS UNDER EACH HOUSING DEMAND SCENARIO



Adjusted housing demand results

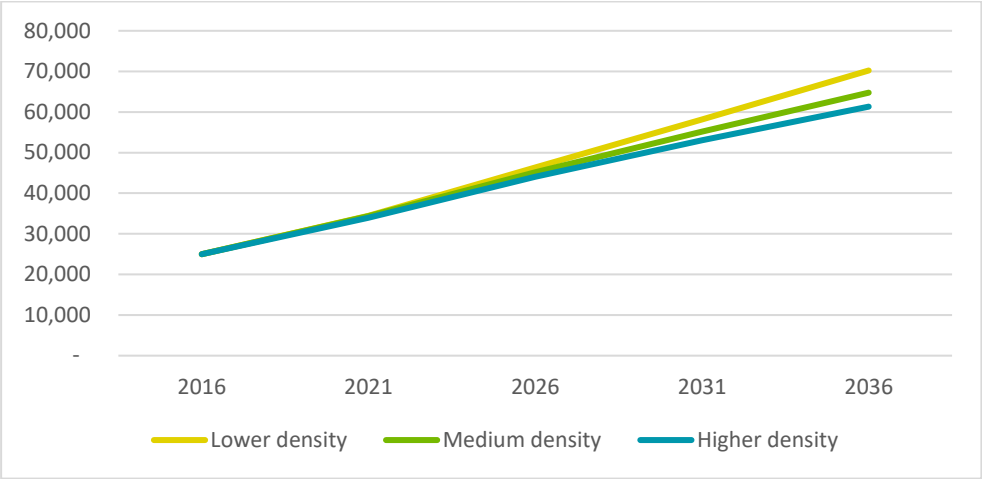
Housing demand in the Camden LGA under each demand scenario is shown in Table 21, Figure 44, Figure 45 and Figure 46. Under the medium and higher density scenarios, expressed dwelling preferences in the Camden LGA would gradually change from their current state to the adjusted scenario between 2016-2036.

TABLE 21: HOUSING DEMAND FOR THE CAMDEN LGA 2016-2036 UNDER DIFFERENT DEMAND SCENARIOS

Dwelling type	Scenario	2016	2021	2026	2031	2036	Change 2016-2036	Average annual growth rate
Separate house	Lower density	24,982	34,569	46,593	58,488	70,682	45,700	5.3%
	Medium density	24,982	34,621	45,538	55,784	65,860	40,878	5.0%
	Higher density	24,982	34,208	44,423	53,671	62,422	37,439	4.7%
Attached Dwelling	Lower density	1,624	2,181	3,019	3,905	4,959	3,335	5.7%
	Medium density	1,624	2,181	3,869	6,038	8,744	7,120	8.8%
	Higher density	1,624	2,395	4,447	7,130	10,516	8,892	9.8%
Apartment	Lower density	219	330	447	573	736	517	6.2%
	Medium density	219	342	728	1,259	1,949	1,730	11.6%
	Higher density	219	541	1,266	2,279	3,616	3,397	15.1%
Other dwellings		111	203	227	242	253	76	1.8%

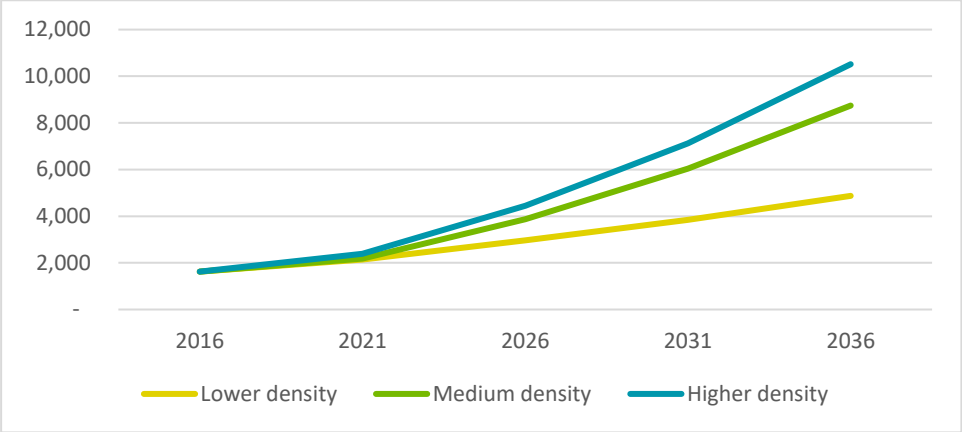
Under all scenarios, many separate houses will be needed in the Camden LGA between now and 2036 (see Figure 44). The number of separate houses is expected to increase by between 150%-183% on 2016 levels under these scenarios. However, under the medium density scenario approximately 4,820 less separate houses would be needed to accommodate the same population while under higher density scenario around 8,260 less separate dwellings would be needed.

FIGURE 44: DEMAND SCENARIOS FOR SEPARATE HOUSES IN THE CAMDEN LGA BETWEEN 2016-2036



There is a substantial difference in the number of attached dwellings which would be needed in Camden in 2036 under the different scenarios (see Figure 45). Under even the lower density scenario, the average annual growth rate of attached dwellings (5.7%) would exceed that of separate houses (5.3%). Under the medium and higher density scenarios the annual rate of growth of attached dwellings would be much higher, and there would be a demand for approximately an additional 3,790 attached dwellings in the medium density scenario and an additional 5,560 attached dwellings in the higher density scenario.

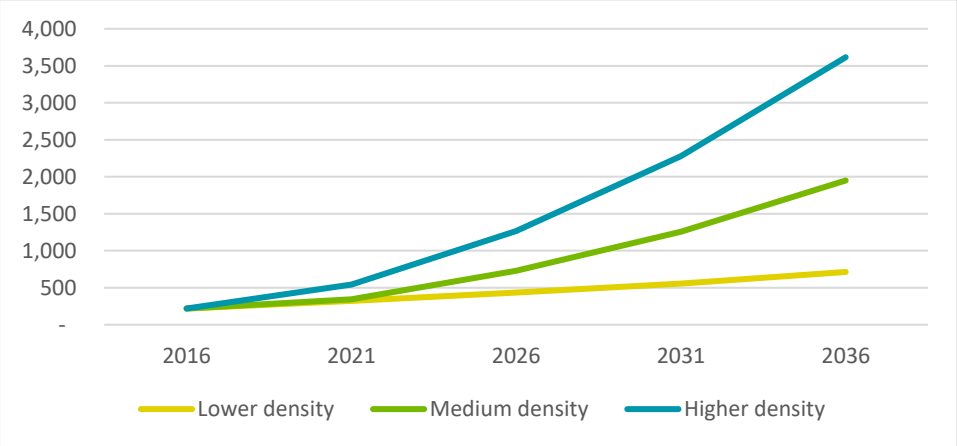
FIGURE 45: DEMAND SCENARIOS FOR ATTACHED DWELLINGS IN THE CAMDEN LGA BETWEEN 2016-2036



There is also a substantial difference in the possible demand for apartments under the medium and higher density scenarios when compared with the lower density scenario (see Figure 46). Under the lower density scenario there would be demand for only 517 additional apartments on current numbers, well below existing capacity. Under the medium and higher density scenarios this increases to 1,730 and 3,397 respectively.

Average annual growth rates for numbers of apartments in the Camden LGA (6.2% - 15.1% depending on the scenario) are greater than average annual growth rates for either attached dwellings (5.6& - 9.8%) or separate houses (4.7% - 5.3%). This is in part because of the very low number of apartments in the Camden LGA at the moment.

FIGURE 46: DEMAND SCENARIOS FOR APARTMENTS IN THE CAMDEN LGA BETWEEN 2016-2036



5.4 Social and affordable housing demand

Introduction

Aim

Household financial stress, which drives demand for Social and Affordable Housing (SAH), is influenced by a range of factors, ranging from macroeconomic conditions (such as demographics, employment, and wages) to the operation of our cities and the housing market (supply and location of housing stock). It is important to have a clear understanding of the definition of *total demand* for SAH. Households who are in need of SAH are those who, due to financial stress (and potentially other issues), are either:

- Unable to access market housing (including homeless persons)
- Have low household incomes and spend a high proportion of this income on rent (i.e. are experiencing rental stress)

Importantly, this definition excludes those who are homeowners, and are experiencing mortgage stress[5].

Once total demand is known, the quantum of unmet demand must consider the existing stock of social and affordable housing, along with expected changes such as:

- Investment in social or affordable housing stock
- The loss of affordable housing due to the National Rental Affordability Scheme (NRAS) ten-year subsidies ending.

Method

At present (i.e. 2016, for this analysis), demand for SAH is classified by three key cohorts. These are:

- Households who are in moderate rental stress (i.e. low income and spending between 30% and 50% of their income on rent) or severe rental stress (i.e. low income and spending greater than 50% of their income on rent).
- Homeless households, who in 2016 (Census night), were outside the private market for dwellings.[6]
- Households residing in social housing. These households are both in need of, and being provided with SAH, and are therefore a component of total demand.

[5] This cohort is typically excluded, as these households have the option of liquidating their asset and entering the rental market

[6] These households are clearly in need of SAH, but would not be identified as being in rental stress as they are homeless (i.e. 0% of income is spent on rent)

These cohorts are then further filtered using the income band definitions as set out in the NSW Affordable Housing Ministerial Guidelines for the 2016-17 year, the closest version to the 2016 Census. These guidelines set Household Income bands, based on the number of persons living in a household by level of income (Very Low, Low, Moderate), Table 22 Identifies these income bands.

TABLE 22: NSW AFFORDABLE HOUSING GUIDELINES HOUSEHOLD INCOME BAND BY HOUSEHOLD SIZE

Household Members	Very Low	Low	Moderate
Single Adult	$25,000	$40,000	$59,900
Additional Adult (18+)	$12,500	$20,000	$30,000
Each Additional Child (Under 18)	$7,500	$12,000	$18,000

Source: NSW Affordable Housing Ministerial Guidelines 2016-17

The definitions have been distributed across Household and Family Types from the 2016 Census for the Greater Sydney Greater Capital City Statistical Area to identify Household Income Bands by Household Size and Family Composition, shown in Table 23 below.

TABLE 23: HOUSEHOLD INCOME BANDS BY HOUSEHOLD AND FAMILY COMPOSITION

Household and Family Composition	Very Low	Low	Moderate
Couple family with no children	$39,436	$63,098	$94,547
Couple family with children	$52,064	$83,302	$124,853
One parent family	$38,260	$61,216	$91,724
Other family	$78,587	$125,739	$188,508
Lone person household	$25,000	$40,000	$59,900
Group household	$43,186	$69,098	$103,547
Other household	$78,839	$126,143	$189,114

Source: ABS Census 2016, NSW Affordable Housing Ministerial Guidelines 2016-17 and SGS Economics and Planning, 2019

Using ABS Census data, the total demand for SAH in 2016, as defined above, can be estimated. The Census attributes considered are presented in Table 24. The model supplements these with data extracted from the 2016 estimate of homelessness (ABS cat. 2049.0).

TABLE 24: CENSUS ATTRIBUTES

Variable	Use
Weekly rent	Weekly rent is used to identify households spending a large proportion of their income on rent.
Weekly household income	Weekly household income is used to identify households spending a large proportion of their income on rent.
Household type	Lone person, Group household, or several family sub-types. The appropriate housing response for households in need of SAH will vary based on household type.
Tenure type	Used to differentiate between home-owner households, rental households, social housing households, and households with no tenure types (includes homeless households).
LGA	Spatial component used to show distribution of SAH demand across NSW

Source: SGS Economics and Planning, 2018

Following this, the SGS model estimates the demand for SAH from 2021 to 2036, which requires the following key assumptions:

- Growth in the number of households, by type and location, are assumed to follow DPE projections
- Unless otherwise stated, new households assume the 2016 distribution across all attributes. For example, newly formed lone person households in Camden (obtained from previous step) will assume the 2016 distribution across the attributes of equivalised income, tenure type, total income, and rent expenditure

Current and Future Demand Social & Affordable Housing

Introduction

In 2016, demand for Social and Affordable Housing (SAH) within the Camden LGA was 2,331 dwellings. The majority of this demand stems from households in moderate to severe rental stress (see Table 25). This demand makes up approximately 8.6% of all dwellings in Camden. In comparison, the demand for affordable housing makes up 16.8% of all dwellings across Greater Sydney.

Demand for SAH in Camden is expected to grow by approximately 2,041 dwellings to 2026 and up to 4,592 additional dwellings will be demanded between 2016 and 2036, resulting in a total demand of 6,923 dwellings (see Table 27).

Sensitivity tests, which correspond to improving and worsening rental affordability, imply the following lower and upper bounds for growth in SAH demand by 2036:

- Improving affordability: Total SAH demand growth of 4,331 dwellings
- Worsening affordability: Total SAH demand growth of 4,978 dwellings

Current demand

In 2016, there was demand for 2,331 social and affordable housing dwellings within Camden. Table 25 presents this demand, disaggregated by current tenure and household type. Demand for SAH in Camden is primarily driven by the 1,072 households currently experiencing moderate rental stress and 724 households experiencing severe rental stress. The 440 households already living in social housing also contribute to the higher expressed demand.

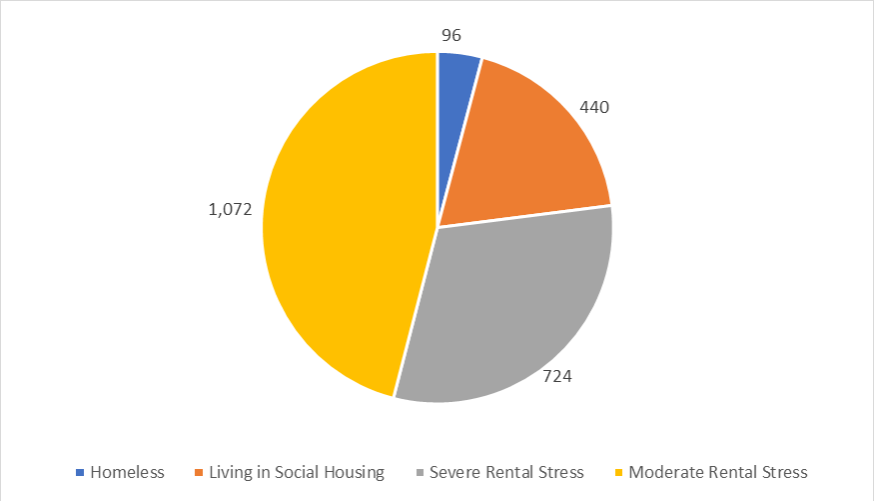
Table 26 also presents median rents in 2016 for Camden.

TABLE 25: CURRENT DEMAND FOR SOCIAL & AFFORDABLE HOUSING, BY COHORT

LGA	Homeless	Living in Social Housing	Severe Rental Stress[7]	Moderate Rental Stress[8]	Total Demand for SAH	Total Households	Demand % of Total households
Couple family with children	0	58	129	359	547	13,228	4.1%
Couple family with no children	0	62	125	188	374	6,822	5.5%
Group household	0	7	24	45	77	400	19.1%
Lone person household	96	206	200	150	652	3,696	17.6%
One parent family	0	100	233	311	644	2,800	23.0%
Other family	0	6	12	19	37	300	12.5%
Total	96	440	724	1,072	2,331	27,246	8.6%

Source: ABS Census 2016, ABS Homelessness Estimate (Cat. 2049.0), SGS Economics & Planning 2018

FIGURE 47: CURRENT DEMAND FOR SOCIAL & AFFORDABLE HOUSING, BY COHORT



Source: ABS Census 2016, ABS Homelessness Estimate (Cat. 2049.0), SGS Economics & Planning 2018

TABLE 26: CAMDEN MEDIAN RENT (2016)

LGA	One Bedroom	Two Bedrooms	Three Bedrooms	Four + Bedrooms
Camden	$300	$385	$450	$540

Source: FACS Rents, Trend March 1990 – June 2016, Metropolitan LGAs, Issue 116 (2016)

Future demand

Between 2016 and 2036, demand for SAH is expected to grow by approximately 4,592 households. This represents an average annual growth rate of 5.6%, compared to an annual growth of 1.5% across NSW.

Table 27 expresses this forecast demand, disaggregated by household type. Lone person households have the fastest annual growth rate of demand for SAH (6.2%). This is consistent with trends across NSW, as the ageing of the population (as the largest driver) leads to more lone person households overall, combined with the lower incomes of such households.

[7] Moderate, Low or Very Low-Income Households only. Other higher income households may be in rental stress, but the relative levels of Household income would exceed Income eligibility criteria.

In absolute terms, Families with children (sub-total) exhibit the greatest growth in demand and remains the largest cohort of households requiring SAH. There is expected to be a substantial need for affordable housing for one parent families between 2016-36.

TABLE 27: FORECAST DEMAND FOR SAH, BY HOUSEHOLD TYPE

Household Type	2016	2021	2026	2031	2036	Change	AAGR
Couple family with children	547	741	994	1,237	1,470	924	5.10%
One parent family	644	874	1,208	1,553	1,909	1,265	5.60%
Families with children (sub-total)	*1191*	*1615*	*2202*	*2790*	*3379*	*2189*	*5.35%*
Couple family with no children	374	514	693	868	1,071	697	5.40%
Other family	37	44	56	81	94	56	4.80%
Group household	77	96	134	163	201	124	4.90%
Lone person household	652	911	1,286	1,697	2,178	1,526	6.20%
Total	**2,331**	**3,180**	**4,372**	**5,598**	**6,923**	**4,592**	**5.60%**

Source: DPE Household Forecasts 2016, SGS Economics and Planning 2018

The proportion of households of each type that will need SAH in 2016 is shown in Table 28. Growth in affordable housing demand under the SGS SAH model is based on DPE population projections, with the proportion of each household type needing SAH remaining constant over time.

TABLE 28: THE PROPORTION OF EACH HOUSEHOLD TYPE WHO NEED SAH IN THE CAMDEN LGA

Household Type	Couple only	Couple with children	Single parent	Other family households	Lone person	Group
Proportion	6%	4%	23%	12%	18%	19%

Source: SGS Economics and Planning 2019

The above analysis presents a base case, which is the expected demand for SAH if the distributions of household incomes and rents remain constant, relative to each other. In other words, it is assumed that rents do not grow faster than income, or vice versa. However, in reality, the evolution of these variables will be influenced by a variety of factors ranging from macroeconomic conditions to housing policy and infrastructure investment[9]. Table 29 examines the forecast demand for SAH under two alternate scenarios, which are defined as follows:

- Improving affordability: Household incomes grow by 1.0% per annum, relative to rents. Over a 20-year period (i.e. at 2036), incomes would have grown by 20% relative to rents
- Worsening affordability: Household rents grow by 1.0% per annum, relative to incomes. Over a 20-year period (i.e. at 2036), rents would have grown by 20% relative to incomes

Under the improving affordability scenario there is expected to be demand for 1,147 additional dwellings between 2016 and 2026, with total demand under this scenario reaching approximately 4,331 dwellings in 2036. In comparison under worsening affordability conditions, by 2026 there will be demand for 1,258 new affordable housing dwellings with total demand reaching 4,978 by 2036.

[9] E.g. Improving the accessibility of an area can significantly alter property values and rents

TABLE 29: FORECAST DEMAND FOR SAH – SENSITIVITY TESTS

Scenario	2016	2021	2026	2031	2036	Change	AAGR
Base	2,331	3,180	4,372	5,598	6,923	4,592	5.6%
Improving affordability	2,331	3,056	4,203	5,384	6,662	4,331	5.4%
Difference	0	-124	-169	-214	-261		
Worsening affordability	2,331	3,367	4,625	5,917	7,309	4,978	5.9%
Difference	0	187	253	319	386		

Source: DPE Household Forecasts 2016, SGS Economics and Planning 2018

Supply of Social and Affordable Housing

The existing supply of Social and Affordable Housing in Camden is primarily provided through public housing, community housing, and the National Rental Affordability Scheme (NRAS). In 2016, Camden had a stock of 417 SAH dwellings across these three providers, with public housing comprising the majority. Table 30 presents this current supply of SAH in Camden.

TABLE 30: EXISTING SOCIAL AND AFFORDABLE HOUSING SUPPLY (2016)

LGA	Public Housing	Community Housing	NRAS	Total
Camden	344	56	17	417

Source: ABS Census 2016, NRAS Quarterly Performance Report Dec 2016, AIHW National Housing Assistance Data Repository 2017, SGS Economics and Planning, 2018

Projected changes in social and affordable housing supply

For planned developments, the availability of data from public sources is limited. There are no known Social and Affordable Housing (SAH) or Communities Plus projects announced in the area, however any new development can be expected to expire after a 10 year period in line with the Affordable Housing SEPP legislation. The affordable housing targets identified by the GSC would potentially apply in the LGA.

An alternative avenue of collecting data regarding possible additional supply via for instance the *State Environmental Planning Policy (Affordable Rental Housing)* 2009 and other mechanisms may be the individual councils and community housing providers[10].

The phasing out of NRAS funding (it involves a 10-year subsidy on new housing) may result in the conversion from affordable to full market rental dwellings and an associated reduction in the supply of affordable housing. The extent to which this conversion will occur is uncertain. It is anticipated that ownership status of NRAS dwellings may play a role, with dwellings owned by Community Housing Providers more likely to be retained as affordable stock. Table 31 shows the expected number of NRAS dwellings within Camden under the following assumptions:

- All NRAS incentives that have not yet been realised (as at December 2017) will be delivered by 2021
- All NRAS dwellings will be lost from the pool of affordable housing once their 10-year subsidy expires

[10] The current timing and scope were limited and this was not accommodated

TABLE 31:NATIONAL RENTAL AFFORDABILITY SCHEME DWELLINGS

LGA	2016	2021	2026
Camden	17	17	0

Source: NRAS Quarterly Performance Reports December 2018

6. HOUSING CAPACITY

Housing capacity is an estimate of the quantum of housing that could be accommodated in an area. It is based on existing planning controls, recent housing supply trends and planned future land-release precincts. It is a theoretical assessment of the maximum number of dwellings that could be developed under existing development controls and conditions and future precincts and is intended to be indicative rather than absolute.

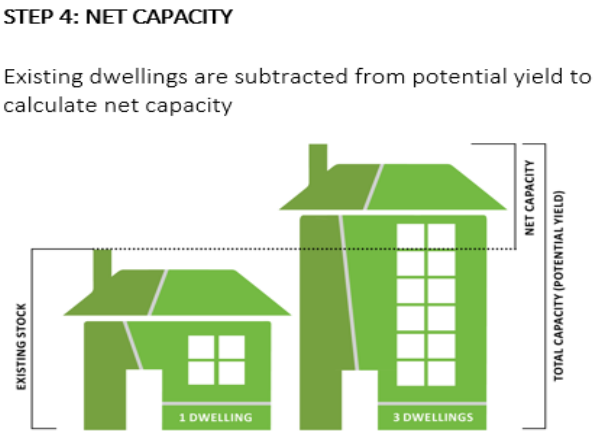
A detailed housing capacity assessment has been conducted to determine the amount of infill development which would be possible in the established parts Camden LGA (the Camden, Narellan and Established Suburbs settlement areas).

In New Urban and Future Urban areas a high-level assessment of possible capacity has been undertaken using notional development densities. Housing in land release areas has been recently developed and would not be expected to be redeveloped in the short or medium term. For this reason, the potential capacity for redevelopment of existing housing in these areas was not calculated.

6.1 Housing capacity method

Figure 48 below charts the 4-step process for determining the volume of dwelling capacity in the LGA. The logical flow is to firstly identify current and future residential land before filtering out all the lots which are unlikely to be developed/redeveloped. Then based on planning controls, the volume of yield possible at a lot level is determined. Finally, existing dwelling stock is subtracted from this total yield to determine net housing capacity (growth).

FIGURE 48 PROCESS FOR ARRIVING AT NET HOUSING CAPACITY



These steps are described in more detail below for Camden LGA.

Established Areas

Step 1: Net land area identification

Net land refers to total land where residential development is permitted, minus the land that cannot be developed for residential purposes e.g. roads and footpaths. The capacity calculation is conducted on a lot by lot basis with only lots where residential development is permissible considered, therefore parts of the public domain are automatically excluded.

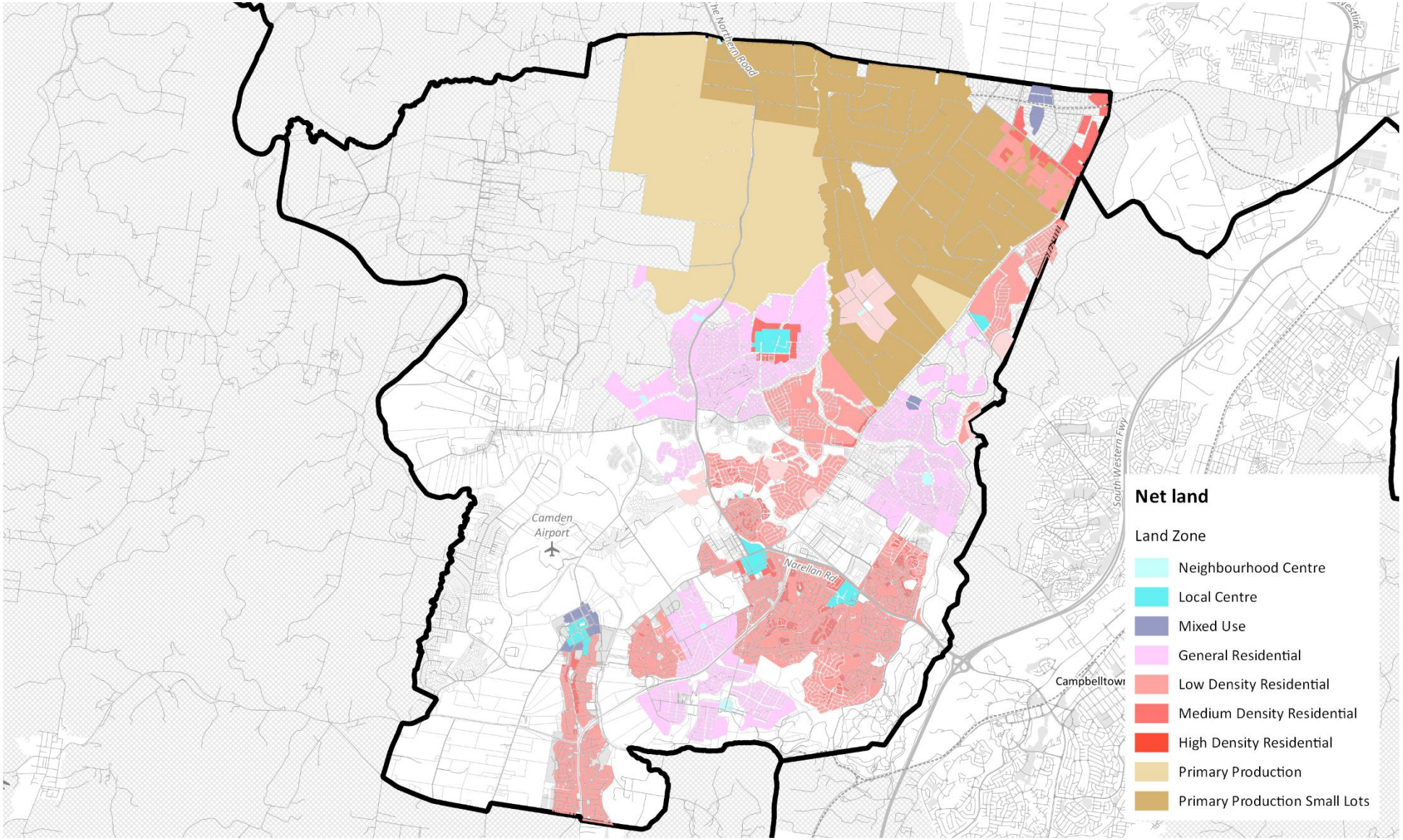
The net land in the LGA in both established areas and release areas (which are discussed below) is shown in Figure 49.

Step 2: Available land assessment

Available land represents any land that has the potential to accommodate additional housing in Camden LGA. It is derived from the net land, from which lots unlikely to be developed are excluded.

Designation of a lot as available land does not mean that development is necessarily feasible or that property owners are ready or willing to develop these sites. Typically, only a small portion of available lots are likely to be developed in any one year. There are also likely to be site-specific attributes which may affect the development potential of some sites, but which cannot be included in an LGA-wide capacity analysis.

FIGURE 49: NET LAND IN THE CAMDEN LGA



Land Exclusions

Lots may be zoned to permit residential development, and included in the net land area, but may not have capacity for additional dwellings due to environmental constraints, existing development or site-specific constraints. Those lots which are unavailable for development or unlikely to be developed are excluded based on the following criteria.

Small Lots

Sites with small lots are generally either not allowed to develop under the planning controls or are difficult to develop. Lots which are not vacant are excluded if they fall under the minimum area and frontage sizes for redevelopment.

Lots zoned R2 low density residential or R3 medium density residential were excluded if the lot size was less than 600 sqm as this is the minimum size under which dual occupancies are permitted under the Camden DCP 2011. Corner lots with a frontage of less than 22m and non-corner lots with a frontage of less than 22m were also excluded.

Heritage Items

Heritage items under the Camden LEP were excluded.

Strata developed lots

Strata developed lots are less likely to be redeveloped due to their distributed ownership structure. In addition, the value of the land and existing development Is high due to the number of dwellings they contain, and so redevelopment would need to deliver a greater return to be viable than development on other land. For this reason, strata-subdivided lots were excluded from comprehensive redevelopment.

Manually excluded lots

The following kinds of sites were excluded manually based upon a desktop audit of lots in the LGA by SGS:

- Lots which are zoned for residential development, but which contain substantial existing managed accommodation developments, or partly commercial developments.
- Lots in business centres in which residential development is permissible, but which have been developed for large-scale retail or business use.
- Existing facilities which are assumed to be fixed in place over the next 20 years, including schools, large places of worship, aged care facilities and major infrastructure items.
- Land which is zoned for residential development but which currently contains a reserve or elements of the public domain.

Step 3: Potential yield assessment

Potential yields were calculated for the available land using a series of yield assumptions depending upon each lot's zone, size, frontage, location, development standards and constraints. Where possible the assumptions used were developed from Camden Council's planning controls or local development data. These assumptions are discussed below.

Yields were calculated for each individual lot, with lots excluded if they were too small for development of a particular dwelling type. Amalgamation of several lots could permit development of multi-dwelling housing or a residential flat building despite the individual lots being too small for this. However, amalgamation of lots is costly and difficult for developers and is unlikely to occur without a significant uplift in land value as a result of development.

Yield Assumptions

Dual Occupancies

Dual occupancies are permissible in the R1, R2 and R3 zones under the Camden LEP 2010 but there are no R1 zones in established areas and so they have been considered separately. Where a lot has a sufficient area and frontage to permit construction of a dual occupancy, a yield of two dwellings has been assigned (an increase from one on the lot before development).

Subdivision

Where a lot has an area greater than twice the minimum subdivision lot size under the Camden LEP 2010, subdivision of the land into two or more new lots could be permitted. In this case yield has been calculated from the smaller of:

- The lot size divided by the minimum subdivision lot size (either 450 sqm or 600 sqm), and
- The lot frontage divided by 8.75m. This is an average of the minimum subdivision lot frontage to a road (15m) and the width required of an access handle to two properties (5m in total or 2.5m each).

On very large lots construction of an internal road may be possible to allow access to subdivided lots. There are very few lots where this would be possible in established suburbs where this calculation has been performed.

Multi-dwelling housing

Multi-dwelling housing is permissible in the R3 zone under the Camden LEP 2010 and on several currently vacant lots in the Mount Annan Centre. Under the Camden DCP 2011, dual occupancies require a lot size of at least 600sqm but there is no minimum lot size for multi-dwelling housing. It is unlikely that multi-dwelling housing could be developed on a lot smaller than the minimum size for a dual occupancy, so a 600sqm minimum site area was used for multi-dwelling housing. Under the Camden DCP 2011 multi-dwelling housing requires a street frontage of at least 25m.

Where multi-dwelling housing is possible, the yield was assessed based upon one dwelling being constructer per 200sqm of site area. This density was derived by rounding the average density of existing multi-dwelling housing in the Camden LGA. A desktop audit gave an average density of 197sqm per dwelling.

Residential flat buildings

Residential flat buildings are permitted in the R3 zone under the Camden LEP 2010. Under the Camden DCP 2011, an area of 1,000 sqm and a frontage of 30m is required to permit construction of a residential flat building.

Where residential flat buildings are possible on an individual lot, the yield has been assessed based upon the density requirement in the Camden Development Control Plan 2011 that there may not be more than 1 dwelling per 20sqm of site area.

Shop-top housing

Shop top housing is permitted in the B1, B2 and B4 zones under the Camden LEP 2010. Amalgamation would be more likely to occur in commercial zones than residential zones, and so no minimum lot size or area has been applied to exclude lots in these zones from development.

The yield for shop-top housing was determined based upon:

- The height of buildings control under the Camden LEP 2010,
- An assumed site coverage of 40%
- An average of 110 sqm of floorspace per dwelling
- A floor-to-floor height of 3.3m
- Ground floor retail

Development in Camden Town Centre

Development yield for shop-top housing in Camden Town Centre has been calculated with a similar approach to that in other centres. However, given the fine subdivision pattern in the Camden Town Centre, a higher site coverage of 70% has been assumed.

Step 4: Net capacity

Net housing capacity is the capacity for new dwellings in excess of the current dwelling stock. Net housing capacity was calculated for every lot by subtracting the number of existing dwellings on the lot from the estimated dwelling yield. The number of existing dwellings was calculated based upon dwellings of each type recorded in the 2016 census supplemented by more recent development.

Land release

Release areas with zoning for urban development have been included. New dwellings in release areas will be developed through subdivision of larger lots. Many of the release areas in Camden contain large areas zoned R1, and some of the land in these zones will become parks and other facilities. To calculate capacity in release areas therefore requires an assumption about the approximate density of development. In addition, much of the land in the South West Growth Area in the Camden LGA has not been released and is not currently zoned for urban development, so an assumption is required regarding how much of the land will be zoned for residential development and the approximate future residential density.

Net Land

The net land in release areas in Camden is comprised of:

- Land zoned R1, R2, R3 or B4 in existing growth precincts governed by both the Camden LEP 2010 and the *State Environmental Planning Policy (Sydney Region Growth Centres)* 2006. Dwellings are permitted in these zones.
- Any land with a rural, rural residential or local centre zoning within the South West Growth Area. As further growth precincts are released for development in the future, it is likely that some of this land will be available for residential development.

Land Exclusions

The following land was excluded from the capacity calculation:

- Sites which have been subdivided to residential allotment sizes, which was approximated by only considering those sites with an area of 2,000 sqm or larger
- Sites which contain open space, drainage or other infrastructure,
- The parts of lots within the South West Growth Area which are indicated as flood-affected under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006.*

Some of the flood-affected land excluded may be developable if flood mitigation works take place through land development but excluding flood-affected areas provides a conservative assumption regarding capacity. In addition, more detailed flood modelling as land is released will likely identify additional land which is flood affected which is not currently identified in the SEPP.

Most of the land in the South West Growth Area is biodiversity certified, and so clearing of native vegetation is permitted. For this reason, it is not necessary to exclude biodiversity-certified vegetated areas from possible future development. Non-certified areas are mostly within the flood-affected part of the Growth Area and so have been excluded under that criterion. Any additional large conservation sites have also been excluded.

Potential Yield

Potential yield of current and future developable land has been assigned using notional development densities which were developed based upon recent development in Camden's growth areas and the density assumptions in a range of already released growth precincts.

Current growth precincts

A notional dwelling density for the remaining land in current release precincts has been determined, based upon the densities observed in the already developed parts of these precincts. The average size of vacant residential allotments in several suburbs in Camden LGA and the New Urban North and New Urban South precincts as a whole are shown in Table 32. The average size of vacant lots sold in 2018 is noticeably smaller than the average size since 2001, illustrating the decline in average lot size which is occurring in land release development areas.

From the average lot sizes shown in Table 32, it appears that an average lot in current release suburbs is around 475sqm, while an average lot sold in 2018 is around 400sqm, with many lots smaller than this. Using an indicative proportion of residentially zoned land developed for roads of 30%, and of other land uses such as open space of 10%, these average lot sizes translate into densities of 12.6 and 15 dwellings/ha respectively. It is likely that average lot sizes will not increase from their current size, and so the current average density of 15 dwellings/ha has been used as the notional density of undeveloped but released land to calculate dwelling capacity.

TABLE 32: AVERAGE LOT SIZE OF VACANT RESIDENTIAL LOTS IN SELECT LAND-RELEASE SUBURBS IN THE CAMDEN LGA

Suburb	Oran Park	Spring Farm	Gregory Hills	Elderslie (release precinct only)	New Urban North and New Urban South
Average size of lots sold since 2001 (sqm)	485	445	444	486	497
Average size of lots sold in 2018 (sqm)	442	439	339	391	431

Source: SGS 2019, NSW Bulk Property Sales Information

Note only lots sold in 2001 or later are included

Oran Park mixed use

There are approximately 16ha of land which are intended to be developed as mixed-use development under the *State Environmental Planning Policy (Sydney Region Growth Centre) 2006* and *Oran Park Precinct Development Control Plan*. This land has a height control of 24m, which would allow a 6-7 storey development.

Based upon floor space ratios (FSRs) in other parts of Greater Sydney, and on a commercial FSR of 0.2-0.5 to allow ground floor retail, a reasonable FSR for this precinct would be between 1-2. Accounting for some of the zoned land being developed for roads and other public domain elements, a lowered ratio of 0.8:1 has been used. A floor space per apartment of 100sqm has been used.

Future growth precincts

The possible density of future growth precincts has been determined based upon benchmarks of other precincts in the South-West and North-West growth areas, including precincts outside of the Camden LGA. While infrastructure availability and the housing market vary slightly between different LGAs and different growth areas, the range of densities planned for in land-release precincts throughout Greater Sydney provide a range which illustrates possible development outcomes in the Camden LGA.

The overall density of a precinct varies greatly depending upon its land use mix. Precincts which have a large amount of industrial or employment land use, such as Turner Road, or which have large amounts of land set aside for conservation or environmental living, such as Box Hill (outside of the Camden LGA), have lower densities than others.

Lowes Creek is a more recent precinct and has not been finalised or rezoned. The proposed planning controls for this precinct envisage higher density development than older precincts. This partly reflects the increasing densities observed in proposed developments in existing land-release precincts. Leppington Stage One was also planned for higher densities than many other precincts, mainly due to its position immediately adjacent to a proposed major town centre.

Development density in the yet to be released parts of the South West Growth Area will likely reflect recently observed densities. While development density has been increasing recently, some of the land in the yet to be released precincts will likely be unsuitable for medium density development and may be required for infrastructure and conservation purposes. The figures shown in Table 33 exclude land proposed to be developed as industrial or employment lands or large areas proposed to be conserved and so excluded from development precincts. For this reason, a density guide for all the undeveloped land in the South-West Growth Area should be slightly lower than the density expected within development precincts as reflected in Table 33.

The amount of developable land and reasonable density in future precincts is inherently uncertain, so a range of densities has been used between 8 dw/ha – 15dw/ha. Within this range, development scenarios are:

- Lower density: A density of 8 dw/ha across the future release precincts would be slightly higher than the densities planned in Marsden Park and Turner Road given that some land will likely be used for employment or conservation purposes. Little medium density development would be delivered.
- Medium density: A density of 12.5 dw/ha would deliver development which is around the same density as Lowes Creek when land likely to be used for employment purposes, infrastructure and conservation is considered. There would be a mixture of detached and medium-density development, and housing density would be higher than that currently being delivered. This would require a small shift towards a preference for medium density dwellings.
- Higher density: A density of 15 dw/ha would deliver densities higher than those planned for Lowes Creek or Leppington Stage 1 when land likely to be used for employment purposes, infrastructure and conservation is considered. Larger amounts of medium density housing and some apartments would be delivered. This would require a larger shift in dwelling preferences towards medium and higher density housing, and would likely require a significant-change in transport infrastructure availability to facilitate shifts in dwelling preferences.

TABLE 33: ANTICIPATED DENSITIES OF LAND-RELEASE PRECINCTS IN CAMDEN AND GREATER SYDNEY, AS PROVIDED IN THEIR PLANNING INSTRUMENTS AND PLANNING REPORTS.

Precinct	Marsden Park*	Turner Road (excluding industrial)	Oran Park	Box Hill*	East Leppington	Lowes Creek	Leppington Stage 1
Year in which planning controls finalised	2013	2007	2007	2013	2013	Currently in planning	2015
% of precinct residentially zoned	68%	59%	69%	73%	81%	51%	73%
Average expected residential density (dwellings/ha)	12.6	14.4	13.9	15.8	15.1	26.3	18.8
Total precinct density (dwellings/ha)	8.6	8.8	10.6	11.5	12.3	13.5	13.7

* Note that these precincts are located outside of the Camden LGA

6.2 Results

The available land in the LGA is shown in Figure 50. More detailed maps of each settlement area are shown in Appendix D.

Much of the unreleased land in the South West Growth Area is considered as available. Flood prone land has been excluded from development but is still shown on this map as the lots which contain flood prone land are considered to be available.

There is some available land in already released land-release precincts around Oran Park, Gregory Hills, Gledswood Hills, East Leppington and Spring Farm. While a reasonable amount of land remains, it is mostly located towards the edges of the precincts. Leppington Stage 1 and the mixed use and residential components of the Leppington Town Centre is marked as available but no development has occurred there yet, in part due to a lack of development feasibility, the high land value caused by the land zoning and the lack of servicing in some areas.

FIGURE 50: AVAILABLE LAND FOR RESIDENTIAL DEVELOPMENT IN THE CAMDEN LGA

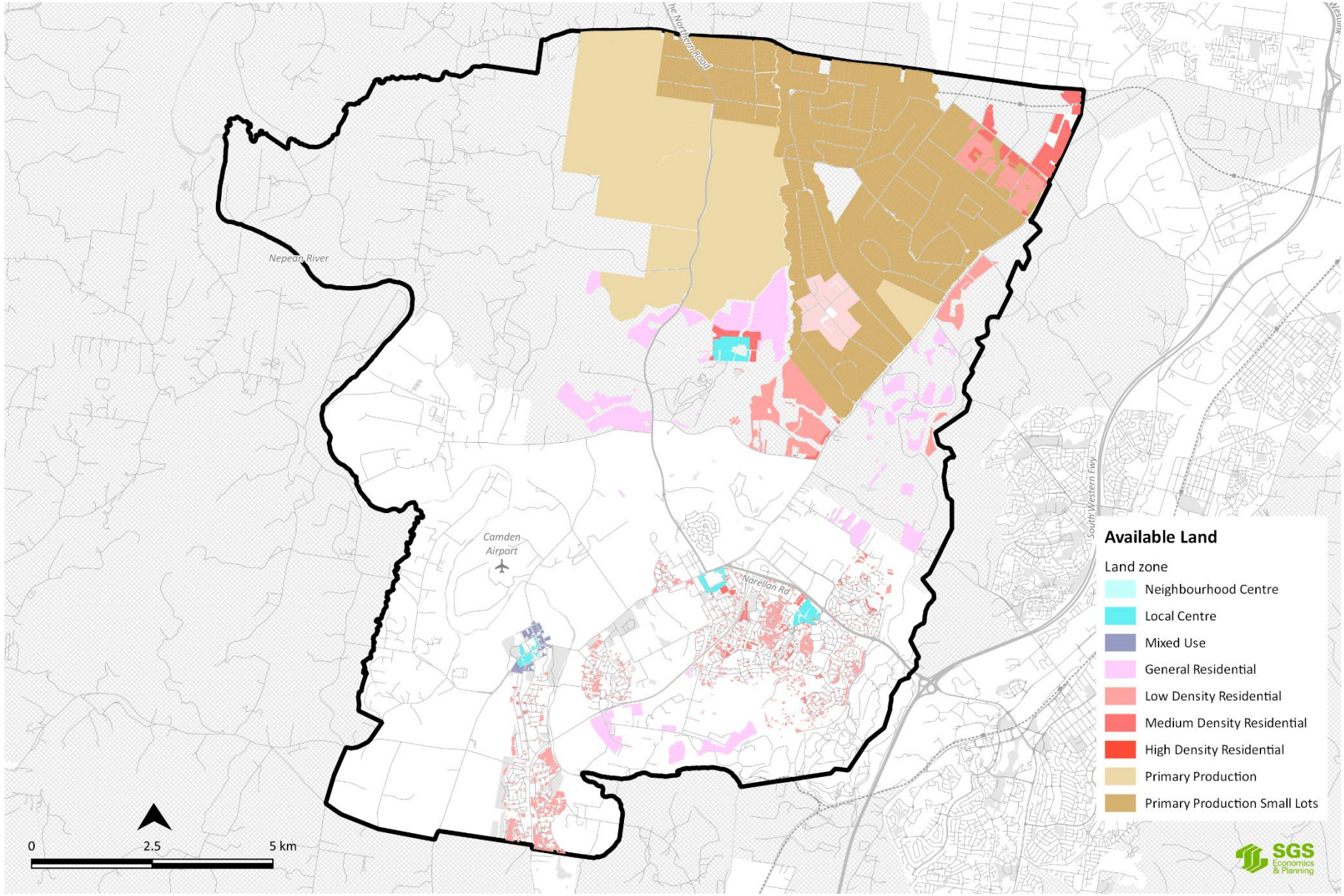
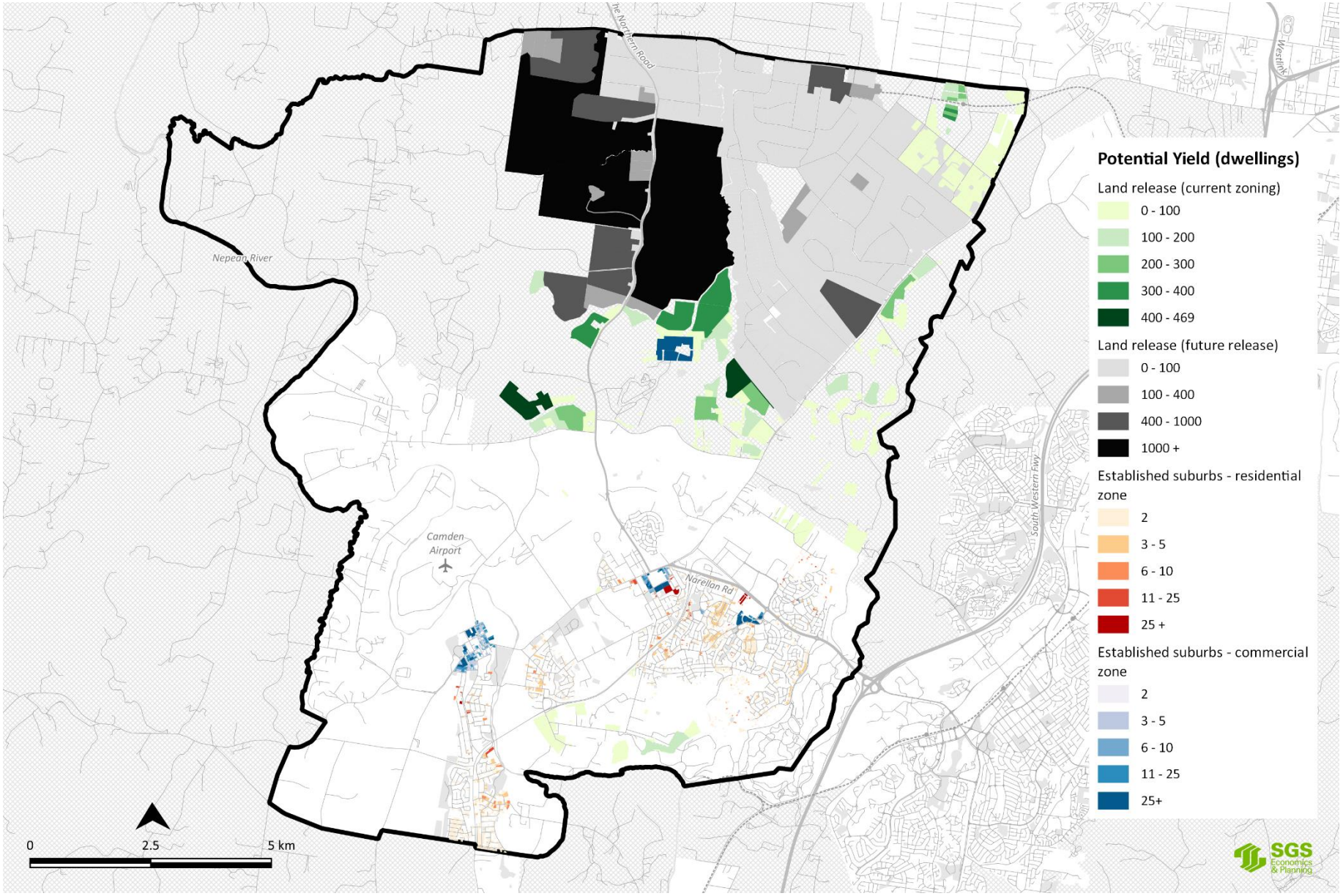


FIGURE 51: POTENTIAL YIELD PER LOT OF RESIDENTIAL DEVELOPMENT ON AVAILABLE LAND IN THE CAMDEN LGA UNDER THE MEDIUM DENSITY SCENARIO



Yield

The net development capacity for each type of development in each settlement area is shown in Table 34. The total capacity under each of the density scenarios is many times Camden's 2016-2021 dwelling target under the *Western City District Plan* of 11,800 dwellings.

Most of the capacity is in future release precincts, with a calculated capacity of 44,675-83,766 out of 70,131-109,122 total. Most of this capacity would be for either separate houses or attached dwellings in land-release precincts, similar to what has been delivered in the New Urban North and New Urban South areas.

There is capacity for a reasonably large number of shop-top housing dwellings (3,346) in existing centres including Camden, Narellan and other local centres throughout the LGA. This kind of development has not occurred in the LGA in the past and may not be feasible under current market conditions. In this case, the capacity for those dwellings would require an alteration of market conditions to be realised and should be disregarded when assessing short-medium term development outcomes.

There is capacity for 248 dual occupancy and 722 multi-dwelling housing dwellings in redevelopment of existing lots in the established parts of the Camden LGA. Only a small portion of these lots would be likely to be redeveloped in any one year, and so the limited yield of this development type could constrain the delivery of medium density housing in the LGA as discussed in Section 8.1.

There is capacity in current release precincts for approximately 14,956 additional dwellings through subdivision, 1,280 high-density dwellings in Oran Park and 4,398 in the Leppington Town Centre. Sydney Water's servicing plans indicate that the precincts which have been released have also been serviced which would make them available for development. The size of this capacity indicates that when combined with the proposed land release at Lowes-Creek Maryland this should provide sufficient capacity for the short-medium term.

TABLE 34: NET YIELD BY SETTLEMENT AREA AND DEVELOPMENT TYPE

Development Type	Density Scenario	Camden	Narellan	Existing Suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
Shop-top housing		1,560	1,141	645					3,346
Dual occupancy		41	5	202					248
Multi-dwelling housing		33	185	504					722
Subdivision (established areas)		127	33	346					506
Subdivision (released)					9,818	1,375	3,750	13	14,956
Subdivision (future release)	Lower						44,675		44,675
	Medium						69,805		69,805
	Higher						83,766		83,766
High density					1,280		4,398		5,678
Total	Lower	1,760	1,364	1,697	11,098	1,375	48,425	13	70,131
	Medium						77,953		95,261
	Higher						87,506		109,222

7. DEVELOPMENT SCENARIOS

This chapter combines future housing demand and capacity with the strategic context of the Camden LGA to outline how housing could be developed across the LGA under two different scenarios: a status-quo development scenario and an adjusted development scenario.

7.1 Supply and demand balance

The approximate number of dwellings in the Camden LGA in November 2018 are shown in Table 35. This comprises the number of dwellings recorded in the LGA in 2016, additions in the 2016-17 and 2017-18 financial years, and an approximate number of additions from July 2018-November 2018 based upon the development rate during the 2016-17 and 2017-18 financial years (note that completions data in the Camden LGA is not available after the end of the 2018 financial year).

The capacity analysis discussed in Section 4 uses data from November 2018, so all of the calculated capacity under the current planning controls would be in addition to the approximate number of dwellings at that time (31,935).

TABLE 35:APPROXIMATE NUMBER OF DWELLINGS IN THE CAMDEN LGA IN NOVEMBER 2018

Column heading	Dwellings in 2016	Completions 2016-2018	Approximate completions July 2018-November 2018 (based on earlier completion rates)	Approximate supply November 2018
Separate house	23,844	4948	1122	31,935
Attached dwelling	1,547			
Flat or apartment	207			
Other	75			
Total	25,865			

Source: ABS Census 2016, Sydney Water count of dwelling completions

SGS's housing demand model shows that based upon population projections and past trends in household type and size, there will be demand for a total of 76,626 dwellings in the Camden LGA in 2036.

This would be an addition of 49,627 dwellings from 2016-2036, or 44,694 from the approximate number of dwellings in November 2018. However, there is capacity in the LGA for a total of approximately 102,273-141,364 additional dwellings depending upon the density of future release precincts. As such, potential dwelling capacity is well in excess of anticipated dwelling demand.

TABLE 36:TOTAL CAPACITY AND HOUSING DEMAND UNTIL 2036 BY DWELLING TYPE IN THE CAMDEN LGA

	Scenario	Houses and attached dwellings	Flats and apartments	Total
Current supply		31,935		
Capacity – established areas		1,476	3,346	4,822
Capacity – land release	Lower density	59,631	5,678	60,911
	Medium density	84,761	5,678	90,439
	Higher density	98,722	5,678	99,992
Total capacity	**Lower density**	**93,042**	**9,231**	**102,273**
	Medium density	**118,172**	**9,231**	**127,403**
	Higher density	**132,133**	**9,231**	**141,364**
Demand 2016		25,423	219	25,632
Demand 2021	Lower density	36,750	330	37,080
	Medium density	36,738	342	
	Higher density	36,540	540	
Demand 2026	Lower density	49,612	447	50,059
	Medium density	49,332	727	
	Higher density	48,795	1,264	
Demand 2031	Lower density	62,393	573	62,966
	Medium density	61,710	1,256	
	Higher density	60,691	2,275	
Demand 2036	Lower density	75,640	736	76,376
	Medium density	74,431	1,949	
	Higher density	72,769	3,616	
Change in demand 2016-2036	**Lower density**	**50,217**	**517**	**50,744**
	Medium density	**49,008**	**1,730**	
	Higher density	**47,346**	**3,397**	

Source: SGS 2019

Note that the demand figures in this table do not include demand for other dwellings

The projected apartment demand is for only 517 additional dwellings under the lower density scenario. This is under the capacity for apartments in either Leppington or Oran Park and so these could be accommodated without development of shop-top housing in any of Camden's established centres. Under the medium and higher density scenarios, demand for apartments increases to totals of 1,949 and 3,616 respectively (an increase of 1,730 and 3,397 dwellings between 2016-2036 respectively).

Separate houses and attached dwellings can be accommodated in land-release development, while some development of attached dwellings would also be expected in the established parts of Camden. There is enough capacity for these dwelling types even if very little redevelopment occurs in the established parts of Camden.

Almost all of the land with capacity in the New Urban North and New Urban South areas have been serviced with drinking water and sewer mains and are available for development now. Servicing plans for Sydney Water after 2022 are not available and so it is not possible to forecast when each of the precincts in New Urban North will be able to be developed. Nonetheless, the rapid pace of development in the Camden LGA will require continued planning for the release and servicing of new precincts.

7.2 Demand accommodation scenarios

There is enough capacity for additional dwellings in the Camden LGA to accommodate demand by 2036 across the whole LGA, as discussed above. However, the availability of land must be staged to ensure that the development pipeline is not restricted at any time between 2016-2036. The balance between housing capacity and demand in different parts of the LGA in each five-year period can be determined by forecasting how many of the 44,694 additional dwellings demanded will be built in each settlement area for each dwelling type.

Other dwellings have been excluded from the following analysis as they their characteristics and land requirements are very different from separate houses, attached dwellings and apartments, which constitute almost all of the dwelling demand in the Camden LGA. Additional other dwellings could be accommodated, for example, through expansion of a caravan park which may take place in land which has not been identified as available for development in this report.

Development scenarios have been created for each of lower, medium and higher density demand scenarios. Comparing the resulting development outcomes illustrates how changes in dwelling preferences could change the future character of different settlement areas in the Camden LGA.

Demand allocation method

To allocate demand for dwellings into settlement areas in order to create a lower density forecast reflecting past development and demographic trends the following assumptions have been made:

- 61 attached dwellings will be built per year in the Camden, Narellan and Existing Suburbs settlement areas between November 2018-2021. This is the average yearly increase in attached dwellings in these areas between 2006-2011 and 2011-2016.
- The number of attached dwellings built in the Camden, Narellan and Existing Suburbs settlement areas will decrease to 30 per year between 2021-2026 and 15 per year between 2026-2036, reflecting the capacity constraints for attached dwellings in those areas.
- Some subdivision for detached dwellings will continue to occur in established parts of Camden on the few large remaining lots, and this development will be spread over the November 2018-2036 timeframe.
- All land in New Urban South and New Urban North will be available for development from 2018 onwards
- New land-release precincts in Future Urban Area will be available progressively from 2021 onwards
- No new apartments will be built in the established parts of Camden. All demand for these dwellings will be taken up in the Leppington and Oran Park centres.

Lower density scenario

The number of dwellings of each type which would added to each settlement area between 2018-2036 under the lower density demand scenario is shown in Table 37. Under this scenario, the New Urban South settlement area will be built out by 2021, while outside of the Oran Park Town Centre the New Urban North area will be built out between 2021-2026. Some capacity in the Future Urban area, for example through Leppington Stage 1 or the Lowes Creek-Maryland Precinct, will need to be developable between 2021-2026 to meet demand for detached and attached dwellings. After 2026, almost all new separate houses will be built in the Future Urban area.

The remaining capacity in 2036 under this scenario is shown in Table 37. There would still be some capacity for dwellings remaining, with most of this in the Future Urban area. At the dwelling development rates modelled under this scenario, there would be less than 10 years of housing capacity left for land-release development.

As it has been assumed in this scenario that no shop-top housing development occurs in established areas by 2036, there is still significant capacity for these dwelling types in Camden, Narellan and the Existing Suburbs.

TABLE 37: FORECAST ADDITIONAL DWELLINGS IN THE SETTLEMENT AREAS IN THE CAMDEN LGA BETWEEN NOVEMBER 2018-2036 UNDER THE LOWER-DENSITY DEMAND SCENARIO

Time period	Development type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
	Separate house	+17	+4	+45	+3,086	+1,346			+4,498
	Attached dwelling	+20	+26	+123	+211	+29			+408
	Flat or apartment				+103				+103
November 2018-2021	*Total*	*+36*	*+30*	*+168*	*+3,400*	*+1,375*			*+5,009*
	Separate house	+37	+10	+100	+6,179		+5,699		+12,024
	Attached dwelling	+18	+24	+112	+342		+342		+838
	Flat or apartment				+58		+58		+117
2021-2026	*Total*	*+55*	*+33*	*+212*	*+6,580*		*+6,100*		*+12,979*
	Separate house	+37	+10	+100			+11,748		+11,895
	Attached dwelling	+9	+12	+56			+809		+886
	Flat or apartment				+63		+63		+126
2026-2031	*Total*	*+46*	*+21*	*+156*	*+63*		*+12,621*		*+12,907*
	Separate house	+37	+10	+100			+12,047		+12,193
	Attached dwelling	+9	+12	+56			+977		+1,054
	Flat or apartment				+81		+81		+163
2031-2036	*Total*	*+46*	*+21*	*+156*	*+81*		*+13,106*		*+13,410*
	Separate house	+127	+33	+346	+9,265	+1,346	+29,494		+40,610
	Attached dwelling	+55	+73	+346	+553	+29	+2,129		+3,186
	Flat or apartment				+306		+203		+509
November 2018 – 2036 Total	*Total*	*+182*	*+106*	*+692*	*+10,124*	*+1,375*	*+31,826*		*+44,305*

TABLE 38: REMAINING DEVELOPMENT CAPACITY IN THE CAMDEN LGA IN 2036 UNDER THE LOWER DEMAND SCENARIO

Dwelling type	Camden	Narellan	Established Suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
Separate house	0	0	0	0	0	16,815	0	17,817
Attached dwelling	146	150	706				0	
Flat or apartment	1,560	1,141	645	974	0	4,195	0	8,515
Total	1,706	1,291	1,351	974	0	21,010	0	26,332

Medium density scenario

The medium housing demand scenario shifts some housing demand from separate houses to attached dwellings and apartments, although the greatest demand from 2016-2036 would still be for separate houses. Using this adjusted scenario, an alternative forecast of new dwellings has been created to show how changes in the housing demand assumptions could affect development outcomes.

The forecast number of dwellings of each type built in each settlement area is shown in Table 39. The difference between the development forecasts under the lower and medium density scenarios is shown in Table 40.

Under this scenario more development would take place in the established parts of the Camden LGA around Camden's centres. This would create opportunities for improving the public domain in these centres. There would be a significant shift from separate houses to attached dwellings, but as this would not occur until towards the end of the 2016-36 period, the difference would be most visible in the Future Urban settlement area.

The remaining capacity in 2036 under the adjusted development scenario is shown in Table 41. There would be more development of apartments in Oran Park and Leppington but there would still be some capacity for apartments in both centres in 2036.

Under this scenario, there would be a remaining capacity for 46,751 dwellings in the future urban area. Based upon projected housing development rates between 2018-2036, this would be enough capacity for between 15-20 years of additional development.

TABLE 39: FORECAST ADDITIONAL DWELLINGS IN THE SETTLEMENT AREAS IN THE CAMDEN LGA BETWEEN NOVEMBER 2018-2036 UNDER A MEDIUM DENSITY DEVELOPMENT SCENARIO

Time period	Development type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
	Separate house	+17	+4	+45	+3,078	+1,346			+4,490
	Attached dwelling	+20	+26	+123	+207	+29			+404
	Flat or apartment				+115				+115
November 2018-2021	*Total*	*+36*	*+30*	*+168*	*+3,400*	*+1,375*			*+5,009*
	Separate house	+37	+10	+100	+5,767		+4,994		+10,908
	Attached dwelling	+18	+24	+112	+766		+766		+1,686
	Flat or apartment				+193		+193		+386
2021-2026	*Total*	*+55*	*+33*	*+212*	*+6,726*		*+5,954*		*+12,979*
	Separate house	+37	+10	+100			+10,067		+10,214
	Attached dwelling	+9	+12	+56			+2,088		+2,164
	Flat or apartment				+264		+264		+529
2026-2031	*Total*	*+46*	*+21*	*+156*	*+264*		*+12,419*		*+12,907*
	Separate house	+37	+10	+100			+9,878		+10,025
	Attached dwelling	+9	+12	+56			+2,620		+2,697
	Flat or apartment				+344		+344		+689
2031-2036	*Total*	*+46*	*+21*	*+156*	*+344*		*+12,843*		*+13,410*
	Separate house	+127	+33	+346	+8,845	+1,346	+24,940		+35,636
	Attached dwelling	+55	+73	+346	+973	+29	+5,474		+6,951
	Flat or apartment				+916		+802		+1,718
November 2018 – 2036 Total	*Total*	*+182*	*+106*	*+692*	*+10,734*	*+1,375*	*+31,215*		*+44,305*

TABLE 40: THE DIFFERENCE IN THE NUMBER OF FORECAST DWELLLINGS BUILT IN EACH SETTLEMENT AREA UNDER THE ADJUSTED DEVELOPMENT SCENARIO, AND UNDER THE STATUS-QUO DEVELOPMENT SCENARIO

Time period	Development type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
	Separate house				-8	+1			-8
	Attached dwelling				-4	-1			-4
	Flat or apartment				+12				+12
November 2018-2021	*Total*								
	Separate house				-412		-705		-1,117
	Attached dwelling				+424		+424		+848
	Flat or apartment				+134		+134		+269
2021-2026	*Total*				*+146*		*-146*		
	Separate house						-1,681		-1,681
	Attached dwelling						+1278		+1278
	Flat or apartment				+201		+201		+403
2026-2031	*Total*				*+201*		*-201*		
	Separate house						-2,169		-2,169
	Attached dwelling						+1643		+1643
	Flat or apartment				+263		+263		+526
2031-2036	*Total*				*+263*		*-263*		
	Separate house				-420	+1	-4,554		-4,974
	Attached dwelling				+420	-1	+3345		+3765
	Flat or apartment				+611		+599		+1209
November 2018 – 2036 Total	*Total*				*+611*		*-611*		

TABLE 41: REMAINING DEVELOPMENT CAPACITY IN THE CAMDEN LGA IN 2036 UNDER THE ADJUSTED DEVELOPMENT SCENARIO

Development Type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
Separate house	0	0	0	0	0	43,154	0	44,156
Attached dwelling	146	150	706				0	
Flat or apartment	1,560	1,141	645	364	0	3,596	0	7,306
Total	1,706	1,291	1,351	364	0	46,751	0	51,462

Higher density scenario

The higher housing demand scenario shifts more housing demand from separate houses to attached dwellings and apartments than the medium density scenario. Under this scenario, as with the other scenarios, the greatest demand from 2016-2036 would still be for separate houses. Using the higher density scenario, an alternative forecast of new dwellings has been created to show how changes in the housing demand assumptions could affect development outcomes.

The forecast number of dwellings of each type built in each settlement area is shown in Table 42. The difference between the development forecasts under the lower and medium density scenarios is shown in Table 43.

Under this scenario, significantly more development of medium-density dwellings and apartments would occur. Increased population density would create opportunities for the delivery of a high-quality public domain in these areas, although the realisation of this scenario would depend upon the availability of improved transport accessibility and significant transport infrastructure investment.

The remaining capacity in 2036 under the adjusted development scenario is shown in Table 41. All capacity for apartments in Oran Park would be taken up by 2036, although there still be some capacity for Apartments in Leppington.

Under this scenario, there would be a remaining capacity for 61,075 dwellings in the future urban area. Based upon projected housing development rates between 2018-2036, this would be enough capacity for between 20-25 years of additional development.

TABLE 42: FORECAST ADDITIONAL DWELLINGS IN THE SETTLEMENT AREAS IN THE CAMDEN LGA BETWEEN NOVEMBER 2018-2036 UNDER AN ALTERNATIVE DEVELOPMENT SCENARIO

Time period	Development type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
	Separate house	+17	+4	+45	+2,691	+1,320			+4,077
	Attached dwelling	+20	+26	+123	+395	+55			+619
	Flat or apartment				+313				+313
November 2018-2021	*Total*	*+36*	*+30*	*+168*	*+3,400*	*+1,375*			*+5,009*
	Separate house	+37	+10	+100	+5,784		+4,276		+10,207
	Attached dwelling	+18	+24	+112	+948		+948		+2,049
	Flat or apartment				+362		+362		+723
2021-2026	*Total*	*+55*	*+33*	*+212*	*+7,093*		*+5,586*		*+12,979*
	Separate house	+37	+10	+100			+9,072		+9,219
	Attached dwelling	+9	+12	+56			+2,600		+2,677
	Flat or apartment				+506		+506		+1,011
2026-2031	*Total*	*+46*	*+21*	*+156*	*+506*		*+12,178*		*+12,907*
	Separate house	+37	+10	+100			+8,556		+8,703
	Attached dwelling	+9	+12	+56			+3,298		+3,375
	Flat or apartment				+99		+1,233		+1,332
2031-2036	*Total*	*+46*	*+21*	*+156*	*+99*		*+13,088*		*+13,410*
	Separate house	+127	+33	+346	+8,475	+1,320	+21,905		+32,206
	Attached dwelling	+55	+73	+346	+1,343	+55	+6,846		+8,719
	Flat or apartment				+1,280		+2,100		+3,380
November 2018 – 2036 Total	*Total*	*+182*	*+106*	*+692*	*+11,098*	*+1,375*	*+30,852*		*+44,305*

TABLE 43: THE DIFFERENCE IN THE NUMBER OF FORECAST DWELLLINGS BUILT IN EACH SETTLEMENT AREA UNDER THE ADJUSTED DEVELOPMENT SCENARIO, AND UNDER THE STATUS-QUO DEVELOPMENT SCENARIO

Time period	Development type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
	Separate house				-395	-26			-421
	Attached dwelling				+184	+26			+210
	Flat or apartment				+210				+210
November 2018-2021	*Total*								
	Separate house				-395		-1,422		-1,817
	Attached dwelling				+606		+606		+1211
	Flat or apartment				+303		+303		+606
2021-2026	*Total*				*+514*		*-514*		
	Separate house						-2,676		-2,676
	Attached dwelling						+1791		+1791
	Flat or apartment				+443		+443		+885
2026-2031	*Total*				*+443*		*-443*		*0*
	Separate house						-3,490		-3,490
	Attached dwelling						+2321		+2321
	Flat or apartment				+18		+1152		+1170
2031-2036	*Total*				*+18*		*-18*		*+0*
	Separate house				-790	-26	-7,589		-8,405
	Attached dwelling				+790	+26	+4717		+5533
	Flat or apartment				+974		+1897		+2872
November 2018 – 2036 Total	*Total*				*+974*		*-974*		

The remaining capacity in 2036 under the adjusted development scenario is shown in Table 41. There would still be capacity for additional shop-top housing and apartments to be built in the centres in the established parts of Camden and in Leppington, but all of the land designated for mixed-use development in Oran Park would be developed.

TABLE 44: REMAINING DEVELOPMENT CAPACITY IN THE CAMDEN LGA IN 2036 UNDER THE ADJUSTED DEVELOPMENT SCENARIO

Development Type	Camden	Narellan	Established suburbs	New Urban North	New Urban South	Future Urban	Rural Living	Total
Separate house	0	0	0	0	0	58,778	0	59,779
Attached dwelling	146	150	706				0	
Flat or apartment	1,560	1,141	645	0	0	2,298	0	5,644
Total	1,706	1,291	1,351	0	0	61,075	0	65,423

8. OPPORTUNITIES AND CONSTRAINTS

8.1 Planning for the missing middle

There is a clear lack of dwelling diversity in the Camden LGA. A high proportion of dwellings are detached, and few new dwellings have less than four bedrooms. This is in part, a reflection of the land release housing market, with the availability of relatively affordable large, new dwellings a factor attracting people to the area.

The presence of some small households, including lone person households and older couples, in new dwellings in land release areas indicates the potential for an increased demand for medium-density dwellings. The development of a greater number of medium density dwellings would create greater housing density, allowing more efficient use of infrastructure and services provision, while not decreasing average lot sizes for separate houses in land-release areas. It would also provide scope for people to downsize within land release areas in the future if their circumstances change.

The challenge to deliver more medium density housing in established parts of Sydney is often called 'the missing middle'. In established parts of Greater Sydney and Camden the challenge is to introduce higher density dwellings within the existing suburban fabric, replacing existing detached dwellings. In land release areas facilitating delivery of more medium density housing will require planning controls which encourage greater dwelling diversity when the land is initially subdivided for suburban development.

Barriers to medium density housing supply in Camden LGA

While there is scope for some increase in the provision of medium density dwellings in the established and release parts of the Camden LGA, there are barriers to their delivery:

Feasibility and market constraints

The proximity of the established parts of Camden to land release areas is likely to limit the market for medium density dwellings unless they are substantially cheaper than new dwellings in land release areas, or unless there are substantial amenity benefits to a location in the established parts of Camden.

Restrictive planning controls in established areas

The analysis in Section 6 has demonstrated that the current standards in the Camden DCP and the proposed minimum areas and frontages in the Camden LEP would prevent most lots being developed for medium density housing by themselves. Rather, housing redevelopment would require amalgamation of adjoining sites.

The costs, risks and difficulty associated with developers amalgamating suburban housing lots mean that it is unlikely to occur at a large scale unless a sufficient value uplift is available in the form of permissible high-density housing. This is a constraint on redevelopment of existing lots for the purpose of medium density housing. More permissive planning controls would facilitate development but would not overcome feasibility and market constraints caused by the proximity of Camden's established suburbs to land-release developments.

Land release housing delivery model

The delivery model for land release housing discourages the development of medium density housing and of innovative housing products. In most land-release housing development, the developer subdivides the land and then sells it to consumers directly or through house and land packages which may be offered by other companies.

The development of medium density and attached housing requires a different model of development, in which integrated development occurs or subdivision anticipates the development of abutting dwellings.

In integrated development, the same developer would subdivide the land and construct attached dwellings on it, typically in the form of terraced housing. This adds to the cost of development, in part through land holding costs and the loss of the economies of scale which occur for builders who construct many project dwellings to the same design and specification. Increased costs decrease the competitiveness of integrated development when compared with small-lot detached housing, which is discussed below.

The construction of abutting dwellings overcomes the need for integrated development to deliver medium density housing in land release areas. The land is torrens subdivided and then sold in the same way as lots for detached dwellings, but owners are able to construct individual dwellings to the side boundaries of their lots which mimics the form of terraced housing.

Some medium density housing has been developed in land release areas and particularly in the New Urban South area, which is shown in Section 3.1. However, the proportion of total dwellings developed which are attached is small and has the potential to be increased, particularly in the New Urban North area. This would require a greater amount of land zoned to permit medium-density development.

Development of small-lot detached instead of medium density dwellings

In some cases in the Camden LGA and nearby, land has been zoned for medium density development, but rather than attached dwellings or a mix of dwelling typologies being delivered, detached dwellings have been developed on very small lots. An example of this occurring in the East Leppington Precinct along Camden Valley Way is shown in Figure 52.

FIGURE 52: SEPARATE HOUSES ON SMALL LOTS WITH HIGH SITE COVERAGE ALONG CAMDEN VALLEY WAY IN THE CAMDEN LGA

Source: Nearmap 2019

Within the Camden LGA detached dwellings have been built in high-amenity locations on lots with a width of 10m or less and an area less than 300 sqm. An example is shown in Figure 53, which shows houses on lots of approximately 250sqm and widths of 8.5m directly opposite the Gregory Hills Shopping Centre. These lots have very high site coverages and a high proportion of the street frontage is taken up by the driveway and garage. If two-storey attached dwellings were built instead of detached dwellings on these lots, site coverage and the amount of impermeable surface would be reduced, creating more space for vegetation and trees.

FIGURE 53: DETACHED HOUSING IN GREGORY HILLS ON LOTS WITH FRONTAGES LESS THAN 10M

There are several ways in which the development of detached dwellings on very small lots could be prevented:

- Desired future character statements in DCPs could be more strongly enforced, which would be difficult given the requirement for DCPs to be interpreted flexibly
- Planning controls could require the delivery of particular dwelling typologies
- Design standards such as site coverage, private open space provision and setbacks could make delivery of higher densities through decreased lot sizes more difficult
- Permitted densities could be increased to a level that they encourage genuine medium density development

Changing planning controls and design standards within most release areas in Camden is outside the Council's control as the planning controls are set by the NSW Government, and many dwellings are developed through complying development, which provides an as-of-right approval pathway whose requirements are also set by the NSW Government.

New Urban North vs New Urban South

As shown in Table 45, the proportion of attached dwellings in the New Urban South Area is much greater than the proportion in the New Urban South area (9% vs 2%). There are several possible reasons for the increased dwelling diversity of the New Urban South Area.

TABLE 45: DWELLING MIX IN THE NEW URBAN NORTH AND NORTH URBAN SOUTH SETTLEMENT AREAS, 2006-2016

Area	Year	Separate Houses		Attached Dwellings		Total Number
		Number	%	Number	%	
New Urban North	2006	1,893	100%	0	0%	1,893
	2011	2,326	100%	0	0%	2,326
	2016	6,855	98%	139	2%	7,035
	Change 2006-2016	*4,962*	*-2%*	*139*	*2%*	*5,142*
New Urban South	2006	466	100%	0	0%	466
	2011	875	94%	60	6%	935
	2016	2,214	91%	226	9%	2,440
	Change 2006-2016	*1,748*	*-9%*	*226*	*9%*	*1,974*

Source: ABS Census 2016

Stage of development

Some of the difference in the number of medium density dwellings could be driven by a greater demand for medium density dwellings in the New Urban South Area. However, this is unlikely to be a significant factor resulting of either the age of the development or overall accessibility.

Much of the development in each settlement area has occurred over the last ten years, and so most housing in the two areas is of a similar age. There was minimal housing in the New Urban South area in 2006. Much of Harrington Park has been built by 2006, but development of this suburb as well as development in Oran Park, Gledswood Hills, Gregory Hills and Cobbitty has occurred since 2006.

While the New Urban South area is slightly closer to destinations such as the Narellan Town Centre and Camden, the areas are not highly different in terms of accessibility. Local accessibility to shops, open space and schools is likely to be more uniform between the areas and is a more important influence on market demand.

Planning Controls

The differences between Council and NSW Government instruments may have caused some of the different in dwelling diversity between the areas. The planning controls in the New

Urban South area were written be Council and are contained in the Camden LEP 2010 and Camden DCP 2011. The planning controls applying to the land release areas within the New Urban North settlement area are governed by the Growth Centres SEPP and DCPs written by the NSW Department of Planning and Environment, except for Emerald Hills and part of Gledswood Hills.

The Camden LEP and DCP are generally more prescriptive regarding dwelling type and density than the Growth Centres SEPP. The Camden DCP and LEP enforce minimum lot sizes for detached dwellings which are significantly larger than those for attached dwellings, and the layout plans for Elderslie specifies what dwelling typologies are appropriate in which locations.

By contrast, the Growth Centres SEPP sets minimum dwelling density, but has no maximum density controls. Minimum subdivision lot sizes can be reduced through integrated DA pathways and allow detached dwellings on smaller lots than in most Camden LEP and DCP precincts. Zones in the Growth Centres SEPP are quite permissive, and DCPs are not as prescriptive about what types of dwellings should be built in which locations. Instead, the Growth Centres SEPP and associated DCPs seek to ensure a certain density with less attention paid to the future character outcomes.

Development models

The differences in dwelling mix between the New Urban North and New Urban South areas may also reflect the business models of the developers in these areas. Some developers are more interested in delivering medium density housing products than others. In large land holdings, such as those around Oran Park, large developers may stage development to deliver medium density dwellings later once more of the surrounding infrastructure has been built. Terraces around Oran Park are currently being advertised, and there is a large amount of land around the Oran Park Town Centre zoned for medium and higher density residential development.

Application of the Low Rise Medium Density Code to land-release development

The Greenfield Housing Code appears to exclude the application of the Low Rise Medium Density Code to land release areas under section 3C.1 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*. However, if this exclusion did not apply, the Low Rise Medium Density Code would have potential implications for land-release development in Camden.

The residential zones in land release areas are relatively permissive, allowing multi-dwelling housing throughout planned new suburbs. Housing density in land-release areas in Camden is controlled through dwelling density standards in the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* and the *Camden Development Control Plan 2011* as well as through minimum lot size controls, indicative layout plans and design standards.

The Code would allow medium density dwellings to be developed wherever dual occupancies and multi-dwelling housing are permissible and the lot size is greater than the minimum lot size for those kinds of development. Both the development of medium density housing and the Torrens and Strata Title subdivision of the resulting development is permitted as complying development under the Code. This means that subdivision of residentially zoned land could occur without requiring approval of a development application by Council under which the Indicative Layout Plan and design provisions of the Development Control Plan is considered. This would bypass dwelling density controls and future housing character statements.

Under the Code, developers could subdivide large landholdings into residual lots which are serviced by roads and other infrastructure. These residual lots could then be developed and subdivided as terraces or other medium density dwelling types under the Code, even if this does not align with the Indicative Layout Plan and intended housing character. Large

unplanned increases in density which could occur in this way would not be catered for by planned infrastructure.

8.2 Key planning issues for new development

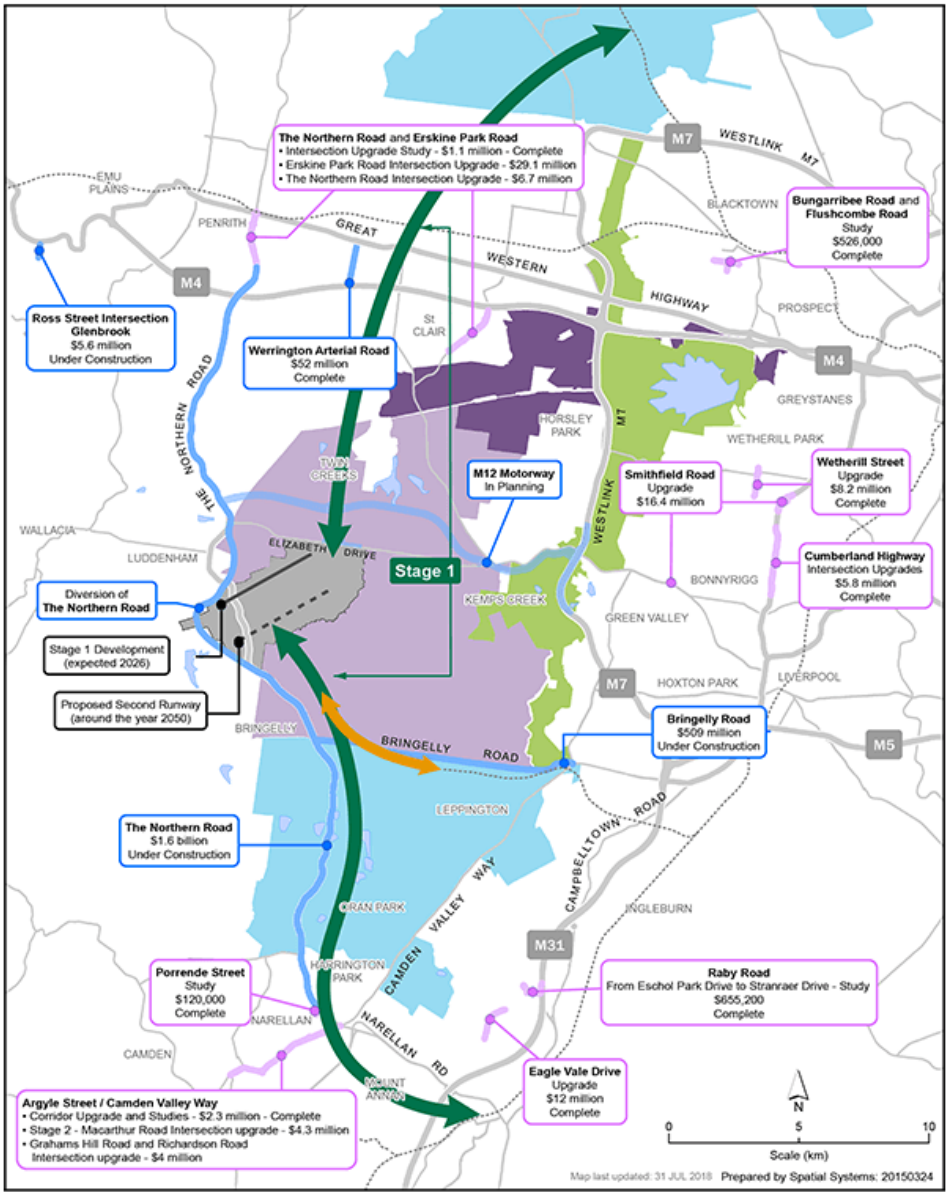
Major Infrastructure

Western Sydney Airport and Badgerys Creek Aerotropolis will be located in close proximity to Camden LGA. The Airport is expected to provide 28,000 job opportunities by 2031 while the Aerotropolis is projected to contribute 200,000 new jobs to Western Sydney[11]. The close proximity of these sites to Camden LGA will provide an opportunity to link local employment growth with local housing growth and assist development of the '30-minute city' advocated by the Greater Sydney Commission.

While an opportunity, the Western Sydney Airport may also act as a constraint due to potential impacts from aircraft noise and visual pollution, particularly as the site is expected to function 24-hours a day with passenger and freight cargo movements. The Australian Government is taking measures to reduce the impact of aircraft noise in the Western Sydney area. Flight path design aims to reduce the impact of noise pollution on local communities. The Government is also considering a policy on noise insulation measures[12]. Future decision-making by people to locate and reside in Camden LGA may be affected by this infrastructure development.

[11] DPE, 2019, https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis; Australian Government, 2018, Aerotropolis Investor Guide, dated accessed: 22/02/2019
[12] Australian Government, 2019, https://westernsydneyairport.gov.au/about/flight-paths/aircraft-noise.aspx, date accessed: 02/03/2019

FIGURE 54: WESTERN SYDNEY AIRPORT (GREY) AND OTHER MAJOR INFRASTRUCTURE



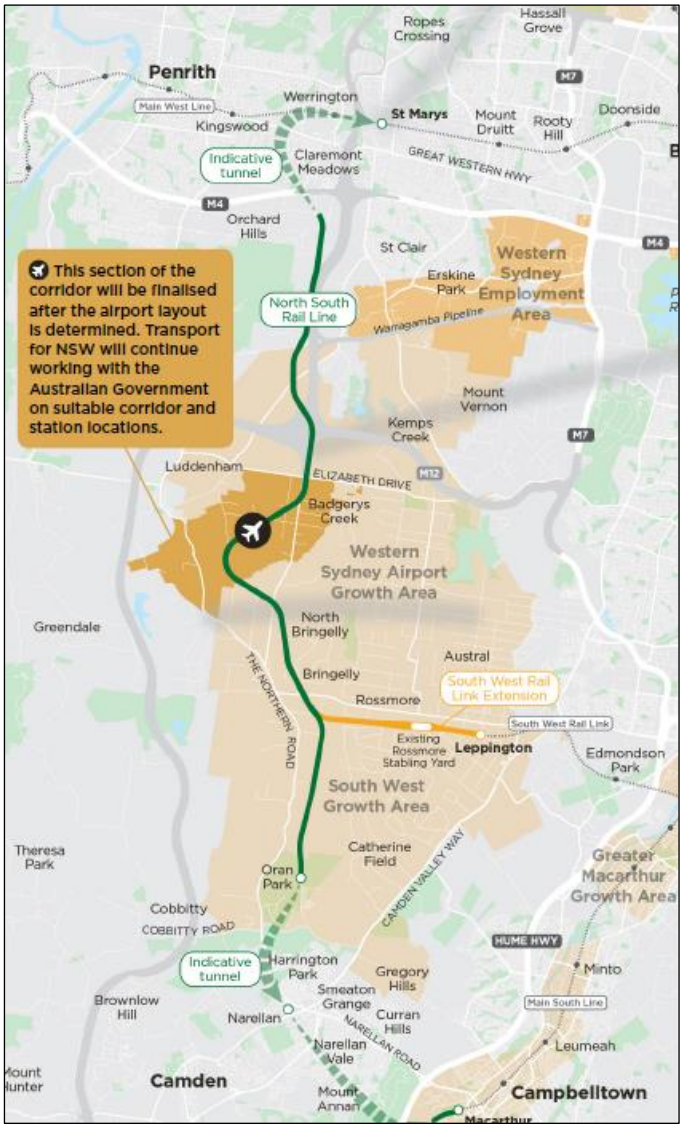
Source: Australian Government, 2019, https://buildingourfuture.gov.au/projects/featured/western-sydney-airport?gclid=EAIaIQobChMIgKrQuoXW4AIVQ4iPCh1RQw5MEAAYASAAEgIRCPD_BwE, date accessed: 25/02/2019

Corridor identification for the North South Rail Link (NSRL) and South West Rail Link (SWRL) Extension is currently being completed by Transport for NSW. The NSRL is currently identified as running from St Marys, through the Western Sydney Airport site and will then pass through several Settlement Areas of Camden LGA, potentially including the Future Urban, New Urban North, Narellan and Existing Suburbs. The SWRL would impact land use in the Future Urban Settlement Area.

Both these transport infrastructure investments represent an opportunity for integrated land use and transport planning. Housing growth and increased density around station nodes would allow local resident catchments greater connectivity to jobs and services in Western Sydney, and greater accessibility to Greater Sydney via public transport modes in general.

While new rail infrastructure is an opportunity, the final corridor alignment of the NSRL and SWRL Extension would also constrain some land use and housing potential in the affected Settlement Areas of Camden LGA.

FIGURE 55: POTENTIAL ALIGNMENT FOR THE NORTH SOUTH RAIL LINK (GREEN) AND SOUTH WEST RAIL EXTENSION (YELLOW)



Source: TfNSW, 2019, https://www.transport.nsw.gov.au/corridors/nsrl-swrl, date accessed: 25/02/2019

Environmental Constraints

Flooding

Camden LGA is located within three catchment areas, including the Nepean River catchment (purple), Upper South Creek catchment (green), and Narellan Creek catchment (orange), see Figure 56. Flooding within these catchments has various impact on individual Settlement areas is discussed below.

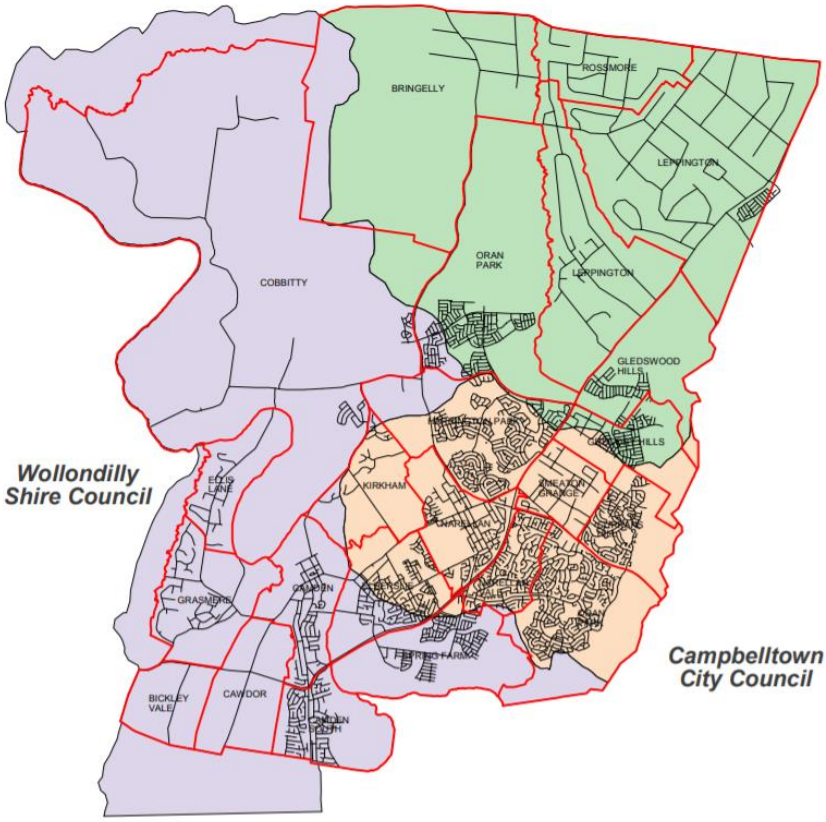
For the Upper South Creek catchment, a flood study completed in 2012, indicated flood liability is limited to low-lying areas and the floodplain. Flood levels do not increase substantially for rarer events and flood extent does not vary significantly between small, more frequent events to larger, rarer events. This is due to a well-defined floodplain. There are low

slopes in the catchment and wide floodplains, therefore, flood flows are less hazardous than expected[13].

The Narellan Creek catchment encompasses a highly urbanised portion of Camden LGA. A flood study has not been completed for this catchment[14].

The flood study for the Nepean River catchment states flooding events are rare within this study area. However, when they do occur, flows from the Nepean River can inundate the low-lying areas of Camden and parts of South Camden and Elderslie[15].

FIGURE 56: CAMDEN LGA CATCHMENTS



Source: Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Environment/Flood-Information/General/Camden-Flood-Catchments-Fixed-31-08-2015.pdf

Bushfire

Bushfire prone vegetation exists throughout Camden LGA in the form of grassland, forest, heath, woodland or wetlands. There is also a wide presence of bushfire prone vegetation buffers[16]. The concentration of bushfire prone vegetation and its impact on particular Settlement Areas is discussed in more detail below.

Within Camden LGA, 870 plants and flora species have been identified. Of these, 557 are native species and 313 are exotic or introduced. Specifically, there are five species that are listed as threatened in NSW and nationally, these include:

- White-flowered Wax Plant (*Cynanchum elegans)*

[13] WMA Water, 2012, https://www.camden.nsw.gov.au/assets/pdfs/Environment/Flood-Information/South-Creek/South-Creek-Upper-South-Creek-Flood-Study-May-2012-WMA-Water-Report-Body.pdf, p. vii
[14] Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/narellan-creek-catchment/, date accessed: 02/03/2019
[15] Worley Parsons, 2015, https://www.camden.nsw.gov.au/assets/pdfs/Environment/Flood-Information/Nepean-River/Nepean-River-Flood-Study-April-2015-Report-Body-1.3MB.pdf, p. 1-2.
[16] Camden Council, https://www.camden.nsw.gov.au/environment/bushfires/

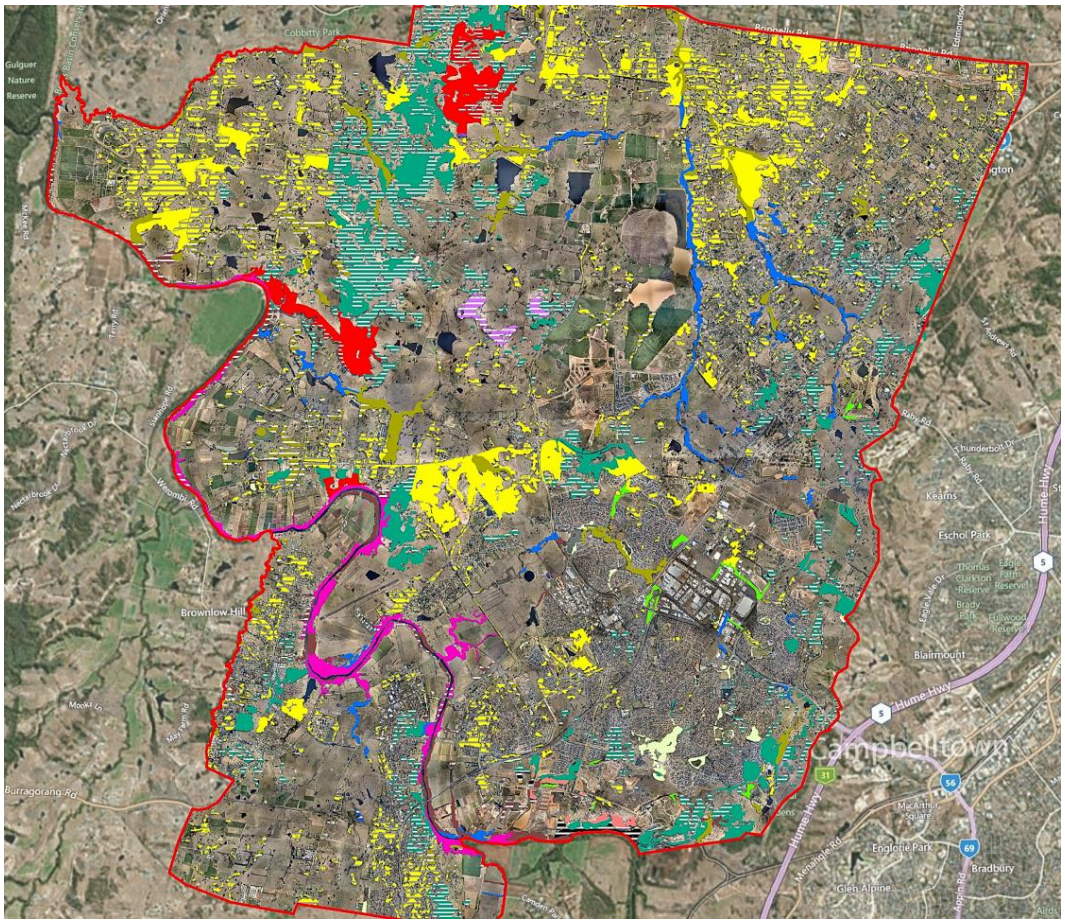
- Camden White Gum (*Eucalyptus benthamii)*
- Spiked Rice-flower *(Pimelia spicata)*
- Brown Pomaderris (*Pomaderris brunnea)*
- Magenta Lilly Pilly (*Syzygium paniculatum)*.

There is an endangered population of Native Pear (*Marsdenia viridiflora* R. Br. Subsp. *viridiflora)* in Camden LGA[17].

At a vegetation community level, the clearing of land for agriculture and urban development has reduced the size of these communities in Camden LGA. Nutrient run-off, overgrazing, weed infestation, salinity, erosion and sedimentation has also degraded their condition.

Figure 57 below identifies the threatened vegetation communities (endangered ecological communities) in Camden LGA. The Cumberland Plain Woodland vegetation community is listed as critically endangered at the state and national levels. All other vegetation communities are listed as endangered. The presence of these types of vegetation in settlement areas would be a constraint to housing development.

FIGURE 57: LOCATION OF VEGETATION COMMUNITIES IN CAMDEN LGA



[17] Camden Council, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 07/02/2019

Source: Camden Council, https://www.camden.nsw.gov.au/assets/Uploads/Map-of-EECs-in-Camden-LGA.pdf, dated accessed: 02/03/2019

Social Housing

As indicated in section 3.1, there are a small number of public housing dwellings in Camden LGA. Majority of the social housing stock is found in the more established areas of Camden LGA, including the suburbs of Camden and Elderslie, followed by some in Narellan, Mount Annan, Currans Hill and Grasmere (see Table 5).

There may be opportunities to increase the share of social housing stock in newer suburbs and land release areas to increase the overall number of social housing dwellings and increase the distribution of social housing across the LGA.

Land fragmentation

The land in the suburb of Leppington and some other parts of the Future Urban area is highly fragmented. This makes land-release development much more difficult than if the land is in consolidated ownership. Some challenges posed by fragmented land ownership include:

- The coordination of infrastructure provision requires more intensive management by Council through development contribution and negotiation of works in kind with many smaller developers.
- Changes to the indicative layout may be proposed on an ad-hoc basis for small developments without proponents considering how roads will connect on a precinct wide basis.
- Development staging is likely to be less rational as it will be determined by when individual developments can occur, making the rational rollout of infrastructure more difficult.
- Smaller developers may be more conservative regarding the kind of development product they deliver, hampering the creation of dwelling diversity on a precinct-wide basis in rational locations.
- Indicative road network design needs to allow each lot to be developed individually, significantly constraining the future layout.
- In proposed centres split across multiple land ownerships, developers may try to maximise yield on their land rather than share proposed yields with other sites. Alternatively, sites may be small enough to make site consolidation difficult, making large-scale development more difficult and reducing development feasibility.

9. CONCLUSION

From 2016 to 2036 Camden is forecast to see an increase of up to 143,650 people. The largest forecast growth is for couple families with children. It is expected that there will be a substantial increase in the 35– 54 age group as well as children and young people aged 0 – 14. There is also a notable percentage change in people aged 55 and over as the population ages. This will create a need for more adaptable housing suitable for people downsizing.

From extrapolating past demographic and housing choice trends it is estimated that by 2036 76,626 dwellings will be required, an increase of 49,625 from 2016. Most of these dwellings are forecast to be separate houses, with an increase of 45,697 dwellings and increases in demand for 3,335 semi-detached dwellings and 517 apartments.

The analysis suggests that based upon past trends, the strong demand for separate houses will be sustained, but the population growth will also increase the demand for semi-detached and smaller more affordable dwellings such as flats, units or apartments. The largest growth in forecast demand is 3 and, 4 or more bedroom dwellings and it is expected that detached houses will remain the dominant dwelling type.

However, in 2036, the forecast shows a shift towards a greater demand for a diversity of dwelling types, with an increase in the number of semi-detached houses, flat, units and apartments and other dwellings. The presence of some small households, including lone person households and older couples, in new dwellings in land release areas indicates the potential for an increased demand for medium density dwellings. The development of a greater number of medium density dwellings would create greater housing density, allowing more efficient use of infrastructure and services provision, while not decreasing average lot sizes for separate houses in land-release areas. It would also provide scope for people to downsize within land release areas in the future if their circumstances change.

Housing capacity analysis has determined that depending upon the dwelling density in future land-release precincts, there is capacity in the Camden LGA for an additional 70,131 to 109,222 dwellings. This capacity is shown in the table below, broken into capacity in each part of the LGA. Much of this capacity is in the Future Urban area, which is comprised of future land-release precincts currently zoned for rural uses. Only a small amount of capacity is for infill development in the established parts of the Camden LGA.

CAPACITY FOR ADDITIONAL DWELLINGS IN THE CAMDEN LGA UNDER EXISTING PLANNING CONTROLS AND IN FUTURE LAND-RELEASE PRECINCTS

Housing capacity Scenario	Future Urban	New Urban North and New Urban South	Camden, Narellan, Established Suburbs and Rural Living	Total
Lower density	48,425	12,455	4,837	70,131
Medium density	77,953	12,455	4,837	95,261
Higher Density	87,506	12,455	4,837	109,222

Forecast housing demand based on three density scenarios is shown in the table below. Under each scenario the total number of dwellings required would be the same, but the split into dwelling types would be different. In every case there is enough land in the Camden LGA to accommodate future dwelling demand.

FORECAST ADDITIONAL HOUSING DEMAND FOR DIFFERENT DWELLING TYPES IN THE CAMDEN LGA

Housing density scenario	Separate houses	Attached dwellings	Flats and apartments	Total
Lower density	45,700	3,335	517	49,552
Medium density	40,878	7,120	1,730	49,552
Higher density	37,439	8,892	3,397	49,552

The housing capacity and demand scenarios each describe lower, medium and higher density future development outcomes in the Camden LGA, with most development to occur in land-release developments.

Under the lower density scenario, there would not be significant infrastructure and transport accessibility improvements and overall dwelling densities would be no higher than they are in Camden's recent release precincts, with a preponderance of separate houses. The medium density scenario lies between the lower and higher density scenarios, and describes some shift in infrastructure, density and dwelling preferences from current trends.

Under the higher density scenario, significant additional infrastructure investment and transport accessibility to jobs and services would occur, which would cause dwelling preferences to shift somewhat towards higher density housing forms, roughly in line with the overall dwelling split in the Hills Shire LGA. Land-release precincts would be delivered at higher densities than now, mostly through a greater proportion of apartments and genuinely medium density dwellings. This would lead to greater dwelling diversity, although separate houses would continue to be the dominant form of housing. The development of the Badgerys Creek Aerotropolis could contribute to this outcome, although is not expected until after the opening of the Airport.

There is a large difference in how much dwelling capacity would remain in the Camden LGA under the different development scenarios. Under the lower density scenario, there would be limited land remaining in 2036, while under the higher density scenario, there would be capacity for an additional 39,091 dwellings remaining. This would mean that less land would need to be developed, and there would be greater scope for development in the northern parts of the LGA which could respond to strategic imperatives created by the development of the Badgerys Creek Aerotropolis.

TABLE 46: REMAINING HOUSING CAPACITY IN THE CAMDEN LGA IN 2036 UNDER EACH HOUSING DENSITY SCENRIO

Scenario	Separate houses and attached dwellings	Flats and apartments	Total
Lower density	17,801	8,515	26,332
Medium density	44,156	7,306	51,462
Higher density	59,779	5,644	65,423

As there is enough dwelling capacity in the Camden LGA to accommodate likely dwelling capacity by 2036, the identification of more land for development is not necessary. Rather, it is important to ensure that the housing that is built is suitable for the current and future population, is sustainable and creates great places. SGS has identified impediments to the delivery of genuine medium density housing in the Camden LGA which can limit dwelling diversity. These include:

- Feasibility and market constraints, which would require increases in amenity and infrastructure investment to overcome
- Lack of capacity for infill development in established areas if it were feasible

- Developer preferences for the sale of house and land packages for detached housing which do not allow the development of medium density attached dwellings. Integrated development applications and development of abutting dwellings could address this.
- The development of separate houses on very small lots, which can be cheaper to purchase than attached dwellings. Planning controls in some instances may facilitate this outcome and in doing so impact the market for attached dwellings, while allowing dwellings with very high site coverages and little room for vegetation.

APPENDIX A: STATUTORY PLANNING CONTEXT

Currently two major planning instruments apply to Camden LGA. Development is largely controlled by Camden LEP 2010 towards the southern half of the LGA and for some portions of the South West Growth Area in the north of the LGA. The State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applies to release precincts in the South West Growth Area in the north of the LGA.

Camden Local Environmental Plan 2010

Camden Local Environmental Plan (LEP) 2010 is the primary legal instrument to control development in the Local Government Area. The LEP establishes land use zones that identify permitted uses and key development standards that control development outcomes.

Key aims of the Camden LEP 2010 include:

- Ensure Camden retains its valued traditional qualities, character and scenic landscapes while providing for sustainable urban growth
- Ensure new communities are planned and developed in an orderly, integrated and sustainable manner and contribute to the social, environmental and economic sustainability of Camden
- Ensure appropriate housing opportunities are provided for all existing and future residents at all stages of life
- Ensure economic, employment, educational, recreational, cultural and social needs of existing and future residents are planned for
- Protect and minimise impact on natural and environmental features.

Principal development standards in the Camden LEP 2010 designate that subdivision should reflect and reinforce the predominant subdivision pattern of the area; a provision of a range of residential lot sizes and types is required; ensure lot sizes and dimensions allow dwellings to be sited to protect natural or cultural features; and to ensure the density of development is consistent with existing and proposed infrastructure provision.

Council has submitted a Planning Proposal to DPE to amend the Camden LEP 2010 to introduce a new clause to provide minimum lot size and minimum frontage controls for dual occupancies and multi-dwelling housing (terraces) development within the Camden LGA.

The amendment aims to encourage low rise medium density housing that aligns with the existing character of localities outside the Growth Areas and allows for sufficient space to provide good urban design, landscaping and ancillary development like carparking; as well as control the impact of DPE's Housing Code which fast tracks development of these dwelling types without the need for Council approval.

The Camden LEP 2010 currently does not include minimum lot or minimum frontage controls for specific types of development. Proposed amendments are as shown in table 2.

TABLE 47: PROPOSED AND EXISTING CONTROLS FOR LOW RISE MEDIUM DENSITY HOUSING

Comparison Table of Controls			
	Housing Code	**Camden DCP 2011**	**Proposed LEP Controls**
Dual Occupancies	400sqm	600sqm or 800sqm for corner lots	600sqm or 800sqm for corner lots
	12m minimum frontage	22m minimum frontage	18m (one behind another) 22m (side by side)
Multi Dwelling Housing	600sqm	25m frontage (no minimum lot control)	1,500sqm
	18m minimum frontage		25m minimum frontage

Source: Camden Council Planning Proposal, http://leptracking.planning.nsw.gov.au/proposaldetails.php?rid=5642, date accessed: 05/02/2019

State Environmental Planning Policy (Sydney Region Growth Centres) 2006

A State Environmental Planning Policy (SEPP) is a legal instrument for planning matters of State or regional significance.

The SEPP Sydney Region Growth Centres applies to three Growth Areas in Sydney, including the South West Growth Centre which encompasses Camden LGA. Aims of the SEPP Sydney Region Growth Centres 2006 include:

- Coordinate land release for residential, employment and other urban development in the North West Growth Centre, South West Growth Centre and Wilton Growth Area of Sydney
- Provide for comprehensive planning of growth centres
- Enable the development of vibrant, sustainable and liveable neighbourhoods that support community well-being and produce high-quality local amenity
- Provide orderly provision of infrastructure, controls to protect waterway health and protection of natural and cultural heritage and conservation of biodiversity.

General development controls under the SEPP require development applications in growth centres to consider, until finalisation of precinct planning for land, whether the proposed development will preclude the future urban and employment development land uses identified in the growth centre structure plan; development of land results in alienation of land from future uses; whether the application results in fragmentation of land holdings; and whether the proposed development is consistent with precinct planning strategies and principles.

Appendix one of the SEPP relates to the Oran Park and Turner Road Precinct Plan. Appendix nine relates to the Camden Growth Centre Precinct Plan. The land applicable to the Camden Growth Centre Precinct Plan includes Catherine Fields Precinct, East Leppington Precinct, Leppington North Precinct, and Leppington Precinct. The aim of these Precinct Plans is to support development controls that create quality environments and good design outcomes; promote housing choice and affordability in these Precincts; and provide for sustainable development.

Camden Council Development Control Plan 2011

The Camden Council Development Control Plan 2011 applies to all land in the Camden LGA, excluding land gazetted under the SEPP (Sydney Region Growth Centres) 2006 which is subject to specific Growth Centre DCPs that contain additional provisions. If there are inconsistencies between the DCP and LEP, the LEP prevails.

Objectives of this DCP seek to ensure:

- Camden LGA retains its heritage qualities and scenic landscapes
- New communities are developed in an orderly, integrated and sustainable way.
- New developments are integrated with existing and planned transport infrastructure, including walking and cycling
- Appropriate and diverse housing opportunities are available for existing and future residents
- New developments deliver the desired future character of places in Camden LGA
- New developments are designed and located to support safety, security and health of the local residents
- New developments contribute to social, environmental and economic sustainability in the LGA.

Camden Council Growth Centre Precincts Development Control Plan 2016 (NSW DPE)

The purpose of the Development Control Plan (DCP) is to guide development outcomes as envisaged by the South West Growth Centre Structure Plan and the SEPP (Sydney Region Growth Centres).

The DCP applies to Precincts within the South West Growth Area (see Figure 58) where precinct planning has been completed:

- Leppington North and Leppington Major Centre (part of the Leppington North Precinct)
- East Leppington
- Catherine Fields (part of the precinct)
- Leppington Priority Precinct.

FIGURE 58: SOUTH WEST CENTRE PRECINCT PLANNING, AS AT JANUARY 2016

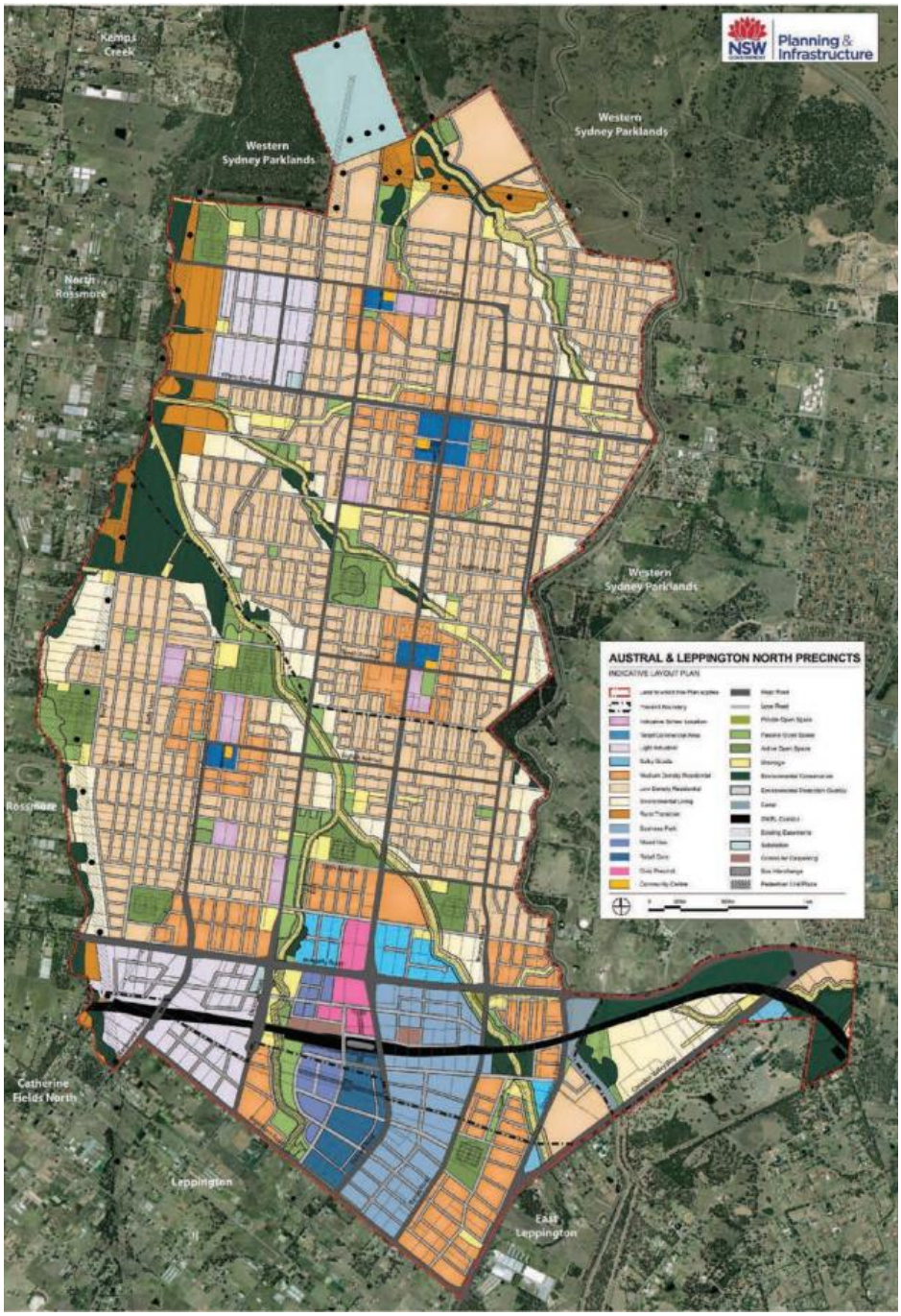
Source: Camden Growth Centre DCP, https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/South-West-Priority-Growth-Area/~/media/84919E3E571A498FAE5A5EB2D25435E0.ashx, p. 3

Directives for housing include residential density that meets minimum density targets; promotion of housing diversity and affordability; and supports the desired character of the residential area. Objectives of the subdivision approval process include facilitation of different types of housing sizes and products, to ensure development on smaller lots is coordinated; and to ensure the correct level of amenity is achieved in all residential lots.

Indicative Layout Plans for the Precincts are as below.

The vision for the Austral and Leppington North Precincts (Leppington North of relevance) is to provide a range of housing types that will develop to meet the needs of a diverse community and will be supported by services, infrastructure, facilities and employment in an environmentally sustainable way[18].

FIGURE 59: INDICATIVE LAYOUT PLAN AUSTRAL AND LEPPINGTON NORTH PRECINCT



Source: DPE, Schedule 1 Austral & Leppington North Precincts, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-development-control-plan-schedule-1-austral-leppington-2013-03.pdf, p. 5, date accessed: 07/03/2019

[18] DPE, Schedule 1 Austral and Leppington North Precincts, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-development-control-plan-schedule-1-austral-leppington-2013-03.pdf, p. 3, date accessed: 07/03/2019

The vision for the Leppington Major Centre is to be focussed on employment, retailing, entertainment and community purposes for the South West Growth Centre[19].

FIGURE 60: INDICATIVE LAYOUT PLAN LEPPINGTON MAJOR CENTRE ONLY

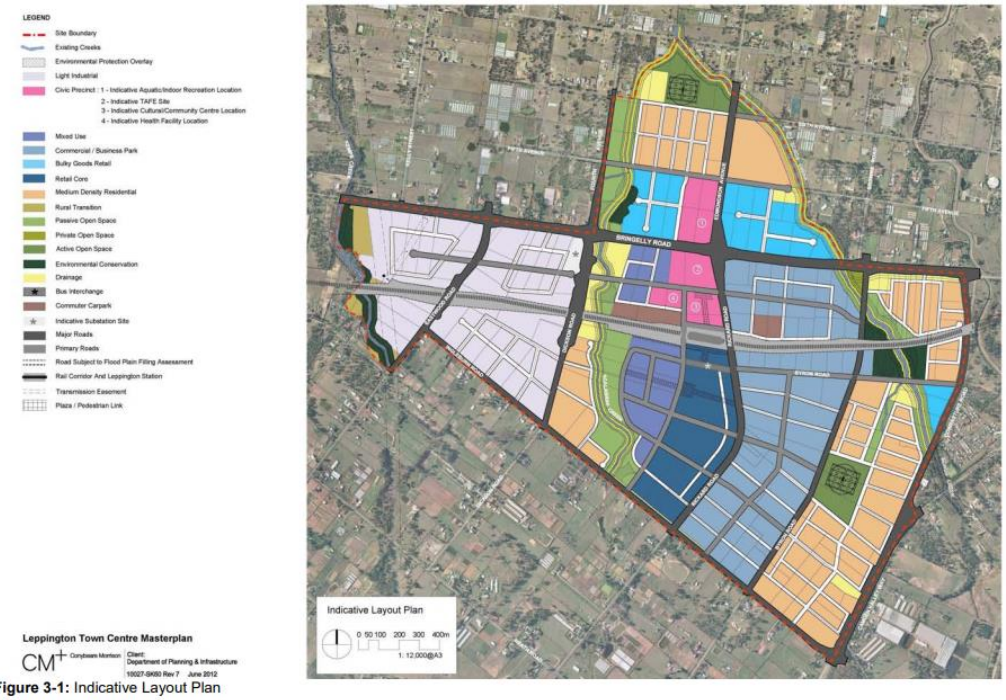


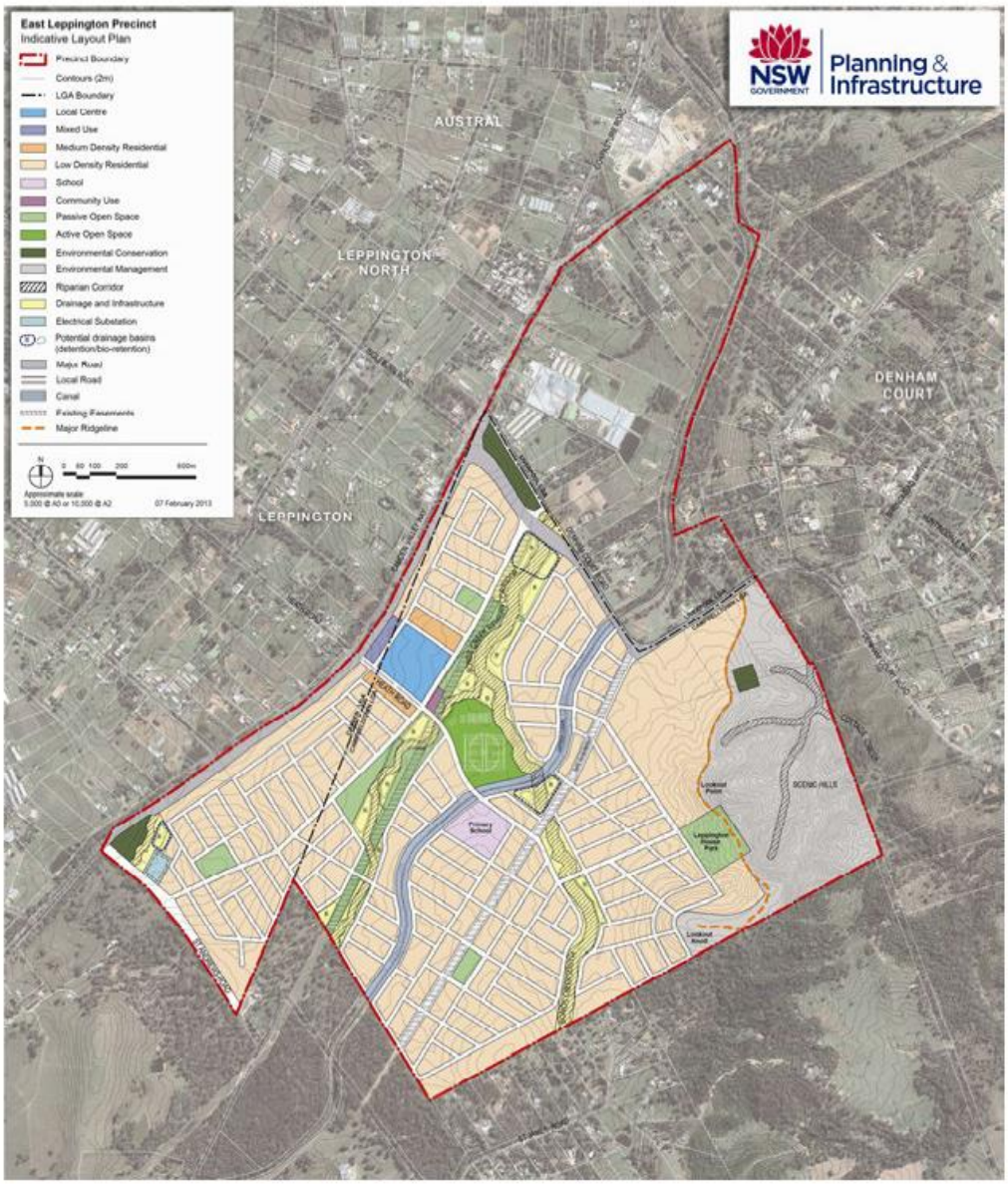
Figure 3-1: Indicative Layout Plan

Source: DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/liverpool-schedule-1-austral-and-leppington-north-part-1-2013-03.pdf, p. 12, date accessed: 07/03/2019

[19] DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/liverpool-schedule-1-austral-and-leppington-north-part-1-2013-03.pdf, p. 3, date accessed: 07/03/2019

The vision for the East Leppington Precinct is to create new walkable residential neighbourhoods that are connected to local retail, community and recreation facilities in an environmentally sustainable way. A range of housing densities, types and affordability options will be provided to meet the diverse needs of the community[20].

FIGURE 61: INDICATIVE LAYOUT PLAN EAST LEPPINGTON PRECINCT

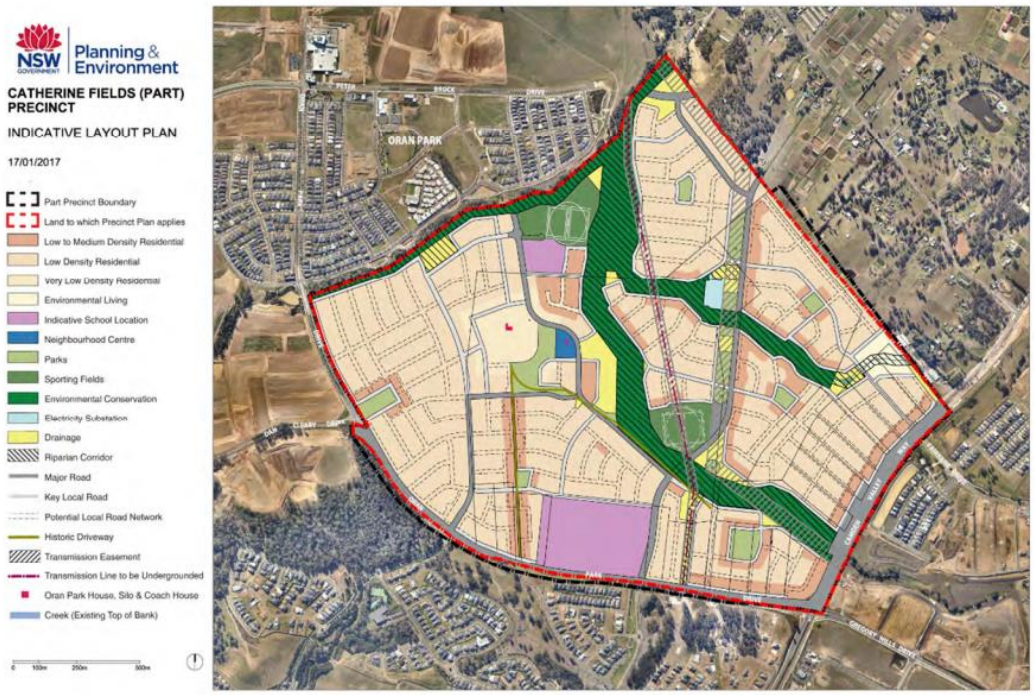


Source: DPE, Schedule 3 – East Leppington Precinct, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-development-control-plan-schedule-3-2018-01-01.pdf?la=en, p. 7, date accessed: 07/03/2019

[20] DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-development-control-plan-schedule-3-2018-01-01.pdf?la=en, p. 5, date accessed: 07/03/2019

The vision for the Catherine Field (Part) Precinct is to develop a range of housing types to meet the needs of a well-connected and diverse local community. Housing needs to be linked to services, infrastructure and open space and is sensitive to the unique characteristics of the Precinct[21].

FIGURE 62: INDICATIVE LAYOUT PLAN CATHERINE FIELDS PRECINCT

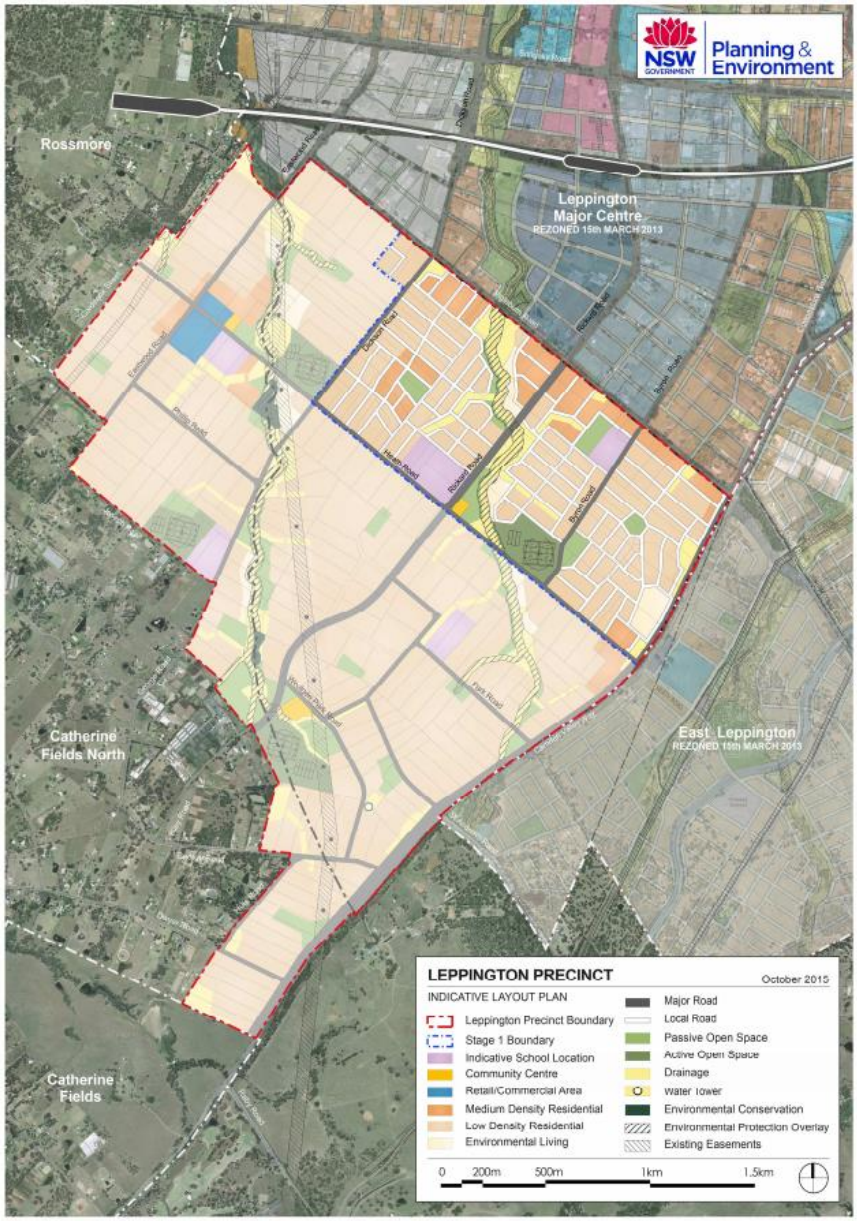


Source: DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-schedule-4-2017-01-17.pdf, p. 5, date accessed: 07/03/2019

[21] DPE, Schedule 4 Catherine Fields (Part) Precinct, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-schedule-4-2017-01-17.pdf, p. 3, date accessed: 07/03/2019

The vision for the Leppington Priority Precinct is for a range of housing types that will develop to meet the needs of well-connected and a diverse community with supporting infrastructure and local facilities and is responsive to the waterways and landforms of the Precinct[22].

FIGURE 63: INDICATIVE LAYOUT PLAN LEPPINGTON PRIORITY PRECINCT



Source: DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-schedule-5-leppington-priority-precinct-2015.pdf, p.4, dated accessed: 07/03/2019

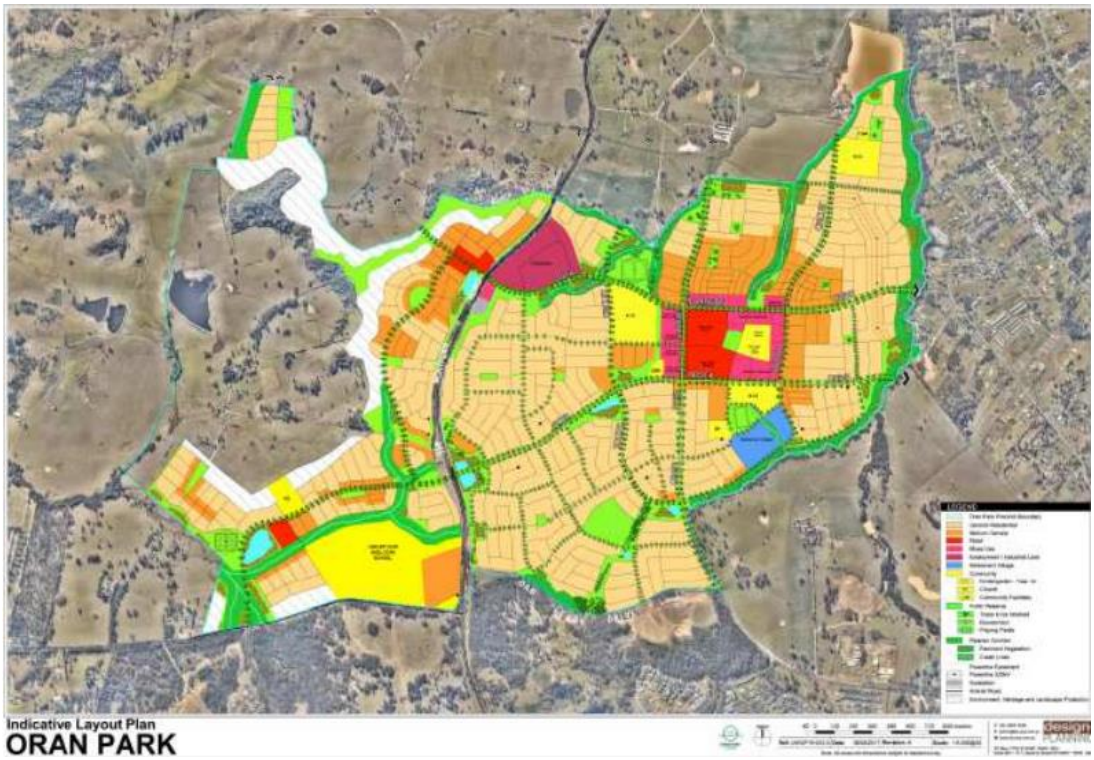
Oran Park and Turner Road precincts within the South West Growth Area are subject to other specific DCPs.

[22] DPE, Schedule 5 Leppington Priority Precinct, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-schedule-5-leppington-priority-precinct-2015.pdf, date accessed: 07/03/2019

Oran Park Development Control Plan 2016 (NSW DPE)

The Oran Park DCP states housing densities will be higher than those traditionally delivered for Camden LGA and will include a broad range of dwelling types and walkable neighbourhoods. The area west of the Northern Road will have a distinct character that is urban and semi-rural.

FIGURE 64: INDICATIVE LAYOUT PLAN ORAN PARK PRECINCT

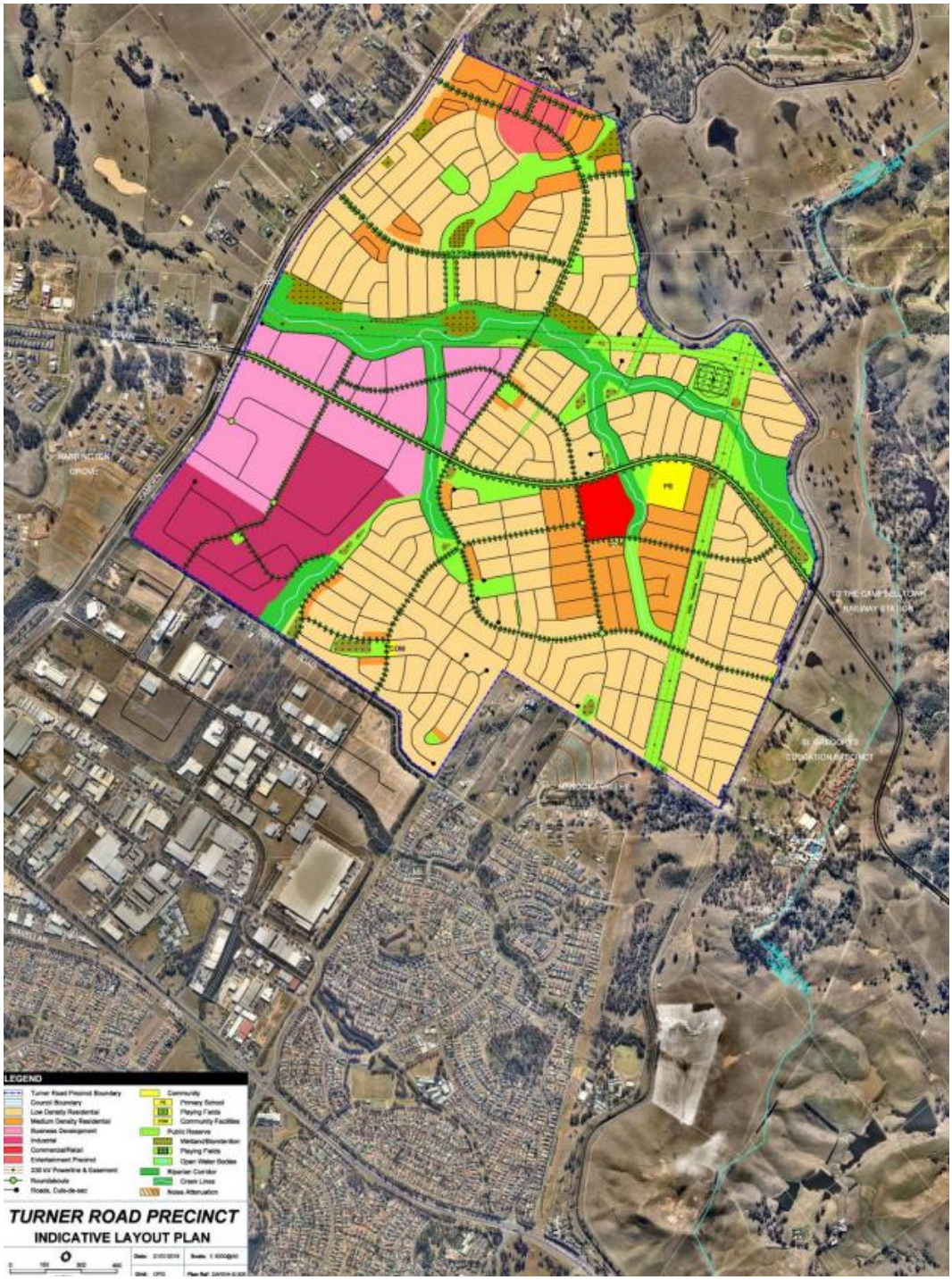


Source: DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/oran-park-development-control-plan-2018-02-10.pdf?la=en, date accessed: 04/02/2019

Turner Road Precinct Development Control Plan 2018 (NSW DPE)

The Turner Road DCP indicates the Precinct will contain a compatible mix of land uses including local employment opportunities. Like Oran Park Precinct, housing will have higher densities than what is traditionally delivered in Camden LGA.

FIGURE 65: INDICATIVE LAYOUT PLAN TURNER ROAD PRECINCT



Source: DPE, https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/turner-road-development-control-plan-2018-11-13.pdf?la=en, date accessed: 04/02/2019

APPENDIX B: SETTLEMENT AREA OPPORTUNITIES AND CONSTRAINTS

Settlement Area – Future Urban

The Future Urban Settlement Area is located in the north of the LGA and encompasses the suburbs of Bringelly, Rossmore, Leppington and Catherine Fields. It is an area earmarked for future suburban development. Dominant dwelling types tends to be single storey dwellings on large lots. Dwelling styles are mixed and includes Post War brick veneer and 'project home' contemporary design.

FIGURE 66: EXAMPLES OF DWELLINGS - CATHERINE FIELDS AND LEPPINGTON

Source: Google Image

Opportunities

Land use options for the future Leppington Town Centre are being developed by the Department of Planning & Environment and local councils. The Town Centre will be centred around Leppington rail station, where Stage 1 indicates local services will include a new primary and high school, a new community centre, a major retail, public administration and entertainment town centre, recreational lands and connections to rail and road links[23]. Housing growth that is connected to the services offered by this future town centre will be an opportunity.

Bringelly Road and The Northern Road are both undergoing upgrades as part of the Western Sydney Infrastructure Plan by the Australian and NSW governments. Benefits are identified as increased road capacity, improved safety for motorists, better bus priorities measures and facilities, more reliable travel times and improved access for pedestrians and cyclists with an off-road shared path[24]. The road infrastructure upgrades present an opportunity for local residents living in the Future Urban Settlement Area to have improved access via private vehicle or public transport to employment and services in the area, as well as recreation options from development of active transport links.

Constraints

There are only a few sites in the Future Urban Settlement Area that are classed as general heritage items. Item I1 the Maryland homestead is the largest general heritage constraint within Bringelly.

The Upper South Creek catchment encompasses the Future Urban Settlement Area. Due to planned urban development, Camden Council has engaged with the State Government's Floodplain Risk Management Planning process[25]. An initial flood study is the first step in the process.

As mentioned above, flood liability is limited to the low-lying areas and the floodplain. There are low slopes in the catchment and wide floodplains, therefore, flood flows are expected to be less hazardous than expected[26]. As shown in Figure 67 below, flooding events have potential to impact housing in all suburbs of the Future Settlement Area. For Rossmore, Bringelly and some parts of Catherine Fields, there is a five percent chance in any one year that that a large flood would affect housing, as shown in green.

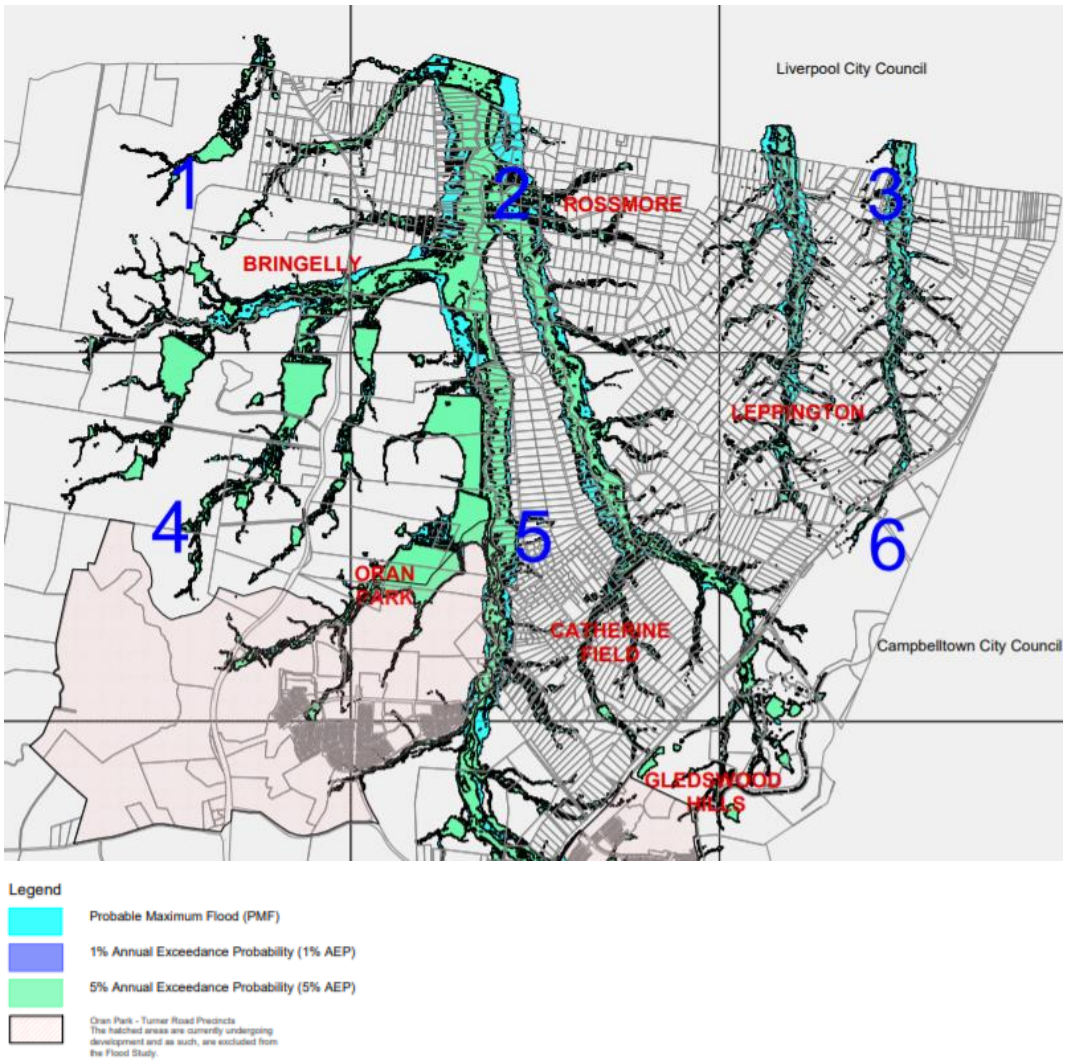
[23] DPE, 2019, https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Leppington-Town-Centre; https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/South-West-Growth-Area/Leppington, date accessed: 25/02/3019

[24] Transport for NSW, 2019, Bringelly Road upgrade, https://www.rms.nsw.gov.au/projects/sydney-west/bringelly-road-upgrade/index.html, date accessed: 21/02/2019

[25] Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/upper-sout-creek/, date accessed: 02/03/2019

[26] WMA Water, 2012, https://www.camden.nsw.gov.au/assets/pdfs/Environment/Flood-Information/South-Creek/South-Creek-Upper-South-Creek-Flood-Study-May-2012-WMA-Water-Report-Body.pdf, p. vii

FIGURE 67: UPPER SOUTH CREEK CATCHMENT FLOODING IMPACT - FUTURE URBAN



Source: Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/upper-sout-creek/, date accessed: 02/03/2019

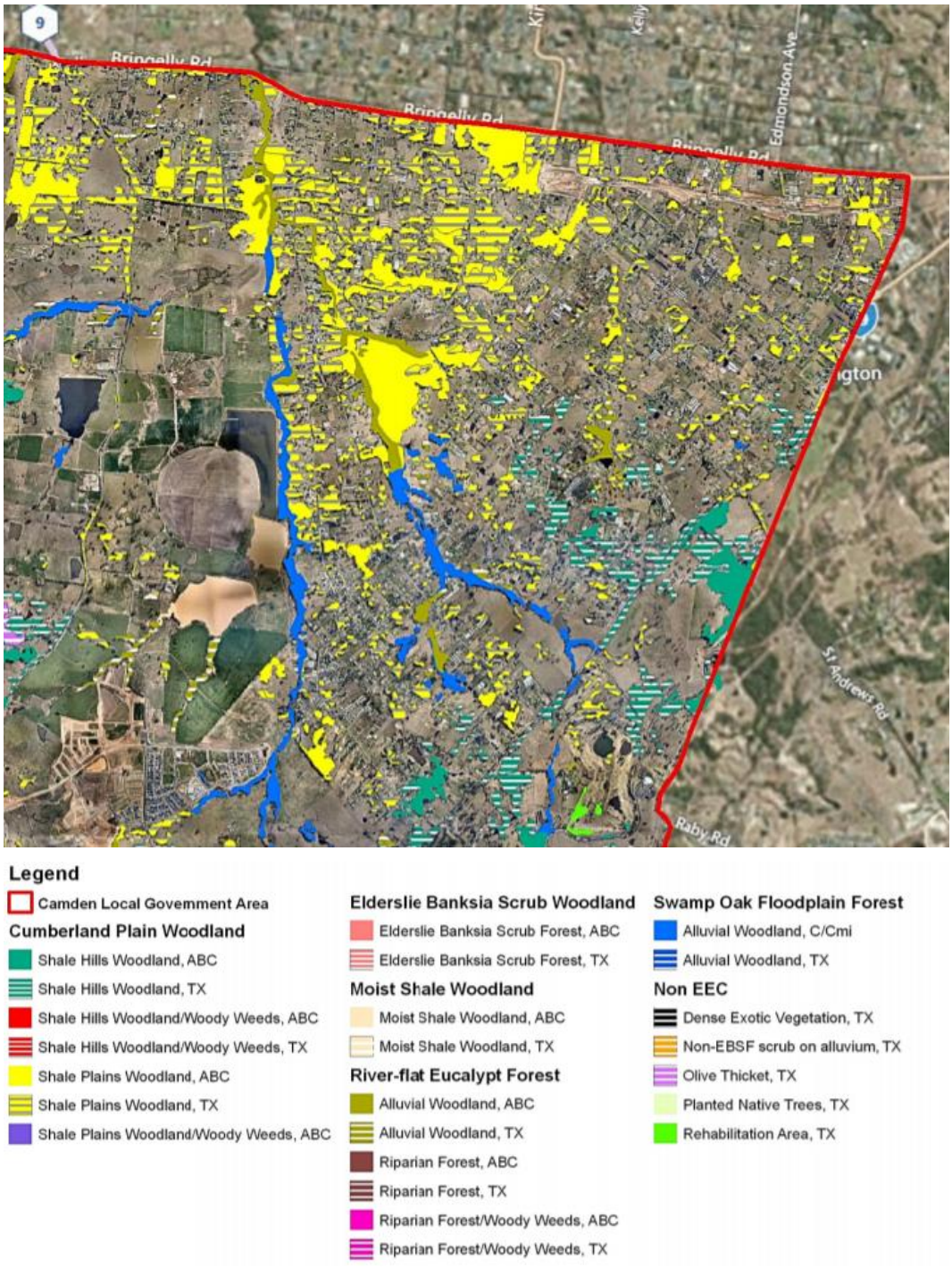
The Future Urban Settlement Area contains three categories of bushfire prone vegetation as defined by Camden Council and the NSW Rural Fire Service[27]. Throughout the Settlement Area there is a presence of bushfire prone vegetation, which may be a threat to future housing.

Bringelly contains areas that are significantly bushfire prone in the western extent of the suburb. Rossmore and Leppington both contain areas of bushfire prone forest, woodland, heath or wetland.

The Future Urban Settlement Area has been identified as containing several communities of Cumberland Plain Woodland and Swamp Oak Floodplain Forest which are listed as Endangered Ecological Communities[28]. These communities of plants would constrain housing development.

[27] Camden Council, 2019, https://www.camden.nsw.gov.au/environment/bushfires/, date accessed: 02/03/2019
[28] Camden Council, NSW Office of Environment and Heritage, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/; https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10191; http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10945 , date accessed: 02/03/3019

FIGURE 68: ENDANGERED ECOLOGICAL COMMUNITIES NORTH-EAST CAMDEN LGA



Source: Camden Council, https://www.camden.nsw.gov.au/assets/Uploads/Map-of-EECs-in-Camden-LGA.pdf, date accessed: 02/03/2019

Settlement Area - New Urban North

The New Urban North includes suburbs and master planned communities of Oran Park, Harrington Park, Gregory Hills and Gledswood Hills. It is predominately occupied by new land-release suburban development. Dominant dwelling types include contemporary 'project homes' of both one- and two-story dwellings. Suburban development tends to be post-2016.

FIGURE 69: EXAMPLES OF DWELLINGS - ORAN PARK AND HARRINGTON PARK

Source: Google Images

Opportunities

The NSRL would represent an opportunity for growth around station nodes. The current corridor alignment suggests a station node may be located at Oran Park, see Figure 55.

The New Urban North contains the Urban Release Areas of Mater Dei, Harrington Grove West and Harrington Grove East along Cobbitty Road and Oran Park Road, as identified in the Camden LEP 2010. Urban Release Areas are also located along the eastern edge of the Settlement Area in Emerald Hills, Lakeside and El Caballo Blanco/Gledswood Hills, noting heritage item I122 runs through the zone. These areas could offer housing opportunities.

Oran Park and Gregory Hills contain little bushfire prone vegetation which would indicate these suburbs have less threat of bushfire than other surrounding suburbs. This would support greater dwelling growth in these suburbs.

Constraints

The New Urban North Settlement Area contains a few sites that are classified as general heritage. Of note is the Struggletown Conservation Area (Item B) along Camden Valley Way. The heritage listing does not prevent future changes but seeks to ensure changes and additions to properties respect the heritage characteristics of the area[29]. Clause 5.10 Heritage Conservation of the Camden LEP states development consent is required for demolishing, moving or altering the exterior of any of a heritage item; or a building within a heritage conservation area; or subdividing land on which a heritage item is located or that is within a heritage conservation area.

The New Urban North falls into two different catchment areas. Oran Park and Gregory Hills are impacted by events in the Upper South Creek Catchment. As mentioned above, Camden Council has engaged with the State Government's Floodplain Risk Management Planning process[30]. An initial flood study is the first step in the process.

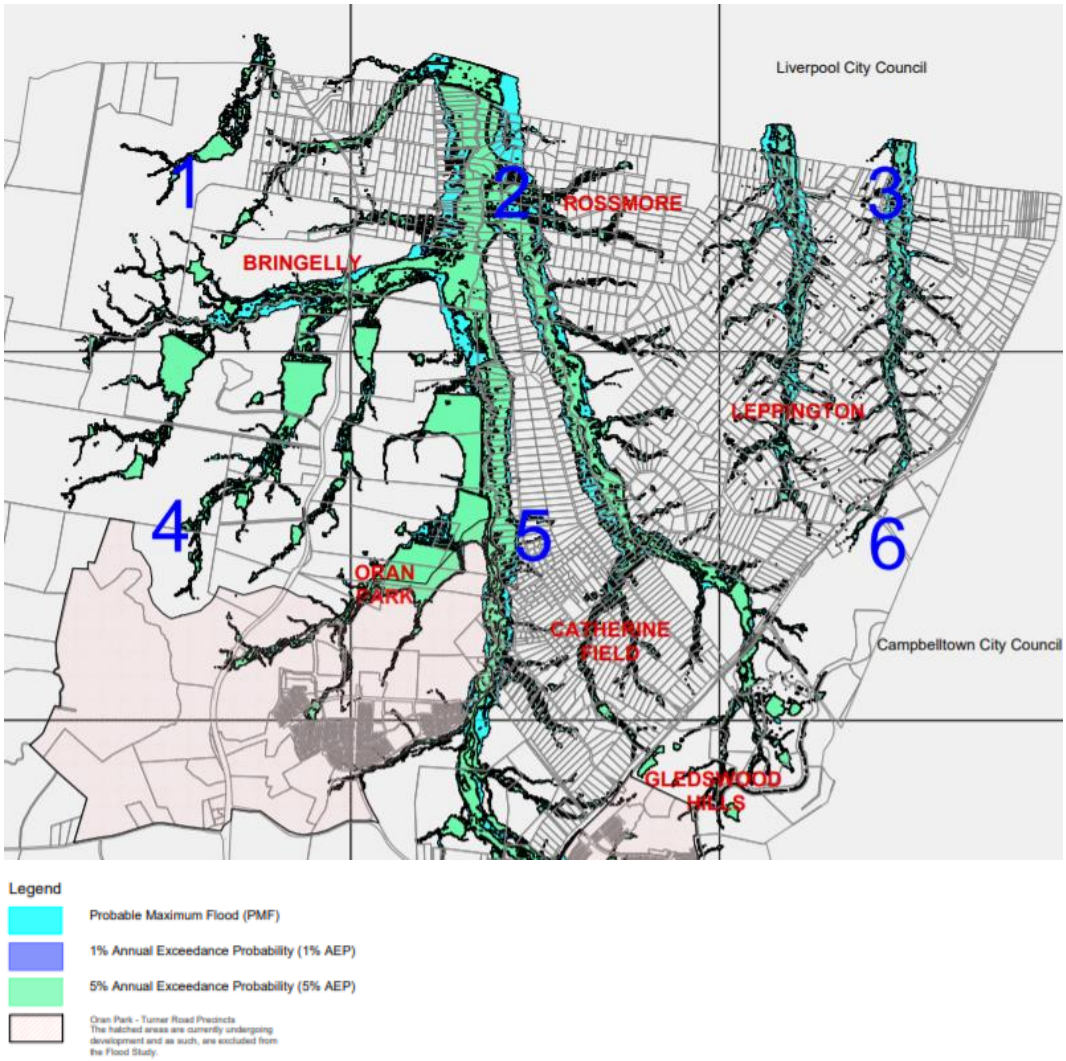
Specifically, as shown in Figure 70 below, for parts of Oran Park and Glenwood Hills, some areas would have a five percent chance in any one year that a large flood could affect housing in the area, as shown in green.

A flood study for Narellan Creek Catchment has not been completed.

Bushfire prone vegetation exists in various areas of the New Urban North Settlement Area. The greatest concentration is in Harrington Park where large areas contain bushfire prone grassland and forest, woodland, heath or wetland.

[29] Camden Council, 2019, https://www.camden.nsw.gov.au/planning/heritage-conservation/, dated accessed: 22/02/2019
[30] Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/upper-sout-creek/, date accessed: 02/03/2019

FIGURE 70: UPPER SOUTH CREEK CATCHMENT FLOODING IMPACT



Source: Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/upper-sout-creek/, date accessed: 02/03/2019

The New Urban North contains Endangered Ecological Communities such as Swamp Oak Floodplain Forest and Cumberland Plain Woodland[31]. The presence of these plant communities could constrain potential housing development.

The Community Land classification list zones several lots of land in Harrington Park as E2 Environmental Conservation and E4 Environmental Living, see Figure 71 below. Camden LEP defines the objectives of zone E2 as to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic value; to prevent development that could destroy or damage these values; to protect and enhance the ecology, hydrology and scenic views offered by this zone. The objective of E4 is to provide for low-impact residential development and ensure it does not have an impact on those values, as such housing growth would be limited in this area.

[31] Camden Council and NSW Office of Environment and Heritage, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

FIGURE 71: E2 AND E4 ZONES HARRINGTON PARK

Source: Camden Council LEP

Settlement Area - New Urban South

The New Urban South includes the suburbs of Elderslie and Spring Farm in the south of the LGA. It is predominately occupied by new land-release suburban development. Dwellings types are mixed with contemporary 'project home' style dwellings that are particularly present in Spring Farm and the eastern side of Elderslie. The western side of Elderslie tends to contain post war brick veneer style. One and two storey dwellings are present with one storey being more dominant.

FIGURE 72: EXAMPLE OF DWELLING TYPES – NEW URBAN SOUTH

Source: Google Image

Opportunities

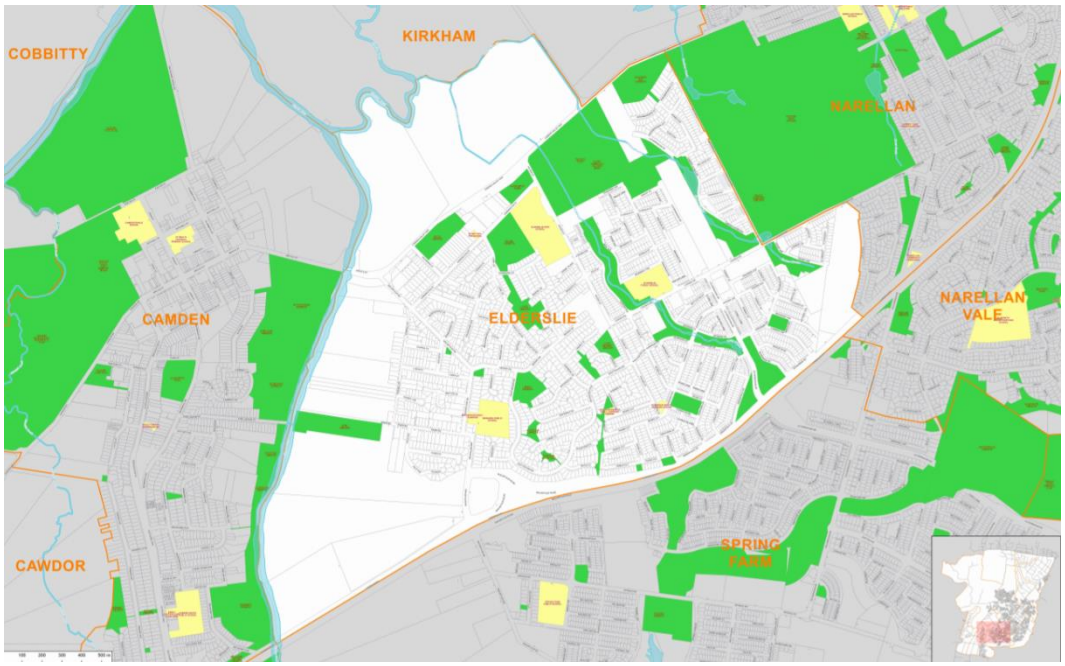
There are several bus routes that connect the suburbs of Camden, Elderslie, Spring Farm and Narellan[32]. Connecting housing growth with these public transport services and routes would assist greater transport and land use planning outcomes.

Spring Farm contains Urban Release Areas, as identified in the Camden LEP 2010, along its southern most edge and could offer housing opportunities, although consideration of flooding constraints would be necessary. Spring Farm is also located in close proximity to retail and services located in Narellan Town Centre and Camden Town Centre which would be beneficial for a growing community.

The suburb of Elderslie has several lots classified as community land and zoned RE1 Public Recreation[33], see Figure 73. These areas could be considered for alternate land use, however this would need to be considered against the public need for reserves and recreation areas in close proximity to more densely settled area of Camden LGA. Furthermore, Elderslie is prone to flooding, more so than other areas of Camden LGA, these green spaces would also act as a natural 'sponge' to high rainfall events.

[32] Busabout, https://busabout.com.au/pdf/Network_Map.pdf, date accessed: 25/02/2019
[33] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Community-Land-4-January-2019.pdf, date accessed: 02/03/2019

FIGURE 73: SUBURB MAP ELDERSLIE – OPEN SPACE



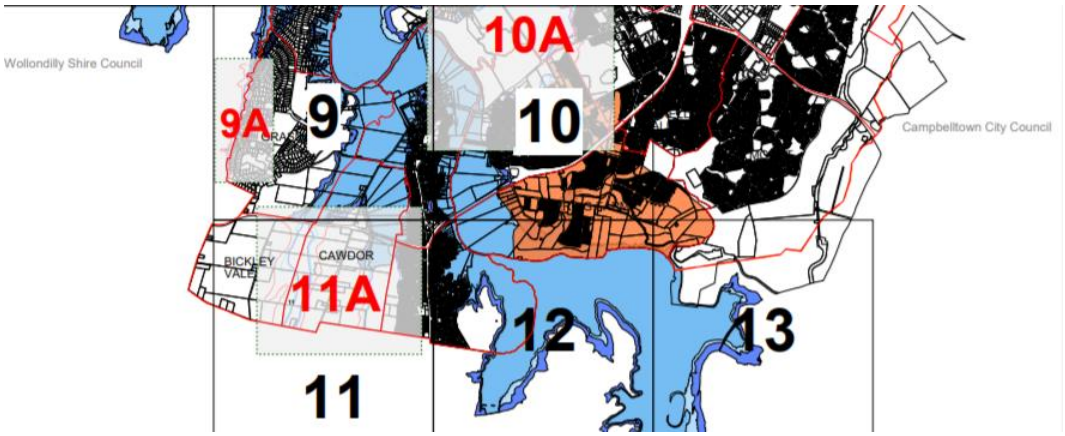
Source: Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Community/Community-Information/Suburb-Maps/ELDERSLIE.pdf, date accessed: 02/03/2019

Constraints

There are a small number of sites within the suburb of Elderslie classed as general heritage items which would be a constraint.

The Nepean River Flood Study indicates in the event of a flood the New Urban South Settlement Area will be affected by flooding. Flood extents mapping shows large parts of Elderslie and Spring Farm have a five percent chance of experiencing flood in any one year, see Figure 74 and Figure 75[34]. Probable maximum flood level is indicated in dark blue.

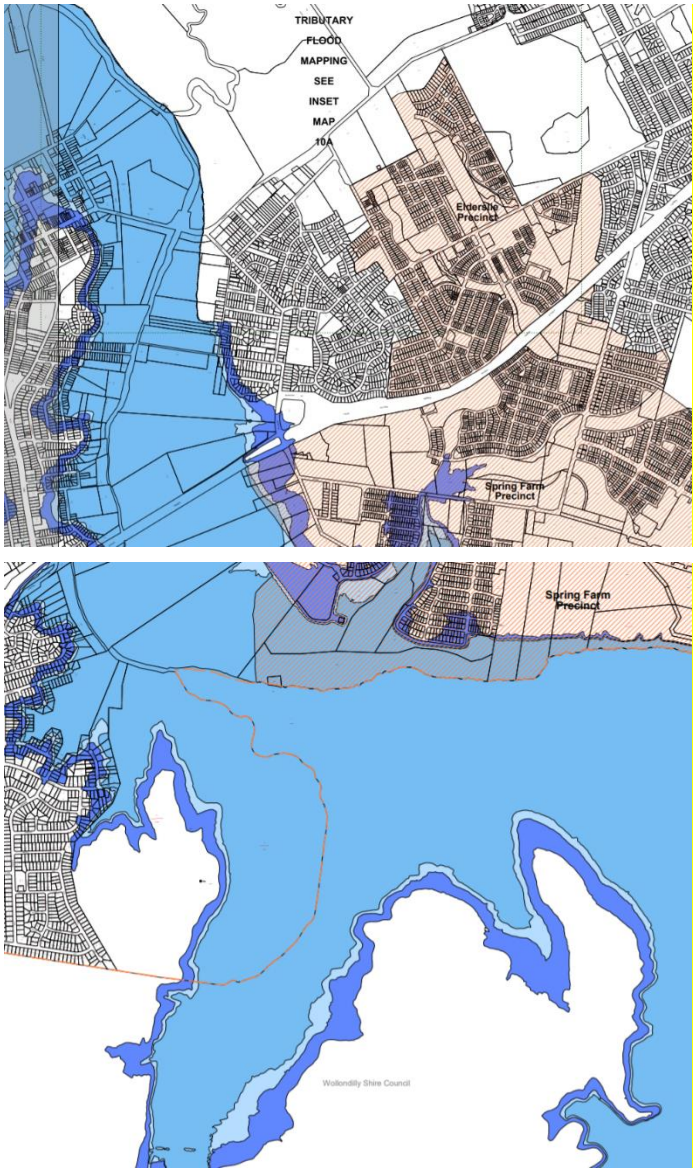
FIGURE 74: FLOODING EXTENT MAPPING FOR CAMDEN LGA SOUTHERN HALF



Source: Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/nepean-river-catchment/, date accessed: 2/03/2019

[34] Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/nepean-river-catchment/, date accessed: 2102/2019

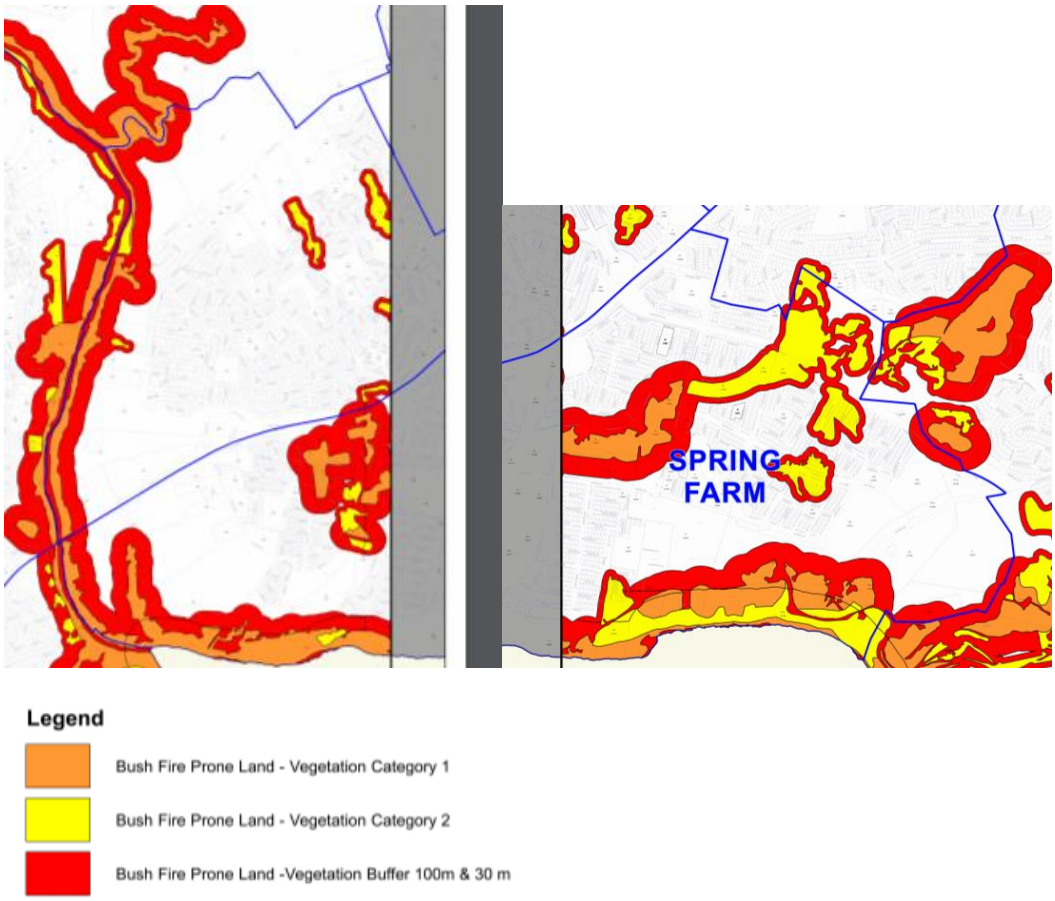
FIGURE 75: FLOODING EXTENT MAPPING ELDERSLIE AND SPRING FARM



Source: Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/nepean-river-catchment/, date accessed: 02/03/2019

Bushfire prone vegetation is present in this Settlement Area and is particularly concentrated to the southern boundary of Spring Farm for bushfire prone grassland. This would be a potential threat to new housing development in this portion of the suburb.

FIGURE 76: BUSHFIRE PRONE VEGETATION ELDERSLIE (ABOVE), SPRING FARM (BELOW)



Source: Camden Council, https://www.camden.nsw.gov.au/environment/bushfires/, date accessed: 02/03/2019

The New Urban South Settlement Area contains Endangered Ecological Communities such as Elderslie Banksia Scrub Woodland and Cumberland Plain Woodland[35]. These communities of plants may constrain housing potential.

The Community Land classification list indicates that several lots in Spring Farm are designated as E2 Environmental Conservation. Camden LEP states E2 zone objectives are to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic value; prevent development that could destroy, damage or have an adverse effect on the values; to protect and enhance the ecology, hydrology and scenic views of the ecosystem. This limits the potential for new dwellings in these locations, but provides an important environmental conservation role.

[35] Camden Council and NSW Office of Environment and Heritage, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

Settlement Area - Existing Suburbs

The Existing Suburbs Settlement Area is well developed and has few new subdivisions. It includes the suburbs of Mount Annan, Smeaton Grange, Narellan Vale and Currans Hill in the south-east of the LGA. Dominant dwelling types tend to be single-storey residential. Streetscapes include cul-de-sac style development. Housing stock tends to be post-2006 in more contemporary styles. Smeaton Grange contain an industrial zone with large floorplate lots and businesses that trade in garden supplies, crash restorations and transportation and logistics, as well as a few facilities that offer activities such as fitness and go-karting.

FIGURE 77: DWELLINGS NARELLAN VALE, CURRANS HILL AND INDUSTRIAL ZONE SMEATON GRANGE

Source: Google Image

Opportunities

Unlike the rest of Camden LGA, Narellan Vale contains almost no bushfire prone vegetation. Similarly, the northern portion of Mount Annan contains little bushfire prone vegetation which would indicate these areas are more desirable for dwelling growth.

Constraints

Smeaton Grange is largely zoned IN1 General Industrial and IN2 Light Industrial. It contains a range of different businesses such as crash repairs, panel beaters, wholesale businesses for machinery, building materials and garden supplies. Existing development is already in close alignment to the IN1 and IN2 zone boundary. The Greater Sydney Commission has indicated the policy direction for industrial lands in the Western Parkland City to retain and manage all existing industrial and urban services land from competing pressures, especially residential and mixed-use zones[36]. Any further development in close proximity to Smeaton Grange and the IN2 zone would have to consider land use conflicts.

For the Existing Suburbs Settlement Area, bushfire prone vegetation is largely prevalent in the southern most portion of the Settlement Area, in the suburb of Mount Annan. The vegetation type prone to bushfire that is largely present is forest, woodland, heath or wetland. There are also some bushfire prone grasslands in Mount Annan, Smeaton Grange and Currans Hill.

The Existing Suburbs Settlement Area contains Endangered Ecological Communities[37], particularly Cumberland Plain Woodland in the south-eastern portion of the Settlement Area. The presence of these ecological communities could act as a constraint on future development.

Settlement Area - Camden

Camden Settlement Area includes the suburbs of Camden and Camden South. Housing in this Settlement Area is older than other development in the LGA. Dwelling types tend to be Post-War brick veneer or built with fibro-cladding. This Settlement Area also contains Camden Town Centre that is generally a one to two storey retail strip.

FIGURE 78: EXAMPLE DWELLING TYPES - CAMDEN

[36] Greater Sydney Commission, 2018, Western Parkland City Plan, p. 90
[37] Camden Council, NSW Office of Environmental and Heritage, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

Source: Google Images

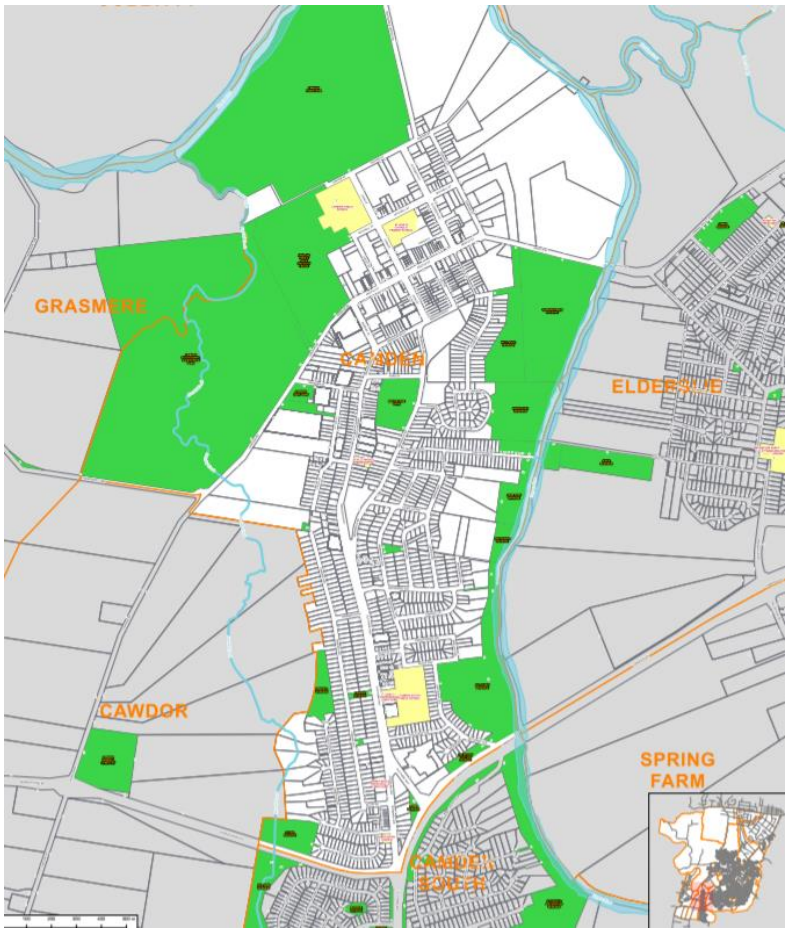
Opportunities

Within Camden Settlement Area there are numerous publicly owned lots classified as Community Land. These lots are generally zoned RE1 Public Recreation and include a number of reserves, parks and include an equestrian park, see Figure 79[38].

Some of these lots may be opportunities for alternate land uses. However, consideration of this would have to be balanced with public need and public good for open space, and its contribution to the Green Grid of Greater Sydney. It is also worth noting that many of the reserves are located towards the perimeter of the suburb, alongside the Nepean River. In the event of flooding, to which Camden Settlement Area is susceptible, these open space areas would act as a natural 'sponge' and buffer to existing dwellings.

[38] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Community-Land-4-January-2019.pdf, date accessed: 02/03/2019

FIGURE 79: CAMDEN SUBURB MAP



Source: Camden Council, https://www.camden.nsw.gov.au/community/community-information/suburb-maps/, date accessed: 02/03/2019

Constraints

Camden Centre contains several sites classified as general heritage items. The whole centre is classified as a conservation area (Camden Town Centre Conservation Area) which will constrain development types. Camden South contains a large State heritage item of Belgenny Farm.

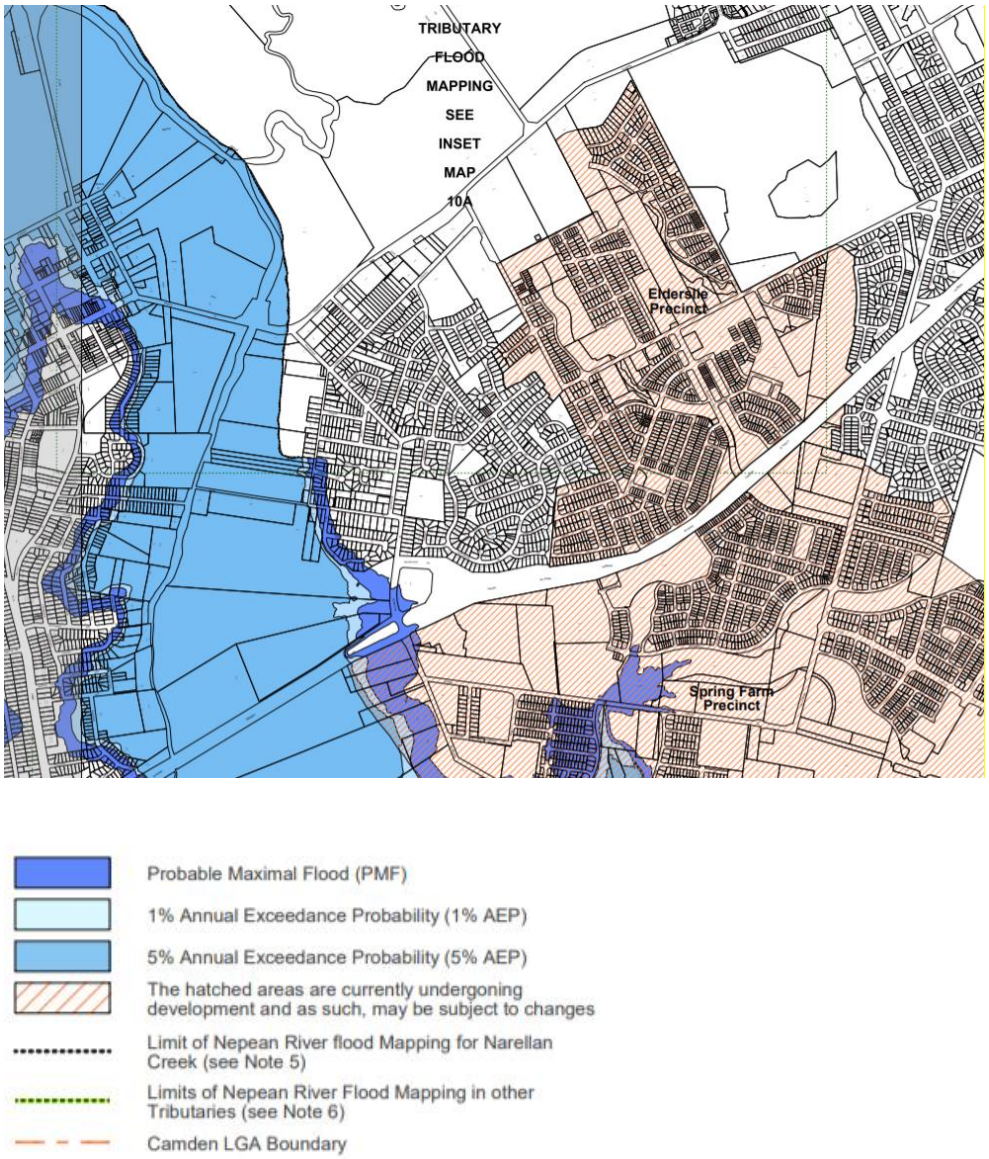
The heritage listing does not prevent future changes but seeks to ensure changes and additions to properties respect the heritage characteristics of the area[39]. Clause 5.10 Heritage Conservation of the Camden LEP states development consent is required for demolishing, moving or altering the exterior of any of a heritage item; or a building within a heritage conservation area; or subdividing land on which a heritage item is located or that is within a heritage conservation area. These requirements will act as a constraint on development in the Camden Settlement Area.

Three lots are designated as Crown Land in Camden Settlement Area. For RE1 Public Recreation, these include Belgenny Reserve, Wetlands Reserve and Crown Reserve[40].

The Nepean River runs along the western edge of Camden LGA and through to Camden and has a significant floodplain. Flood extents mapping indicates that land areas around the existing Camden Town Centre and established areas of Camden Settlement Area have a five percent chance in any one year of flooding occurring which could be a constraint.

[39] Camden Council, 2019, https://www.camden.nsw.gov.au/planning/heritage-conservation/, dated accessed: 22/02/2019
[40] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Crown-Land-4-January-2019.pdf, date accessed: 02/02/2019

FIGURE 80: CAMDEN AND ELDERSLIE FLOOD EXTENTS MAPPING



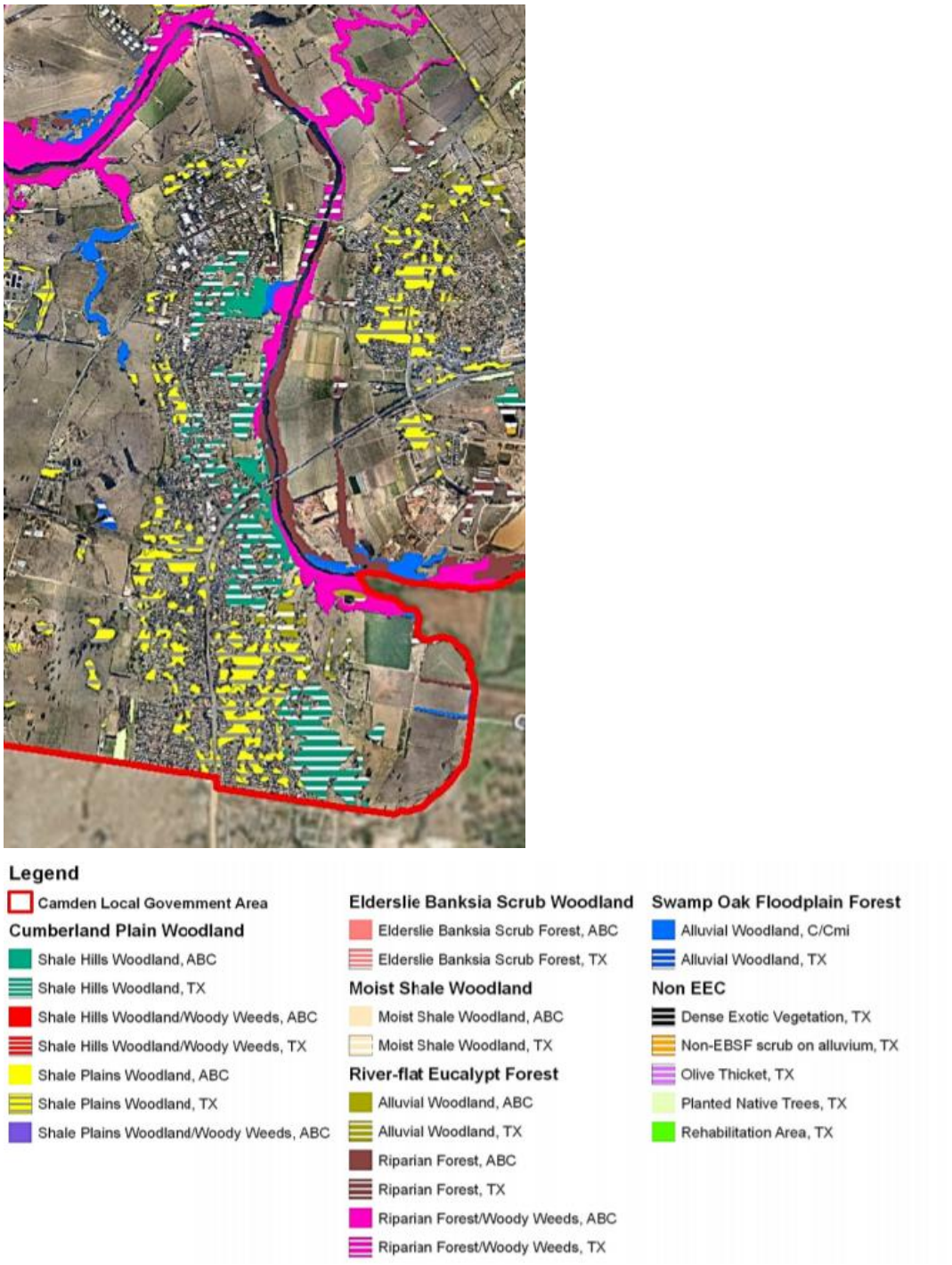
Source: Camden Council, https://www.camden.nsw.gov.au/environment/flood-information/nepean-river-catchment/, date accessed: 02/03/2019

Camden Settlement Area has very small areas of bushfire prone vegetation, that are generally around the perimeter of the two suburbs. Bushfire prone vegetation would be a minimal constraint on housing in this area.

Camden Settlement Area contains Endangered Ecological Communities, including Cumberland Plain Woodland and some River-Flat Eucalypt Forest around the periphery of the suburbs along the river[41]. The presence of these communities of plants would constrain housing.

[41] Camden Council and NSW Office of Environment and Heritage https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

FIGURE 81: CAMDEN AREA ENDANGERED ECOLOGICAL COMMUNITIES



Source: Camden Council, https://www.camden.nsw.gov.au/assets/Uploads/Map-of-EECs-in-Camden-LGA.pdf, date accessed: 02/03/2019

Settlement Area - Narellan

Narellan Settlement Area is located towards the centre of the LGA. Housing stock tends to be older, tending towards post-2006 development. Dwellings are predominantly brick veneer and single storey. There is a presence of some fibro dwelling stock and some double storey dwellings.

FIGURE 82: EXAMPLE DWELLING TYPES - NARELLAN

Source: Google Image

Opportunities

As noted above, the NSRL would represent an opportunity for growth around station nodes, that would allow local resident catchments greater connectivity to jobs and services in Western Sydney. Currently, planning documents suggest a station node could be located at Narellan, see Figure 55.

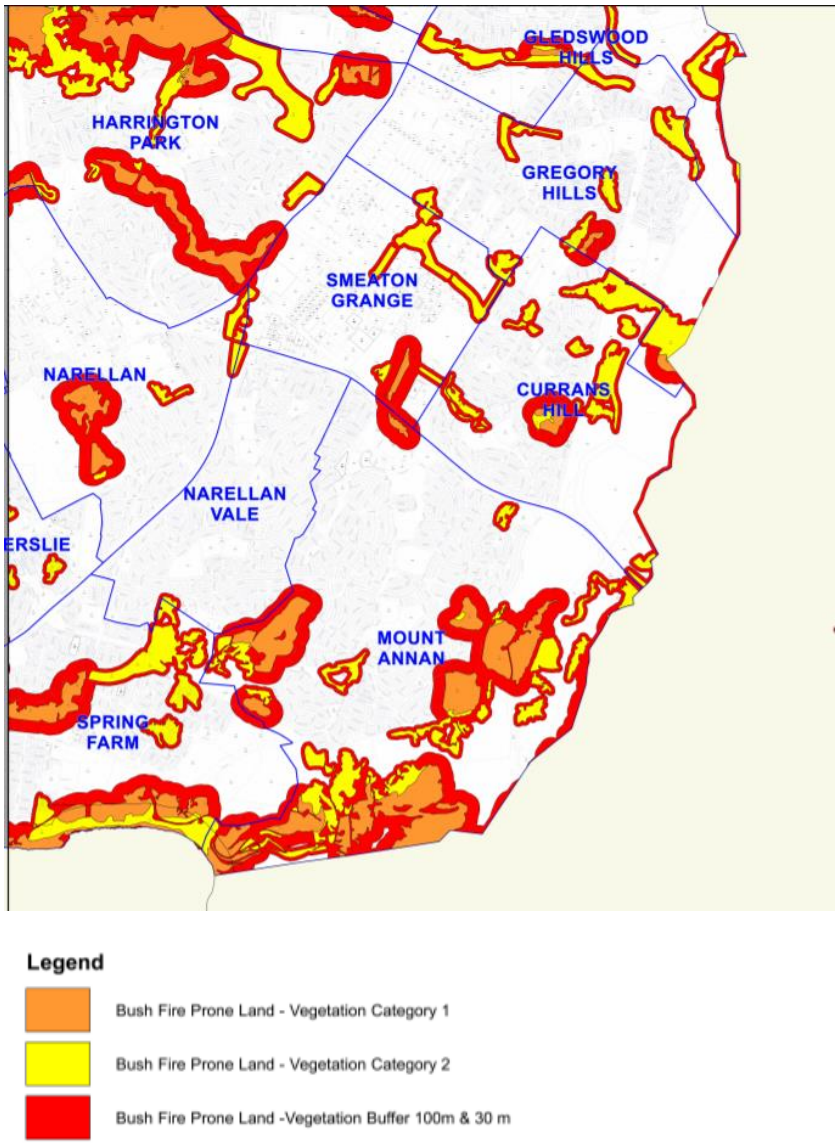
Constraints

Narellan Settlement Area contains only a few sites designated as general heritage items, such as a public school and church. Six lots in Narellan are designated Crown Land for RE1 Public Recreation of Nott Oval[42].

Narellan Settlement Area has a small area of bushfire prone forest, woodland, heath or wetland, as indicated in Figure 83.

Narellan Settlement Area contains the presence of Cumberland Plain Woodland which is classified as an Endangered Ecological Species[43]. This would constrict housing potential.

FIGURE 83: NARELLAN BUSHFIRE PRONE VEGETATION



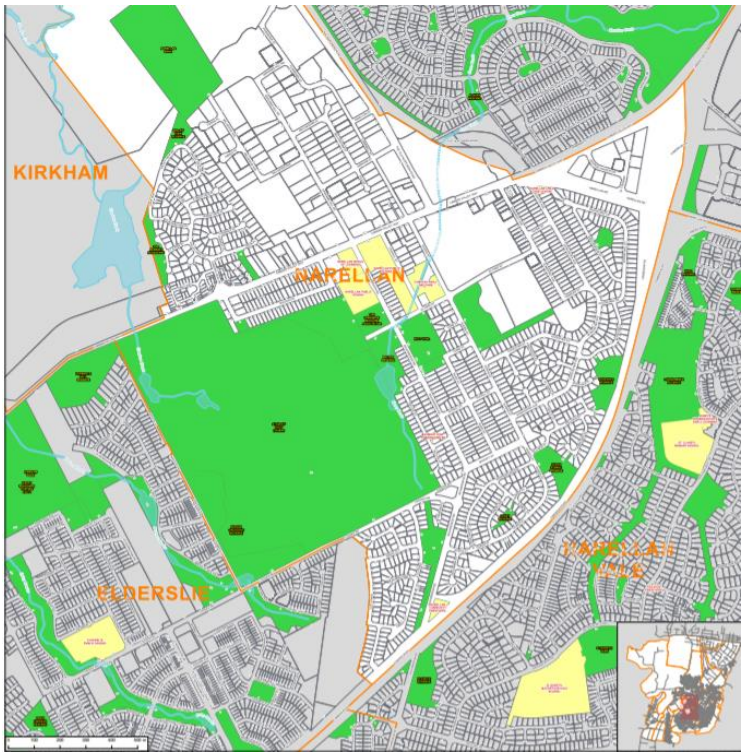
Source: Camden Council, https://www.camden.nsw.gov.au/environment/bushfires/, date accessed: 02/03/2019

[42] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Crown-Land-4-January-2019.pdf, date accessed: 02/02/2019

[43] Camden Council and NSW Office of Environment and Heritage, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

Within the Narellan Settlement Area there are some publicly listed owned lots classified as RE1 Public Recreation[44]. Some of these lots may be opportunities for alternate land uses. However, consideration of this would have to be balanced with public need and public good for open space, and its contribution to the Green Grid of Greater Sydney, particularly as Narellan is located in the middle of some of the most densely settled areas of Camden LGA.

FIGURE 84: NARELLAN SUBURB OPEN SPACE



Source: Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Community/Community-Information/Suburb-Maps/NARELLAN.pdf, date accessed: 02/03/2019

Settlement Area - Rural Living

The Rural Living Settlement Area covers a large area and runs down the western extent of the LGA. It includes the suburbs of Cobbitty, Kirkham, Grasmere, Bickley Vale and Cawdor. It generally contains rural, semi-rural and residential uses and is not planned to be released for more intensive urban development.

Dominant dwelling types tend to be low density, single storey residential dwellings on large-lots with countryside surroundings, see Figure 85.

[44] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Community-Land-4-January-2019.pdf, date accessed: 02/03/2019

FIGURE 85: DWELLING TYPES COBBITTY, GRASMERE AND CAWDOR

Source: Google Image

Opportunities

The Outer Sydney Orbital alignment is in close proximity to the Rural Living Settlement Area. The Rural Lands Strategy notes that this is an opportunity for agricultural pursuits in this area, allowing expedient transport access for agricultural produce to market. This could be considered an opportunity if the land use was to include agricultural production[45].

FIGURE 86: POTENTIAL OUTER SYDNEY ORBITAL CORRIDOR

Source: TfNSW, 2019, https://www.transport.nsw.gov.au/corridors/oso, date accessed: 25/02/2019

Constraints

The rural setting of Camden LGA is highly valued with the local community and is supported by local strategies and planning principles contained in the Community Strategic Plan and Rural Lands Strategy[46].

Key planning principles listed below will limit the capacity for housing growth in the Rural Living Settlement Area:

1. Protect Camden's remaining rural lands
2. Retain scenic and cultural landscapes

[45] Camden Council, Rural Lands Strategy, p.8.
[46] Camden Council, 2017, Rural Lands Strategy, p. 3; Camden Council, 2017, Community Strategic Plan, p. 21

3. Avoid rural land fragmentation
4. Minimise and manage rural land use conflict
5. Enhance the rural economy
6. Minimise unplanned non-agricultural development[47].

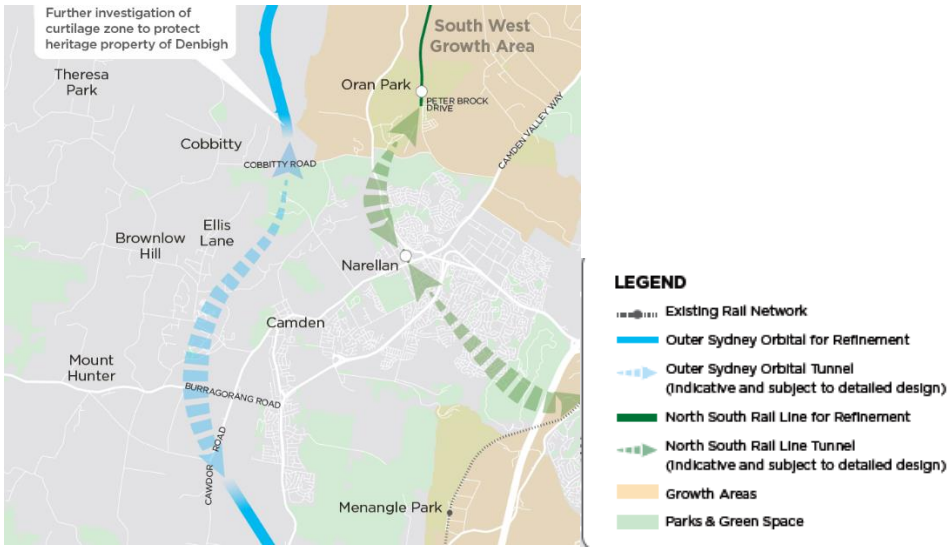
Ensuring rural lands and the scenic and cultural landscapes are maintained in the Rural Living Settlement Area will be a constraint on dwelling development. Land use for agricultural purposes alongside housing has the potential to create land use conflict.

Transport for NSW is currently investigating the potential land corridor and corridor protection process for the Outer Sydney Orbital that could encompass a north-south motorway and freight rail line. This piece of transport infrastructure has potential to impact Camden LGA and in particular the Rural Living Settlement Area.

The Outer Sydney Orbital is likely to run from Box Hill in North West Sydney to the Hume Motorway near Menangle in the south, connecting with Western Sydney Airport and future employment lands. Consultation for the recommended corridor was conducted in June 2018 and feedback will further refine the corridor. Currently, further consultation is to be conducted with property owners and the final corridor will be recommended to the Department of Planning and Environment for protection[48]. There is potential that a 10-kilometre tunnel would run from north of Cobbitty Road, Cobbitty to the south-east of Cawdor Road, Cawdor. The aim of the tunnel is to minimise impact on Cobbitty, Brownlow Hill, Grasmere and Ellis Lane communities[49].

Housing development will be constrained in the Rural Living Settlement Area dependent on the outcomes of the corridor investigation and final alignment. Suburbs that are likely to be impacted include Cobbitty, Grasmere and Bickley Vale.

FIGURE 87: OUTER SYDNEY ORBITAL POTENTIAL TUNNEL



Source: TfNSW, https://www.transport.nsw.gov.au/corridors, date accessed: 02/03/2019

Camden Aerodrome is also located within this Settlement Area however, it does not cater for regular commercial passenger flights.

Camden LEP 2010 indicates there are a few sites classified as general heritage items in the Rural Living Settlement Area. Carrington Hospital and the WWII Transmitter Bunker (items

[47] Camden Council, 2017, Rural Lands Strategy, p. 3.
[48] Transport for NSW, 2018, Outer Sydney Orbital corridor identification, https://www.transport.nsw.gov.au/corridors/oso, dated accessed: 15/02/2018, p. 8.
[49] TfNSW, https://www.transport.nsw.gov.au/corridors, date accessed: 02/03/2019

I117 and I118, schedule 5) between Werombi Road and the Nepean River are a larger general heritage item constraint.

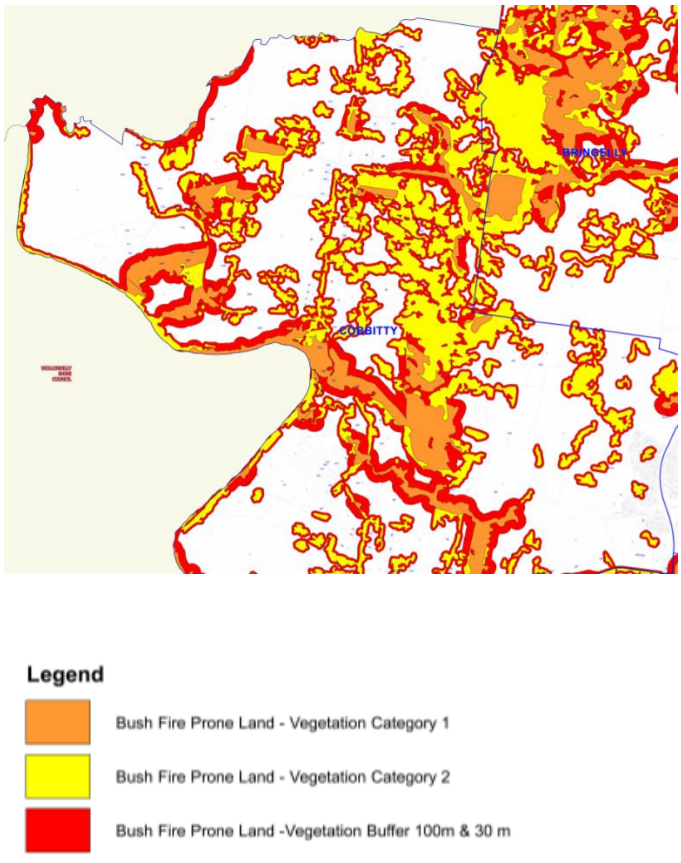
Cawdor contains two lots of Crown Land for RU1 Primary Production and SP1 Special Activities, for Camden Cemetery[50].

The Nepean River runs along the western edge of Camden LGA and through to Camden and has a significant floodplain. The Nepean River Catchment is an area that extends significantly into the Rural Living Settlement Area.

Flood extents mapping indicates large portions of the Rural Living Settlement Area could experience a five percent chance in any one year of flooding. This could constrain housing growth.

The Rural Living Settlement Area contains all three categories of Bushfire Prone Land as defined by Camden Council and the NSW Rural Fire Service[51]. There is a large extent of forest, woodland, heath or wetlands and grassland bushfire prone vegetation in the suburb of Cobbitty which could pose a threat to future dwellings.

FIGURE 88: BUSHFIRE PRONE VEGETATION RURAL LIVING



Source: Camden Council, https://www.camden.nsw.gov.au/environment/bushfires/, date accessed: 02/03/2019

The Rural Living Settlement Area contains a large number of different Endangered Ecological Communities of plants[52]. These include varieties of plants such as the Cumberland Plan Woodland; River-flat Eucalypt Forest; and the Swamp Oak Floodplain Forest. These communities of plants would constrain dwelling growth potential.

[50] Camden Council, https://www.camden.nsw.gov.au/assets/pdfs/Council/About-Us/Land-Register/Land-Register-Crown-Land-4-January-2019.pdf, date accessed: 02/02/2019
[51] Camden Council, 2019, https://www.camden.nsw.gov.au/environment/bushfires/, date accessed: 02/03/2019
[52] Camden Council, https://www.camden.nsw.gov.au/environment/biodiversity/native-plants/, date accessed: 02/03/2019

APPENDIX C: DATA TABLES

CHANGE IN DWELLINGS IN THE CAMDEN LGA BY DWELLING SIZE AND TYPE, 2011-2016
THIS DATA IS ALSO SHOWN IN FIGURE 15

Number of bedrooms	Separate houses	Attached dwellings	Flats and apartments	Other	Total
Studios	5	-4		-3	1
1 Bedroom	42	116	-71	7	99
2 Bedrooms	78	234	-3	-6	312
3 Bedrooms	582	325	14	1	935
4 Bedrooms	5,296	182	-12		5,494
5 bedrooms or more	1,403	25			1,431
Total	8,248	1,010	-77	-44	9,206

Source: ABS Census 2006, 2016

CHANGE IN NUMBER OF HOUSEHOLDS BY TYPE IN THE CAMDEN LGA, 1996-2016
THIS DATA IS ALSO SHOWN IN FIGURE 19

Household type	Number of households 1996	Number of households 2016	Change 1996-2006	% Change 1996-2006	Change 2006-2016	% Change 2006-2016
Couple family with children	5,172	11,549	2,491	48%	3,886	51%
Couple family without children	2,406	5,769	1,448	60%	1,915	50%
Lone parent family	885	2,669	1,010	114%	774	41%
Lone person household	1,442	3,220	786	55%	992	45%
Group household	216	255	60	28%	-21	-8%
Visitor only household	53	158	24	45%	81	105%
Other household	186	50	368	198%	-504	-91%
Total	**10,360**	**25,010**	**6,187**	**60%**	**8,463**	**51%**

Source: ABS Census 1996, 2006, 2016

NUMBER AND PROPORTION OF HOUSEHOLDS OF EACH TYPE IN EACH SETTLEMENT AREA, 2016
THIS DATA IS ALSO SHOWN IN FIGURE 20

Area	Couple family with children	Couple family without children	One parent family	Other family	Lone person	Group household	Visitors only household	Other non-classifiable household	Total
New Urban South	2,166 (48%)	1,106 (24%)	568 (12%)	20 (0%)	468 (10%)	68 (1%)	-	162 (4%)	4,558 (100%)
New Urban North	7,264 (54%)	3,210 (24%)	1,036 (8%)	116 (1%)	1,006 (8%)	114 (1%)	28 (0%)	560 (4%)	13,334 (100%)
Established Suburbs	7,568 (52%)	3,046 (21%)	2,000 (14%)	56 (0%)	1,594 (11%)	110 (1%)	-	278 (2%)	14,652 (100%)
Future Urban	1,144 (42%)	562 (21%)	220 (8%)	24 (1%)	498 (18%)	30 (1%)	6 (0%)	220 (8%)	2,704 (100%)
Camden	2,776 (35%)	2,064 (26%)	896 (11%)	48 (1%)	1,786 (23%)	118 (1%)	42 (1%)	160 (2%)	7,890 (100%)
Narellan	860 (34%)	604 (24%)	414 (16%)	44 (2%)	488 (19%)	44 (2%)	-	94 (4%)	2,548 (100%)
Rural Living	1,276 (40%)	962 (30%)	188 (6%)	8 (0%)	576 (18%)	26 (1%)	18 (1%)	112 (4%)	3,166 (100%)
Camden LGA	23,136 (46%)	11,712 (23%)	5,530 (11%)	426 (1%)	6,598 (13%)	728 (1%)	198 (0%)	1,678 (3%)	50,006 (100%)
Western City District	269,158 (40%)	136,710 (20%)	94,670 (14%)	8,290 (1%)	14,008 (17%)	14,250 (2%)	3,462 (1%)	29,812 (4%)	670,360 (100%)
Greater Sydney	1,105,938 (36%)	680,556 (22%)	314,922 (10%)	41,342 (1%)	613,996 (20%)	139,306 (5%)	26,776 (1%)	145,808 (5%)	3,068,644 (100%)

Source: ABS Census 2016

PLACE OF RESIDENCE FIVE YEARS AGO FOR RESIDENTS OF THE CAMDEN LGA IN 2016
THIS DATA IS ALSO SHOWN IN FIGURE 21

Household Type	Camden LGA	Other Greater Sydney	Other NSW	Interstate	Overseas
Lone parent	68%	27%	3%	1%	1%
Group household member	48%	33%	9%	2%	8%
Lone person	71%	24%	3%	2%	1%
All persons	64%	30%	2%	1%	2%

Source: ABS Census 2016

HOUSEHOLD TENURE FOR EACH SETTLEMENT AREA IN THE CAMDEN LGA IN 2016
THIS DATA IS ALSO SHOWN IN FIGURE 22

Area	Owned with a mortgage	Owned outright	Rented	Other tenure type
New Urban South	80%	15%	5%	0%
New Urban North	75%	20%	4%	1%
Established Suburbs	71%	25%	4%	0%
Future Urban	28%	66%	4%	1%
Camden	51%	44%	4%	1%
Narellan	51%	41%	7%	1%
Rural Living	43%	48%	2%	7%
Camden LGA	64%	30%	4%	1%
Western City District	54%	38%	7%	1%
Greater Sydney	49%	42%	8%	1%

Source: ABS Census 2016

SUITABILITY OF DWELLINGS IN EACH SETTLEMENT AREA FOR THEIR OCCUPANTS, 2016
THIS DATA IS LSO SHOWN IN FIGURE 23

Area	Additional bedrooms needed		0-1 Bedrooms spare		2+ Bedrooms spare		Unable to determine or N/A	Total
	Number of dwellings	%	Number of dwellings	%	Number of dwellings	%	Number of dwellings	Number of dwellings
New Urban South	22	1%	784	37%	1,298	62%	336	2,440
New Urban North	85	1%	2,099	34%	3,949	64%	902	7,035
Established Suburbs	138	2%	3,017	44%	3,729	54%	950	7,834
Future Urban	47	4%	581	50%	537	46%	283	1,448
Camden	45	1%	1,756	48%	1,830	50%	617	4,248
Narellan	17	1%	542	47%	589	51%	233	1,381
Rural Living	9	1%	576	41%	807	58%	328	1,720
Camden LGA	481	2%	9,432	42%	12,805	56%	3,477	26,195
Western City District	19,048	6%	153,962	51%	126,158	42%	57,373	356,541
Greater Sydney	97,947	7%	817,747	60%	442,297	33%	293,910	1,651,901

Source: ABS Census 2016
Note that dwellings whose suitability is unable to be determined or not applicable have not been included in the calculation of percentages.

VACANCY RATES IN SETTLEMENT AREAS IN THE CAMDEN LGA BY DWELLING TYPE, 2016
THIS DATA IS ALSO SHOWN IN FIGURE 24

Area	Separate houses	Attached dwellings	Flats or apartments
New Urban South	5.3%	1.9%	
New Urban North	3.6%	4.2%	
Established Suburbs	3.1%	5.9%	
Future Urban	5.0%		
Camden	5.5%	6.2%	4.5%
Narellan	3.9%	4.5%	
Rural Living	6.0%	7.3%	
Camden LGA	4.2%	7.3%	8.1%
Western City District	5.5%	6.6%	8.0%
Greater Sydney	5.7%	6.9%	9.1%

Source: ABS Census 2016

MEDIAN NON-STRATA DWELLING PRICES IN EACH SETTLEMENT AREA IN THE CAMDEN LGA, 2001-2018 ($)
THIS DATA IS ALSO SHOWN IN FIGURE 32

Year	Camden	Existing Suburbs	Future Urban	Narellan	New Urban North	New Urban South	Rural Living
2001	250,000	250,000	475,000	235,000	309,950	196,667	492,500
2002	310,000	325,000	645,000	292,000	376,000	359,500	660,000
2003	375,000	380,000	870,000	343,500	444,000	360,000	798,500
2004	387,000	395,000	900,000	354,048	503,000	500,500	782,500
2005	365,000	378,000	925,000	355,000	490,000	380,000	710,000
2006	362,500	370,000	850,000	358,250	476,000	523,077	727,500
2007	360,000	380,000	975,000	332,000	450,000	413,475	760,000
2008	352,500	369,000	930,000	323,000	446,250	395,000	730,000
2009	365,000	385,000	800,000	345,000	479,975	415,000	715,000
2010	415,500	420,000	945,000	382,500	532,000	427,500	835,000
2011	410,000	415,000	792,500	390,000	526,065	449,950	787,500
2012	425,000	435,000	400,000	375,000	515,000	455,000	780,000
2013	465,000	460,000	890,000	415,000	538,000	485,000	820,000
2014	492,250	500,000	1,245,000	482,000	605,500	547,000	980,000
2015	615,000	615,000	2,147,500	622,000	695,500	635,275	1,183,077
2016	653,500	645,000	2,750,000	636,830	755,000	690,000	1,280,000
2017	689,000	700,000	3,700,000	681,000	770,000	709,000	1,725,000
2018	720,000	692,000	3,630,000	665,000	750,000	704,000	1,617,500

Source: SGS 2018, *NSW Bulk Property Sales*

MEDIAN PRICES OF LAND PARCELS IN SUBURBS IN THE FUTURE URBAN SETTLEMENT AREA ($)
THIS DATA IS ALSO SHOWN IN FIGURE 33

Year	Bringelly – Future Urban	Bringelly – Rural Living	Catherine Field	Leppington
2001	487,500	537,500	425,000	510,000
2002	566,250	645,000	522,500	720,000
2003	930,000	933,000	808,000	910,500
2004	1,010,000	975,000	875,000	937,500
2005	222,000	800,000	895,000	995,000
2006	450,000	845,000	767,475	1,100,000
2007	-	915,000	717,500	1,200,000
2008	1,155,000	875,000	250,000	1,182,500
2009	775,000	797,500	747,500	977,500
2010	870,000	1,005,000	735,000	1,000,000
2011	935,000	952,500	790,000	775,000
2012	1,030,000	932,500	742,500	368,506
2013	1,050,000	855,000	932,500	820,000
2014	-	1,091,250	1,100,000	1,550,000
2015	2,100,000	1,485,000	1,820,000	3,110,000
2016	-	1,457,475	2,200,000	3,400,825
2017	1,000,000	3,000,000	2,230,000	4,535,000
2018	3,660,000	2,862,500	2,400,000	4,060,000

Source: SGS 2018, *NSW Bulk Property Sales*

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE CAMDEN SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	1,388	98.5%	*-1.3%*	1.2%	*1.0%*	0.3%	*0.3%*	0.0%	*0.0%*
Couple family without children	1,032	92.2%	*-0.4%*	4.4%	*0.7%*	1.6%	*-1.2%*	1.8%	*0.9%*
One parent family	448	90.8%	*-0.9%*	6.9%	*0.3%*	2.2%	*0.6%*	0.0%	*0.0%*
Lone person household	893	59.8%	*-1.5%*	27.5%	*9.4%*	9.9%	*-7.2%*	2.8%	*-0.7%*
Group household	59	100.0%	*22.2%*	0.0%	*0.0%*	0.0%	*-22.2%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE NARELLAN SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	430	97.0%	*-1.7%*	3.0%	*1.7%*	0.0%	*0.0%*	0.0%	*0.0%*
Couple family without children	298	90.9%	*-2.0%*	9.1%	*2.0%*	0.0%	*0.0%*	0.0%	*0.0%*
One parent family	207	91.8%	*-5.0%*	6.3%	*3.1%*	1.9%	*1.9%*	0.0%	*0.0%*
Lone person household	241	78.8%	*2.3%*	21.2%	*-2.3%*	0.0%	*0.0%*	0.0%	*0.0%*
Group household	22	100.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE ESTABLISHED SUBURBS SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	3,784	97.7%	*2.1%*	2.3%	*-2.1%*	0.0%	*0.0%*	0.0%	*0.0%*
Couple family without children	1,523	95.9%	*0.6%*	4.1%	*-0.4%*	0.0%	*-0.3%*	0.0%	*0.0%*
One parent family	1,000	93.9%	*-0.1%*	6.1%	*0.1%*	0.0%	*0.0%*	0.0%	*0.0%*
Lone person household	797	87.6%	*-6.8%*	12.4%	*6.8%*	0.0%	*0.0%*	0.0%	*0.0%*
Group household	55	100.0%	*14.0%*	0.0%	*-14.0%*	0.0%	*0.0%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE FUTURE URBAN SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	572	98.4%	*-0.1%*	1.6%	*0.5%*	0.0%	*0.0%*	0.0%	*-0.4%*
Couple family without children	281	100.0%	*6.4%*	0.0%	*0.0%*	0.0%	*-1.2%*	0.0%	*-5.2%*
One parent family	110	100.0%	*2.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*-2.0%*
Lone person household	249	95.2%	*25.2%*	1.2%	*1.2%*	0.0%	*0.0%*	3.6%	*-26.4%*
Group household	15	100.0%	*14.3%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*-14.3%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE RURAL LIVING SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	635	100.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*
Couple family without children	481	87.1%	*5.8%*	11.2%	*-4.8%*	1.7%	*-1.0%*	0.0%	*0.0%*
One parent family	94	100.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*
Lone person household	285	41.4%	*-1.0%*	49.1%	*-2.2%*	9.5%	*3.2%*	0.0%	*0.0%*
Group household	13	100.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE NEW URBAN NORTH SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	3,623	99.6%	*-0.4%*	0.4%	*0.4%*	0.0%	*0.0%*	0.0%	*0.0%*
Couple family without children	1,601	97.1%	*-2.9%*	2.7%	*2.7%*	0.2%	*0.2%*	0.0%	*0.0%*
One parent family	518	99.4%	*-0.6%*	0.6%	*0.6%*	0.0%	*0.0%*	0.0%	*0.0%*
Lone person household	500	91.2%	*-8.8%*	6.8%	*6.8%*	2.0%	*2.0%*	0.0%	*0.0%*
Group household	57	100.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE NEW URBAN SOUTH SETTLEMENT AREA
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	1,083	94.2%	*-3.6%*	5.8%	*3.6%*	0.0%	*0.0%*	0.0%	*0.0%*
Couple family without children	553	93.5%	*-1.5%*	6.5%	*1.5%*	0.0%	*0.0%*	0.0%	*0.0%*
One parent family	284	84.5%	*-7.9%*	15.5%	*7.9%*	0.0%	*0.0%*	0.0%	*0.0%*
Lone person household	234	84.2%	*-7.9%*	15.8%	*7.9%*	0.0%	*0.0%*	0.0%	*0.0%*
Group household	34	85.3%	*18.6%*	14.7%	*-18.6%*	0.0%	*0.0%*	0.0%	*0.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE CAMDEN LGA

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	11,550	97.7%	*0.6%*	2.2%	*-0.5%*	0.0%	*-0.1%*	0.1%	*0.0%*
Couple family without children	5,839	94.1%	*1.1%*	5.1%	*-0.2%*	0.6%	*-0.5%*	0.3%	*-0.4%*
One parent family	2,761	92.1%	*-1.2%*	7.2%	*1.5%*	0.6%	*-0.1%*	0.1%	*-0.2%*
Lone person household	3,279	75.1%	*2.4%*	19.5%	*3.7%*	4.2%	*-3.2%*	1.1%	*-2.9%*
Group household	358	91.1%	*5.3%*	8.9%	*-1.1%*	0.0%	*-3.2%*	0.0%	*-1.0%*

Source: ABS Census 2011, 2016

EXPRESSED DWELLING PREFERENCES FOR HOUSEHOLDS IN THE WESTERN CITY DISTRICT
THIS DATA IS ALSO SHOWN IN FIGURE 38

Household type	Number of households (2016)	Separate house		Attached dwelling		Flat or apartment		Other	
		2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16	2016 %	Change 2011-16
Couple family with children	134,270	89.0%	*0.2%*	7.0%	*-0.4%*	3.8%	*0.2%*	0.2%	*0.1%*
Couple family without children	68,005	85.1%	*0.2%*	8.7%	*-0.3%*	5.9%	*0.2%*	0.3%	*0.0%*
One parent family	47,204	77.5%	*-0.9%*	14.6%	*0.4%*	7.6%	*0.5%*	0.3%	*0.0%*
Lone person household	56,516	63.6%	*-0.9%*	19.8%	*1.8%*	15.7%	*-0.8%*	1.0%	*-0.2%*
Group household	7,077	70.6%	*-0.5%*	14.0%	*-1.0%*	14.7%	*1.2%*	0.7%	*0.2%*

Source: ABS Census 2011, 2016

FORECAST POPULATION BY HOUSEHOLD TYPE IN THE CAMDEN LGA 2016-2036 BASED ON THE SGS HOUSING DEMAND MODEL AND DPE POPULATION PROJECTIONS
THIS IS ALSO SHOWN IN FIGURE 39

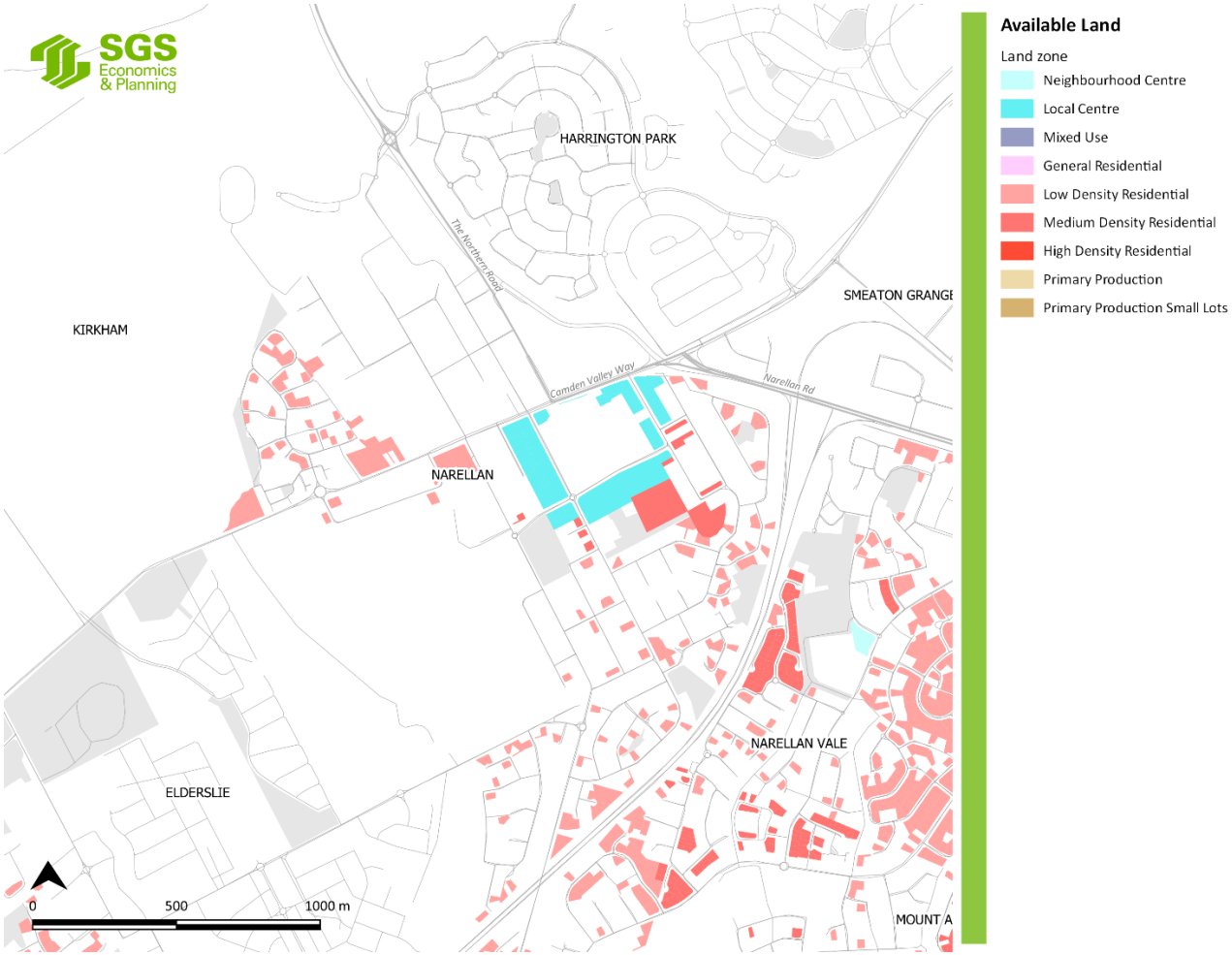
Household type	2016	2021	2026	2031	2036	2016 – 2036 Change	Average annual growth rate 2016-2036
Couple family with children	48,294	63,936	85,772	106,439	127,029	78,735	4.95%
Couple family without children	13,034	18,749	25,595	32,963	41,272	28,239	5.93%
One parent family	8,400	12,222	16,990	21,707	26,510	18,110	5.91%
Other family	1,094	1,466	1,984	2,487	3,013	1,919	5.20%
Group households	822	1,158	1,513	1,856	2,231	1,409	5.12%
Lone person households	3,337	4,783	6,397	8,102	9,906	6,568	5.59%
Other households	5,283	7,035	9,600	12,097	14,639	9,356	5.23%
Total Population	**80,264**	**109,350**	**147,850**	**185,650**	**224,600**	**144,336**	**5.28%**

FORECAST NUMBER OF HOUSEHOLDS BY HOUSEHOLD TYPE IN THE CAMDEN LGA 2016-2036 BASED ON THE SGS HOUSING DEMAND MODEL AND DPE POPULATION PROJECTIONS
THIS IS ALSO SHOWN IN FIGURE 40

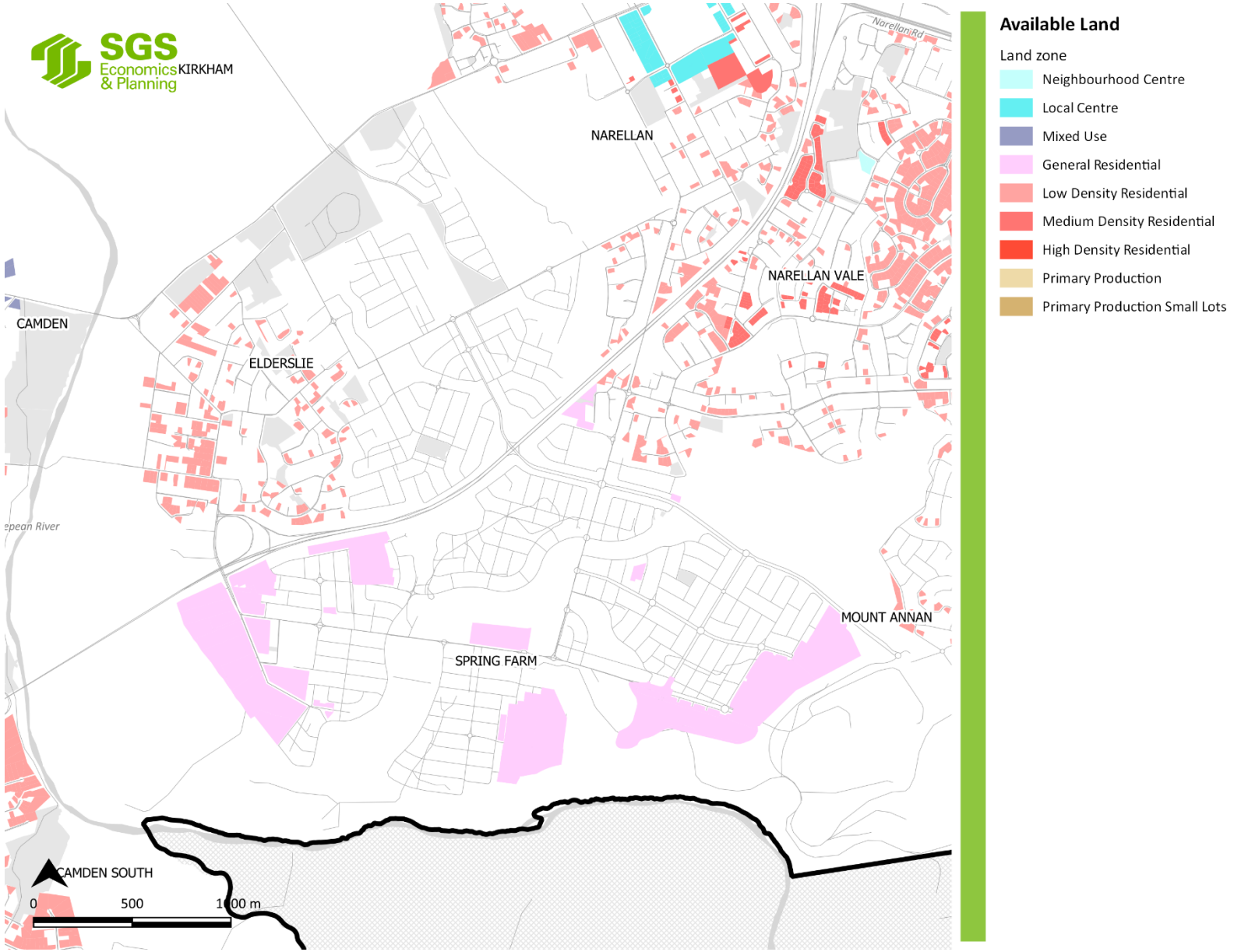
Household type	2016	2021	2026	2031	2036	2016 – 2036 Change	Average annual growth rate 2016-2036
Couple family with children	12,019	15,922	21,370	26,532	31,679	19,661	4.97%
Couple family without children	6,010	8,582	11,585	14,755	18,272	12,263	5.72%
One parent family	2,861	4,190	5,804	7,389	8,992	6,131	5.89%
Other family	224	313	425	534	649	425	5.46%
Group households	377	535	696	850	1,018	642	5.10%
Lone person households	3,350	4,783	6,397	8,102	9,906	6,556	5.57%
Other households	977	1,301	1,775	2,237	2,707	1,730	5.23%
Total Population	**25,817**	**35,626**	**48,051**	**60,399**	**73,223**	**47,407**	**5.35%**

APPENDIX D: SETTLEMENT AREA CAPACITY MAPS

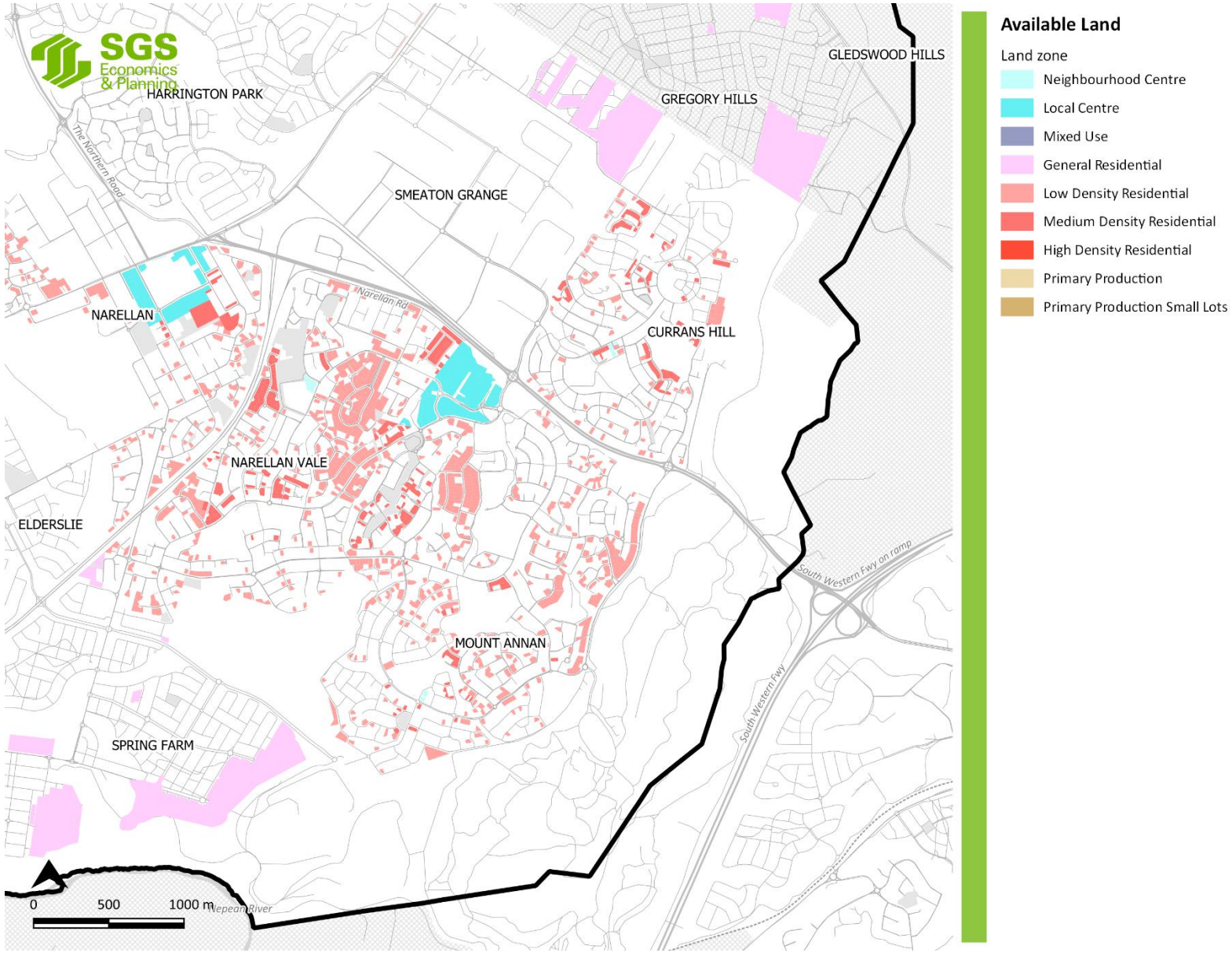
AVAILABLE LAND IN THE NARELLAN SETTLEMENT AREA



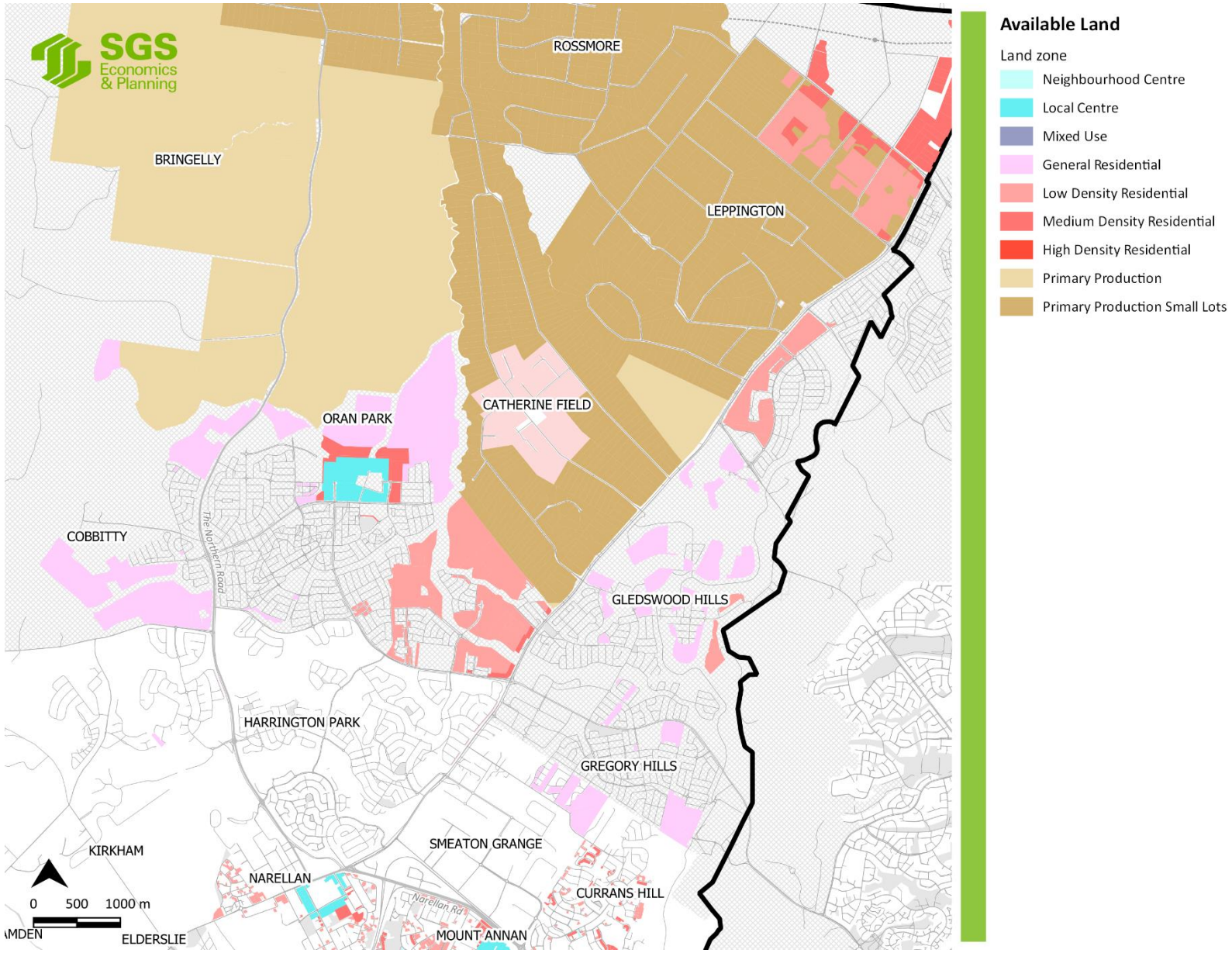
AVAILABLE LAND IN THE NEW URBAN SOUTH SETTLEMENT AREA



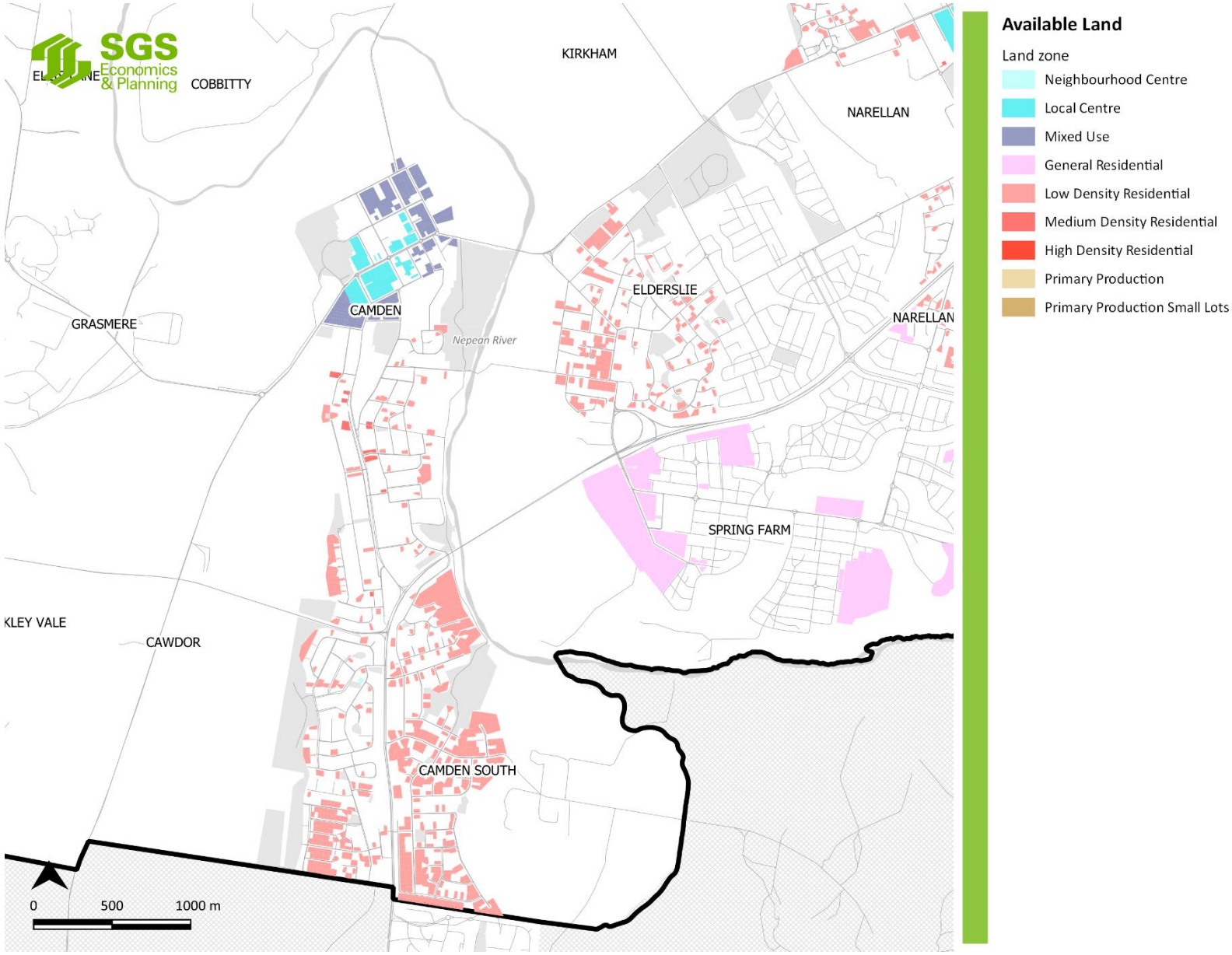
AVAILABLE LAND IN THE EXISTING SUBURBS SETTLEMENT AREA



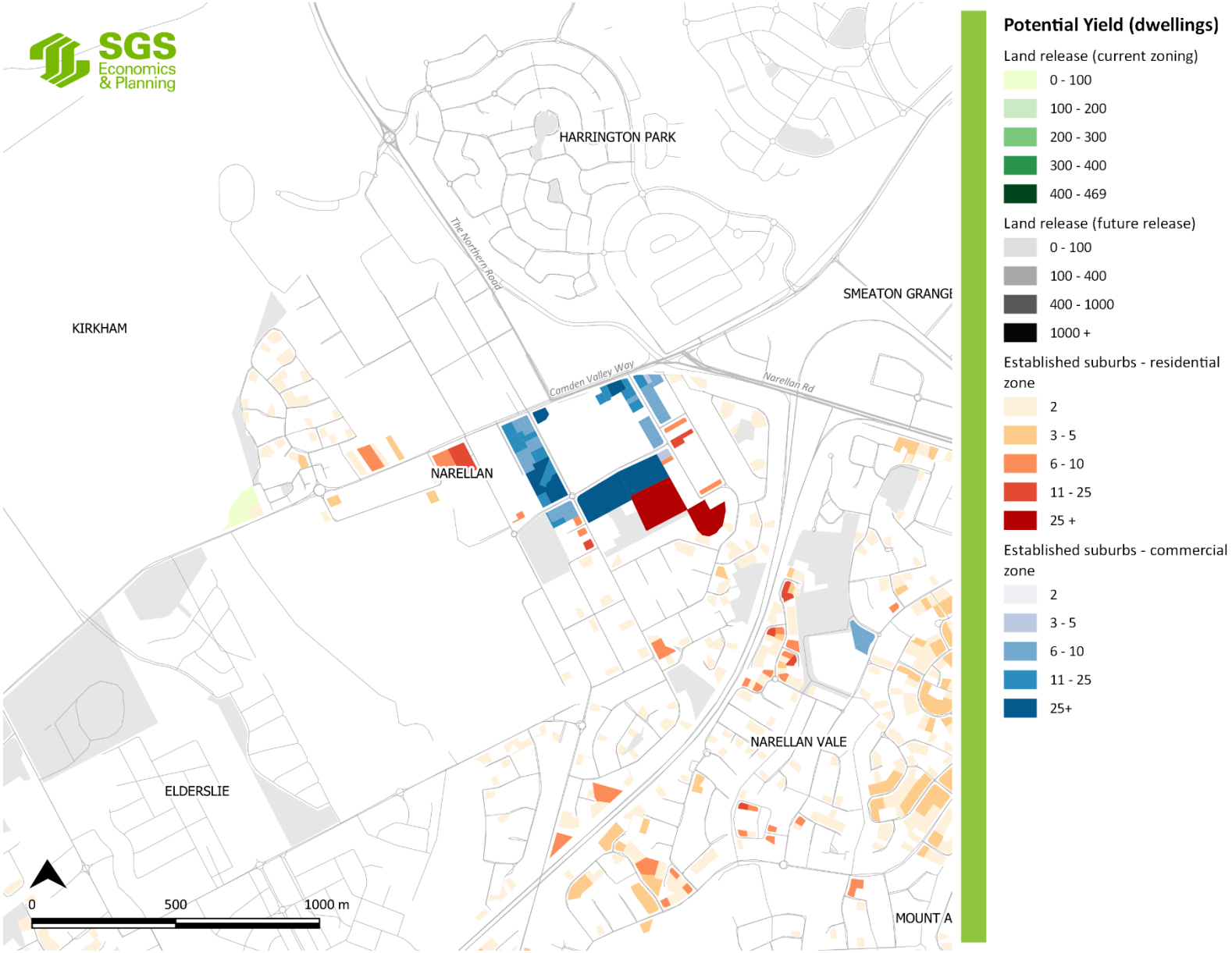
AVAILABLE LAND IN THE NEW URBAN NORTH SETTLEMENT AREA



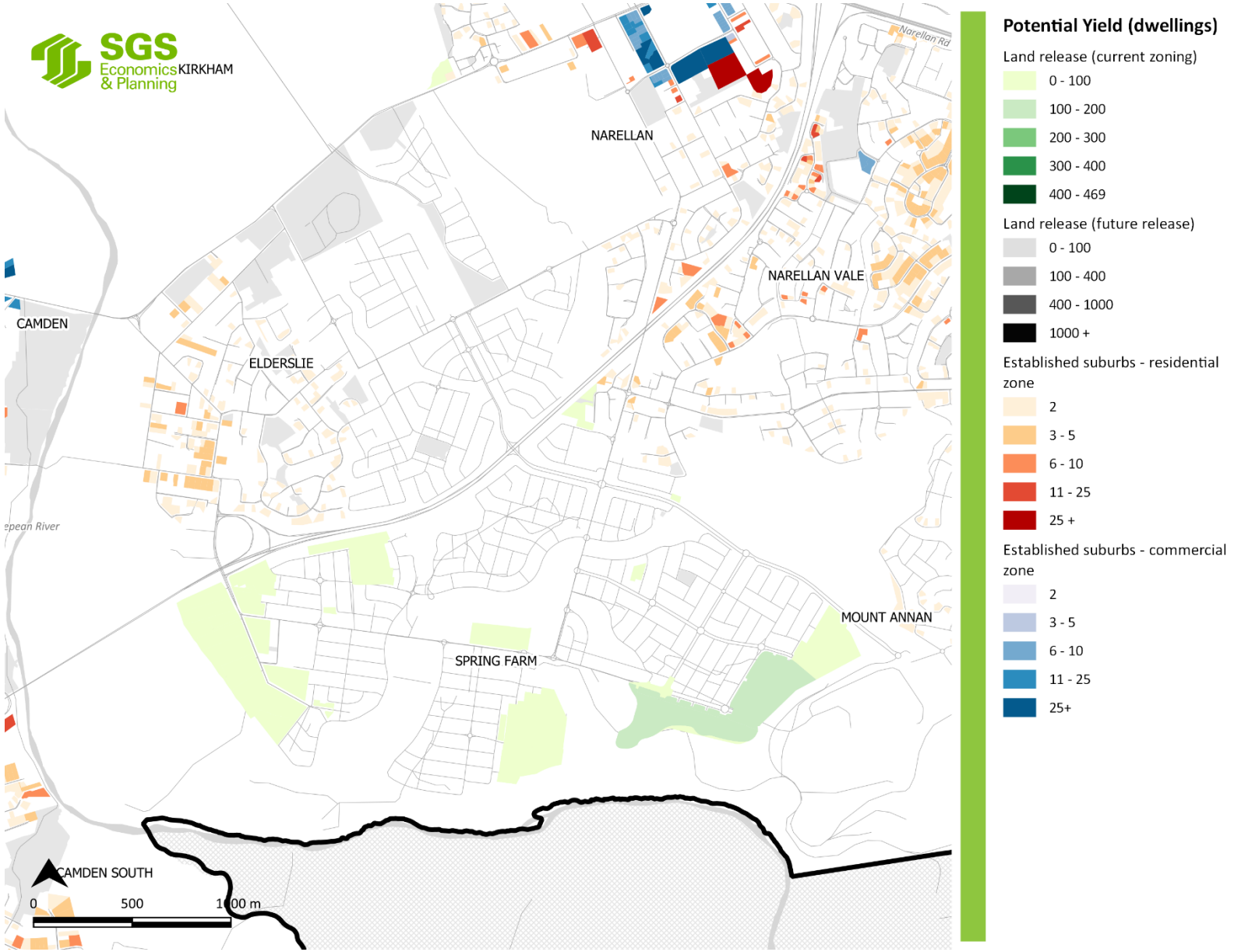
AVAILABLE LAND IN THE CAMDEN SETTLEMENT AREA



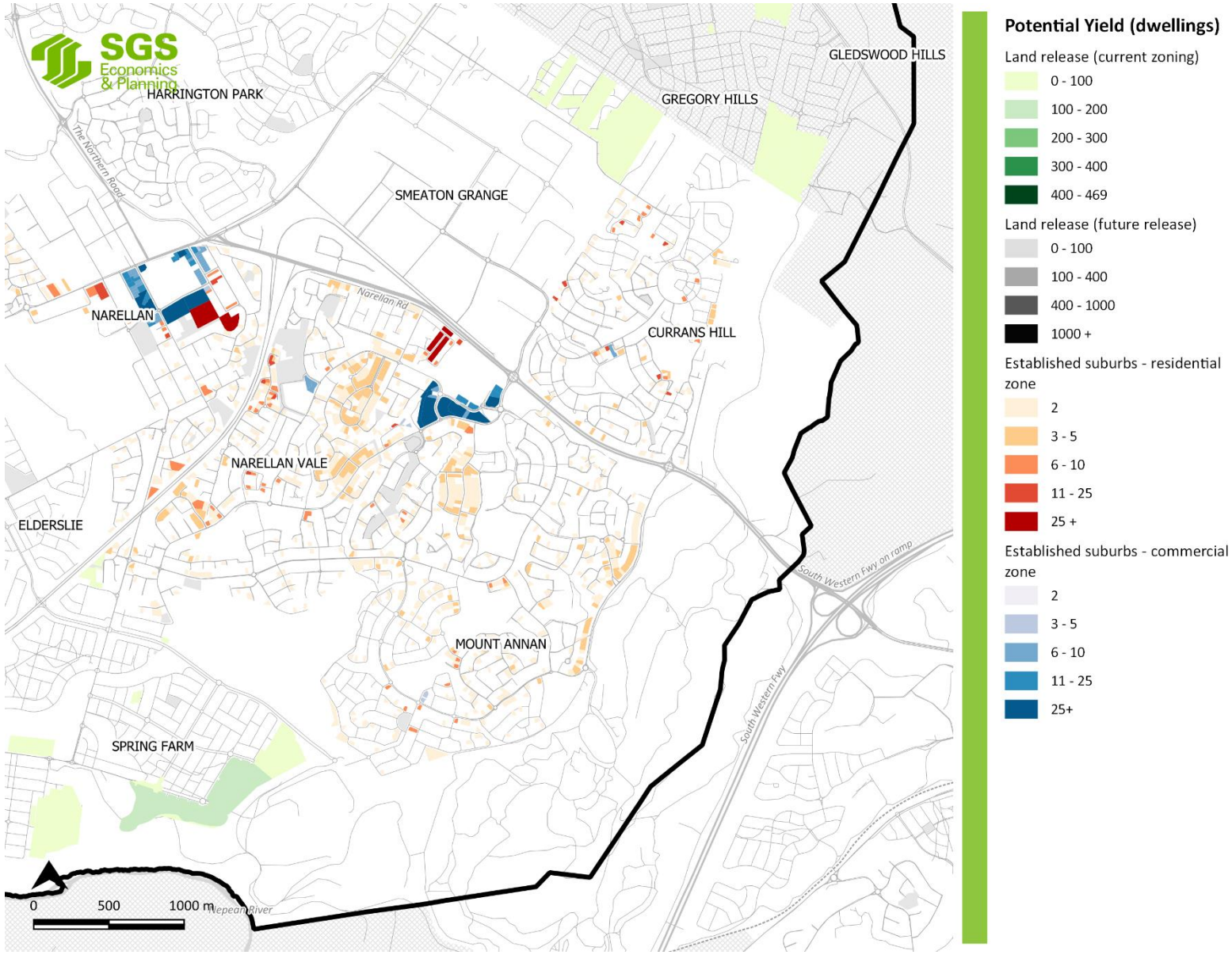
POTENTIAL YIELD IN THE NARELLAN SETTLEMENT AREA



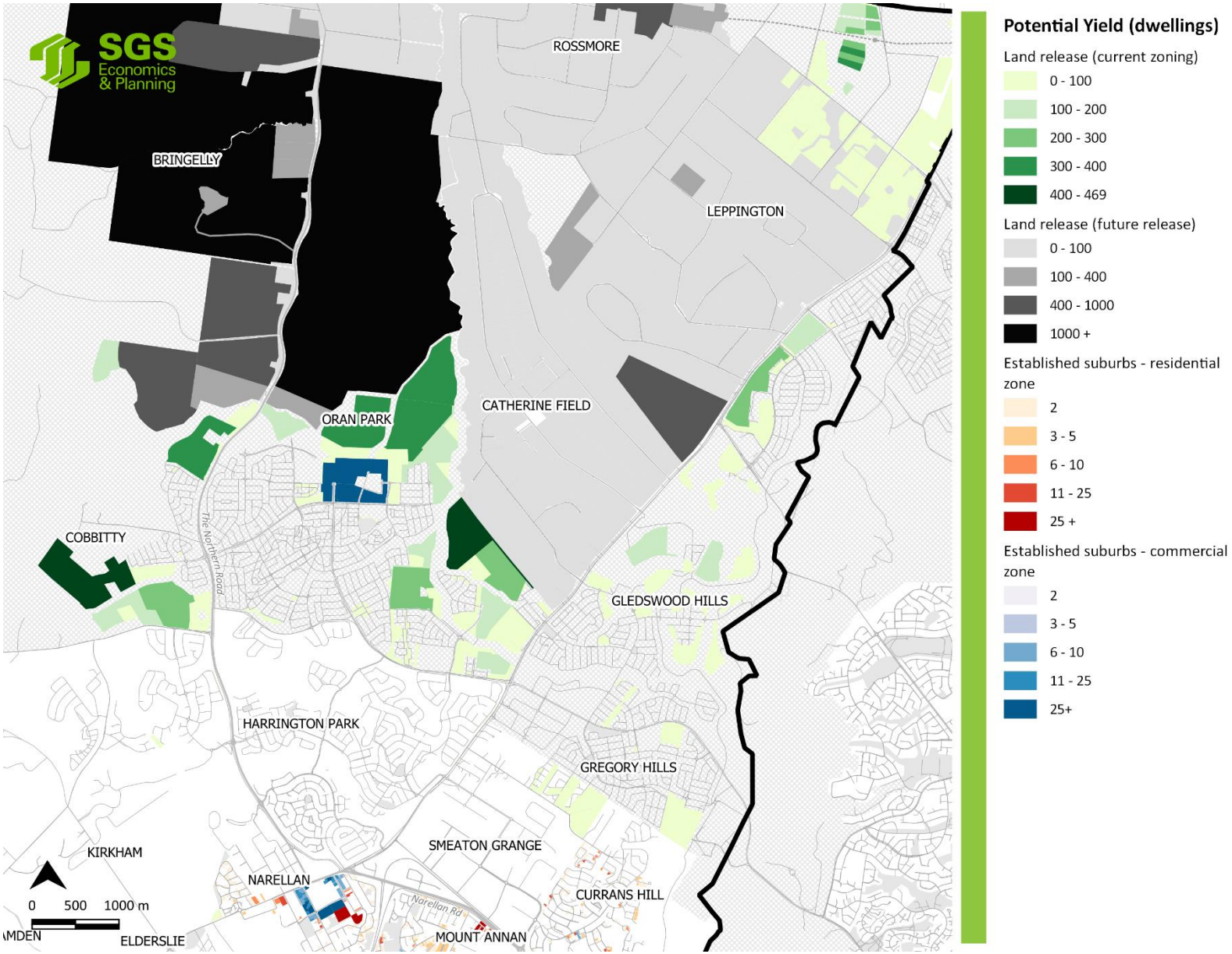
POTENTIAL YIELD IN THE NEW URBAN SOUTH SETTLEMENT AREA



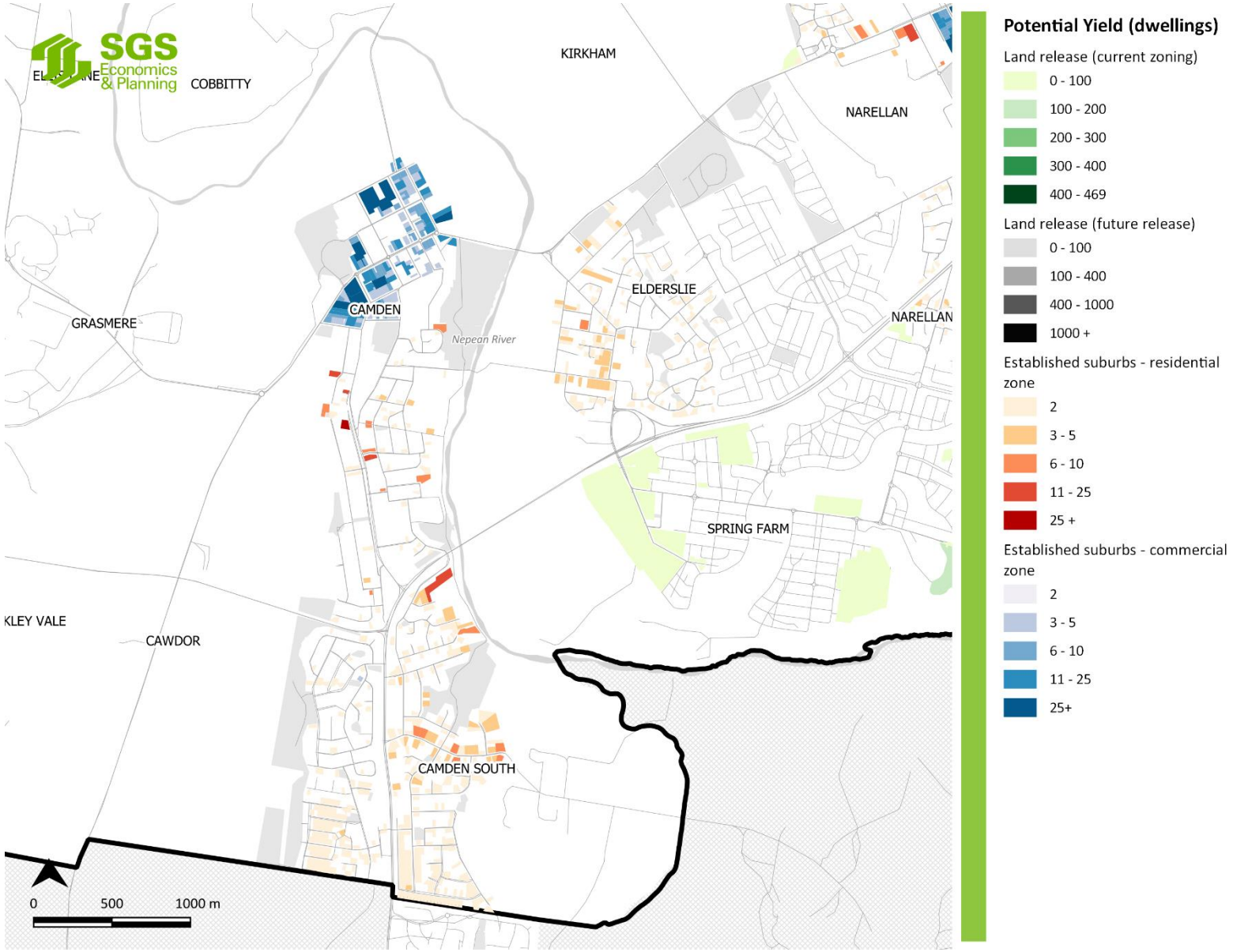
POTENTIAL YIELD IN THE EXISTING SUBURBS SETTLEMENT AREA



POTENTIAL YIELD IN THE NEW URBAN NORTH SETTLEMENT AREA



AVAILABLE LAND IN THE CAMDEN SETTLEMENT AREA



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