

Cobbitty Precinct

Housing Needs and Economic Impact Assessment

BHL Group

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Document Control

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Executive Summary

BACKGROUND AND OVERVIEW

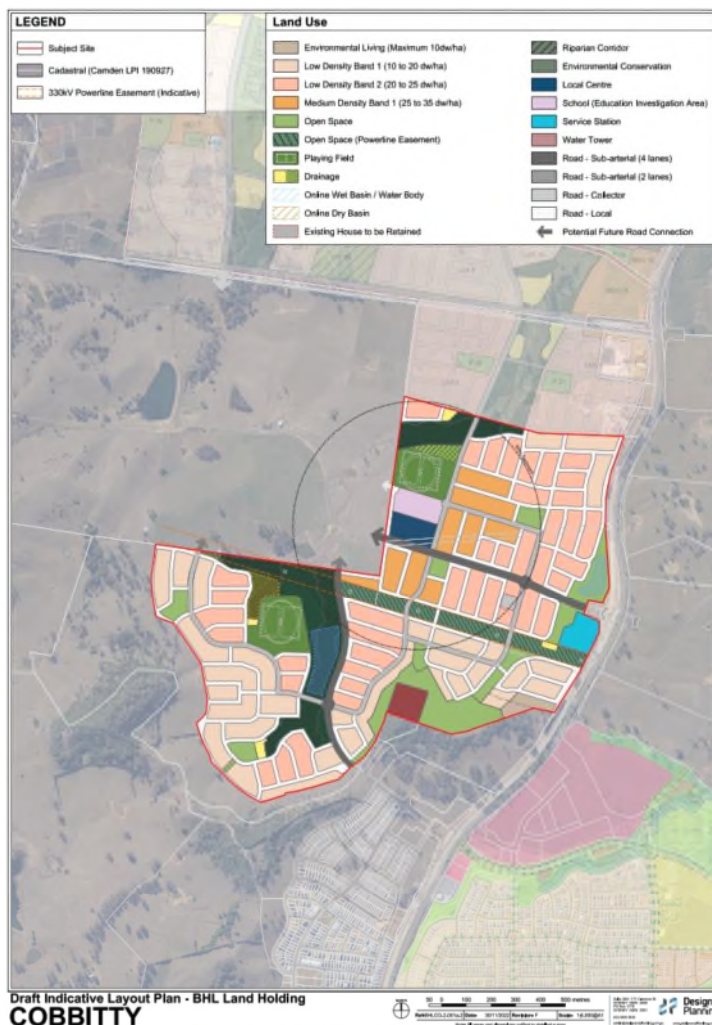
The South Creek West (SCW) precinct has been identified as one of Greater Sydney's largest future greenfield precincts with potential for circa 30,000 new homes. BHL Group (the Proponent) are a landowner within the SCW release area, specifically Cobbitty Sub-Precinct 5 (referred to as Precinct 5).

The Proponent has commissioned various technical investigations to inform the precinct planning process for Precinct 5 in accordance with the new approach to precinct planning launched by DPE. Precinct 5 was identified as a 'Collaboration Precinct', which is a collaboration between Department of Planning and Environment (DPE) and Camden Council.

Similar to the previous Precinct Acceleration Protocol (PAP) process that has applied to the already rezoned precincts across the North West and South West Growth Areas, a draft Indicative Layout Plan (ILP) has been prepared for Precinct 5 and has guided the drafting of the proposed land uses and housing mix. Atlas Economics (Atlas) have been engaged to carry out a Housing Market Needs and Economic Impact Analysis to inform the precinct planning process for Precinct 5.

The findings of this Study were based on a previous ILP which considered the entirety of Sub-Precinct 5. The current ILP only incorporates Lots 2 & 4 in DP 1216380, Lot 2 in DP 1241819 and Lot 500 in DP 1231858 as shown in **Figure ES.1**.

Figure ES.1: Current ILP, Sub-Precinct 5



Source: BHL

The findings of this report remain relevant, providing a holistic assessment of the precinct to inform future development on the subject site. This report will be updated to reflect the refined ILP and any comments received following public notification.

NEED FOR MORE HOUSING

The location, strategic planning context and depth of infrastructure investment all jointly influence the role of the Precinct 5 in providing housing to support the growth of Greater Sydney's South West Region. For the purposes of this Study, the South West Region encompasses the Camden, Campbelltown and Liverpool LGAs.

Population and Dwelling Projections

Official population projections prepared by DPE were released in 2019. Revised projections which reflect the impact of COVID-19 on population growth were not available during the course of this Study. To reflect the impacts of the COVID-19 pandemic on population growth, DPE's 'Low Scenario' population projections have been relied upon in this Study. These projections suggest the South West Region will reach ~939,000 residents by 2041. This population is expected to require a total of some ~341,000 dwellings by 2041.

Current Market Conditions

Despite soft economic conditions over the course of 2020 due to the COVID-19-induced recession and the extended lockdowns across Greater Sydney through much of 2021, demand for housing across the South West Region (and broader Sydney region) has been significant. This has been primarily driven by record low interest rates and a raft of Commonwealth and NSW Government incentive programs implemented in 2020.

Active estates across the SWGA recorded some of the highest sales volumes on record in 2020, with total sales across the SWGA up 75% compared to 2019. In the first quarter of 2021, a total of just over 1,000 sales were recorded across the SWGA, representing the largest number of sales recorded in a single quarter in the SWGA. This unprecedented level of demand has resulted in strong price growth, with most estates unable to accommodate current demand levels.

A distinct two-tiered market has emerged since the onset of COVID-19 with a preference for detached housing product. However, this flight to traditional housing compared to smaller housing formats (i.e. townhouses, apartments) is not expected to persist over the medium to long-term. Housing affordability in Greater Sydney has deteriorated markedly over the past 12-months. These affordability pressures are already resulting in overflow demand for medium-density typologies in the SWGA, with medium-density typologies in areas such as Oran Park being met by strong market take-up.

Existing Supply

The following steps are taken to estimate the number of dwellings (as at Q4 2020) in the South West Region:

1. Adopt the 2016 Census dwelling counts as a starting point.
2. Sum dwelling completions for each LGA from September 2016 to December 2016 (the months prior to September 2016 are not included given the 2016 Census was conducted on 9 August 2016).
3. Sum the 2016 Census dwelling counts and DPE dwelling completions from September 2016 onwards to arrive at existing dwelling supply for December 2020.

Table ES.1 shows the process in estimating the total number of existing dwellings in the South West as at Q4 2020.

Table ES.1: Existing Dwelling Supply (December 2020), South West Region

Area	Census 2016 Dwellings (a)	DPE Dwelling Completions (b)					Existing Supply (a+b)
		2016 ¹	2017	2018	2019	2020	
Camden	26,197	1,048	2,841	2,409	2,276	2,009	36,780
Campbelltown	55,326	422	1,606	1,247	1,196	1,230	61,027
Liverpool	65,931	755	1,836	1,857	2,122	1,988	74,489
South West	147,454	2,225	6,283	5,513	5,594	5,227	172,296

Notes: 1 - Dwelling completions from September 2016-December 2016, 2 - Data is current to Q4 2020
Source: ABS (2017)/ Atlas/ DPE (2021b)

There are an estimated ~172,000 dwellings across the South West Region as at Q4 2020. This will be an important starting point to assess the potential of the South West Region in meeting future housing demand.

Remaining Dwelling Need

Based on future population and household growth in the South West Region, it is estimated that under DPE's Low Scenario population projections that there will be a need for approximately ~341,000 dwellings by 2041. The assessment of supply estimated that as at Q4 2020 there were about ~172,000 private dwellings across the South West Region.

By deducting the number of existing dwellings in the South West Region against the implied dwelling requirement for 2041, a Remaining Dwelling Need of ~169,000 dwellings are calculated. This is illustrated in **Figure ES.2**.

Figure ES.2: Remaining Dwelling Need, South West Region



Source: Atlas

FUTURE HOUSING SUPPLY

Theoretical v Market Capacity

A common misconception is that if land is zoned for urban uses it will be developed. In practice, this can be far from reality as the development potential of land is collectively influenced by environmental, market or economic constraints that can together impede development. This is directly observable in certain precincts in the SWGA (e.g. Leppington, Austral) where despite being zoned for urban development, development as planned has not occurred.

The capacity of urban land for new development is two-fold: Planning Capacity and Market Capacity.

- **Planning (Theoretical) Capacity** refers to the physical ability of land to be developed, taking into account permissibility under the planning framework, environmental and infrastructure constraints and other factors.
- **Market Capacity** refers to issues of commercial viability whether pricing levels, market acceptance/ attitudes, development costs, etc. make development a commercial proposition, i.e. if development is financially feasible.

A supply audit has concluded that there is **Planning (Theoretical) Capacity** for some ~202,000 dwellings to be delivered across the South West Region. This is sufficient to meet the Remaining Dwelling Need of ~169,000 additional dwellings.

However, the Market Capacity of these 202,000 dwellings is **likely to be lower** once market and economic factors are considered.

Supply Forecasts

To assess the likelihood of dwelling supply in the South West Region being able to meet projected housing demand, forecasts of future dwelling supply over the coming decades to 2041 is undertaken. To reflect the range of potential supply outcomes which could result over two decades to 2041, three forecast scenarios have been developed:

- **Scenario 1: Historical Growth**
This scenario considers the quantum of new housing which could be delivered across the South West Region if future growth aligns with that observed in that past. Over the 2006-2020 period, average dwelling supply has been approximately ~3,600 dwellings per annum.

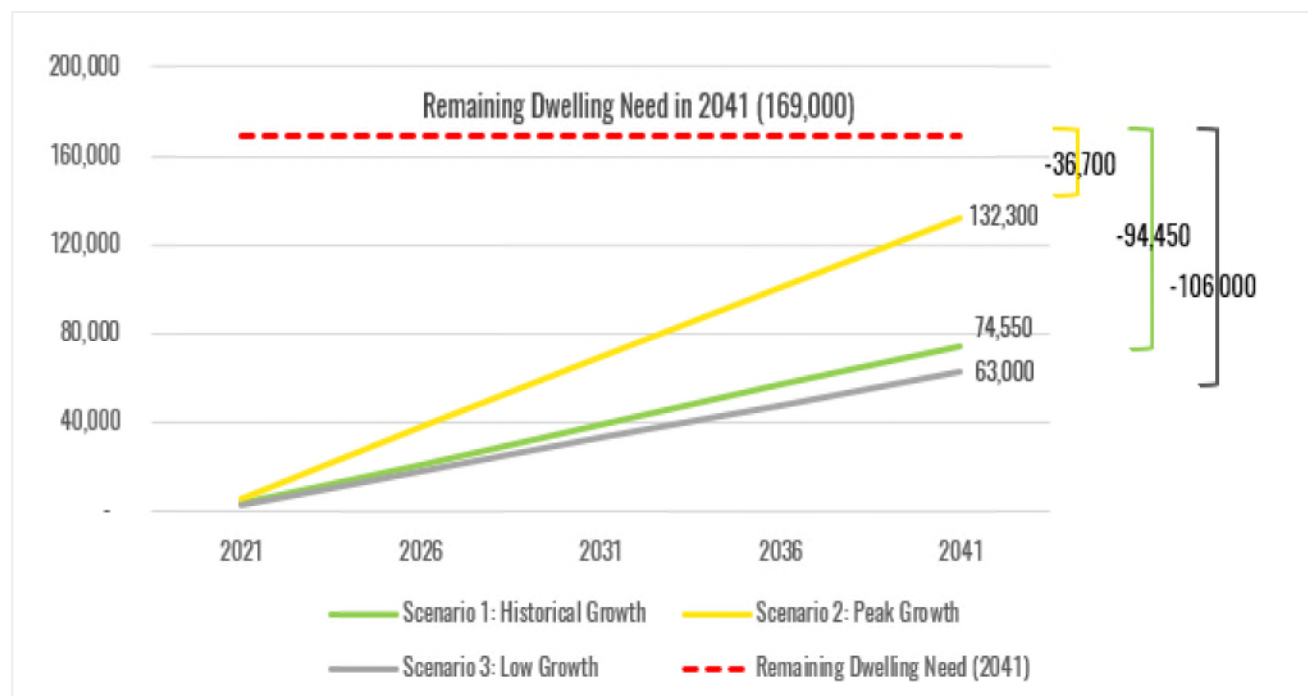
Accordingly, Scenario 1 assumes the South West Region will deliver 3,600 net additional dwellings per annum over 2021-2041, equating to a total of 74,550 new dwellings.

- Scenario 2: Peak Growth**
 Scenario 2 assumes a significant greater level of sustained dwelling supply than observed historically. In 2017, new supply peaked at some ~6,300 dwellings before falling to 5,500-5,600 dwellings per annum in 2018 and 2019.

 Scenario 2 assumes the South West Region could maintain peak supply of ~6,300 dwellings per annum over 2021-2041, delivering a total of 132,300 new dwellings.
- Scenario 3: Low Growth**
 Scenario 3 assumes a lower growth scenario with dwelling supply falling below that historically observed, with just 3,000 dwellings delivered per annum across the South West over 2021-2041, equating to some 63,000 new dwellings.

Figure ES.3 illustrates the net additional supply that could be delivered under the three supply scenarios over 2021-2041.

Figure ES.3: Dwelling Supply Scenarios (2021-2041), South West Region



Source: Atlas

EXPECTED SUPPLY SHORTFALL

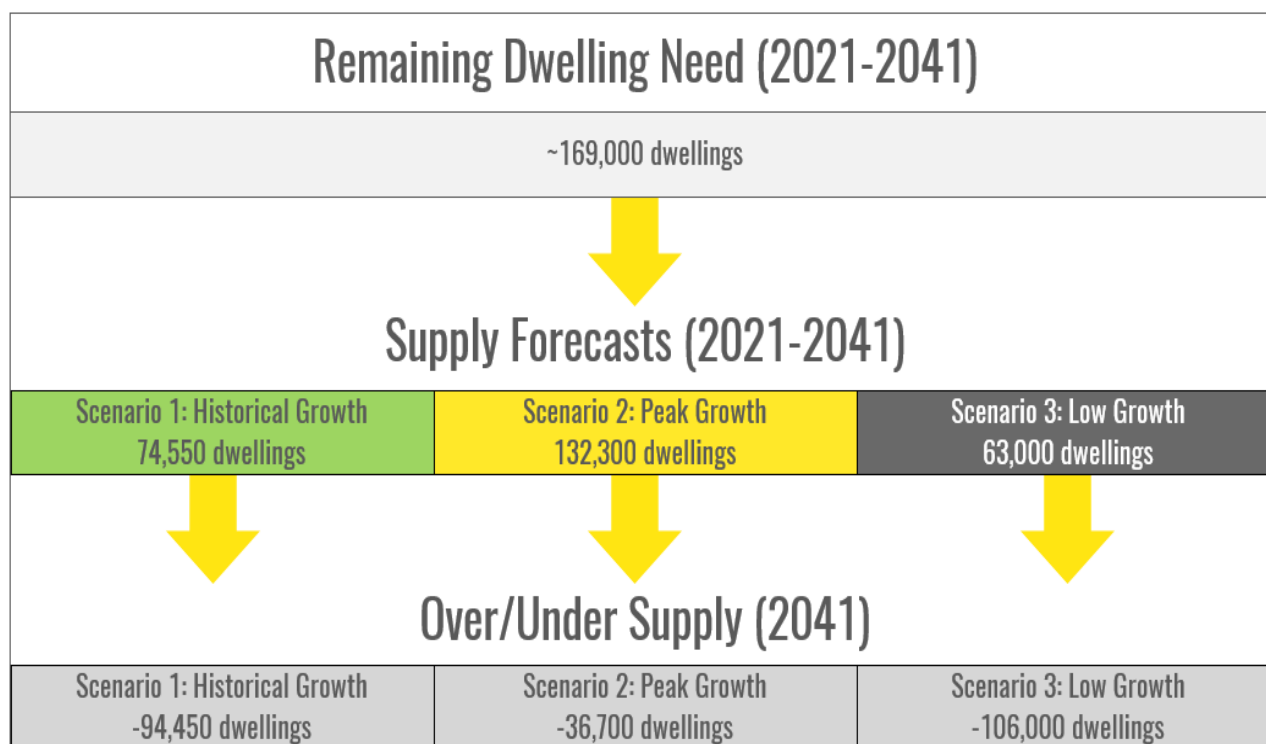
After deducting the number of existing dwellings in the South West Region (to Q4 2020) from the implied dwelling requirement for 2041, a Remaining Dwelling Need of ~169,000 dwellings results. To meet Remaining Dwelling Need, some ~8,100 additional dwellings are needed per annum (on average) over the two decades to 2041.

Each year dwelling completions fall short of this annual need; unmet demand grows and exacerbates the housing shortfall.

Supply forecasts carried out indicate that between 3,000 dwellings (Low Growth Scenario) and 6,300 dwellings (Peak Growth Scenario) per annum could be delivered across the South West Region over the 2021-2041 period.

In each supply scenario, a significant housing shortfall is expected to occur. This is illustrated in **Figure ES. 4**.

Figure ES. 4: Housing Demand and Supply Forecasts, South West Region



Source: Atlas

ROLE FOR PRECINCT 5

Supply forecasts identified a major shortfall in the amount of new housing required to meet projected housing demand across the South West Region to 2041. Whilst there is sufficient ***theoretical dwelling capacity***, it is unlikely all land will be developed.

Landowner objectives, motivations and personal circumstances often misalign with development requirements and in precincts where ownership is highly fragmented, development take-up is often less than the theoretical capacity for dwellings. Accordingly, Precinct 5 is of critical importance to mitigate the forecast shortfall in housing supply. Each year dwelling completions fall short of the annual dwelling requirement need, unmet demand grows and makes the likelihood of supply matching future demand more challenging.

Beyond the important issue of housing supply, the location of Precinct 5 proximate the Western Sydney Aerotropolis is of strategic importance. Ensuring housing supply proximate one of Greater Sydney's largest planned employment precincts is delivered in timely and orderly fashion will be critical to the success of the Aerotropolis.

Draft Indicative Layout Plan

A draft Indicative Layout Plan (ILP) has been which outlines the future role of Precinct 5 in addressing future housing demand. The draft ILP envisages a scheme with ~2,600 dwellings (across a mix of dwelling typologies) which will be supported by a small local village centre, ~40ha of open space, a future local school and a mix of other necessary infrastructure.

The economic impacts of delivering the draft ILP have been considered in an economic impact assessment.

ECONOMIC IMPACT ASSESSMENT

Economic modelling estimates economic impacts of developing Precinct 5 *ahead of* its anticipated development post-2030.

Take-Up by 2031

A high-level forecast of expected take-up of residential and non-residential uses within the 10-year modelling period has been carried out for the purposes of economic modelling. This forecast has been based on historic take-up rates observed elsewhere within the SWGA, current market conditions and the future economic outlook and suggests by 2031:

- The entirety of the residential dwellings (2,596 dwellings)
- Almost 14,500sqm of gross floor area within the future neighbourhood/village centre;
- The entirety of the land dedicated for service station uses.
- A new educational establishment (likely a primary school).

Summary of Economic Impact Modelling

By bringing forward its rezoning and development, the Proposal is estimated to result in a **net increase in economic activity** during the construction phase through a mix of direct and indirect (flow-on) activity, including supporting ~5,476 full-time equivalent jobs (including 2,784 direct jobs):

When operational, the Proposal is estimated to result in an annual **net increase in economic activity** by 2031 with:

- **\$286.5 million** in output (including \$172.5 million in direct activity).
- **\$140.4 million** contribution to GRP (including \$81.9 million in direct activity).
- **\$76.5 million** in incomes and salaries paid to households (including \$49.4 million in direct income).
- **947 FTE jobs** (including 592 FTE directly related to activity on the Site).

Additional local retail expenditure associated with the Proposal's 2,596 new residential dwellings are estimated to support significant economic activity through direct and flow-on impacts (per annum) by 2031, including 1,079 FTE jobs.

Other Economic Benefits

In addition to the significant economic activity supported by development of the draft ILP, development of Precinct 5 within the next decade (as opposed to post-2031) would produce several other important economic and social benefits:

- **Supporting Housing Affordability:** The Proposal will provide some 2,596 new dwellings over the next 10 years at a range of price points. This increase in housing supply will support housing affordability for residents seeking accommodation in the South West Region, including the availability of rental accommodation.
- **Providing Significant Local Infrastructure:** The Proposal includes an allowance for ~40ha of open space in addition to civil/road and educational infrastructure to support the growth of the local community. This is intended to be provided at no-cost to government in line with the principles of the Precinct Acceleration Protocol (PAP) process.
- **Increase in Rates and Taxation Revenues:** Along with greatly increased economic activity, the Proposal will support significant taxation revenues to all levels of government including Council rates, payroll tax, stamp duty, and income tax.
- **Create a Buffer of Housing Supply:** As Precinct 5 is held in majority ownership, the issues of land fragmentation observed elsewhere across the SWGA are mitigated. In other rezoned precincts where land ownership is heavily fragmented, the timely supply of housing is not a given. The Proposal has the capacity to provide a buffer of housing supply which mitigates the timing risk observed elsewhere across the SWGA.

Overall, the Proposal is considered to have strong economic merit and could contribute significantly to the Camden economy. Furthermore, development of the Precinct 5 is also considered to have merit from a market perspective and its delivery will be critical for the South West Region to meet projected housing demand over the coming decade and towards 2041.

Importantly, the Proposal intends on delivering a broad range of local infrastructure at no cost to government.

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1. Introduction

1.1 Background

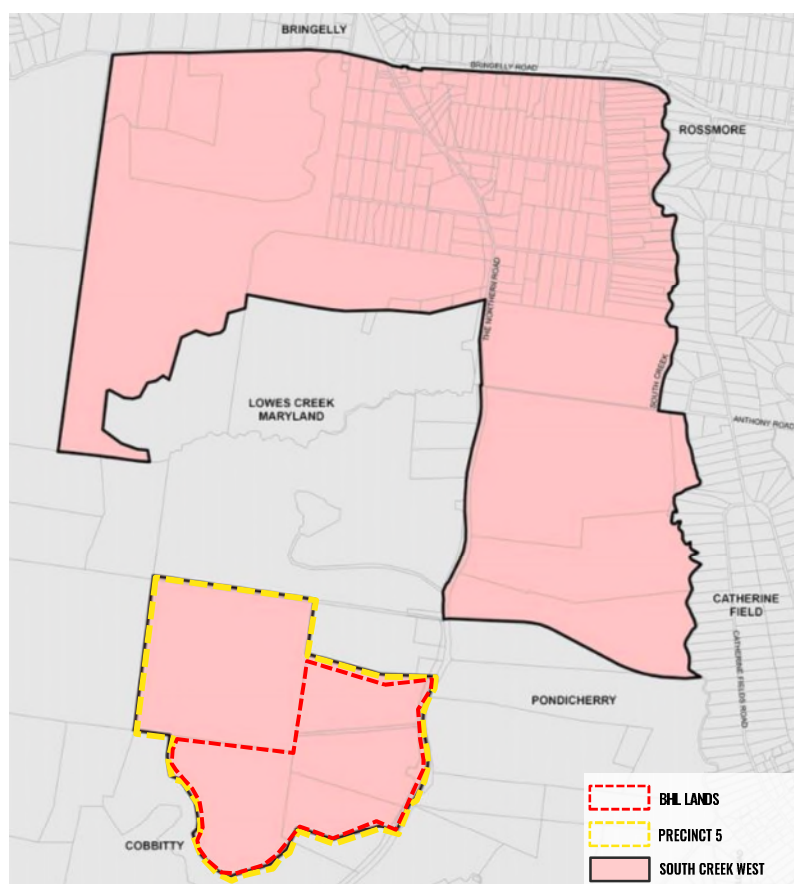
The South Creek West (SCW) precinct has been identified as one of Greater Sydney's largest future greenfield precincts with potential for circa 30,000 new homes. It is strategically located southwest of the future Western Sydney Airport and forms part of the larger South West Growth Area (SWGA).

Given the scale of SCW, the Department of Planning and Environment (DPE) has divided SCW into five precincts numbered 1 to 5. BHL Group (the Proponent) are a landowner within the SCW release area, specifically Cobbitty Sub-Precinct 5 (referred to as Precinct 5).

Comprising 303ha, Precinct 5 adjoins the Lowes Creek Maryland Precinct to the north which has recently been rezoned, the Pondicherry precinct to the east (currently being rezoned) and the growing suburb of Oran Park to the south. The Planning Proposal relates specifically to the Proponent's landholdings which is approximately 172 hectares of Precinct 5.

Figure 1.1 depicts the location of the Cobbitty Sub-Precinct 5 within the broader South Creek West Land Release Area.

Figure 1.1: Cobbitty Sub-Precinct 5



Source: BHL

The Proponent has commissioned various technical investigations to inform the precinct planning process for Precinct 5 in accordance with the new approach to precinct planning launched by DPE. Precinct 5 was identified as a 'Collaboration Precinct', which is a collaboration between DPE and Camden Council.

Similar to the previous Precinct Acceleration Protocol (PAP) process that has applied to the already rezoned precincts across the North West and South West Growth Areas, a draft Indicative Layout Plan (ILP) has been prepared for Precinct 5 and has guided the drafting of the proposed land uses and housing mix. Atlas Urban Economics (Atlas) have been engaged to carry out a Housing Market Needs Analysis to inform the precinct planning process for Precinct 5.

1.2 Scope and Approach

Atlas are engaged to carry out a Housing Market Needs Analysis to understand the need and nature of demand for housing in Greater Sydney's South West region. It is from this analysis that specific recommendations for Precinct 5 can be made to assist in the precinct planning process. Upon finalisation of an Indicative Layout Plan (ILP) for Precinct 5, the economic impacts of the proposed development are then modelled and quantified.

To meet the requirements of the brief, the following tasks have been undertaken:

- **Strategic Context**
 - Review relevant State and local planning documents and policies, including the Camden Local Strategic Planning Statement and draft Camden Local Housing Strategy.
 - Carry out socio-demographic analysis for the South West region.
- **Market Appraisal**
 - Review historic market data to understand long-term demand for housing across the South West region.
 - Carry out a market appraisal to understand the nature of market demand, including housing preferences, price points, purchaser profile and affordability thresholds in the South West region.
 - Review the most recent NSW population, household and implied dwelling projections.
 - Investigate the nature of housing supply and development activity in the South West region, including quantum, typologies and likely delivery timeframes.
- **Implications and Recommendations for the Cobbitty Sub-Precinct 5**
 - Based the foregoing research and analysis, provide site-specific recommendations for Precinct 5 including:
 - Housing type and corresponding splits;
 - Residential density and corresponding splits;
 - Lot sizes.
 - Recommend the likely delivery timeframes which could be expected for development.
- **Economic Impact Assessment**
 - Following finalisation of an ILP, estimate the economic impacts (direct and indirect/flow-on) that could result from the future redevelopment of Precinct 5 during and post-construction.

Over the course of Q2 and Q3 2022, the Proponent responded to a series of Request for Information (ROIs) from Council to assist in the assessment process. As part of this ROI process, Atlas was commissioned to provide further evidence to support the recommended housing mix adopted in the ILP. **This separate piece of advice is appended at Schedule 3.**

1.3 Structure of the Study

The Study is structured in three parts:

- **Part A (Strategic Context)** considers the locational and strategic planning context of Precinct 5, planned and ongoing infrastructure projects and the socio-demographic profile of residents within the South West region. The strategic and demographic analysis contained in Part A was carried out over the course of Q1 2021.
- **Part B (Housing Need)** examines the economic and market drivers influencing demand and supply of housing in the South West and provides a series of housing yield recommendations for consideration in the development of the ILP. Population projection analysis, property market research and supply forecasting were carried out in Q1 2021.
- Based on the draft ILP, **Part C (Economic Impacts)** undertakes an economic impact assessment to ascertain the economic impacts of the future development of Precinct 5 against a no-intervention scenario to conclude whether the Proposal would deliver a net positive economic impact. Economic impact modelling carried out in Part C was undertaken in Q4 2022.

1.4 Assumptions and Limitations

Atlas acknowledges a number of limitations associated with the Study.

- At the time of writing, the fallout of the COVID-19-induced recession is still being understood. The true economic ramifications of the recession are yet to fully play out.
- Following extensive consultation with Council, the Proponent finalised an Indicative Layout Plan for Precinct 5 in Q4 2022. Economic impact modelling (Part C of this Study) was subsequently carried out in Q4 2022. No revisions to socio-economic profiling, market research or take-up analysis were made in Q4 2022.
- Data from third party sources is assumed to be correct and is not verified.
- Projections carried out by the NSW Government (DPE) are 'point in time' projections and were made prior to the onset of the COVID-19-induced recession.
- Desktop market research has been undertaken without physical site surveys and inspections.
- Specific assumptions related to economic impact modelling are detailed in Chapter 9.

Notwithstanding the above, all due care, skill and diligence has been applied to this Study as is reasonably expected.

PART A: STRATEGIC CONTEXT



2. Strategic Context

Research and analysis included Part A of this Study was carried out in Q1 2021.

2.1 Location

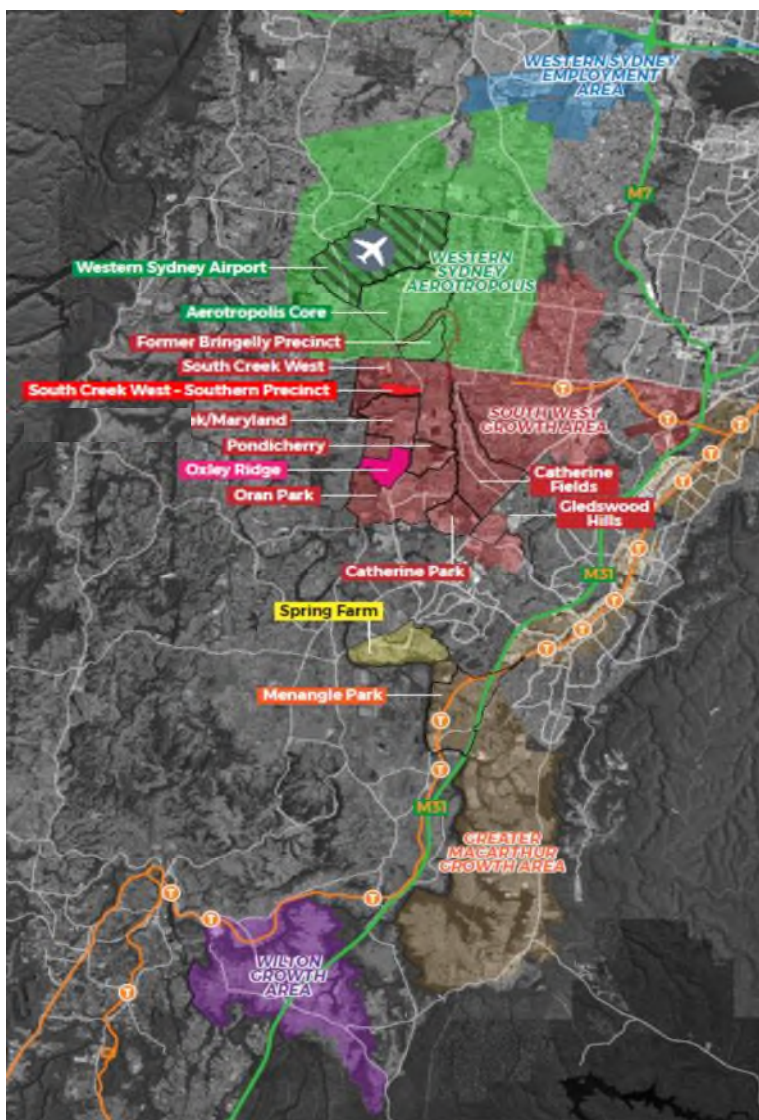
Precinct 5 is located within the Camden local government area (LGA) about 54km west of the Sydney CBD and approximately 27km south of the Penrith CBD. It is characterised by a mix of rural-residential and agricultural uses.

Precinct 5 is strategically located given its proximity to other emerging centres and employment areas. The largest of these is the future city of Bradfield (Western Sydney Aerotropolis) – a 11,200ha greenfield precinct being planned and developed around the future Western Sydney Airport. The Western Sydney Aerotropolis is being planned as a highly connected, technologically advanced city and is expected to accommodate 139,000 jobs. Other nearby centres include Oran Park Town Centre just 3km to the east and the emerging centre of Leppington around 10km north-east.

Precinct 5 is located within the South West Growth Area (SWGA) and forms part of the South Creek West Land Release Area. The SWGA is one of the largest greenfield release areas in Greater Sydney. The SWGA comprises 14 precincts and stretches across most of the Camden LGA with some precincts falling within the Liverpool and Campbelltown LGAs.

Figure 2.1 illustrates the location of Precinct 5 in the context of the broader region.

Figure 2.1: Location Map



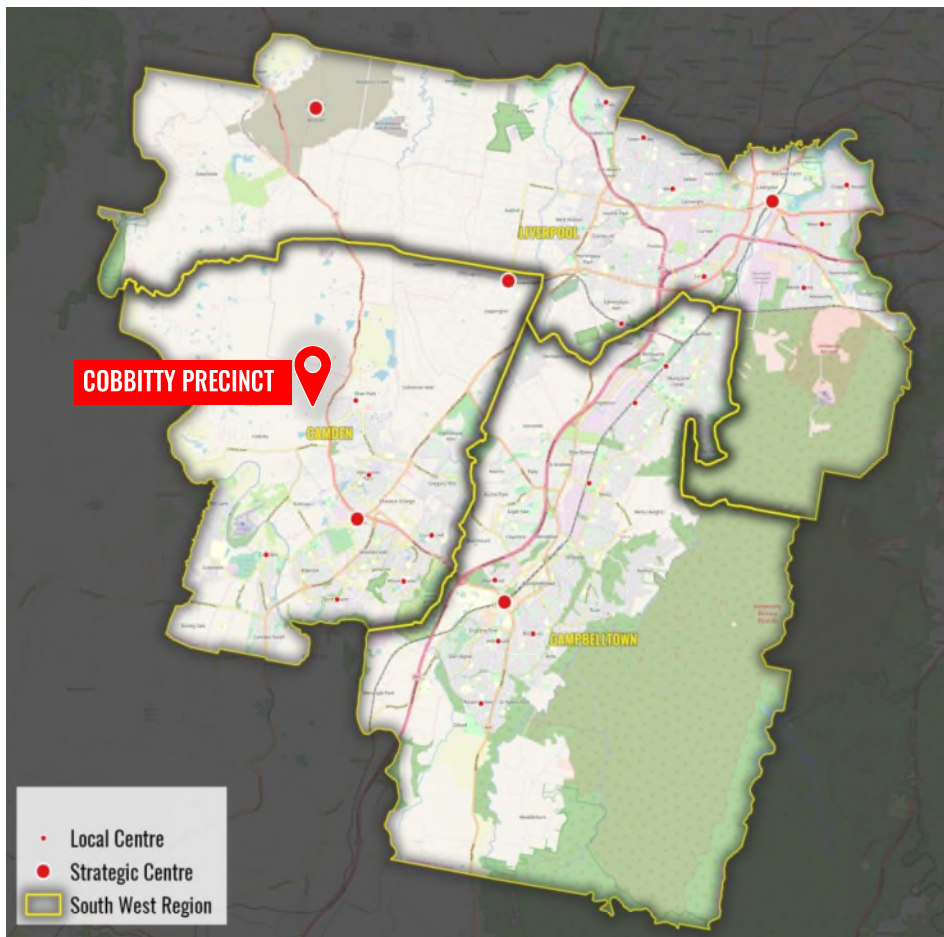
Source: Mecone

The South West Region

Precinct 5 falls within the Greater Sydney's South West Region, which for the purposes of this Study refers to the Liverpool, Camden and Campbelltown LGAs.

The fastest growing area within Greater Sydney, the South West Region is characterised by a mix of established centres and neighbourhoods and emerging residential areas in traditionally peri-urban areas. This mix can be distinctly observed by location; established areas being located east of the M7 Motorway with emerging areas and peri-urban areas to the west.

Figure 2.1: South West Region



Source: Atlas

2.2 Strategic Planning

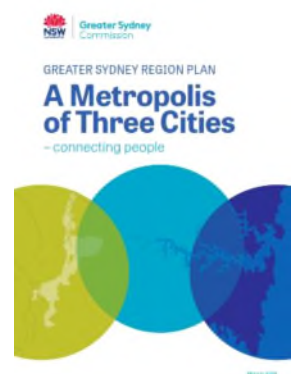
2.2.1 State Planning Policy

Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (the Region Plan) seeks to accommodate the needs of Sydney's growing population into a metropolis of three cities: Western Parkland City, Central River City and Eastern Harbour City, building on a vision where most residents live within 30 minutes of their jobs, education and health facilities.

The Region Plan delineates Greater Sydney into five districts; Western City District, Central City District and Eastern City District, Northern District and the Southern District.

The Region Plan outlines a series of planning priorities, objectives and actions for each District. Those of direct relevance to the Site are detailed in the Western City District Plan (GSC, 2018b).



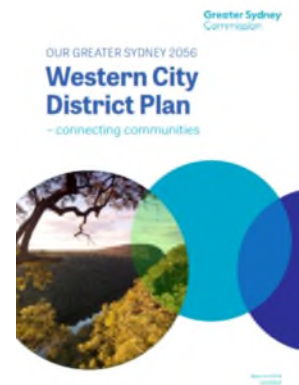
Western City District Plan

The Western City District Plan outlines the 20-year vision for growth and development in the Western City District. The Western City District is defined in the Greater Sydney Region Plan as comprising eight LGAs including Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly.

The entirety of the South West Region falls within the Western City District.

The District Plan outlines short and long-term housing targets for the Western City District in order to meet projected population growth. These include:

- Short-term Target (2016-2021): 39,850 additional dwellings (average of 7,970 dwellings per annum).
- Long-term Target (2016-2036): 184,500 additional dwellings (average of 9,225 dwellings per annum).



2.2.2 Local Planning Policy

Camden Local Strategic Planning Statement (2020)

The Camden LSPS is the local planning policy linking the objectives and actions outlined in the District Plan with the Camden LGA. The Camden LSPS outlines the a 20-year vision for the Camden LGA, detailed with a set of planning priorities and actions organised into the themes of the District Plan.

The key priorities and actions of relevance to Precinct 5 include:

- **Local Priority L1: Providing housing choice and affordability for Camden's growing and changing population**

The LSPS recognises the significant role Camden is expected to play in accommodating population growth across Greater Sydney given much of the SWGA within the LGA. The South Creek West precinct is identified as a key source of housing supply for the LGA.

Local Priority L1 sets out a series of principles for housing growth across Camden. Key principles of relevance include:

- New greenfield housing growth is wholly contained within the SWGA;
- Release of new precincts in the SWGA are sequenced to align with infrastructure provision;
- The planned housing capacity for new precincts within the SWGA is sufficient to meet forecast demand;
- Housing growth is in line with the delivery of local and regional infrastructure.

A key action under Local Priority 1 was the finalisation of Local Housing Strategy to develop the vision and evaluation options for housing growth across the Camden LGA.

- **Local Priority P2: Creating a network of successful centres**

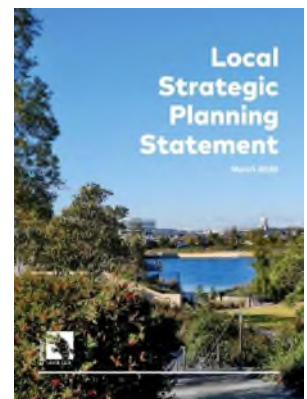
Ensuring Camden has a strong network of local centres is a key component to delivering economic and social benefits to existing and future residents. In addition to the higher order centres of Narellan, Leppington, Camden and Oran Park, local and neighbourhood centres are critical to meeting the essential amenities and services to local residents.

The future development of Precinct 5 and broader South Creek West will be supported by a number of local and neighbourhood centres which support the Camden LGA's larger strategic centres.

- **Local Priority P4: Ensuring a suitable supply of industrial and urban services land**

The critical role of industrial and urban services land in supporting local economy activity and employment across the Camden LGA is recognised in the LSPS.

A key action of Local Priority P4 is ensuring that new precincts within the SWGA contain an adequate supply of industrial and urban services land, with a focus on locating these areas close to transport corridors.



Camden Local Housing Strategy (2020)

The Camden Local Housing Strategy (LHS) establishes a strategic vision and plan for the delivery of housing across Camden over the coming 20-years and is a key action from the Camden LSPS (specifically Planning Priority L1).

Based on a series of population and household projections, the LHS sets a 10-year housing target (2016-2026) of between 10,000 and 12,500 dwellings. These dwellings will need to accommodate the quickly changing and ageing demographic of Camden. Accordingly, the draft LHS comprises five key Priorities to be addressed, each with their own set of objectives and actions, including:



- Priority 1: Providing housing capacity and coordinating growth with infrastructure
- Priority 2: Delivering resilient, healthy and connected communities
- Priority 3: Delivering the right housing in the right location
- Priority 4: Increasing housing choice and diversity
- Priority 5: Addressing housing affordability

The Priorities and associated objectives of direct relevance to Precinct 5 are considered below.

- **Priority 1: Providing housing capacity and coordinating growth with infrastructure**

The LHS identifies that there is some sufficient planning capacity to meet the 6-10-year housing target for the Camden LGA – a total planning capacity of some 16,694 dwellings was assessed compared to the target of 10,000 to 12,500 new dwellings by 2026.

Though not specifically identified as required to meet the 6-10-year housing target, the South Creek West precinct is recognised as an important part in meeting future housing demand beyond 2026.

Whilst acknowledging the need for more housing, the LHS notes the critical nexus between infrastructure and development. To improve the alignment between infrastructure servicing and precinct planning in the SWGA, the LHS recommends the development of a SWGA Structure Plan and Camden LGA SWGA Infrastructure Study.

- **Priority 3: Delivering the right housing in the right location**

New housing across Camden LGA should promote walkability, support lively local centres and maximise investment into infrastructure. Priority 3 recognises the role of providing higher-density housing typologies proximate to local centres for these reasons.

Whilst demand for higher density typologies across Camden is not fully matured, the LHS recommends that master planning for future precincts and centres incorporating staging plans to allow for medium and high-density residential development to be developed over the course of a precinct or centre's development.

- **Priority 4: Increasing housing choice and diversity**

Given the dominance of low-density housing typologies across Camden's housing market, increasing housing diversity is a key objective of the LHS. The demand for medium and higher-density typologies is expected to increase over the coming decades, driven by changing demographics, market preferences and affordability pressures.

Master plans should avoid delivering housing based on 'blanket' density controls but instead incorporate a mix of housing typologies at different densities to deliver a mix of distinct character areas within a precinct.

The various Priorities and objectives outlined in the draft LHS should be considered and adopted (where applicable) in future master plans for SWGA's remaining undeveloped precincts, including South Creek West.

2.3 Infrastructure Pipeline

The South West Region is poised to benefit from the significant level of government (Commonwealth, State and local) infrastructure investment currently being planned and delivered across the region. Largely centred around maximising the opportunity brought on by the future Western Sydney Airport, accessibility to and connectivity within the South West will greatly improve over the coming decade.

Western Sydney Airport

The Western Sydney Airport (WSA) is a game-changer for the Western Sydney and broader NSW economy. Located some 15km to the north of Precinct 5, the \$5.3 billion airport is expected to be operational by 2026. The WSA is initially anticipated to service some 5 million passengers annually before doubling to 10 million annual passengers by 2031 (DIRD, 2016). By 2063, the WSA is expected to service some 82 million passengers per annum.

Air freight will be an important component of the WSA. It is anticipated to operate 24 hours, 7 days per week and will link Western Sydney industries with global markets. A master plan for the airport includes a large business precinct on-site that will be targeted at freight, logistics, transport and agribusiness activities.

The WSA will provide significant benefits for residents and business within the South West. Initial employment projections suggest the WSA will accommodate circa 28,000 direct and indirect jobs by the early 2030's (DIRD, 2016).

Western Sydney Aerotropolis

Centred around the future WSA, the Western Sydney Aerotropolis (the Aerotropolis) is 11,200ha greenfield precinct being planned by the NSW Government as a highly connected, innovative new city to be known as 'Bradfield'. In addition to a variety of major transport projects, the Commonwealth, NSW Government and Penrith and Liverpool Councils are investing heavily into digital, social and cultural infrastructure throughout the Aerotropolis (WSPP, 2020). Key projects will include:

- **Connectivity infrastructure**, including, *inter alia*:
 - High quality 5G radio cells integrated into buildings, public transport and other infrastructure.
 - Wi-fi nodes and mesh networks for public access and sensor connection.
 - Fibre optic network to buildings and homes and data transfer from gateway devices.
 - Vehicle to Infrastructure (V2I) to communicate between road signs, traffic lights and connected autonomous vehicles (CAVs).
- **Sensor infrastructure** to assist in the management of infrastructure services, traffic and transport and public safety.
- **Communications infrastructure** such as digital signage and interactive smart screens in public places, smart poles and benches and smart road marking.
- A network of **high-quality community centres, multi-purpose hubs, libraries and aquatic centres**.
- An **Integrated Health Hub** (modern health facility).
- An **internationally significant research/innovation, science, training and education area** (including tertiary, Vocational Education and Training institutions and secondary school level).

The delivery of these infrastructure items is anticipated to be staged in accordance with the growth of the Aerotropolis.

North South Rail Link and South West Rail Extension

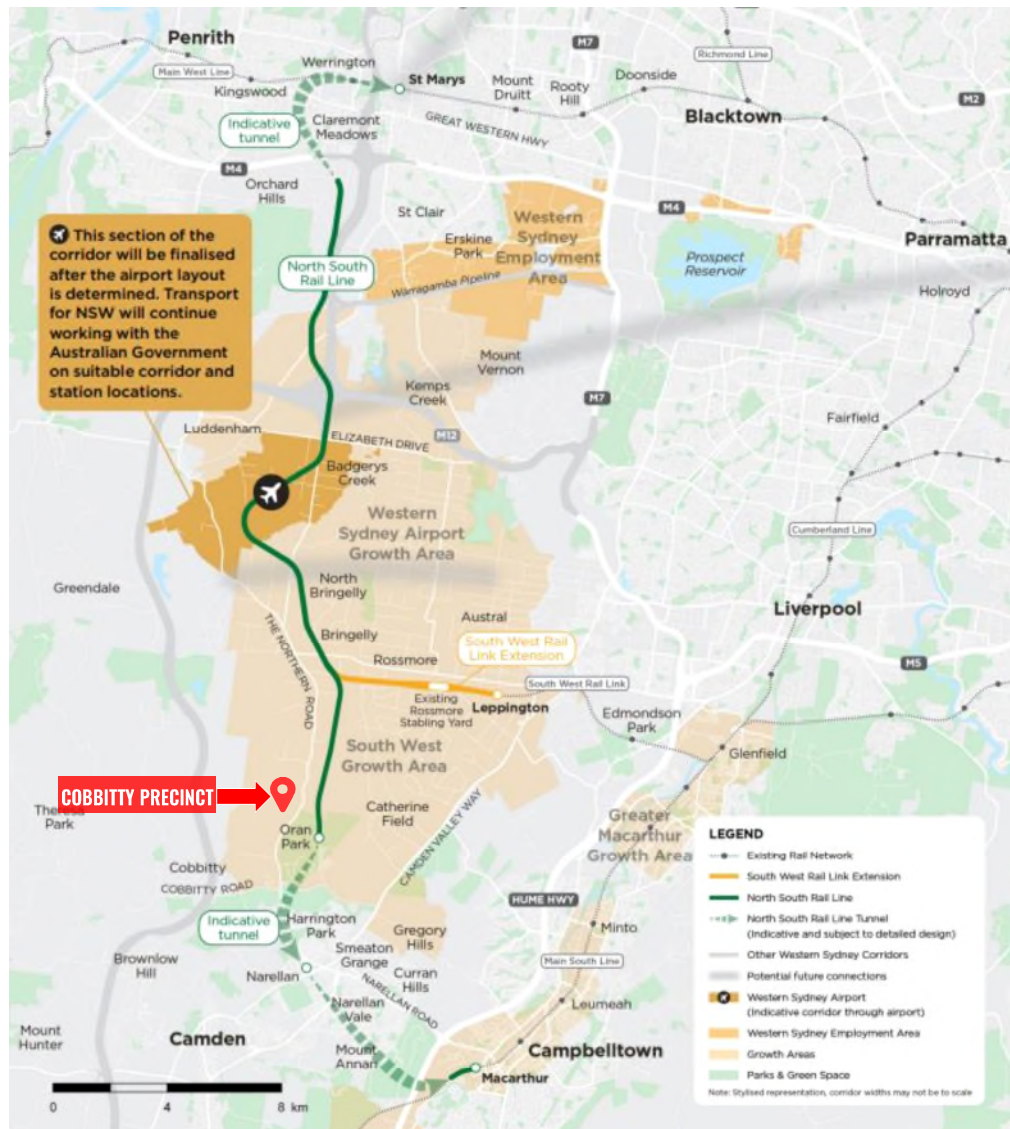
The North South Rail Link (NSRL) is a major city shaping rail investigation corridor which has been proposed in the NSW Government's *Future Transport Strategy 2056* (Transport for NSW, 2018). The rail corridor will extend from Tallawong Metro Station (the western terminus on the recently completed Sydney Metro Northwest line) in Schofields to Macarthur in Campbelltown, via St Marys and the Western Sydney Airport.

The initial stage of the NSRL – Sydney Metro Greater West – will provide a direct link from the existing St Marys Train Station to the WSA and Western Sydney Aerotropolis. The \$11 billion rail link is scheduled for completion in 2026, aligning with the completion of the WSA and will feature five new metro stations including two within the future airport.

Additional stages will include Tallawong to St Marys via Marsden Park and the Western Sydney Aerotropolis to Macarthur via Oran Park and Narellan. Both these additional stages will likely be delivered post 2030 with further investigations to examine the potential for any potential station locations along either route.

The South West Rail Link Extension will connect the Sydney Metro Greater West metro line with the existing South West Rail Link at Leppington. Delivery of this extension is not anticipated until post-2030.

Figure 2.2: North South Rail Link (Initial Stages) and South West Rail Extension



Source: Transport for NSW

Western Sydney Infrastructure Plan

The Western Sydney Infrastructure Plan is the key strategic road infrastructure plan for Western Sydney over the 2016-2016 period (RMS, 2016). Capitalising on \$3.6 billion in joint funding from the Commonwealth and NSW Governments to deliver a mix of new projects and major upgrades, a key objective of the Plan is to support and capitalise on the benefits of WSA, with an upshot being the drastically improved accessibility for precincts within the SWGA such as South Creek West.

Significant projects currently funded under the Plan with direct implications for Precinct 5 include:

- **The Northern Road Upgrade**

A \$1.6 billion, 35km upgrade of The Northern Road from Narellan to Jamison Road in South Penrith. Being delivered across 6 stages, the first stage (Narellan to Peter Brock Drive, Oran Park) was completed in mid-2018.

Completed in December 2020, Stage 2 included a 11km of upgraded roadway featuring six lanes and six intersections, including a major interchange at The Northern Road and Bringelly Road. Precinct 5 bears a frontage to this section of the upgrade and will benefit from improved north-south travel times. Remaining stages are to be completed by 2022.

- **Bringelly Road Upgrade**

A \$509 million, 10km upgrade of Bringelly Road is being delivered across two stages between Camden Valley Way at Leppington and The Northern Road at Bringelly. Part of the upgrade will involve increasing Bringelly Road from two lanes to a six-lane divided road through the future Leppington Town Centre with the remainder increasing to a four lane divided road with capacity for two additional lanes in the future. Both stages of the upgrade have been completed with Stage 1 completed in 2017 and Stage 2 completed in December 2020.

- **M12 Motorway**

The \$1.25 billion, 14km M12 Motorway is proposed to connect the M7 Motorway near Cecil Hills to The Northern Road at Luddenham, providing direct access from the Sydney's existing Orbital Network to the Western Sydney Airport. The roadway is to be motorway grade with four lanes, potentially expanded to six lanes in the future. The new motorway is expected to be completed by 2024.

Outer Sydney Orbital

The Outer Sydney Orbital (OSO) would comprise a 70km major motorway linking the Hills LGA in the north (Windsor Road) to the Camden LGA in the south (Hume Highway) with an associated freight rail line being considered to run parallel to the proposed motorway.

The project is expected to improve freight connectivity between metropolitan Sydney and regional NSW. Funding for early planning has been provided with technical studies currently being tabled; should the project receive Government endorsement completion would be post 2036.

Precinct 5 is located immediately east of the M12 Motorway corridor and would significantly benefit from future transport accessibility upon its completion.

2.4 Implications for Housing Demand

The location, strategic planning context and depth of infrastructure investment all jointly influence the role of Precinct 5 in providing housing to support the growth of the South West Region. Key implications of the overview undertaken in Chapter 2 of relevance the Proposal include:

- Precinct 5 forms part of the South Creek West Land Release Area, a major sub-precinct within the SWGA.
- Precinct 5 is located 15km south-west of the future Western Sydney Airport and city of Bradfield (Western Sydney Aerotropolis) – a future city and employment hub planned to accommodate some 139,000 jobs.
- There is a whole-of-government (Commonwealth, State and local Councils) agenda to establish Bradfield as a highly connected and technologically advanced city.
- Significant infrastructure investment has dramatically improved accessibility to Precinct 5, namely the completion of The Northern Road (Stage 2) and Bringelly Road upgrades.
- Precinct 5 is ideally positioned proximate existing infrastructure corridors (North South Rail Link, Outer Sydney Orbital) which will significantly improve connectivity with Greater Sydney.
- The Camden Local Strategic Planning Statement recognises the role of South Creek West in addressing demand for housing over the coming decades.
- The draft Camden Local Housing Strategy (LHS) states there will be sufficient supply in Camden's existing zoned precincts to meet housing targets of 10,000-12,500 dwellings by 2026. This will be explored in Part B of this report.

3. Socio-Demographic Profile

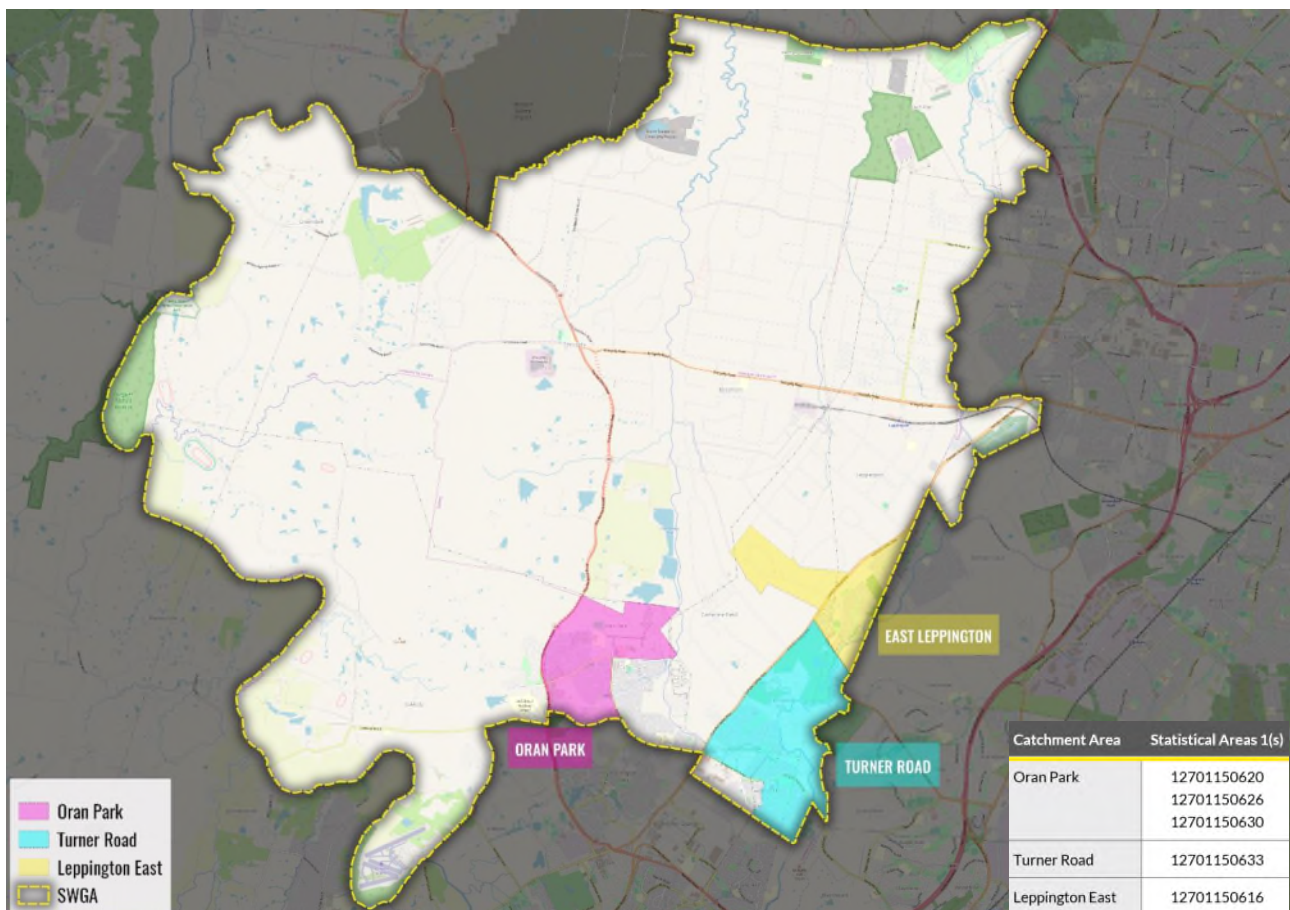
3.1 Catchment Area

The basis of demographic analysis is the Australian Bureau of Statistics (ABS) Census. The ABS define a series of geographies known as Statistical Areas (SA) which vary in size and range from SA4s (large regions comprising multiple local government areas) to SA1s (often smaller than a suburb). Census data can be extracted based on these statistical areas to understand the socio-demographic profile of different areas at various scales.

For the purpose of analysing how the socio-demographic profile of the SWGA has evolved in recent years, a number of SA1 geographies have been identified where new housing development occurred over the 2011-2016 period. These SA1 geographies are identified as the 'Catchment Areas' and include Oran Park (comprising the Oran Park Town Estate), Turner Road (comprising the Gregory Hills Estate) and East Leppington (comprising the Willowdale and Emerald Hills estates).

This analysis is then benchmarked against SA2 geographies which generally align with the boundaries of the SWGA (referred to as the 'South West Catchment Area'). Benchmarking against the South West Region (Camden, Campbelltown and Liverpool LGAs) is also undertaken to understand how new residents in the SWGA differ from those in the broader LGAs.

Figure 3.1: Catchment Areas for Demographic Analysis



Source: ABS/Open Street Map

The purpose of this analysis is to understand the socio-demographic profile of residents moving into new estates across the SWGA and how they compare to the broader South West region.

Whilst we note the chosen geographies do not align exactly with estate boundaries or the formal boundaries of the SWGA, the analysis is considered useful as a proxy to provide insight into the socio-demographic characteristics of households in the SWGA. Accordingly, the limitations of different boundary alignments of the data and catchment areas are acknowledged.

3.2 Demographic Profile

3.2.1 Historic Population Growth

The South West Catchment Area recorded significant population growth of 11.7% per annum (average) over the 2011-2016 Census period to reach almost 28,000 residents in 2016. The Catchment Areas were major contributors to this growth, accounting for about two thirds of the overall population growth in the South West Catchment Area.

The Liverpool LGA recorded the greatest overall level of population growth over 2011-2016 with an additional 4,384 residents each year (on average). This was closely followed by Camden with about 4,300 additional residents per year, noting that this rate of growth was significantly faster than the Liverpool LGA. By contrast, the Campbelltown LGA (which comprises a smaller component of the SWGA than either Liverpool or Camden) recorded lower levels of population growth.

Table 3.1 shows historic population growth in the Catchment Areas over the 2011-2016 Census period.

Table 3.1: Historic Population Growth (2011-2016), Catchment Areas

Catchment Area	2011	2016	Average Annual Growth	
			%	No.
Oran Park	13	3,407	206.7%	679
Turner Road	17	3,077	183.4%	612
East Leppington	333	1,532	35.7%	240
South West Catchment Area	15,924	27,673	11.7%	2,350
Camden LGA	56,726	78,220	6.6%	4,299
Campbelltown LGA	145,969	157,007	1.5%	2,208
Liverpool LGA	180,160	204,330	2.5%	4,384

Source: ABS

In more recent times, the SWGA has continued to record significant rates of population growth. Since 2016, the SWGA has grown by some 19,300 people with an estimated resident population of 46,993 in 2020 (ABS, 2020). This reflects an average annual growth rate of 14.2%, or 4,830 additional residents per annum. By comparison, the Camden, Liverpool and Campbelltown LGAs recorded average annual growth of 8.4%, 2.7% and 3.1% respectively.

Table 3.2 shows the most recent population growth in the SWGA and South West Region.

Table 3.2: Recent Population Growth (2016-2019), SWGA and South West Region

Catchment Area	2016	2017	2018	2019	2020	Average Annual Growth	
						%	No.
South West Catchment Area	27,673	31,625	36,041	41,281	46,993	14.2%	4,830
Camden LGA	78,220	87,146	94,159	101,437	107,806	8.4%	7,397
Campbelltown LGA	157,007	164,649	168,139	170,943	174,912	2.7%	4,476
Liverpool LGA	204,330	217,788	223,304	227,585	231,296	3.1%	6,742

Source: ABS

*It is noted that the smallest geography at which the annual Estimated Resident Population release by the ABS is carried out at is Statistical Area 2. Accordingly, the Estimated Resident Population of the SA1 Catchment Areas is not provided.

3.2.2 Age Profile

The SWGA is characterised by a growing younger population, predominantly residents aged 34 years and younger. The proportion of this age cohort has grown strongly over the five years to 2016, whereas the proportion of residents aged 55 years and older has declined as a proportion of total residents.

Table 3.3: Age Composition (2011-2016), Catchment Areas

Catchment Area	0-19 Years		20-34 Years		35-54 Years		55 Years and Older	
	2011	2016	2011	2016	2011	2016	2011	2016
Oran Park	26.3%	33.1%	22.7%	33.6%	30.8%	24.1%	20.2%	9.4%
Turner Road	26.7%	28.9%	18.7%	35.8%	25.1%	25.2%	29.5%	9.9%
East Leppington	29.1%	30.7%	18.3%	31.1%	31.2%	25.9%	21.3%	12.7%
South West Catchment Area	28.3%	28.2%	17.5%	23.8%	26.6%	25.5%	27.5%	22.5%
Camden LGA	31.7%	30.8%	19.4%	21.4%	29.3%	27.9%	19.6%	20.0%
Campbelltown LGA	29.9%	28.3%	21.7%	22.1%	27.1%	25.9%	21.4%	23.6%
Liverpool LGA	31.1%	29.9%	21.6%	21.7%	28.7%	27.8%	18.6%	20.6%

Source: ABS

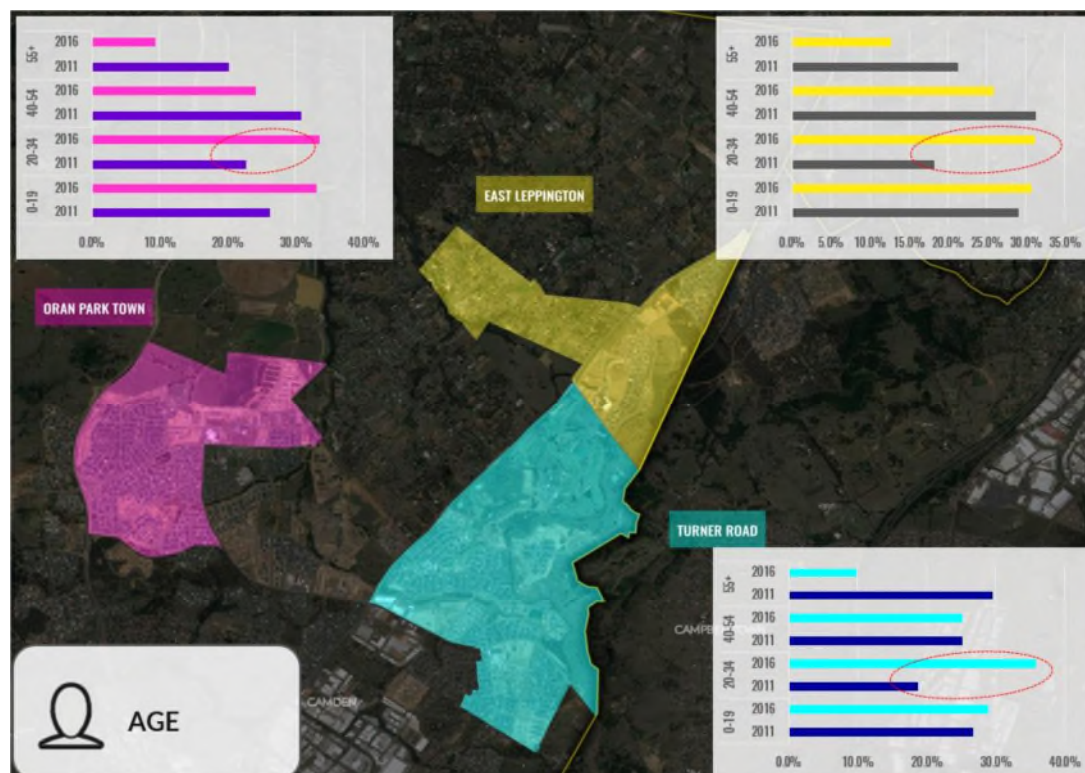
Analysis of the age profiles over the 2011-2016 period indicates a number of key points, including:

- In Oran Park, Turner Road and East Leppington, the median age fell from 37 years to between 28 and 30 years old. The dominant age cohort in these estates is residents aged 20-49 years (51% to 57%), followed by children and adolescents aged 0-19 years (29%-33%). Strong growth in these age cohorts occurred across all three areas over the 2011-2016 period, illustrating the growing number of younger and middle-aged residents moving into the area.
- The South West Catchment Area is similarly dominated by residents aged 20 to 49 years, accounting for 44% of the local population. Children aged 0-19 years are the second largest cohort, accounting for around 30% of the resident population. The strongest growth recorded over the 2011-2016 period was observed in the 20-49 years age cohort.
- By contrast, the Camden, Campbelltown and Liverpool LGAs recorded an increase in the median age to 2016 with the number and proportion of residents aged 55 years and older rising steadily over the 2011-2016 period.

In summary, the Catchment Areas and South West Catchment Area is **becoming younger** compared to the broader South West Region. This is conceivably a result of younger couples and families moving into new estates across the South West.

Figure 3.2 illustrates the change in population composition in the three SA1 Catchment Areas over 2011-2016.

Figure 3.2: Age Composition (2011-2016), SA1 Catchment Areas



Source:ABS

3.2.3 Household Composition

In the South West Catchment Area, family households account for almost 80% of all households which is higher than family composition observed in both the Liverpool and Campbelltown LGAs (although slightly lower than that observed in the Camden LGA). The SA1 Catchment Areas comprise the highest proportion of families at around 85% of all households.

Over 2011-2016, the proportion of family households grew across the South West Catchment Area, particularly in Turner Road and East Leppington Catchment Areas. This directly contrasts with that observed in the Liverpool and Campbelltown LGAs, where the *proportion* of family households declined with the proportion of other households rising.

Table 3.4: Household Composition (2011-2016), Catchment Areas

Catchment Area	Family Households		Lone Person Households		Group Households		Other Households	
	2011	2016	2011	2016	2011	2016	2011	2016
Oran Park	80.6%	84.9%	14.5%	7.5%	0.0%	1.3%	4.8%	6.3%
Turner Road	78.3%	85.3%	3.8%	7.0%	0.0%	1.7%	17.9%	5.9%
East Leppington	75.5%	84.3%	9.2%	7.6%	5.1%	0.9%	10.2%	7.2%
South West Catchment Area	77.0%	78.3%	13.6%	12.5%	1.6%	1.6%	7.7%	7.6%
Camden LGA	81.3%	81.6%	14.1%	13.2%	1.8%	1.5%	2.9%	3.8%
Campbelltown LGA	76.2%	75.5%	18.0%	17.5%	2.1%	2.2%	3.7%	4.8%
Liverpool LGA	77.9%	77.1%	15.2%	14.6%	1.7%	1.6%	5.1%	6.6%

Source: ABS

3.2.4 Family Composition

Within the definition of 'family households', analysis shows that couple families with children are the largest family type within the South West Catchment Area, followed by couples with no children and one parent families. Compared to the broader South West Region, there is a higher proportion of couple with children families in the SA1 Catchment Areas. This again reflects the growing desirability of new estates within the South West Catchment Area for younger and middle-aged families with children.

Notably, the proportion of single parent households in the SA1 Catchment Areas declined over the 2011-2016 periods compared to the South West Region (where they generally rose as proportion of total households).

Table 3.5: Family Composition (2011-2016), Catchment Areas

Catchment Area	Couple No Children		Couple with Children		One Parent Family		Other Family	
	2011	2016	2011	2016	2011	2016	2011	2016
Oran Park	47.1%	29.3%	37.3%	57.6%	15.7%	11.3%	0.0%	1.8%
Turner Road	35.9%	38.4%	54.3%	54.3%	9.8%	7.0%	0.0%	0.3%
East Leppington	21.9%	30.1%	63.0%	58.1%	15.1%	10.5%	0.0%	1.3%
South West Catchment Area	31.1%	32.9%	53.7%	54.1%	13.9%	11.7%	1.1%	1.3%
Camden LGA	30.0%	29.8%	54.9%	55.1%	14.1%	14.0%	1.0%	1.0%
Campbelltown LGA	27.5%	27.9%	48.6%	48.8%	22.3%	21.8%	1.6%	1.6%
Liverpool LGA	23.7%	23.2%	56.7%	57.0%	18.2%	18.2%	1.3%	1.5%

Source: ABS

3.2.5 Education Levels

The new residents moving into the SA1 Catchment Areas are observed to be well-educated. As at 2016, the proportion of residents in the SA1 Catchment Areas who completed secondary schooling was well-above that observed in the broader South West Region.

Additionally, the proportion of residents in the SA1 Catchment Areas with some form of tertiary qualification is higher than the South West Region LGAs.

Table 3.6: Secondary School and Post-School Education (2011-2016), Catchment Areas

Catchment Area	Secondary School		Post-School Qualifications				
	Completed	Not Completed	Post-Grad	Bachelor	Diploma	Certificate	None
Census 2011							
Oran Park	33.8%	66.2%	2.1%	0.0%	8.9%	12.3%	28.8%
Turner Road	38.1%	61.9%	0.0%	0.0%	10.6%	7.3%	28.9%
East Leppington	31.6%	68.4%	0.0%	0.0%	6.5%	6.1%	24.9%
Camden LGA	43.8%	56.2%	1.8%	1.1%	9.0%	8.1%	21.3%
Campbelltown LGA	44.9%	55.1%	2.3%	0.8%	8.6%	7.1%	20.1%
Liverpool LGA	52.0%	48.0%	2.1%	0.7%	10.0%	7.9%	17.6%
Census 2016							
Oran Park	63.1%	36.9%	5.8%	1.1%	15.2%	11.0%	27.0%
Turner Road	64.0%	36.0%	5.6%	1.6%	23.4%	17.1%	33.3%
East Leppington	63.3%	36.7%	8.4%	1.9%	18.8%	13.3%	24.0%
Camden LGA	50.4%	49.6%	6.0%	2.8%	22.7%	20.0%	47.4%
Campbelltown LGA	51.4%	48.6%	8.4%	2.2%	23.8%	19.0%	46.0%
Liverpool LGA	57.0%	43.0%	7.5%	2.0%	28.0%	21.3%	40.8%

Source: ABS

3.2.6 Household Income and Housing Costs

Households in the newest estates of the South West Catchment Area are generally more affluent than households in the broader South West Region, earning between \$2,200 and \$2,400 per week compared to between \$1,450 to \$2,050 per week in the Camden, Campbelltown and Liverpool LGAs.

As a result of higher income levels, households in the SA1 Catchment Areas generally pay a lower amount of their median weekly income on mortgage payments. That said, the proportion of weekly income spent on rental payments is slightly higher than in nearby LGAs which is a function of higher market rents in newly established areas.

Interestingly, households in the Turner Road Precinct generally earn higher incomes than those in Oran Park and East Leppington. This aligns with market prices for new housing; higher prices typically achieved in the Gregory Hills precinct compared to Oran Park.

Table 3.7: Household Income and Housing Costs (2016), Catchment Areas

Catchment Area	SA1 Catchment Areas			South West Region			Greater Sydney
	Oran Park	Turner Road	East Leppington	Camden	Campbelltown	Liverpool	
Weekly Household Income	\$2,240	\$2,387	\$2,224	\$2,043	\$1,458	\$1,550	\$1,750
Monthly Mortgage (\$)	\$2,624	\$2,643	\$2,600	\$2,220	\$1,842	\$2,123	\$2,167
Weekly Rent (\$)	\$540	\$560	\$555	\$460	\$350	\$370	\$440
% of Income on Mortgage	27.0%	25.6%	27.0%	25.1%	29.2%	31.6%	28.6%
% of Income on Rent	24.1%	23.5%	25.0%	22.5%	24.0%	23.9%	25.1%

Source: ABS

3.2.7 Housing Tenure

Households in the South West Catchment Area are typically homeowners- over 72% of households either owning their home outright or with a mortgage. This rate of home ownership generally aligns with that observed in the Camden LGA, although it is much higher than either the Campbelltown or Liverpool LGAs.

Interestingly, about a third of households in Oran Park and East Leppington are renting which is higher than the Camden LGA. This suggests investors were active in purchasing homes in these new precincts.

Table 3.8: Housing Tenure (2016), Catchment Areas

	Owned Outright	Owned with a Mortgage	Rented	Other Tenure
Oran Park	8.4%	58.0%	32.6%	1.0%
Turner Road	8.3%	67.9%	23.1%	0.8%
East Leppington	10.7%	56.8%	31.7%	0.7%
South West Catchment Area	30.7%	41.7%	26.4%	1.2%
Camden LGA	24.7%	53.0%	20.9%	1.5%
Campbelltown LGA	24.9%	40.2%	33.4%	1.5%
Liverpool LGA	24.8%	41.2%	32.4%	1.5%

Source: ABS

3.2.8 Internal Migration

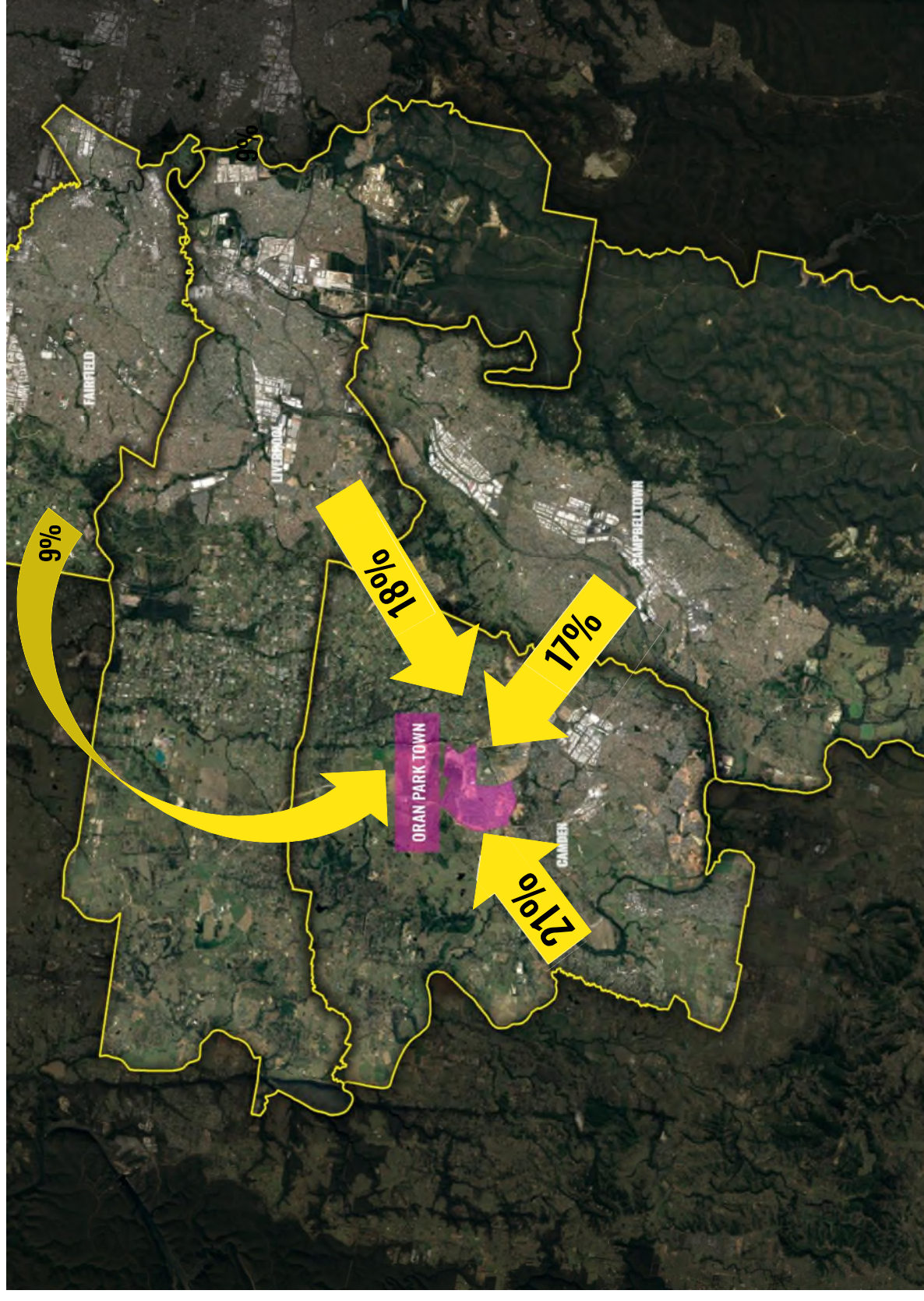
ABS data has been analysed to identify where the region's new residents in the Catchment Areas have relocated from. The most recent ABS data indicates where residents lived one and five years ago before the 2016 Census. Key findings include:

- In Oran Park, about 64% of residents lived in the Camden LGA one year prior to 2016, followed by Campbelltown LGA (8%) and Liverpool LGA (7%). In the five years prior, 21% of residents lived in Camden LGA, 18% lived in the Liverpool LGA, 17% lived in the Campbelltown LGA and 9% lived in the Fairfield LGA. Interesting, just over 5% had lived in another country the five years prior to 2016.
- In the Turner Road Catchment Area, about 64% of the population lived in the Camden LGA in the year prior to 2016. In the five years prior to 2016, 23% resided in the Liverpool LGA, 20% in the Campbelltown LGA, 19% in the Camden LGA and 9% in the Fairfield LGA. Similar to Oran Park, about 4% of residents had lived in another country 5 years prior 2016.
- In East Leppington, about 52% of residents lived in the Camden LGA in the year prior to 2016, followed by 24% in the Campbelltown LGA. In the five years preceding 2016, 33% resided in the Liverpool LGA, 20% in the Camden LGA, 9% in the Campbelltown LGA and 9% in the Fairfield LGA.

These sources of migration generally align with the broader South West Catchment Area, where the overwhelming majority of new residents relocating from the South-West Region.

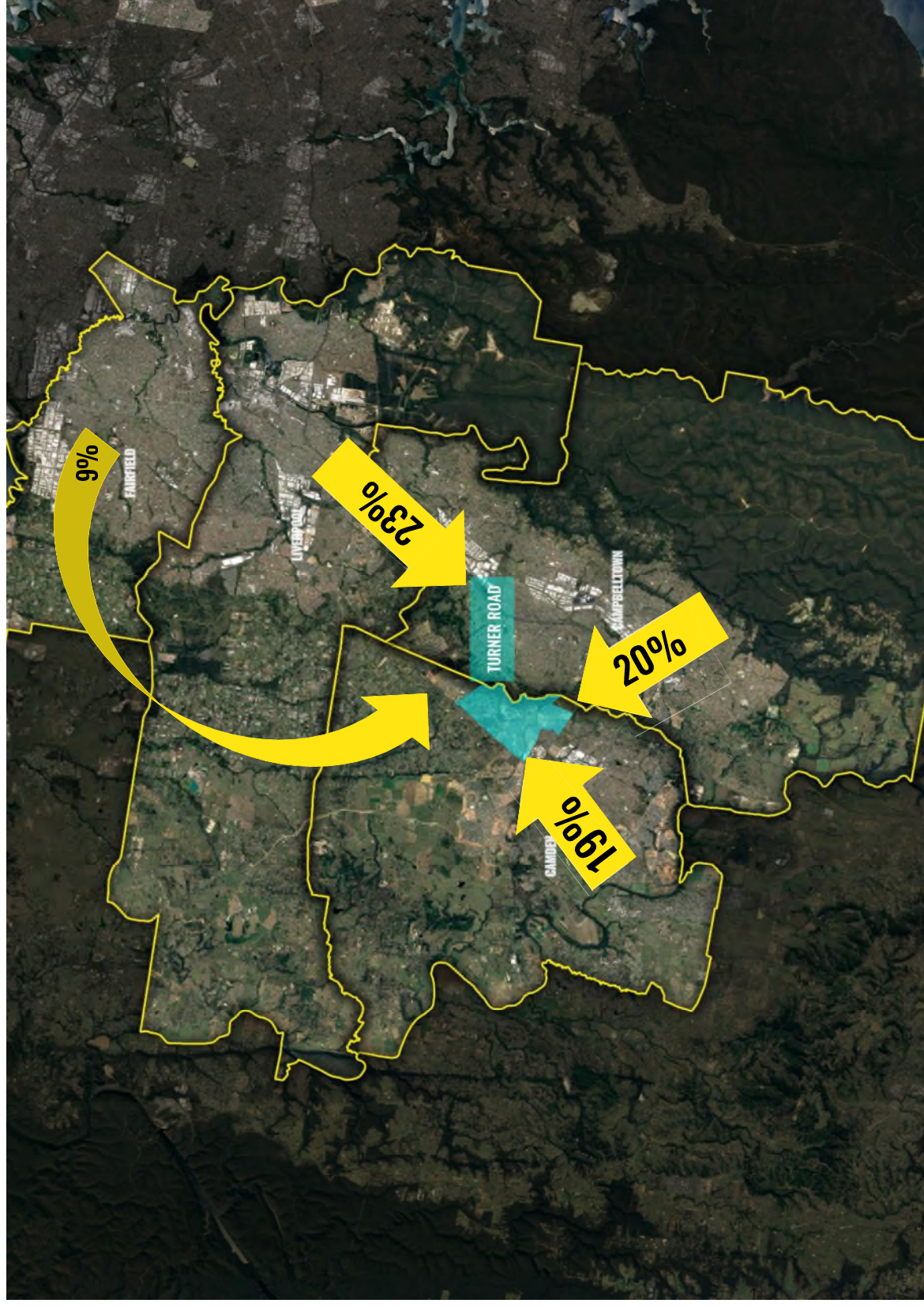
Figure 3.3 to Figure 3.5 illustrate the patterns of internal migration in the three SA1 Catchment Areas in the five years prior to 2016.

Figure 3.3: Where Residents Used to Live 5 Years Ago (2016), Oran Park Catchment Area



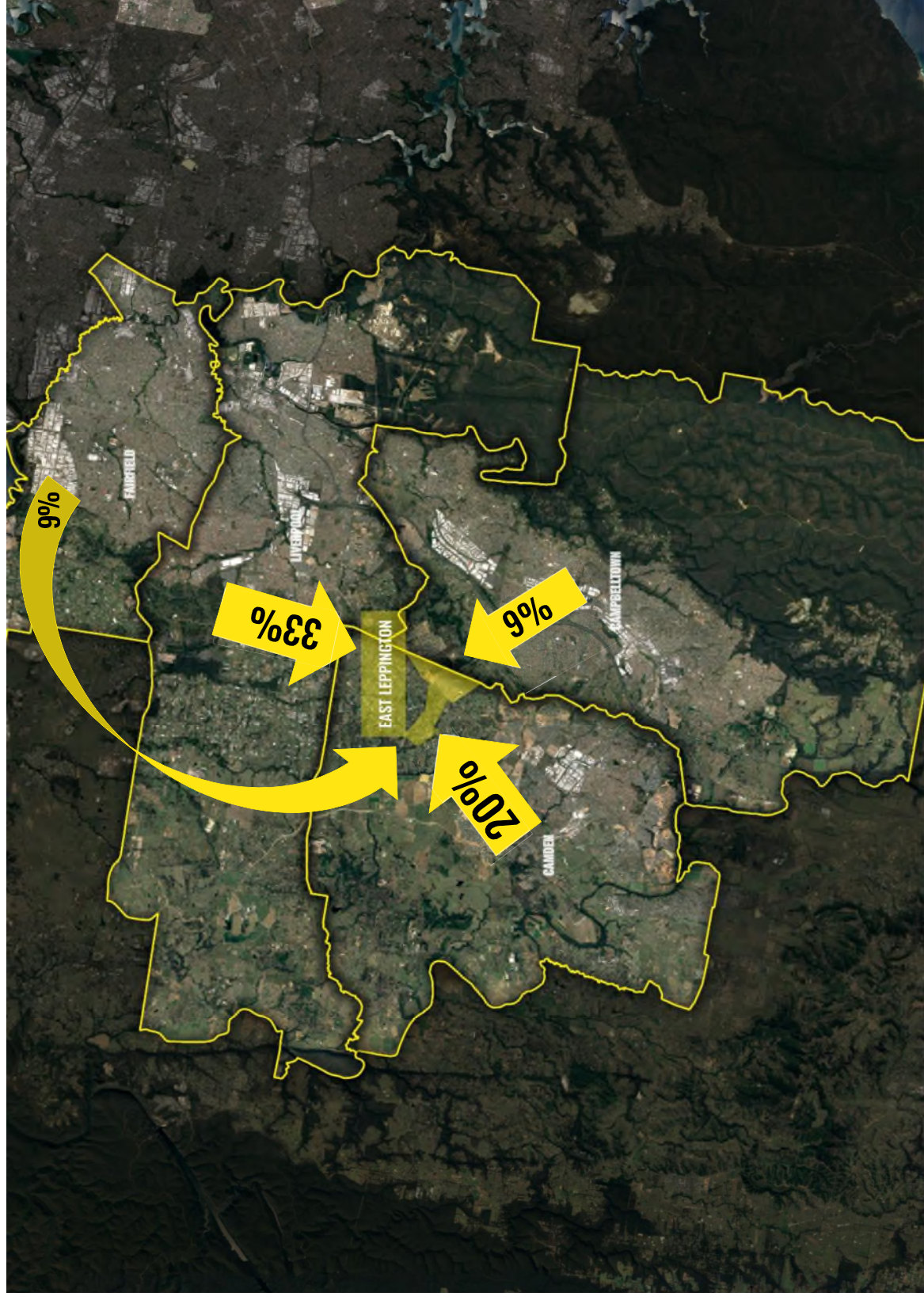
Source: ABS

Figure 3.4: Where Residents Used to Live 5 Years Ago (2016), Turner Road Catchment Area



Source: ABS

Figure 3.5: Where Residents Used to Live 5 Years Ago (2016), East Leppington Catchment Area



Source: ABS

3.2.9 Employment by Occupation

As at 2016, most residents in the Catchment Areas were employed as professionals, clerical and administrative workers and technicians and trade workers. A much higher proportion of white-collar workers (professionals, managers) reside within the Catchment Areas as compared to the broader LGAs of Liverpool, Camden and Campbelltown. This aligns with the higher incomes of residents within the Catchment Areas in comparison to the broader South West Region.

Table 3.9: Employment by Occupation (2016), Catchment Areas

Occupation	Oran Park	Turner Road	East Leppington	Camden	Campbelltown	Liverpool
Manager	11.8%	12.8%	16.0%	13.0%	8.6%	10.2%
Professional	20.4%	20.1%	18.7%	18.2%	15.6%	17.4%
Technician/Trades Worker	15.4%	15.8%	14.2%	15.3%	14.2%	14.9%
Community/Personal Service Worker	8.9%	9.1%	8.3%	10.3%	11.5%	10.2%
Clerical and Administrative Worker	17.2%	17.7%	18.9%	16.8%	16.5%	16.5%
Sales Worker	10.4%	9.8%	9.1%	10.1%	9.9%	9.4%
Machinery Operators and Driver	7.9%	9.2%	8.1%	8.3%	12.1%	10.7%
Labourer	7.8%	5.6%	6.6%	7.8%	11.5%	10.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: ABS

3.2.10 Where Residents Work

ABS journey to work data has been analysed to understand where residents in the Catchment Areas travel to work. This is an important indicator as proximity to employment is a well-known consideration for prospective purchasers of new housing. The main findings of the journey to work analysis include:

- In Oran Park, one fifth of all residents' work within the Camden LGA. This is closely followed by the Liverpool LGA (16% of residents) and Campbelltown LGA (11%). Other important areas include the Sydney LGA (8%), Fairfield (6%) and Parramatta and Blacktown (4% each respectively). Overall, almost 50% of residents work locally within the South West.
- In the Turner Road Catchment Area, approximately 16% of residents' work in the Camden LGA, closely followed by Liverpool (15%) and Campbelltown (12%). Notably, the Sydney LGA is also a major destination for employment with 12% of residents travelling there for work. Overall, 43% of residents in Turner Road work in the South West Region.
- In East Leppington, the Liverpool LGA is the largest destination for working residents at 16%. This is closely followed by Camden at 15% of all residents and the Sydney LGA at 12%. 10% of residents work in the Campbelltown LGA. The East Leppington precinct has the smallest proportion of local workers with 41% working in the South West Region.

These findings align with the South West Catchment Area, give most new residents have relocated from the South-West.

3.2.11 Household Occupancy Rates

As at 2016, the household occupancy rate (i.e. the average number of persons per household) in the South West Catchment Area was 3.18. This was slightly down from the occupancy rate of 3.24 recorded the five years prior in 2011. In the SA1 Catchment Areas, occupancy rates ranged from 3.13 in Oran Park, 2.99 in Turner Road and 3.03 in East Leppington.

The household occupancy rate in the South West Catchment Area aligns with that observed in the Camden and Liverpool LGAs, whereas the Campbelltown LGA has a smaller household occupancy rate.

Table 3.10: Household Occupancy Rates (2011-2016), Catchment Areas

Catchment Area	2011	2016
Oran Park	2.79	3.13
Turner Road	3.58	2.99

Catchment Area	2011	2016
East Leppington	3.54	3.03
South West Catchment Area	3.24	3.18
Camden LGA	3.08	3.13
Campbelltown LGA	2.97	2.99
Liverpool LGA	3.19	3.25

Source: ABS

3.2.12 Dwellings

In 2016, a total of 147,360 dwellings were collectively recorded in the Camden, Campbelltown and Liverpool LGAs. Approximately 2,500 dwellings were delivered per annum over the 2006-2016 period (on average), with a much higher rate of growth recorded over the five years to 2016 as opposed to the 2011-2016 period.

Table 3.11 shows private dwelling growth across the South West Region over the 2006-2016 period.

Table 3.11: Private Dwelling Growth (2006-2016), South West Region

LGA	2006	2011	2016	Avg. Annual Growth (No.)		
				2006-11	2011-2016	2006-16
Camden	16,969	19,343	26,187	475	1,369	922
Campbelltown	50,218	51,280	55,281	212	800	506
Liverpool	55,068	58,838	65,892	754	1,411	1,082
South West Region	122,255	129,461	147,360	1,441	3,580	2,511

Source: ABS

3.3 Summary of Demographic Analysis

An understanding of the current and historical socio-demographic profile of residents in the South West Catchment Area is critical to planning for future housing demand in South Creek West. Of particular relevance is the demographic profile of residents in the Catchment Areas of Oran Park, Turner Road and East Leppington given they provide a useful barometer for the type of residents which could be accommodated at Precinct 5.

Key findings from the socio-demographic analysis are as follows.

- Historically, the South West Catchment Area has been growing at an exponential rate with average annual growth of 11.7% (2,350 residents per annum) over 2011-2016. This pace of growth has continued in recent years, with an additional 13,600 residents recorded between 2016 and 2019 at an average annual rate of 14.3%.
- The South West Catchment Area is characterised as an area with young, family-oriented households with children and a much younger population compared to the broader South West Region.
- The new residents moving into the South West Catchment Area are also more educated and affluent than the broader South West Region, with higher proportions of residents being tertiary qualified with higher income levels.
- The overwhelming majority of residents moving into the South West Catchment Area's new housing estates are South West locals, having relocated from the Camden, Liverpool and Campbelltown LGAs.
- Most residents in the South West Catchment Area go to work in the surrounding South West Region, although a large proportion also commute to the Sydney LGA for employment.
- Households in the South West Catchment Area earn markedly higher incomes than residents in the broader South West Region as well as Greater Sydney.
- The average household size in the South West Region is 3.18 persons per dwelling (in 2016), generally aligning with that observed in the broader South West Region.

PART B: HOUSING NEED



4. Population and Dwelling Projections

Research and analysis included Part B of this Study was carried out in Q1 2021.

A variety of factors influence the housing market though a key driver of demand for housing is population growth.

The outbreak of COVID-19 has significantly impacted national population growth due to the cessation of international migration. Capital cities – where international migration is a key source of population growth - the pause in international migration has had an even more significant impact.

This section considers anticipated population growth in the South West Region and its implication for housing.

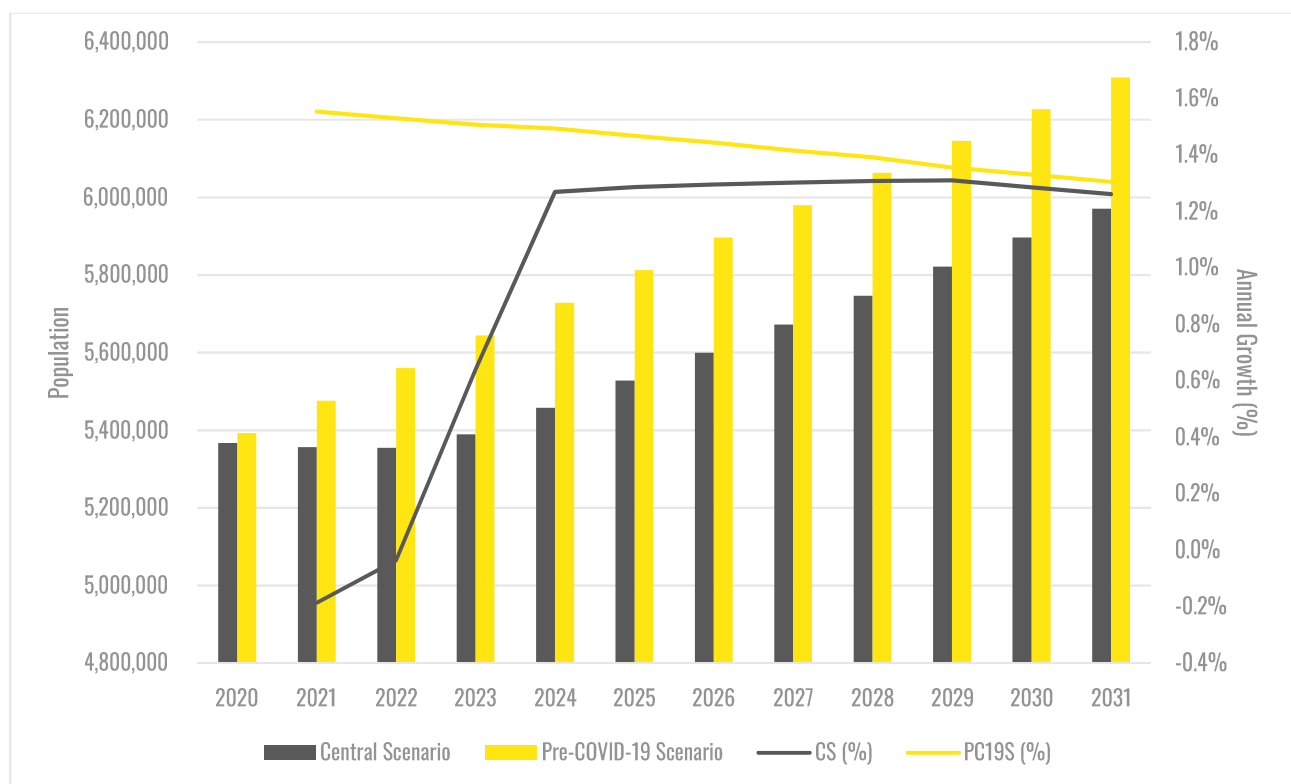
4.1.1 Centre for Population Projections

In December 2020, the Australian Government's Centre for Population, working with the NSW Government, released population projections which have included adjustments for the impact of the COVID-19 pandemic and subsequent changes to migration policy. These projections are based over a 10-year period from 2020-21 to 2030-31.

These projections conclude that Greater Sydney is expected to grow by some 614,000 residents over the decade to 2020-2031. This compares with growth of almost 832,000 new residents which were expected in a pre-COVID-19 scenario. As such, this suggests Greater Sydney's population (by 2031) could be ~5% smaller due to the COVID-19 pandemic.

Figure 4.1 illustrates the Centre for Population's projections for Greater Sydney over the 2020-2031 period.

Figure 4.1: Centre for Population Projections (Greater Sydney), Central Scenario and Pre-COVID-19 Scenario



Source: Centre for Population (2020)

The Centre for Population's projections do not break down population growth across Greater Sydney at the LGA level. The most current population projections carried out at the LGA-level remain those prepared by the NSW Department of Planning, Industry and Environment (DPE), released in 2019.

4.1.2 DPE Population Projections

Official population projections in NSW are carried out by the NSW Department of Planning Industry and Environment (DPE).

DPE's Demography and Research Unit project population growth on a variety of demographic assumptions, including birth and fertility rates, mortality rates, migration levels and household formation patterns. These projections of population growth are divided by projected household occupancy rates to arrive at the number of dwellings impliedly required to accommodate the projected population.

The most recent population projections prepared by DPE were released in 2019. Three sets of population projections were made publicly available at a State, Capital City and LGA level:

- **Main Series Projections:** the NSW Government's 'central scenario' for population growth over the coming decades to 2041 and the standard set of population projections used in the State strategic and transport planning.
- **High Scenario Projections:** an alternative set of population projections based on higher levels of population growth compared to the Main Series.
- **Low Scenario Projections:** an alternative set of population projections based on lower levels of population growth compared to the Main Series.

As at the date of writing, the NSW Government's Main Series population projections remain the standard set of projections used in the NSW Government's Common Planning Assumptions to inform strategic planning and transport planning. However, it is understood that DPE are preparing an updated set of population projections to reflect the impact of the COVID-19 pandemic on local population growth at the LGA level.

Given the significant difference in population growth in Greater Sydney expected by the Centre for Population, this Study considers DPE's Low Scenario population projections to assess the need for more housing in the South West.

Population Projections

Under the Main Series population projections, the South West Region was projected to increase by some ~544,000 residents over the coming decades to 2041, reaching a population of ~998,000 residents. This was to be largely driven by growth in the Liverpool and Camden LGAs who were expected to account for almost 84% of all new residents.

Under the Low Scenario, the South West Region is expected to grow by around ~485,000 residents by 2041, totalling a population of some ~939,000 residents. This is approximately ~59,000 (-11%) fewer residents than that anticipated in the Main Series. **Table 4.1** illustrates the Low Scenario and Main Series population projections for the South West Region.

Table 4.1: Main Series and Low Scenario Population Projections (2016-2041), South West Region

Area	2016	2021	2026	2031	2036	2041	Change (2016-41)
Main Series							
Camden	80,264	127,647	153,299	180,071	236,255	307,727	227,463
Campbelltown	161,566	180,051	194,039	212,366	227,946	249,262	87,696
Liverpool	211,983	251,322	291,187	328,447	380,085	441,427	229,444
South-West Region	453,813	559,020	638,525	720,884	844,286	998,416	544,603
Low Scenario							
Camden	80,264	126,598	149,388	173,326	226,152	293,160	212,896
Campbelltown	161,566	177,965	187,975	202,764	214,464	231,484	69,918
Liverpool	211,983	248,599	282,896	314,818	360,415	414,629	202,646
South-West Region	453,813	553,162	620,259	690,908	801,031	939,273	485,460

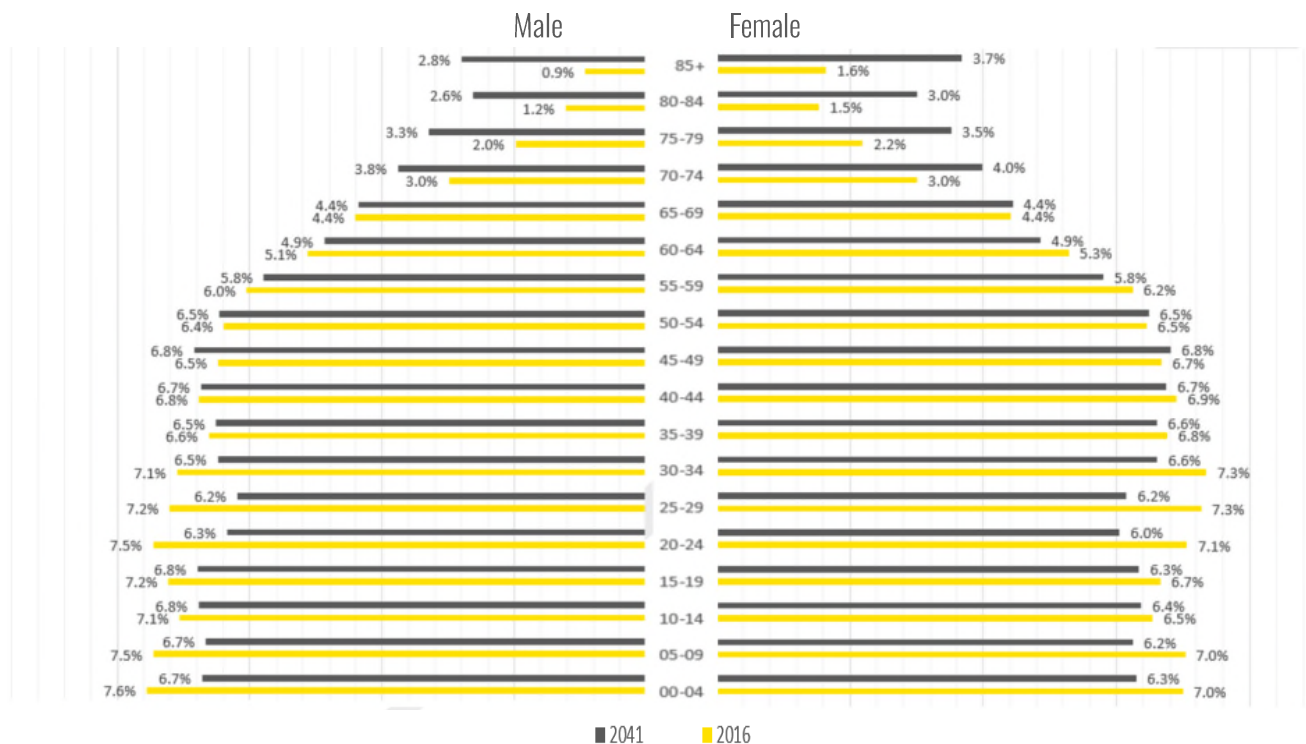
Source: DPE (2019)

Age Composition

The age profile of the South West Region is expected to gradually change over the coming decades with the proportion of residents aged 65 years and older rising considerably. This a broad trend with a gradually older population expected across Greater Sydney and NSW in general.

That said, the South West Region is expected to remain a major hub for young families with residents aged 14 years and younger expected to comprise around 39% of the population in 2041.

Figure 4.2: Age Composition by Gender (2016-2041), South West Region



Source: DPE (2019b)

4.2 Household and Family Composition

Under the Main Scenario, the number of households in the South West Region was expected to increase by ~211,000 over the coming decades to 2041, reaching a total of just over 375,000 households. Household projections were not included in the Low Scenario projection series.

Couples with children are expected to remain the largest household type over this period, although the proportion of couples with no children and lone person households is expected to progressively increase in the coming decades. This also contrasts with forecasts for select precincts in the GMGA, where couples with children are expected to grow markedly and increase their overall proportion of total households.

Table 4.2 shows the projected household composition across the South West Region over the 2016-2041 period (as per the Main Scenario projection series).

Table 4.2: Household Composition (2016-2041), South West Region

Household Type	2016	2021	2026	2031	2036	2041	Change (2016-41)
Couple only	27,804	36,726	42,482	48,614	58,811	72,002	44,199
Couple with children	65,226	80,311	91,458	102,444	118,975	139,121	73,895
Single parent	21,555	26,444	30,626	35,088	41,035	48,339	26,785
Other family	6,942	8,571	9,729	10,957	12,914	15,325	8,383
Lone person	23,144	30,168	36,568	43,497	53,228	65,456	42,311
Group	2,391	2,957	3,340	3,740	4,438	5,383	2,992
Total Households	147,062	185,176	214,202	244,340	289,401	345,626	198,565

Source: DPE (2019b)

4.3 Implied Dwelling Requirements

Under the Main Series, the South West Region was expected to require around ~362,000 dwellings over the coming decades to 2041. Unfortunately, implied dwelling requirements for DPE's Low or High Scenario population projections have not been made publicly available.

In order to estimate the quantum of dwellings required under the Low Scenario, the number of residents per dwelling in the Main Series projections have been analysed. This analysis is shown in **Table 4.3**.

Table 4.3: Capita by Dwelling (Main Series; 2016, 2041), South West Region

Area	2016			2041		
	Dwelling Need	Population	Pop/Dw	Dwelling Need	Population	Pop/Dw
Camden	27,159	80,264	2.96	110,353	307,727	2.79
Campbelltown	57,591	161,566	2.81	95,256	249,262	2.62
Liverpool	69,556	211,983	3.05	156,776	441,427	2.82
Western City	154,306	453,813	2.94	362,385	998,416	2.76

Source: Atlas/DPE (2019)

Assuming these capita/dwelling ratios would remain consistent in the Low Scenario, these ratios have then been applied to the population projections in the Low Scenario to identify the potential number of dwellings required under the Low Scenario.

Applying these assumptions suggests that under the Low Scenario, the South West Region would require ~341,000 dwellings by 2041. This represents around 21,500 fewer dwellings by 2041 than under the Main Series.

Table 4.4 shows the analysis applied to assess the potential dwelling need for the South West Region under the Low Scenario.

Table 4.4: Potential Dwelling Need (Low Scenario; 2016, 2041), South West Region

Area	Low Series (2016)			Low Series (2041)		
	Population	Pop/Dwl	Dwelling Need	Population	Pop/Dwl	Dwelling Need
Camden	80,264	2.96	27,159	293,160	2.79	105,129
Campbelltown	161,566	2.81	57,591	231,484	2.62	88,462
Liverpool	211,983	3.05	69,556	414,629	2.82	147,258
Western City	453,813	2.94	154,306	939,273	2.76	340,849

Source: Atlas/DPE (2019)

As demonstrated in **Table 4.4**, some ~341,000 dwellings could be needed by 2041 period under the Low Scenario. This implied dwelling requirement of ~341,000 is a key metric in measuring the need for more housing across the South-West Region.

5. Economic and Market Context

5.1 Economic Trends and Drivers

Impacts of COVID-19 Shutdowns in Greater Sydney

As at September 2021, much of Greater Sydney remains in a temporary lockdown due to an outbreak of COVID-19. Social distancing initiatives aimed at slowing the spread of COVID-19 have included suspending most forms of retail, sports and recreation, construction and requiring most office-based work to be performed at home.

It is likely that the continued uptake of COVID-19 vaccines will allow an easing of restrictions to commence from October 2021. Whilst this is undoubtedly a positive step in recommencing the economic recovery, the economic ramifications of Greater Sydney's ~4-month lockdown are yet to be fully quantified. NSW Treasury have estimated each week of lockdown accounts for a loss in GDP of between \$700m and \$800m.

There is consensus amongst economists that the Greater Sydney lockdown and temporary shutdown orders in Greater Melbourne and Adelaide in July 2021 will result in Australia recording negative economic growth in Q3 2021.








5.1.1 Macroeconomic Indicators


Prior to the outbreak of COVID-19 across Greater Sydney and Greater Melbourne in June 2021, the Australian economy had appeared to have entered a recovery phase following the historic falls in economic output and employment during 2020 as a result of the COVID-19-induced recession. This was first and foremost driven by historically accommodative fiscal and monetary policy, principally the Commonwealth Government's JobKeeper and JobSeeker financial assistance packages and the record low cash rate of 0.1% set by the Reserve Bank of Australia (RBA).

Strong growth over the December 2020 quarter had resulted in the national economy being down just 1.1% compared to pre-COVID-19 levels. Household spending is rising, and unemployment is falling. Notably, house prices in Greater Sydney have reached record highs as low interest rates and a mix of Government incentives fuel purchaser activity and sentiment.

Table 5.1 summarises some of the key economic indicators influencing housing demand across Australia and NSW at Q2 2021.

Table 5.1: Key Economic Indicators

Indicator	Comment
 National GDP to Grow by ~4.0%	The Australian economy is expected to experience growth in GDP of 4.0% in 2021 (RBA, 2021). Australian GDP rose by 0.7% over the June 2021 quarter, with GDP recording growth of 2.4% since the initial outbreak of COVID-19 in Q1 2020.
 Cash Rate at 0.1%	The Reserve Bank of Australia (RBA) has held the cash rate into 2021 and has continued with quantitative easing supply of money to assist debt and is unlikely to cut the cash rate below 0.1%. Recent commentary on the potential need for an increase in the cash rate to mitigate potential inflation have been repudiated by the RBA who do not expect an increase to the cash rate until 2023.
 Population Growth Slows to 0.5%	The Australian population grew by just 136,300 in the year to December 2020, representing growth of 0.5%. Over the quarter to September 2020, the population declined for the first time since WW1. Further declines are expected over 2021 should overseas migration restrictions be maintained.
 Household Savings still at Historic Highs	Following a peak of almost 20% in mid-2020, the national household savings ratio was most recently recorded at 9.7% in June 2021. This remains well above the household savings rate recorded over the course of 2019 before the onset of the COVID-19 pandemic (3.7% to 6.1%).
 Unemployment at 4.6%	National unemployment has fallen to 4.6% in July 2021 following its peak of 7.5% in July 2020. That said, the underemployment rate grew by 0.4% to 8.3% in July 2021. In NSW, underemployment rose by 2.1% in the month to July 2021 as much of the state was impacted by lockdowns.
 Residential Construction Strong	Following a 20-year peak in October 2020, dwelling approvals fell in the month to July 2021 though are still up over 12% over the 12-month period. NSW recorded a softer dip in house approvals compared to the national average, though still remain at historical highs.
 Median House Prices at Record Highs	House prices have surged across Greater Sydney with the median house price of over \$1,000,000 surpassing the record high levels recorded at the peak of the residential property boom in 2017. Further price growth is anticipated over the course of 2021 given historic low interest rates.

Indicator	Comment
 Wages Rise by 1.5%	Wage growth across Australia was recorded at 1.7% over the 12-months to June 2021, with a 1.3% rise in the public sector and 1.9% rise in the private sector. Private wages in NSW grew by 2.0% over the year, with public wages up by 1.1%.

Source: Various – see References

5.1.2 Impact of COVID-19 Stimulus Packages

Following the outbreak of COVID-19 across Australia in Q1 2020, both the Commonwealth and NSW Governments implemented a broad range of economic stimulus and household/ business support packages aimed at limiting the economic and social damage caused by restriction measures. JobKeeper and JobSeeker proved critical to supporting household consumption over this period until their cessation in April 2021.

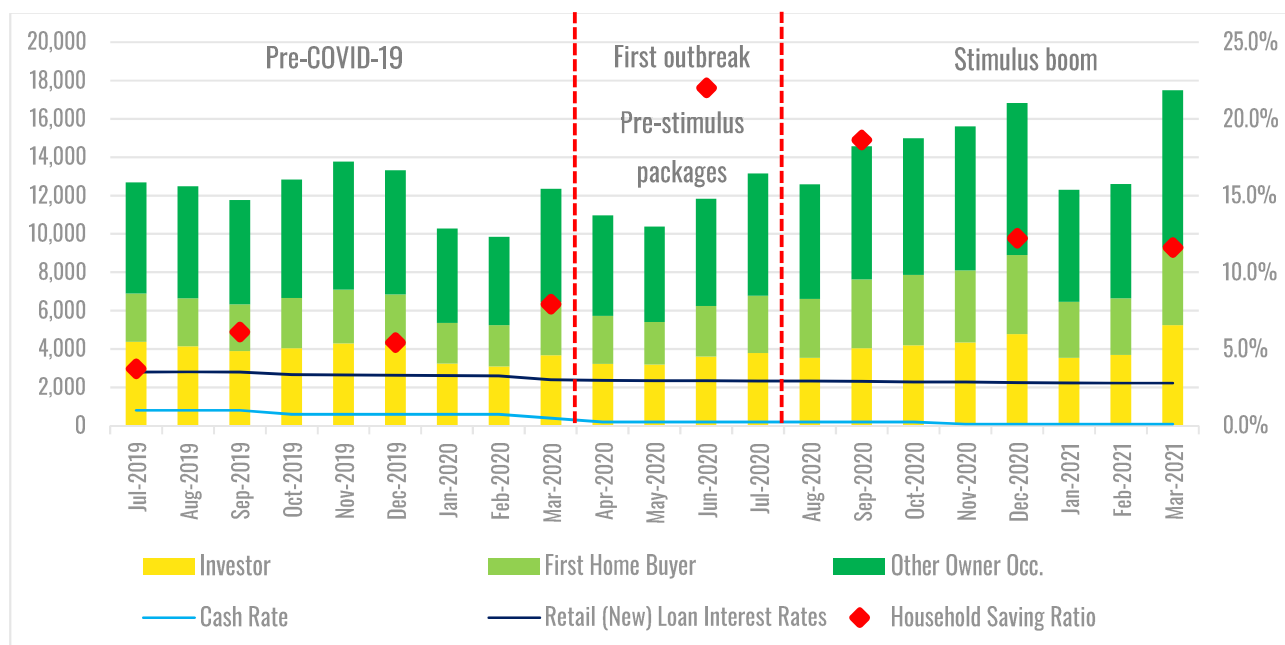
Many of these stimulus packages have had a significant impact on the NSW housing market. Some of these included:

- **HomeBuilder Grant:** The Commonwealth Government's HomeBuilder program provided eligible owner occupiers (including first home buyers) with a grant of \$25,000 or \$15,000 to build a new home or renovate an existing dwelling.
- **First Home Owner's Grant (New Homes):** The NSW Government provides a \$10,000 grant for eligible FHBs when purchasing a new home up to \$600,000 or a house and land package of up to \$750,000.
- **First Home Buyer Assistance Scheme:** The NSW Government waives stamp duty for FHBs when purchasing new properties of up to \$800,000, existing homes up to \$650,000 or vacant land up to \$400,000.
- **First Home Loan Deposit Scheme (FHLDS):** The Commonwealth Government's FHLDS has issued 10,000 places for eligible FHBs to enter the market with a 5% deposit, without paying lender's mortgage insurance.

In unison with historically low retail interest rates driven by the RBA's 0.1% cash rate, these stimulus packages have driven a surge in housing activity as represented by marked growth in new loan commitments, particularly owner occupiers.

Figure 5.1 illustrates the growth in new loan commitments across in NSW over the 20-months to March 2021.

Figure 5.1: Residential Loan Approvals by Purchaser Type (July 2019–March 2021), NSW



Source: ABS (2021c,d)/Atlas/RBA (2021)

As demonstrated in Figure 5.1, new loan commitments in the lead up to Q1 2020 were tracking at a relatively consistent level. First home buyers generally accounted for ~20% of total loan commitments. Upon the outbreak of COVID-19 in March 2020, the number of loan commitments initially fell as lockdown measures and uncertainty impacted the market, though began to increase from June 2020.

Upon the release of the Commonwealth's Homebuilder stimulus package and the raft of other incentives offered by the NSW Government in July 2020, a marked uptick in new loan commitments to owner occupiers was observed. This uptick was assisted by a significant rise in household saving rates (approaching 20%) observed since the initial outbreak in March 2020.

A similar trend was observed across Australia, with a rise in the number of owner occupier loans observed post June 2020. In June 2020, owner occupiers accounted for 74% of all residential loans before rising to circa 76%-77% over the remainder of 2020 and peaking at just under 78% in January 2021. In NSW, owner occupier loans peaking in September 2020 with the number and proportion of investor loans increasing ever since.

5.2 Historical Market Activity

Sale prices are one of the principal indicators for housing demand over time. Over the decade to June 2021, house prices across the South West Region have risen on average by between 5.5% to 7.4% per annum (CoreLogic RP Data, 2021). This is broadly in line with Greater Sydney, where house prices have on average risen by 6.2% per annum since 2011.

A distinct hierarchy of housing values is observed across the South West Region. The Liverpool LGA records the highest median sale price at \$890,000, followed closely by Camden (\$860,000). Campbelltown records the lowest median house price within the region at \$732,000.

Median house price growth over the 12-months to June 2021 has varied significantly. In the Campbelltown LGA, median house prices have grown by over 12%, whereas Camden and Liverpool grew by 7.6% and 4.7% respectively. This reflects the 'lower base' from which house prices in Campbelltown grew from.

All LGAs recorded strong median house price growth over the past 3-months however, ranging from 3.8% to 5.1% (\$12,000 to \$45,000) in this short period. Notwithstanding, median house price growth in the South West Region has not been as marked as that witnessed across the broader Greater Sydney area in recent times, where house prices have risen by 14.4% in the year to June 2021.

Table 5.2 shows the growth in median house prices across the South West Region.

Table 5.2: Median Sale Prices (Houses) by LGA, South West Region

LGA	Median Sale Price		Recent Changes in Median Sale Prices (%)			Long-Term Avg. Annual Growth (%)	
	June-2020	June-2021	2020-2021	2018-2021	2017-2021	2011-2021	2001-2021
Camden	\$799,357	\$860,000	7.6%	2.3%	8.9%	5.5%	6.4%
Campbelltown	\$651,854	\$732,000	12.3%	5.4%	20.6%	7.4%	7.0%
Liverpool	\$850,205	\$890,000	4.7%	-0.6%	6.2%	5.8%	6.1%
Greater Sydney	\$1,089,088	\$1,245,500	14.4%	12.6%	22.2%	6.2%	6.8%

Source: CoreLogic RP Data

In a similar trend to the housing market, most apartment markets across the South West Region recorded growth over the 12 months to June 2021. This growth has yet to result in apartment values returning to the highs recorded over the 2017-18 period, with LGAs such as Campbelltown and Liverpool still recording below-peak median apartment prices.

Over the 10-years to Q1 2021, apartment values across the South West have increased by between 5.9% and 7.0% per annum (on average). This rate of growth is greater than that recorded across Greater Sydney which averaged of 4.3%. Unlike the housing market, most LGAs across the South West Region have recorded nominal to negative unit price growth over the recent 3-month period, with change in values ranging from -1.7% (Camden LGA) to 2.9% (Campbelltown LGA).

Table 5.3 shows the growth in median apartment prices across the South West Region.

Table 5.3: Median Sale Prices (Units) by LGA, South West Region

LGA	Median Sale Price		Recent Changes in Median Sale Prices (%)			Long-Term Avg. Annual Growth (%)	
	June-2020	June-2021	2020-2021	2018-2021	2017-2021	2011-2021	2001-2021
Camden	\$491,676	\$511,000	3.9%	-7.8%	19.0%	7.0%	6.4%
Campbelltown	\$448,097	\$479,000	6.9%	-2.3%	8.1%	6.3%	6.6%

LGA	Median Sale Price		Recent Changes in Median Sale Prices (%)			Long-Term Avg. Annual Growth (%)	
	June-2020	June-2021	2020-2021	2018-2021	2017-2021	2011-2021	2001-2021
Liverpool	\$507,317	\$520,000	2.5%	-4.7%	0.5%	5.9%	6.2%
Greater Sydney	\$736,378	\$760,000	3.2%	2.8%	4.2%	4.3%	4.9%

Source: CoreLogic RP Data

5.2.1 Sales Volumes

Measuring the volumes of dwellings being offered for sale (i.e. listings) and the number actual sales recorded over any given time series is another useful barometer for housing demand. These indicators provide a further level of insight into housing demand beyond that which can be obtained from analysis of pricing data alone.

Over the 12 months to June 2021, all LGAs within the South West Region recorded a strong uptick in the number of house sales as market activity across Greater Sydney steadily improved. The number of listings in the Campbelltown and Liverpool LGAs also grew over this period, whereas the Camden LGA recorded a *decline* in the number of listings in June 2020-21 compared to June 2019-20. This lack of available supply is conceivably one of the contributing factors to the rapid increase in median house prices across the Camden LGA in recent months.

Table 5.4 shows listing and sales volumes for detached houses across the South West Region over 2019-2021.

Table 5.4: Sales Activity (2019-2021), South West Region

LGA	Listings			Sales		
	2019-20	2020-21	Change	2019-20	2020-21	Change
Camden	2,357	2,306	-2.1%	2,272	3,060	25.3%
Campbelltown	1,835	2,189	19.3%	1,923	2,387	3.5%
Liverpool	1,979	2,164	9.3%	1,939	2,778	18.1%

Source: CoreLogic RP Data

5.3 Demand for New Housing

The greenfield housing market (i.e. land and/or dwelling and land) is distinct from the established housing market in many respects. This section provides a summary of the greenfield housing market in the neighbouring SWGA and other select estates to provide insight into the nature of demand for new residential product proximate the Site.

5.3.1 Sales Volumes

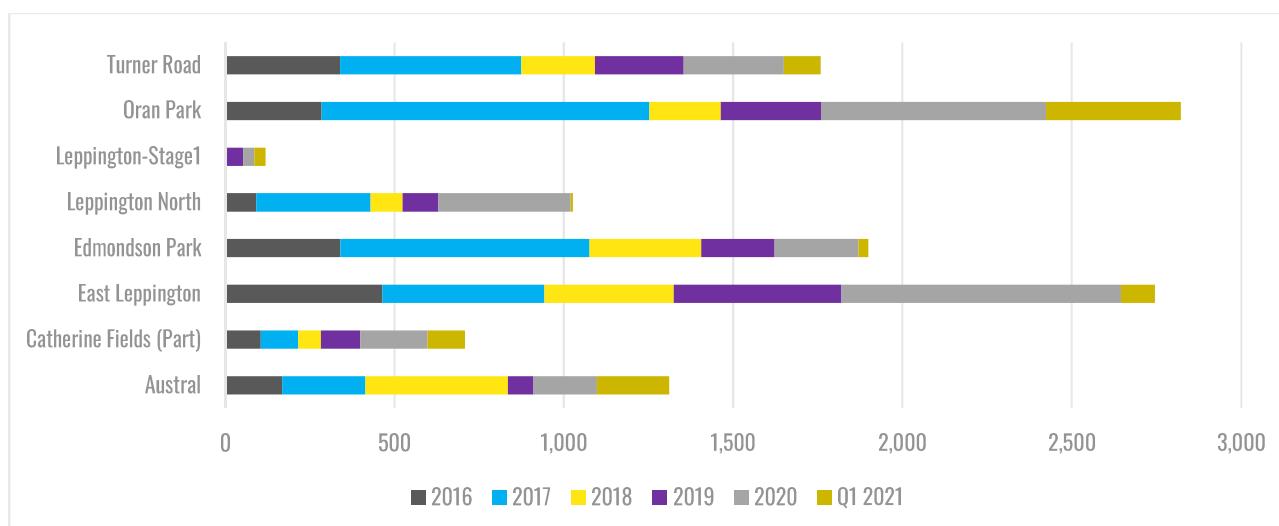
Sales data in Greater Sydney's North West and South West Growth Areas is tracked by DPE. This is useful in understanding demand for new housing proximate the Site. Sale data in the GMGA is not currently tracked by DPE.

In the four years to March 2021, a total of 10,600 sales were recorded in precincts which have been released in the SWGA at an average rate of 2,650 sales per annum. The greatest number of sales over this period was recorded in Oran Park at 2,500 sales, closely followed by East Leppington (2,300 sales) and Edmondson Park (1,600 sales).

Sales activity across the SWGA peaked over the course of 2020 and was amongst the most active years – a total of 2,800 sales were recorded over the 2020 period. This compares to approximately 1,600 sales over the course of 2019 and reflective of a 75% increase in sales volumes. This marked uptick in sales volumes is testament to the current market conditions buoyed by various government incentive schemes and record low interest rates.

In the first quarter of 2021, a total of just over 1,000 sales were recorded across the SWGA. This represents the largest number of sales recorded in a single quarter in the SWGA. An equally strong level of sales is expected in Q2 2021.

Figure 5.2: Sales Volumes (2016-Q1 2021), Released Precincts in South West Growth Area



Note: 2016 data available for Q3 and Q4 only
Source: DPE (2021)

5.3.2 Emerging Housing Typologies

Demand for housing Western Sydney and the SWGA has historically been focused on low-density, detached housing product. Whilst detached housing is still the preferred housing type for most purchasers, changing lifestyle preferences and rising housing affordability constraints have seen housing demand shift towards medium and higher-density housing.

Medium-Density Housing

Medium-density housing typologies (i.e. townhouses, villas) are increasingly being progressed across the SWGA. Market feedback suggests that the market for medium-density housing is driven by the fragility of housing affordability in the SWGA. In many instances, a difference of just \$10,000 can be the factor driving purchaser decisions.

In Oran Park, there are multiple townhouse developments being progressed. For instance, Villa World – Oran Park features a mix of 2, 3 and 4-bedroom, two-storey townhouses. Since October 2020, approximately 100 sales have been recorded with marketing agents noting demand has been primarily observed from owner occupier purchasers unable to afford land or house and land packages elsewhere across the SWGA.

Smaller releases in Cobbitty are also understood to be receiving strong market interest from owner occupier purchasers. Further north in Edmondson Park, two and three-storey townhouses are a key component of the ‘Ed. Square’ development and are achieving sale prices on par with house and land packages elsewhere across the SWGA.

Table 5.5: Snapshot of Medium-Density Residential Projects (Q2 2021), SWGA



Source: Atlas/Nearmap

High-Density Housing

Demand for high-density residential housing is beginning to build in some of Greater Sydney's Growth Areas as a result of housing affordability issues and changing lifestyle preferences. Over the past 2-3 years, this has begun to emerge across the SWGA and adjoining areas with some of the first apartment projects coming to market.

The largest apartment project in the SWGA to date has been the mixed-use development '**Ed Square**' in **Edmondson Park**. 'Ed. Square' is a mixed-use development comprising 992 apartments and 892 terrace/town homes directly opposite the existing Edmondson Park train station. The retail component at Ed. Square (to be known as the Ed. Square Town Centre) is set to be significant with 25,000sqm of retail floorspace comprising a full-line supermarket, 'eat street' dining precinct and cinema complex. Stage 1 (367 units and town homes) of the development sold over the course of 2019 and attracted a strong mix of interest from FHBs, international investors and downsizers.

Prices achieved have been strong; one-bedroom apartments have achieved prices from \$500,000 whilst two-bedroom apartments have achieved prices from \$600,000 to \$650,000. These prices are testament to the growing acceptance of higher-density housing. Critically however, these strong prices reflect the high amenity that will be offered on-site and close proximity to an existing train station.

In **Oran Park**, the '**Metro Apartments**' immediately opposite Oran Park Town Centre commenced marketing in Q3 2020. The 6-storey residential flat building is set to comprise 53 apartments and is approximately 70% sold. Interest has been strong from both investors and first home buyers, with almost all buyers understood to be locals from the Camden and Campbelltown LGAs. One-bedroom units have achieved prices from \$465,000 to \$500,000, two-bedroom units from \$550,000 to \$600,000 and three-bedroom penthouses from \$790,000 to \$820,000.

Further south, the 100-unit development '**Somerset Rise**' in **Narellan** commenced marketing in November 2020. Approximately 30% of apartments are understood to be sold, with all buyers being existing Narellan or Camden locals. Few investors have been observed to date, with owner occupiers being a mix of first home buyers and downsizers. Buying activity has been driven by a desire of buyers to remain living locally, with proximity to Narellan Town Centre a key factor.

5.4 Implications for Housing Demand

Key findings from the analysis of housing demand across the South West Region are outlined in turn.

Historic Growth in South West Region

Following a softening in market conditions witnessed over 2018-2019, demand for housing across the South West Region over the course of 2020 and into 2021 has reached historic levels. Sales volumes of new housing in the SWGA have been amongst the highest on record and well above the historical average. New estates proximate Precinct 5 have also recorded significant levels of purchaser activity and interest, notably Oran Park.

Market Activity

Market activity in the major estates across the SWGA picked up significantly over 2020, buoyed by the lowest interest rates recorded on record and a raft of Commonwealth and NSW Government incentive programs for owner occupiers, particularly First Home Buyers. Significant demand is beginning to translate into escalating prices across almost all major estates.

The onset of the COVID-19 pandemic in 2020 has brought on a distinct preference for detached housing typologies with many buyers seeking larger housing formats to accommodate more time spent at home. However, this emerging trend has not impacted the persistent shift towards smaller lot sizes.

- **Detached Lots**
Detached lots remain the preferred housing typology. Prospective purchasers are continually willing to accept smaller lot sizes in exchange for a detached housing product with 400sqm-450sqm understood as the current 'sweet spot' in the market given the affordability of such product.
- **Attached Housing**
Market acceptance for medium-density typologies continues to grow across the SWGA and other neighbouring markets. Market response to such product in Oran Park and Edmondson Park has been strong as demonstrated by swift take-up rates and prices comparable to some detached housing products.

- **Apartments and Units**

Some of the first apartment projects in the SWGA and adjoining areas have begun to emerge over the past 2-3 years. These projects have received good levels of interest, particularly from local buyers looking to enter the market at a more affordable price point or for lifestyle reasons.

Housing Affordability and Implications for Housing Demand

The significant growth in residential property values, primarily houses, across Greater Sydney over the past 6-months has returned the issue of housing affordability to the fore. House prices are expected to continue to rise over the course of 2021 given historically low interest rates are expected to remain in place for some time.

These pressures are expected to result in housing demand across the South West continue to shift towards more affordable housing typologies such as townhouses and apartments.

The next chapter examines the nature of housing supply in the South West Region.

6. Housing Supply

6.1 Existing Supply

At the time of writing, there was no current count of existing private dwellings in the South-West Region. Accordingly, a combination of ABS Census (2016) and DPE dwelling completions data has been used to estimate the existing number of private dwellings in the South-West Region.

6.1.1 Census Count

The most recent formal count of private dwellings in the South West Region was the 2016 Census. The number of private dwellings in the recorded as at the 2016 Census night (August 2016) is shown in **Table 6.1**.

Table 6.1: Private Dwelling Count (2016), South West

LGA	Private Dwellings	Proportion of Total
Camden	26,197	17.8%
Campbelltown	55,326	37.5%
Liverpool	65,931	44.7%
South West Region	147,454	100.0%

Source: ABS (compiled by .id)

As shown in **Table 6.1**, there were some 147,454 private dwellings recorded across the South West as at the 2016 Census.

6.1.2 Recent Growth

Net dwelling completions across Greater Sydney's LGAs are monitored by the DPE Metropolitan Housing Monitor on a monthly basis. The Metropolitan Housing Monitor is current to Q4 2020.

Analysis of dwelling completions is useful for the purposes of this Study given it shows the rate of historical dwelling growth in the South West Region since the 2016 Census.

Metropolitan Housing Monitor

Over 2016-2020, ~27,350 dwellings were completed across the South West Region with an average completion rate of 5,500 dwellings per annum. Dwelling completions peaked in 2017 with almost 6,300 completions. Completions fell in 2018 and 2019 to circa 5,500-5,600 completions per annum, with completions again falling in 2020 to ~5,200.

The majority of completions in the South West Region have been recorded in the Camden LGA, where around 43% of new dwellings were delivered. This was followed by Liverpool (34%) and Campbelltown (23%). Approximately 73% of dwelling completions have been for one net dwelling completion ("detached").

Table 6.2 shows the number of dwelling completions across the South West Region (by LGA) over 2016-2020.

Table 6.2: Dwelling Completions (2016 to Q4 2020), South West Region

Area	2016			2017			2018			2019			2020		
	Detached	Multi-unit	Total	Detached	Multi-unit	Total	Detached	Multi-unit	Total	Detached	Multi-unit	Total	Detached	Multi-unit	Total
No. of Dwelling Completions															
Camden	2,166	162	2,328	2,585	256	2,841	2,191	218	2,409	2,184	92	2,276	1,845	164	2,009
Campbelltown	609	304	913	980	626	1,606	945	302	1,247	823	373	1,196	1,033	197	1,230
Liverpool	1,035	464	1,499	1,169	667	1,836	1,020	837	1,857	766	1,356	2,122	744	1,244	1,988
South West	3,810	930	4,740	4,734	1,549	6,283	4,156	1,357	5,513	3,773	1,821	5,594	3,622	1,605	5,227
Proportion of Dwelling Completions															
Camden	93.0%	7.0%	100.0%	91.0%	9.0%	100.0%	91.0%	9.0%	100.0%	95.7%	4.3%	100.0%	91.8%	8.2%	100.0%
Campbelltown	66.7%	33.3%	100.0%	61.0%	39.0%	100.0%	75.8%	24.2%	100.0%	63.0%	37.0%	100.0%	84.0%	16.0%	100.0%
Liverpool	69.0%	31.0%	100.0%	63.7%	36.3%	100.0%	54.9%	45.1%	100.0%	34.0%	66.0%	100.0%	37.4%	62.6%	100.0%
South West	80.4%	19.6%	100.0%	75.3%	24.7%	100.0%	75.4%	24.6%	100.0%	67.4%	32.6%	100.0%	69.3%	30.7%	100.0%

Notes:

"Detached" does not refer to the dwelling type (i.e. it does not refer to a freestanding dwelling). The term "detached" is used to denote the net number of dwellings. If a development results in one net dwelling completion (e.g. a two-unit development that demolishes one house), the net dwelling completion is categorised as "detached".

"Multi-unit" refers to a net dwelling completion that is more than one. If a development results in two or more net dwellings (e.g. a three-unit development that demolishes one house), the net dwelling completion is categorised as "multi-unit".

Source: DPE (2021b)

6.1.3 Calculating Existing Supply

The following steps are taken to approximate the existing number of dwellings (at 2020) in the South West Region:

1. Adopt the 2016 Census dwelling counts (total private dwellings) as a starting point.
2. Sum dwelling completions for each LGA from September 2016 to December 2016 (months prior to September 2016 are not included given the 2016 Census was completed on 9 August 2016).
3. Sum the 2016 Census dwelling counts and DPE dwelling completions from September 2016 onwards to arrive at existing dwelling supply for Q4 2020.

Table 6.3 shows the process in estimating the total number of existing dwellings in South West as at Q4 2020.

Table 6.3: Existing Private Dwelling Supply (Q4 2020), South West Region

Area	Census 2016 Dwellings (a)	DPE Dwelling Completions (b)					Existing Supply (a+b)
		2016 ¹	2017	2018	2019	2020	
Camden	26,197	1,048	2,841	2,409	2,276	2,009	36,780
Campbelltown	55,326	422	1,606	1,247	1,196	1,230	61,027
Liverpool	65,931	755	1,836	1,857	2,122	1,988	74,489
South West	147,454	2,225	6,283	5,513	5,594	5,227	172,296

Notes: 1 - Dwelling completions from September 2016-December 2016, 2 - Data is current to Q4 2020

Source: ABS/ Atlas/ DPE (2021b)

As calculated in Table 6.3, an existing supply of **~172,000** dwellings are identified in the South West Region. This will be an important starting point to assess the potential of South West Region to meet future housing demand.

6.2 Planned Supply

There is a significant amount of housing that is being planned for in the South West Region. The majority of new housing to be delivered over the coming decades is well-known and planned in three main Growth Areas - Western Sydney Aerotropolis, South West Growth Area (SWGA) and Greater Macarthur Growth Area (GMGA). That said, there are also other precincts which are set to deliver a significant quantum of new housing (e.g. the Liverpool CBD).

This section identifies the various precincts which could deliver housing in the South West Region over the coming decades. This has involved investigating all known areas and regions where future housing is being planned, including Growth Areas, Planned Precincts and Investigation Areas.

6.2.1 Areas Investigated

A review of planned housing supply across the South West Region has identified approximately 34 individual precincts. These individual precincts are mostly located within the SWGA, GMGA and Western Sydney Aerotropolis.

South West Growth Area

The SWGA is one of the largest greenfield release areas. The SWGA comprises 14 individual precincts and stretches across most of Camden LGA with some precincts falling within the Liverpool and Campbelltown LGAs. Initial planning identified a total planning (theoretical) capacity of around **108,000 dwellings** across the SWGA upon buildout.

Precinct release across the SWGA has been staged. Oran Park and Turner Road were first rezoned and released in 2007 with strong take-up and development across both precincts. This has largely been attributed to both precincts being held in single or majority ownership. Edmondson Park was rezoned and released in 2008 and has enjoyed similar success given the precinct was held in majority ownership.

Numerous other precincts (Catherine Field, East Leppington, Austral and Leppington North) were rezoned over the course of 2013-2014. Development in these precincts has been more tempered, particularly in Austral and Leppington North where small landholdings and fragmented land ownership patterns have presented difficulties for development.

More recently, the Lowes Creek Maryland and South Creek West precincts have been released for planning, though rezoning has yet to occur. Release of the precincts was initiated by landowners under Precinct Acceleration Protocol (PAP) process.

Table 6.4: Summary of Planned Supply, South West Growth Area

The map displays the South West Growth Area, which is a collection of precincts within the Camden, Campbelltown, and Liverpool Local Government Areas (LGAs). The precincts are color-coded: dark green for rezoned areas, light green for released areas, and grey for areas not released. The map includes labels for various precincts such as North Creek, South Creek, Lowes Creek, and others. It also shows the boundaries of the LGAs and the M5 motorway. A scale bar and a north arrow are located in the bottom left corner.

South West Growth Area

Location (LGA)	Camden, Campbelltown, Liverpool
Status	8 precincts rezoned; 3 precincts released; 3 precincts not released
Planned Supply	108,000 dwellings
Remaining Supply	87,298 dwellings

Source: Atlas

Western Sydney Aerotropolis

The Western Sydney Aerotropolis comprises some 11,200ha of land centred around the future Western Sydney Airport (WSA) and is planned to be one of Greater Sydney's largest economic hubs. The Aerotropolis is divided into nine precincts which will be released in two stages to align with the completion of the WSA in 2026. A series of initial precincts (Aerotropolis Core, Northern Gateway, Agribusiness) were rezoned in late-2020.

Planning for the Aerotropolis envisages the delivery of some 200,000 jobs and 60,000 new homes by 2026. Approximately 11,400 dwellings are planned for delivery in Stage 1.

Table 6.5: Summary of Planned Supply, Western Sydney Aerotropolis

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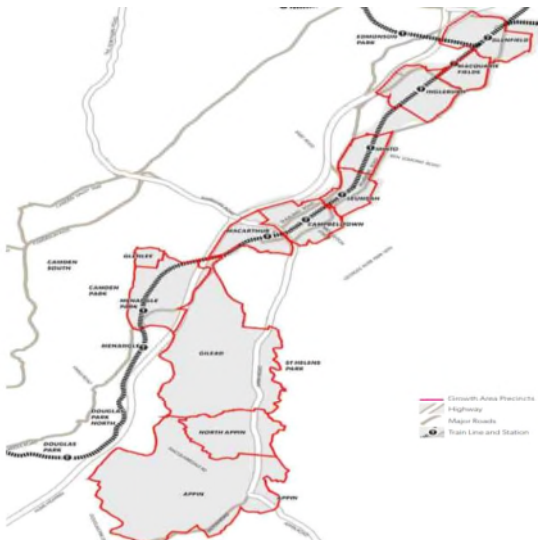
Source: Atlas

Greater Macarthur Growth Area

The Greater Macarthur Growth Area (GMGA) is a major growth area in the Campbelltown and Wollondilly LGAs and comprises a mix of greenfield release areas (Menangle Park, Gilead, North Appin, West Appin) and urban renewal areas, incorporating the Glenfield to Macarthur Urban Renewal Corridor. With a total of 11 individual greenfield and urban renewal areas, planning for the GMGA has identified the potential for some 56,000 dwellings upon build-out.

Only three precincts within the GMGA are currently being progressed. The Menangle Park (~4,000 dwellings) and Gilead (1,250 dwellings – first stage) precincts received rezoning approval in 2019 with marketing expected to commence in 2020. The Leumeah precinct is the first precinct within the Glenfield to Macarthur Urban Renewal Corridor to be progressed for rezoning, with Campbelltown City Council progressing a rezoning of the precinct in early 2020.

Table 6.6: Summary of Planned Supply, Greater Macarthur Growth Area

	Greater Macarthur Growth Area	
	Location (LGA)	Campbelltown, Wollondilly
	Status	Precinct planning
	Planned Supply	56,230 dwellings
	Remaining Supply	56,230 dwellings


Source: Atlas

Liverpool City Centre

The Liverpool City Centre is one of two metropolitan clusters within the Western City District and is a major commercial, civic, retail and residential hub within Sydney's South West. In 2018, the City Centre was rezoned B3 Commercial Core to B4 Mixed Use to facilitate high-density residential development. The Liverpool Place Strategy (2018) identified that the City Centre had the capacity to deliver an additional 18,800 dwellings based on the recently implemented planning controls.

There is a significant quantum of development activity underway in the Liverpool City Centre. As Liverpool grows in importance following the completion of the Western Sydney Airport and implementation of possible direct links (fast bus route), development activity is expected to further grow.

Table 6.7: Summary of Planned Supply, Liverpool City Centre

	Liverpool City Centre	
	Location (LGA)	Liverpool
	Status	Rezoned
	Planned Supply	18,800 dwellings
	Remaining Supply	18,800 dwellings

Source: Atlas

Summary of Findings

The following key observations are made:

- There is planned supply for some ~223,000 dwellings across the South West Region in some 34 individual precincts.
- After deducting the number of dwellings which have been delivered to date, there is a remaining capacity of about **202,100 dwellings**.
- The greatest quantum of planned supply is in the Liverpool and Camden LGAs.

Table 6.8. summarises the theoretical dwelling capacity of the South West Region by LGA.

Table 6.8: Planned Supply in Growth Areas and Planned Precincts, South West Region

LGA	Total Planned Supply	Remaining Planned Supply*
Camden	84,382	71,714
Campbelltown	39,230	36,749
Liverpool	99,271	93,646
South West Region	222,883	202,109

*after deducting dwellings already completed

Source: Various – see References

A list of each Growth Area and Planned Precinct considered is contained in Schedule 1.

6.3 Infrastructure Servicing Programme

The availability of essential services including water, sewerage and electricity is one of the key influencing factors of housing supply in the South West Region. This is given the significant number of Growth Areas in the Region which have not previously required services infrastructure given their existing uses (i.e. agricultural or rural uses).

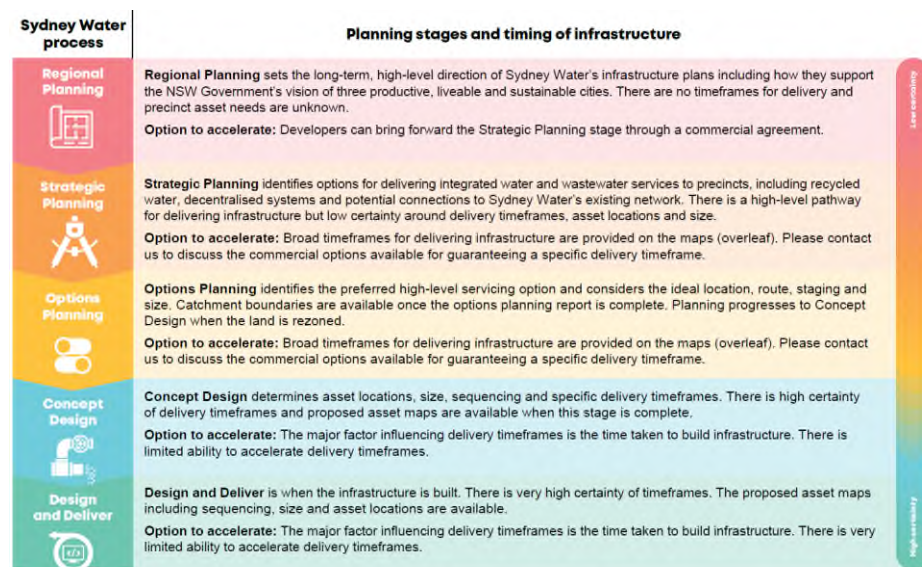
Water and Sewerage

The development and management of water and sewerage infrastructure across the South West Region is principally managed by Sydney Water. The Sydney Water Growth Servicing Plan 2020-2025 (the Servicing Plan) outlines proposed timelines for delivery of new water and sewerage infrastructure across Greater Sydney's Growth Areas.

The Servicing Plan outlines the status of water and sewerage infrastructure for each precinct across the Growth Areas through five main categories: Regional Planning, Strategic Planning, Options Planning, Concept Design and Design and Deliver. These categories reflect the certainty on infrastructure planning and delivery timeframes.

Figure 6.1 illustrates the various planning stages for water and sewerage infrastructure as defined by Sydney Water.

Figure 6.1: Water and Sewerage Planning Stages, Sydney Water



Source: Sydney Water (2020)

A review of the Servicing Plan (2020) shows that water and sewerage infrastructure is only expected to be operational in some precincts across the Western City's Growth Areas in the short-term. Austral and Leppington North are expected to be serviced by 2023 which will facilitate approximately 50% of the 15,557 dwellings planned in both precincts. The Aerotropolis's Northern Gateway and Aerotropolis Core precincts are expected to be serviced by 2022/23. Menangle Park is expected to be serviced by 2023, facilitating delivery of the 4,000 dwellings proposed.

The key precincts expected to be serviced for drinking and wastewater in the medium-term are those within the Western Sydney Aerotropolis and many of Wilton's sub-precincts.

Table 6.9 describes the status and expected delivery timeframes of drinking water and sewerage infrastructure in the South West Region's various Growth Areas.

Table 6.9: Status of Drinking and Waste Water Infrastructure, South West Region

Area	Drinking Water		Waste Water	
	Status	Delivery Timeframe	Status	Delivery Timeframe
Western Sydney Aerotropolis*				
Aerotropolis Core	Options Planning	FY2022-23	Options Planning	FY2024
South Creek	Options Planning	FY2022-23	Options Planning	FY2024
Rossmore	Strategic Planning	Unknown	Strategic Planning	Unknown
South West Growth Area				
Lowes Creek Marylands	Design and Deliver	FY2022-23	Concept Design	Unknown
South Creek West	Design and Deliver	FY2022-23	Strategic Planning/ Concept Design	Unknown
Austral	Concept Design	FY2023	Concept Design	Dec-2021
Leppington North	Concept Design	FY2023	Concept Design Design and Deliver	Dec-2019 Dec-2021-22
East Leppington	Adequate existing capacity		Adequate existing capacity	
Oran Park	Adequate existing capacity		Adequate existing capacity	
Turner Road	Adequate existing capacity		Adequate existing capacity	
Edmondson Park	Adequate existing capacity		Adequate existing capacity	
Pondicherry	Design and Deliver	Unknown	Concept Design	Unknown
Rossmore South	Strategic Planning	Unknown	Strategic Planning	Unknown
Catherine Fields (part)	Adequate existing	Adequate existing	Adequate existing capacity	Adequate existing
Catherine Fields North	Strategic Planning	Unknown	Strategic Planning	Unknown
Catherine Fields	Strategic Planning	Unknown	Strategic Planning	Unknown
Greater Macarthur Growth Area				
Menangle Park	Options Planning	FY2023	Options Planning	FY2023
Gilead	Concept Design	Unknown	Concept Design	Unknown
Glenfield to Macarthur	Strategic Planning	Unknown	Strategic Planning	Unknown

*The Northern Gateway precinct has been excluded given it falls within the Penrith LGA
Source: Sydney Water (2019)

Maps illustrating the status and timing of water infrastructure across the Growth Areas are included at Appendix 1.

Electricity

The primary supplier of electricity network service provider in the South West Region is Endeavour Energy. Timing of upgrades to the existing network is aligned with the Sydney Water servicing plan. Upcoming upgrades to the network required to meet future residential and employment demand are outlined in the Endeavour Energy Growth Servicing Plan 2019-2024 and Distribution Annual Planning Report 2019.

Key projects required to facilitate residential growth in the South West Region include:

- The Menangle Park zone substation to support residential and employment growth in Menangle Park. Expected to be completed by 2021/2022. This will support the 4,000 dwellings planned.
- The South Leppington zone substation will be required to support residential development in the Leppington Town Centre/ Leppington precinct. Expected to be completed by 2021/2022. This is needed for the >9,000 dwellings planned.
- The Southern Macarthur 66kV Network to support broader electricity supply in the Macarthur and South West Region; expected to be progressively completed over 2023-2025. This will be needed to support the additional dwelling capacity (circa 17,000 dwellings) to be unlocked in the Glenfield to Macarthur Corridor.

Zone substations may require upgrading depending on development take-up (which is largely determined by water servicing timeframes) in Austral, Bringelly, North Catherine Fields, Rossmore, North Rossmore and Kemps Creek.

Maps of existing and proposed substations across the South West Region are appended at Appendix 2.

6.4 Short-Term Dwelling Forecasts

The NSW DPE carries out 5-year housing supply forecasts at the suburb and local government area level for the Greater Sydney region. The forecast is based on several factors:

- The current development pipeline (including DAs under assessment, approved or under construction);
- Analysis of likely future development under current zoning and planning controls;
- Information from state and local government and industry; and,
- Factors reflecting the outlook for housing demand and market conditions.

The 2020 forecast (released in December 2020) has taken into consideration the impacts of the COVID-19 outbreak and includes three scenarios that respond to the uncertainty resulting from the pandemic. These include:

- **Central Base Case:** reflects the market conditions and demand factors at the time of the forecast in October 2020.
- **High Growth:** reflects a faster recovery and improving conditions that are more favourable to housing development.
- **Low Growth:** reflects a slower recovery and more subdued conditions that are less favourable to housing development

These forecasts are summarised in **Table 6.10**.

Table 6.10: DPE Supply Forecasts (2020-2025), South West Region

LGA	High Growth Scenario	Central Base Case Scenario	Low Growth Scenario
Supply Forecasts (Total)			
Camden	7,300	6,900	6,850
Campbelltown	4,800	4,550	4,400
Liverpool	8,000	7,200	6,200
South West Region	20,150	18,650	17,450
Supply Forecasts (Avg. Annual)			
Camden	1,460	1,380	1,370
Campbelltown	960	910	880
Liverpool	1,600	1,440	1,240
South West Region	4,030	3,730	3,490

Source: DPE (2020)

Under the Central Base Case Scenario, the South West Region is expected to deliver some 18,700 dwellings over the five years to 2025, averaging around 3,700 dwellings per annum.

Under each of the three scenarios, forecast dwelling growth is **lower** than that historically observed over the 2016-2020 period (4,700 dwellings to 6,300 dwellings per annum). This has implications for the capacity of the South West Region to meet dwelling projections in the coming decades to 2041.

7. Supply Capacity Assessment

7.1 Remaining Dwelling Need

Based on future population and household growth in the South West Region, it is estimated that under DPE's Low Scenario population projections that there will be a need for approximately ~341,000 dwellings by 2041. The assessment of supply estimated that as at Q4 2020 there were about ~172,000 private dwellings across the South West Region.

By deducting the number of existing dwellings in the South West Region against the implied dwelling requirement for 2041, a Remaining Dwelling Need of ~169,000 dwellings is calculated.

Figure 7.1 illustrates the how the remaining dwelling need to 2041 was calculated for the South West Region.

Figure 7.1: Remaining Dwelling Need, South West Region



Source: Atlas

7.2 Dwelling Supply Forecasts

7.2.1 Theoretical v Market Capacity

A common misconception is that if land is zoned for urban uses it will be developed. In practice, this can be far from reality as the development potential of land is collectively influenced by environmental, market or economic constraints that can together impede development. This is directly observable in certain precincts in the SWGA (e.g. Leppington, Austral) where despite being zoned for urban development, development as planned has not occurred.

The capacity of urban land for new development is two-fold: Planning Capacity and Market Capacity.

- **Planning (Theoretical) Capacity** refers to the physical ability of land to be developed, taking into account permissibility under the planning framework, environmental and infrastructure constraints and other factors.
- **Market Capacity** refers to issues of commercial viability whether pricing levels, market acceptance/ attitudes, development costs, etc. make development a commercial proposition, i.e. if development is financially feasible.

It is Market Capacity which determines the quantum and speed of dwelling production and take-up.

Chapter 6 concluded that there is **Planning (Theoretical) Capacity** for some ~202,000 dwellings to be delivered across the South West Region. This is sufficient to meet the Remaining Dwelling Need of ~169,000 additional dwellings by 2041. However, the realisable amount of this ~202,000 dwellings (i.e. the Market Capacity) is **likely to be lower** once market and economic factors are considered.

7.2.2 Supply Scenarios

To assess the likelihood of dwelling supply in the South West Region being able to meet projected housing demand, forecasts of future dwelling supply over the coming decades to 2041 is undertaken. These supply scenarios are carried out at the South West Region level.

Similar to DPE's Short Term Dwelling Forecasts (discussed in section 6.4), three forecast scenarios have been developed. These scenarios provide a range of supply outcomes for the South West Region and therefore reflect the broad range of demand and supply-side factors which influence development activity.

The three supply scenarios considered include:

- **Scenario 1: Historical Growth**

This scenario considers the quantum of new housing which could be delivered across the South West Region if future growth is on par with the past. Over the 2011-2016, the South West Region delivered a net additional supply of circa 3,500 dwellings per annum. Dwelling production quickened over the 2016-2020 period on the back of Greater Sydney's 2013-2018 housing boom, averaging at 5,500 dwellings per annum. Over the 2006-2020 period, average dwelling supply has been approximately ~3,550 dwellings per annum.

Accordingly, Scenario 1 assumes the South West Region will deliver 3,550 net additional dwellings per annum over 2021-2041, equating to a total of 74,550 new dwellings.

- **Scenario 2: Peak Growth**

Scenario 2 assumes a significant greater level of sustained dwelling supply than observed historically.

A significant uptick in new dwelling supply across the South West Region was observed over the 2016-2020 period. In 2017, new supply peaked at some ~6,300 dwellings before falling to 5,500-5,600 dwellings per annum in 2018 and 2019.

Scenario 2 assumes the South West Region could maintain peak supply of ~6,300 dwellings per annum over 2021-2041, delivering a total of 132,300 new dwellings.

- **Scenario 3: Low Growth**

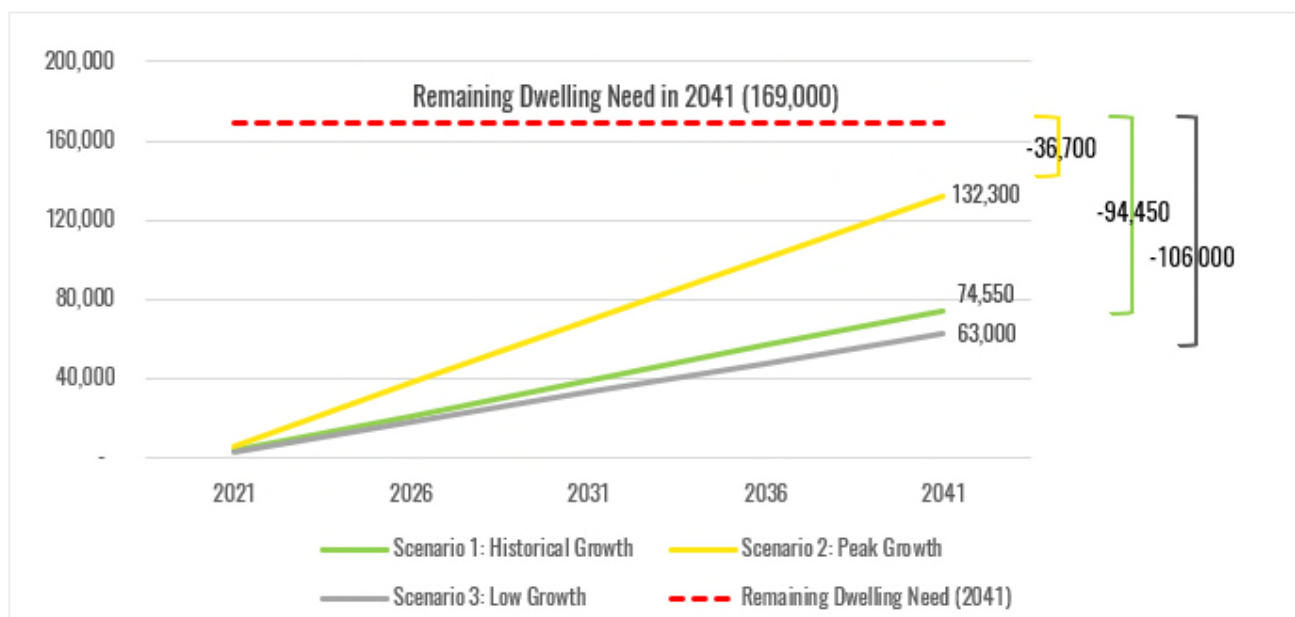
Scenario 3 assumes a lower growth scenario with dwelling supply falling below that historically observed.

Over the 2006-2016 period, the South West Region delivered around 2,500 dwellings per annum. The Low Growth Scenario included in DPE's Short Term Dwelling Forecasts suggests the South West Region would deliver some 3,490 dwellings per annum over the 2020-2025 period.

Scenario 3 assumes that just 3,000 dwellings per annum will be delivered across the South West over 2021-2041, delivering some 63,000 new dwellings.

Figure 7.2 illustrates the net additional supply that could be delivered across the South West Region over the 2021-2041 period under the three dwelling supply scenarios.

Figure 7.2: Dwelling Supply Scenarios (2021-2041), South West Region



Source: Atlas

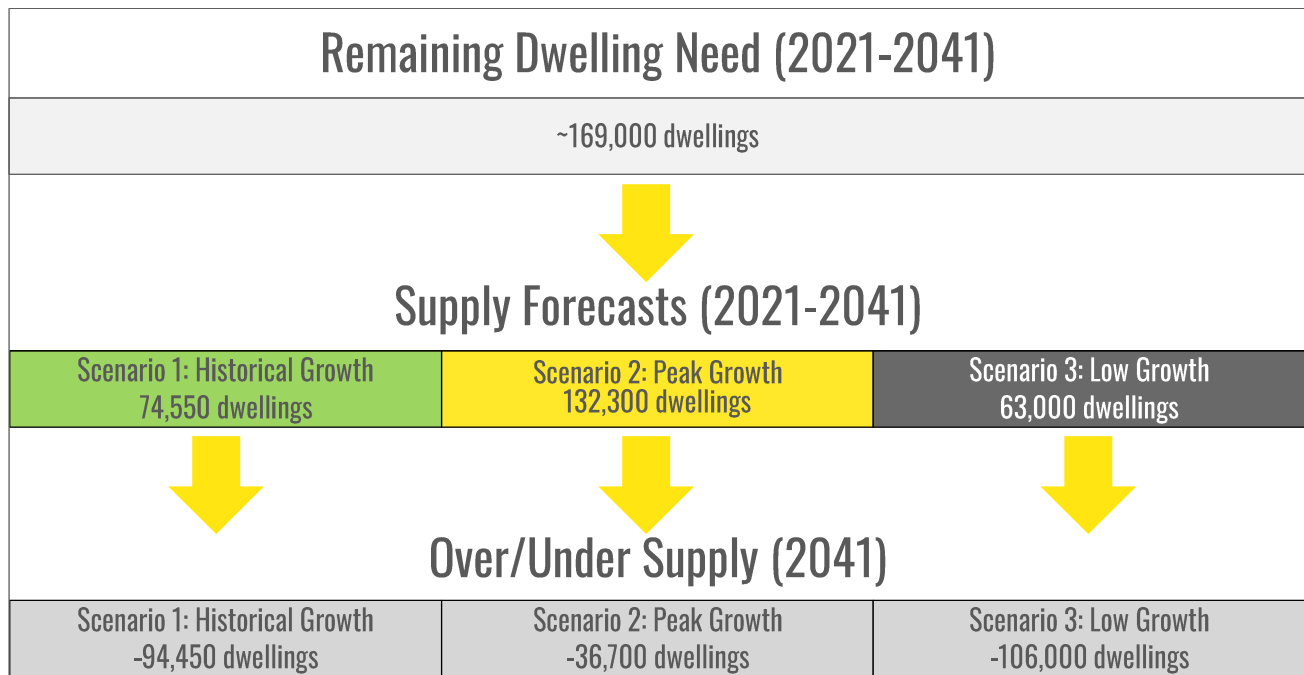
7.3 Housing Demand and Supply Forecasts

After deducting the number of existing dwellings in the South West Region (to Q4 2020) from the implied dwelling requirement for 2041, a Remaining Dwelling Need of ~169,000 dwellings results. To meet Remaining Dwelling Need, some ~8,100 additional dwellings are needed per annum (on average) over the two decades to 2041.

Each year dwelling completions fall short of this annual need; unmet demand grows and exacerbates the housing shortfall.

Supply forecasts carried out indicate that between 3,000 dwellings (Low Growth Scenario) and 6,300 dwellings (Peak Growth Scenario) per annum could be delivered across the South West Region over the 2021-2041. Accordingly, a shortfall in dwelling supply is anticipated to occur. This is depicted in **Figure 7.3**.

Figure 7.3: Housing Demand and Supply Forecasts, South West Region



Source: Atlas

The factors that influence housing supply capacity and housing demand were examined in Chapters 4 to 6. Dwelling completions across South West Region peaked in 2017 (~6,600 dwellings) commensurate with a peak in Sydney's housing market. Completions fell over 2018-2020 as market conditions softened.

Despite the economic uncertainty resulting from the COVID-19-induced recession in 2020 and subsequent lockdowns over the course 2021, Greater Sydney's residential market is beginning to return to the peaks of activity witnessed in 2017. Even still, dwelling completions will take time before they return to peak levels of 2017. Development activity is 'lumpy' in nature and will take time to re-mobilise.

Even under the Peak Growth Scenario (~6,300 dwellings per annum sustained to 2041), dwelling completions would be insufficient to meet the Remaining Dwellings Need of 169,000. A housing shortfall (36,700 dwellings) would still result.

There remains a significant amount of planned supply which is not expected to be delivered prior to 2041. If **all** of this planned supply was brought forward and delivered in the period to 2041, there would be sufficient capacity to meet projected demand. Owing to a variety of constraints (e.g. land ownership, environmental, development feasibility), this is considered unlikely.

The next Chapter considers the role Precinct 5 could play in addressing housing demand.

8. Need for the Proposal

8.1 Role of Precinct 5

Supply forecasts identified a major shortfall in the amount of new housing required to meet projected housing demand across the South West Region to 2041. Even though there may be sufficient *theoretical dwelling capacity*, it is unlikely all land will be developed.

Landowner objectives, motivations and personal circumstances often misalign with development requirements and in precincts where ownership is highly fragmented, development take-up is often less than the theoretical capacity for dwellings. Accordingly, Precinct 5 is of critical importance to mitigate the forecast shortfall in housing supply.

Beyond the important issue of housing supply, the location of Precinct 5 proximate the Western Sydney Aerotropolis is of strategic importance. Ensuring housing supply proximate one of Greater Sydney's largest planned employment precincts is delivered in timely and orderly fashion will be critical to the success of the Aerotropolis.

8.2 Housing Mix and Yield

Market investigations have identified strong demand for dwellings in the various estates across the SWGA. Affordability issues in Greater Sydney's housing market in conjunction with shifting lifestyle preferences is seeing a continuing trend towards owner occupier purchasers favouring smaller, denser product.

Detached housing typologies remain the preferred product of choice for most prospective purchasers across the SWGA, though the popularity and acceptance of medium-density and high-density typologies is growing. This is directly observable in neighbouring precincts such as Oran Park and Edmondson Park.

8.2.1 Target Densities

'Target density' controls are generally used in neighbouring precincts within the SWGA. Immediately north of the Precinct 5 in the Lowes Creek Maryland (LCM) precinct, the following density targets are applied in residential and mixed use zones:

- Low Density Band 1 - 10/ha to 20dw/ha.
- Low Density Band 2 - 20dw/ha to 25dw/ha.
- Medium Density Band 1 - 25dw/ha to 35dw/ha.
- Medium Density Band 2 - 35dw/ha to 60dw/ha.
- Mixed Use - 35dw/ha to 60dw/ha.

Indicative lot sizes envisaged by density provisions in the Growth Centres Development Code are classified below:

- Townhouses, semi-detached and detached small dwellings (up to 350sqm).
- Detached medium dwellings (350sqm-450sqm).
- Detached large dwellings (450sqm).

Development at higher densities than the target density controls is permitted however the maximum number of dwellings is controlled by stipulated minimum lot sizes in each precinct. Higher density development is not anticipated to occur unless access to transport, employment and/or other services are available.

8.2.2 Market Densities

Market investigations suggests that the trend towards smaller lot sizes and denser housing product which has been observed over the past decade is continuing amidst an enduring housing affordability issue. In particular, the market appears to be willing to compromise on lot size if a detached product can be secured.

Given this ongoing structural shift in demand, **Table 8.1** and **Table 8.2** outline potential market densities for Precinct 5. Detached product is still expected to be the dominant typology, a function of general market expectations.

Table 8.1 outlines the potential mix of housing typologies and their respective sizes which could be considered at Cobbitty.

Table 8.1: Potential Product Typology and Mix, Precinct 5

Dwelling Type	Mix (%)		Density (Dw/ha)	
	Low	High	Low	High
Detached housing – Large	3%	5%	10/ha	
Detached housing – Standard	37%	50%	10/ha	20/ha
Detached housing – Small	32%	39%	20/ha	25/ha
Medium-Density (Attached)	14%	16%	25/ha	35/ha
High-Density (Apartments)	2%	5%	35/ha	60/ha

Source: Atlas

Based on these development typologies and mixes and following extensive consultation with Council, a revised final indicative layout plan (the ILP) has been prepared. The ILP proposes five residential density bands to provide certainty on the quantum of dwellings which can be delivered throughout the precinct, though also enable flexibility in the distribution of different dwelling typologies. The density bands and their potential dwelling yields are summarised in **Table 8.2**.

Table 8.2: Residential Densities to Build-Out, Indicative Layout Plan

Dwelling Type	Density (Dw/ha)		Yield	% of Yield
	Min	Max		
Environmental Living	10	10	8	0.3%
Low-Density Band 1	10	20	834	32.1%
Low-Density Band 2	20	25	1,177	45.3%
Medium-Density Band 1	25	35	477	18.4%
Village Centre (2-3 storey apartments)	35	60	100	3.9%
Total			2,596	100%

Source: BHL Group

8.2.3 Population Estimates

On an overall basis, household occupancy rates in South West Region ranged from 3.0 to 3.3 persons per dwelling as at 2016. In the South West Catchment Area, a household occupancy rate of 3.2 persons per dwelling was assessed.

DPE projections for the South West Region suggest a declining household occupancy size over the coming decades to 2041 will be observed, aligning with a growing population of older, single residents. This is considered appropriate for the broader South West Region; however it is not expected to be reflective of greenfield areas such as Precinct 5 which are expected to continue to attract younger families with children.

Based on previous experience and industry standards, the following household occupancy rates are considered appropriate:

- 'Environmental Living – 3.6 persons
- Low Density Band 1 – 3.4 persons
- Low Density Band 1 – 3.2 persons
- Medium Density Band 1 – 2.8 persons
- Village centre (units) – 2.2 persons

Table 8.3 applies the adopted household occupancy rates to the proposed dwelling yields to estimate resident population.

Table 8.3: Dwellings and Population, Precinct 5

Dwelling Type	Dwellings	Household Occupancy	Population
Environmental Living	8	3.6	29
Low-Density Band 1	834	3.4	2,836
Low-Density Band 2	1,177	3.2	3,766
Medium-Density Band 1	477	2.8	1,336
Village Centre (units)	100	2.2	220
Total	2,596	3.1	8,187

Source: Atlas

Application of the adopted household occupancy rates results in a resident population of 8,187 residents, equating to an average of 3.1 persons per dwelling. This is broadly consistent with the occupancy rates of 3.2 persons per dwelling observed across the South West Catchment Area (in 2016).

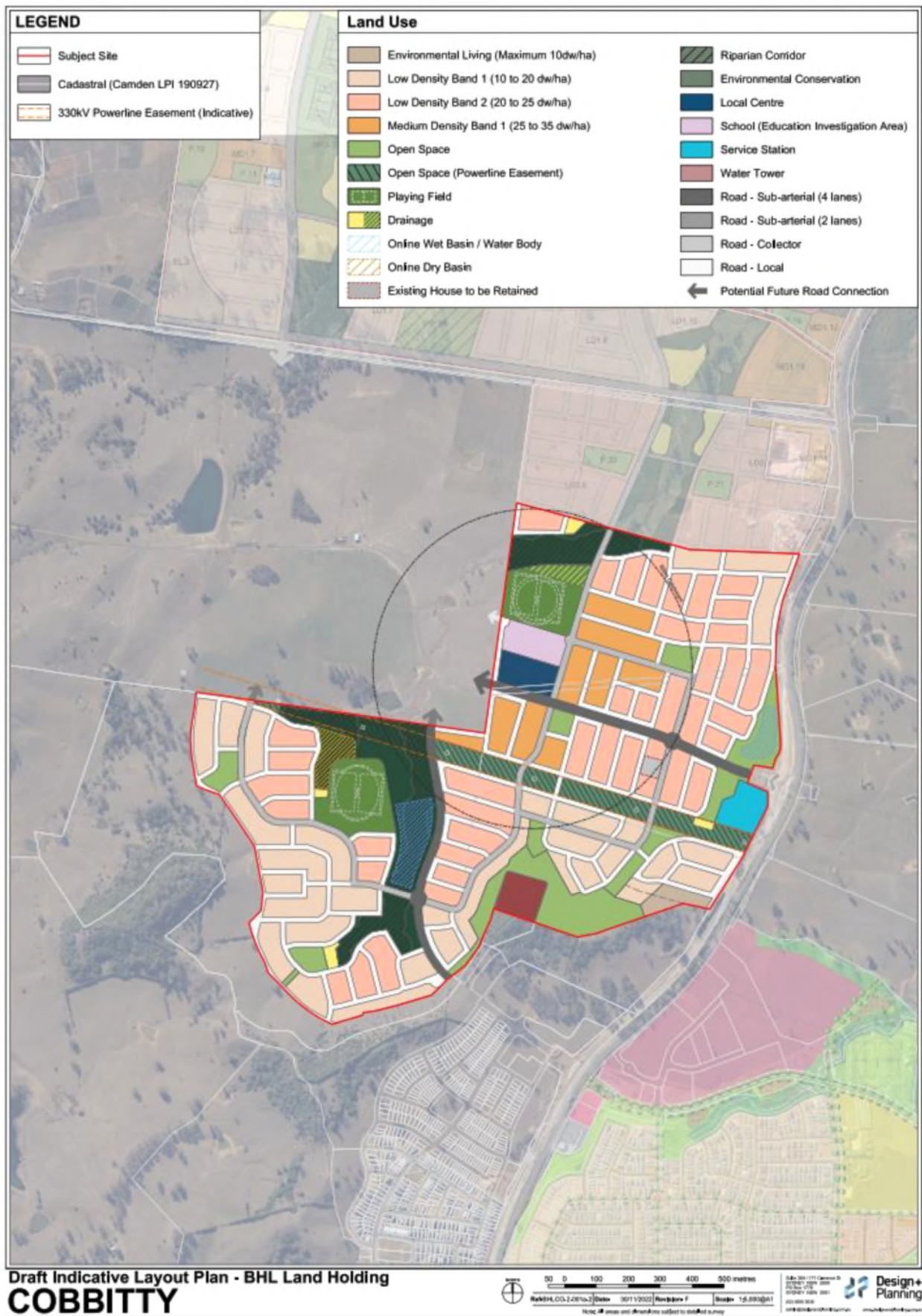
8.3 Final Indicative Layout Plan

The revised final ILP for Precinct 5 (BHL'S Lands) envisages a mix of residential typologies, a local centre to support the local resident population, a riparian corridor and network of green spaces and a

The final draft ILP envisages the following yields and land uses:

- 75.7ha of residential land totalling 2,596 dwellings, including:
 - Environmental Living – 1.2ha (comprising 8 dwellings).
 - Low Density Band 1 – 30.9ha (comprising 834 dwellings).
 - Low Density Band 1 – 33.6ha (comprising 1,177 dwellings).
 - Medium Density Band 1 – 10.0ha (comprising 477 dwellings)
- A 1.8ha local centre (including 100 dwellings), 1.8ha of land for service station uses and 1.9ha of land dedicated for education uses.
- Around 46.1ha of open space and riparian land.

Figure 8.1: Revised Final Indicative Layout Plan (December 2022), -Precinct 5 (BHL Lands)



Source: Urbis

The economic impacts which could result from the development of the land uses proposed in the ILP are considered next

PART C: ECONOMIC IMPACTS



9. Economic Impact Assessment

Research and economic modelling carried out in Part C of this Study was undertaken in Q4 2022.

9.1 Overview

This Chapter examines the economic activity and impacts that could be facilitated through progressing development of Precinct 5 during construction and ongoing upon completion.

The economic impacts are assessed at the Camden LGA level. An Input-Output model (including the development of specific regional Input-Output transaction tables) was developed to reflect the economic structure of the Camden LGA (see Schedule 2 for further detail).

Input-Output modelling describes economic activity through the examination of four types of impacts described in **Table 9.1**.

Table 9.1: Economic Indicators

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project either directly or indirectly.
Employment	Employment positions generated by the Project (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas

Input-Output modelling estimates show the impacts of direct spending in a particular industry as well as from Production-induced impacts (Type I) or Consumption-induced impacts (Type II).

- **Production-induced impacts (Type I)** show the effects of industrial support from additional activities undertaken by supply chain industries increasing their production in response to direct spending.
- **Consumption-induced impacts (Type II)** estimate the re-circulation of labour income earned as a result of the initial spending through other industry impacts (or impacts from increased household consumption).

The estimates of economic impacts consider production and consumption-induced flow-on impacts. Type II impacts are commonly considered to overstate economic activity and therefore the types of flow-on impacts are reported separately.

9.2 Modelling Approach

This Chapter seeks to understand the economic impacts of developing Precinct 5 prior to its anticipated development post-2030. Accordingly, economic modelling is based on a 10-year period (i.e. 2021-2031). It is not expected that Precinct 5 will be fully developed, or 'built out', within this period.

9.2.1 Expected Take-Up over Modelling Period

A high-level forecast of expected take-up of residential and non-residential uses (as envisaged in the ILP's Preferred Scenario) within the 10-year modelling period has been carried out for the purposes of economic modelling.

This forecast has been based on historic take-up rates observed elsewhere in the SWGA, current market conditions and future economic outlook.

This high-level forecast suggests that by 2031 the following land uses will have been delivered:

- The entirety of the residential dwellings (2,596 dwellings)
- Almost 14,500sqm of gross floor area within the future neighbourhood/village centre;
- The entirety of the land dedicated for service station uses.
- A future educational establishment (anticipated to be a primary school).

Table 9.2 summarises the estimated take-up of different land uses within Precinct 5 over the 2021-2031 period.

Table 9.2: Estimated Take-up (2021-2031), Cobbitty Precinct

Land Use	Yield (GFA* /dwellings)	% Delivered
Residential:	2,596	100%
Local Centre	14,400sqm	80%
Service Station Uses	5,400sqm	100%
Education	15,200sqm	100%

*Gross floor area has been estimated for the purposes of economic modelling.
Source: Atlas

9.2.2 Base and Proposal Case

The economic impacts of developing Precinct 5 within the 10-year modelling period (i.e. the Proposal Case) is compared against the expected use of the Precinct up until 2031 without the Proposal (i.e. the Base Case):

- **Proposal Case:** Development of the draft ILP with the following yields delivered by 2031:
 - 2,596 new dwellings accommodating 8,352 residents.
 - A neighbourhood/village centre comprising 14,400sqm of GFA.
 - Service station uses comprising 5,400sqm GFA.
 - A future educational establishment (anticipated to be a primary school).
- **Base Case:** Precinct 5 remains as undeveloped rural residential landholdings until the year 2031.

The economic impacts of the Proposal Case reflect the impacts which would be realised within the decade 2031 and if Precinct 5 was developed earlier than currently envisaged.

9.2.3 Drivers of Economic Activity

To understand the economic impacts likely to result from the Proposal compared to the Base Case, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following construction completion and operations commencement and stabilisation.

- **Construction Phase:** Construction activity will draw resources from and thereby generate economic activity in the Camden LGA as well as from outside the LGA. Assumptions are made on the proportion sourced from within and from outside the LGA. Construction activity is assessed for the Proposal Case only.
- **Operations Phase:** The Proposal is expected to generate ongoing economic/ operational activity through:
 - Direct turnover generated by the 14,400sqm town centre.
 - Additional household expenditure within the Camden LGA generated through delivery of new housing.

Refer to Schedule 2 for a description of the drivers and assumptions that underpin the assessed economic impacts.

9.3 Economic Activity and Impacts

Economic impacts arising in the Construction phase are estimated separately to the Operational phase. Construction impacts are expected to be short-term in nature and will conclude when development activity is completed.

9.3.1 Construction Phase

The Proposal Case is projected to generate significant economic impacts for Camden LGA through construction activity. Cumulative total impacts to 2031 are estimated at:

- **\$2.4 billion** in output (\$1.5 billion directly).
- **\$878.4 million** contribution to GRP (\$455.9 million direct contribution).
- **\$503.0 million** in wages and salaries paid to local workers (\$293.3 million directly).
- **5,476 FTE jobs** (2,784 direct FTE).

Table 9.3 summarises the estimated economic impacts during the construction phase in the Proposal Case.

Table 9.3: Construction Impacts in Camden LGA (Proposal Case)

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$1,501.5	\$455.9	\$293.3	2,784
Production Induced	\$537.1	\$228.9	\$134.5	1,587
Consumption Induced	\$325.1	\$193.6	\$75.2	1,104
Total Impact	\$2,363.8	\$878.4	\$503.0	5,476

Note: Totals may not sum due to rounding.
Source: Atlas

9.3.2 Operational Phase

Following the completion of construction, the Proposal Case is estimated to support the following annual economic activity through direct and indirect (flow-on) impacts associated with operations on the Site¹ by 2031:

- **\$286.5 million** in output (including \$172.5 million in direct activity).
- **\$140.4 million** contribution to GRP (including \$81.9 million in direct activity).
- **\$76.5 million** in incomes and salaries paid to households (including \$49.4 million in direct income).
- **947 FTE jobs** (including 592 FTE directly related to activity on the Site).

Table 9.4 summarises the estimated economic impacts during the operational phase in the Proposal Case.

Table 9.4: Operational Impacts in Camden LGA, Proposal Case (2031)

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$172.5	\$81.9	\$49.4	592
Production Induced	\$62.7	\$28.0	\$15.2	181
Consumption Induced	\$51.4	\$30.6	\$11.9	175
Total Impact	\$286.5	\$140.4	\$76.5	947

Note: Totals may not sum due to rounding.
Source: Atlas

¹ Including impacts from dispersed employment (i.e. residents working from home).

9.3.3 Household Expenditure

Compared to the Base Case, additional local retail expenditure associated with the Proposal's 2,596 new dwellings (by 2031) are estimated to support the following economic activity through direct and flow-on impacts (per annum):

- **\$230.4 million** in output (including \$151.0 million in direct activity).
- **\$131.7 million** in contribution to GRP (including \$88.4 million in direct activity).
- **\$68.0 million** in incomes and salaries paid to households (including \$48.7 million in direct activity).
- **1,079 FTE jobs** (including 818 FTE jobs directly).

Table 9.5 summarises the economic impacts associated with household retail spend in the Proposal Case. It should be noted that not all households residing in the development would be net new to the Camden LGA, and that a degree of double counting exists between the expenditure of residents and the operational impacts of the development (e.g. retail). Therefore, the household expenditure impacts should not be summed with the operational impact estimates considered earlier.

Table 9.5: Household Retail Impacts in Camden LGA, Proposal Case (2031)

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$151.0	\$88.4	\$48.7	818
Production Induced	\$33.7	\$16.1	\$8.7	106
Consumption Induced	\$45.7	\$27.2	\$10.6	155
Total Impact	\$230.4	\$131.7	\$68.0	1,079

Note: Totals may not sum due to rounding.
Source: Atlas

9.4 Other Economic Benefits

In addition to the significant economic activity supported by the Proposal Case, development of Precinct 5 within the next decade (as opposed to post-2031) would produce several other important economic and social impacts and benefits compared to the Base Case. These include:

- **Supporting Housing Affordability:** The Proposal will provide some 2,596 new dwellings over the next 10 years at a range of price points. This increase in housing supply will support housing affordability for residents seeking accommodation in the South West Region, including the availability of rental accommodation.
- **Providing Significant Local Infrastructure:** The Proposal includes an allowance for ~40ha of public open space (sporting fields, local parks) in addition to civil/road and educational infrastructure to support the growth of the local community. This is intended to be provided at no-cost to government in line with the principles of the Precinct Acceleration Protocol (PAP) process.
- **Increase in Rates and Taxation Revenues:** Along with greatly increased economic activity, the Proposal will support significant taxation revenues to all levels of government including Council rates, payroll tax, stamp duty, and income tax.
- **Create a Buffer of Housing Supply:** As Precinct 5 is held in majority ownership, the issues of land fragmentation observed elsewhere across the SWGA are mitigated. In other rezoned precincts observed across the SWGA where land ownership is heavily fragmented, the timely supply of housing is not a given.

The Proposal has the capacity to provide a buffer of housing supply which mitigates the timing risk observed elsewhere across the SWGA.

9.5 Summary of Findings

The development of Precinct 5 prior to its anticipated development post-2030 is shown to deliver positive economic impacts to the Camden LGA and the broader South West Region. Given it is held in majority ownership, its development could quickly become 'shovel-ready' and support the shortfall in housing supply expected over the medium to long-term whilst also alleviating pressure on housing affordability.

Compared with the Base Case, by bringing forward development of the Proposal, it is estimated to result in a **net increase in economic activity** during the construction phase through a mix of direct and indirect (flow-on) activity, including:

- **\$2.4 billion** in output (\$1.5 billion directly).
- **\$878.4 million** contribution to GRP (\$455.9 million direct contribution).
- **\$503.0 million** in wages and salaries paid to local workers (\$293.3 million directly).
- **5,476 FTE jobs** (2,784 direct FTE).

When operational, the Proposal is estimated to result in an annual **net increase in economic activity** by 2031 with:

- **\$286.5 million** in output (including \$172.5 million in direct activity).
- **\$140.4 million** contribution to GRP (including \$81.9 million in direct activity).
- **\$76.5 million** in incomes and salaries paid to households (including \$49.4 million in direct income).
- **947 FTE jobs** (including 592 FTE directly related to activity on the Site).

Additional local retail expenditure associated with the Proposal's 2,818 new residential dwellings which could be delivered by 2031 are estimated to support economic activity through direct and flow-on impacts (per annum), including:

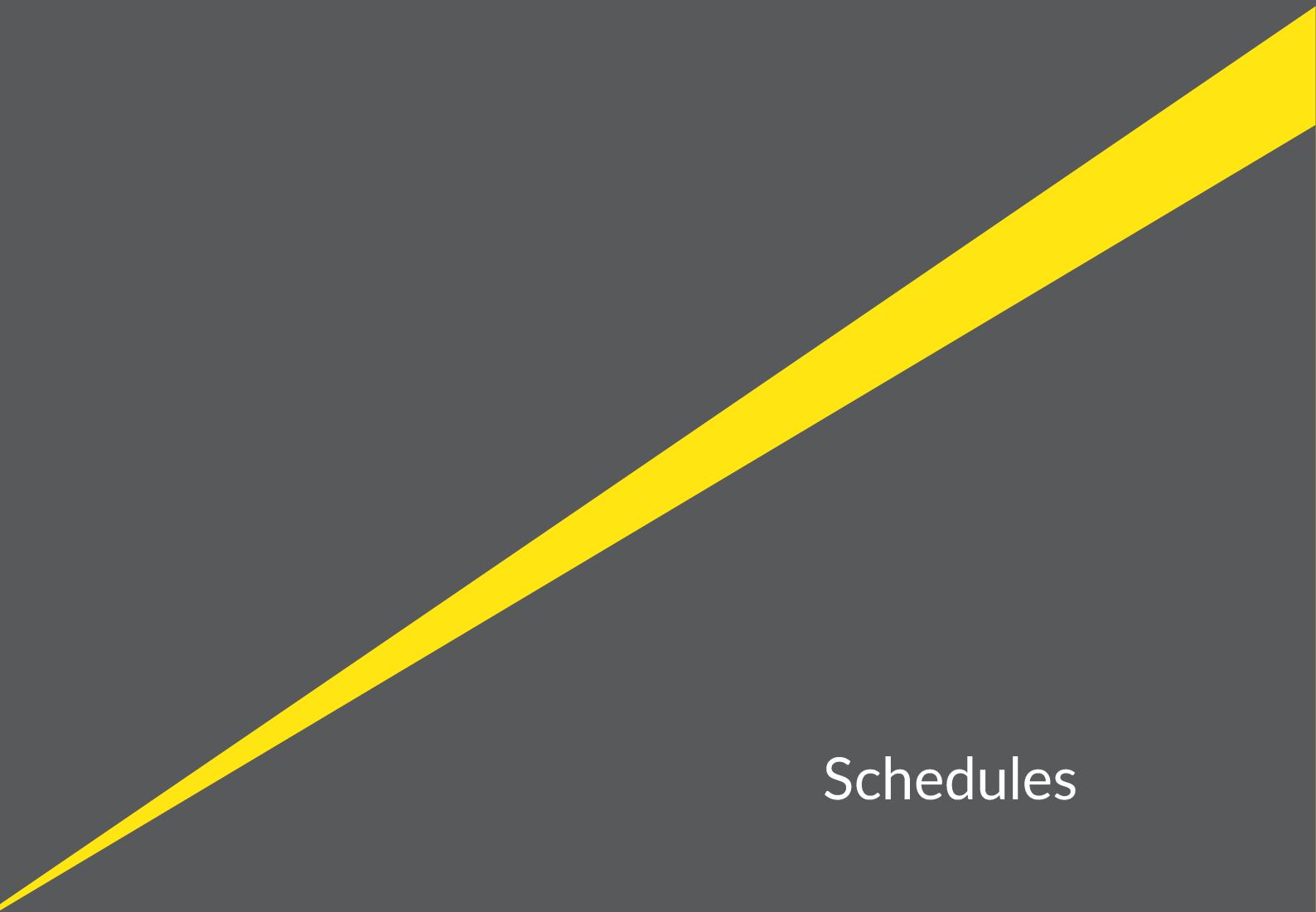
- **\$230.4 million** in output (including \$151.0 million in direct activity).
- **\$131.7 million** in contribution to GRP (including \$88.4 million in direct activity).
- **\$68.0 million** in incomes and salaries paid to households (including \$48.7 million in direct activity).
- **1,079 FTE jobs** (including 818 FTE jobs directly).

The economic impacts estimated in this chapter demonstrates the Proposal has economic merit, having the ability to contribute significantly to the Camden economy.

Development of Precinct 5 is also considered to have merit from a market perspective and its delivery will be critical for the South West Region to meet its dwelling need over the coming decade. Importantly, the Proposal intends on delivering a broad range of local infrastructure at no cost to government.

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Schedules

Planned Supply in South West Region

Table S1.1: Planned Supply, South West Region

Name	Original Planning Capacity	Current Planning Capacity
Camden LGA		
Camden Lakeside	1,200	1,200
El Caballo and Gledswood	860	860
Campbelltown LGA		
Glenfield	4,000	4,000
Macquarie Fields	340	340
Ingleburn	3,240	3,240
Minto	350	350
Leumeah	900	900
Campbelltown	3,600	3,600
Macarthur	4,700	4,700
Menangle Park	4,000	4,000
Gilead	15,100	15,100
Liverpool LGA		
Liverpool CBD	18,800	18,800
Middleton Grange	671	671
South West Growth Area		
Austral/Leppington North	17,350	15,725
Rossmore	2,500	2,500
Leppington Town Centre	9,000	9,000
Edmondson Park	6,000	2,000
Lowes Creek Maryland	6,983	6,983
Catherine Fields North	9,500	9,500
East Leppington	4,450	519
Catherine Fields	5,000	5,000
South Creek West	30,000	30,000
Pondicherry	2,500	2,500
Oran Park	7,540	1,440
Catherine Fields (Part)	3,229	2,131
Turner Road	4,020	-
Western Sydney Aerotropolis*		
North Luddenham	-	-
Kemps Creek	-	-
Badgerys Creek	-	-
South Creek	300	300
Aerotropolis Core	8,000	8,000
Dwyer Road	-	-
Rossmore	48,300	48,300

*Only includes precincts within South West LGAs
Source: Various – see references

Economic Impact Modelling Assumptions

Input-Output models are a method to describe and analyse forward and backward economic linkages between industries based on a matrix of monetary transactions. The model estimates how products sold (outputs) from one industry are purchased (inputs) in the production process by other industries.

The analysis of these industry linkages enables estimation of the overall economic impact within a catchment area due to a change in demand levels within a specific sector or sectors.

Impacts are traced through the economy via:

- Direct impacts, which are the first round of effects from direct operational expenditure on goods and services.
- Flow-on impacts, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
 - Industry Support Effects (Type I) derived from open Input-Output models. Type I impacts represent the production induced support activity as a result of additional expenditure by the industry experiencing the stimulus on goods and services, and subsequent round effects of increased purchases by suppliers in response to increased sales.
 - Household Consumption Effects (Type II) derived from closed Input-Output Models. Type II impacts represent the consumption induced activity from additional household expenditure on goods and services resulting from additional wages and salaries being paid within the catchment economy.

The economic analysis considers the following four types of impacts.

Table S2.1: Economic Activity Indicators

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project either directly or indirectly.
Employment	Employment positions generated by the Project (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas

REGIONAL MODEL DEVELOPMENT

Multipliers used in this assessment have been created using a regionalised Input-Output model derived from the 2018-19 Australian transaction table (ABS, 2021).

Estimates of gross industry production in the catchment area were developed based on the share of employment (by place of work) of the Catchment Area within the Australian economy (ABS, 2017a) using the Flegg Location Quotient and Cross Hauling Adjusted Regionalisation Method (CHARM). See Norbert (2015) and Kronenberg (2009) for further details.

MODELLING LIMITATIONS AND ASSUMPTIONS

Input-Output modelling is subject to a number of key assumptions and limitations (ABS, 2021):

- **Lack of supply-side constraints:** The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.
- **Fixed ratios for intermediate inputs and production:** Economic impact analysis using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount.
- **No allowance for purchasers' marginal responses to change:** Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Absence of budget constraints:** Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.

Despite these notable limitations, Input-Output techniques provide a solid approach for assessing the direct and flow on economic impacts of a project or policy that does not result in a significant change in the overall economic structure.

DRIVERS OF ECONOMIC IMPACT

In order to understand the economic impacts likely to result from the Proposal, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following construction completion and operations commencement.

- **Construction Phase:** Construction activity will draw resources from and thereby generate economic activity in the Camden LGA as well as from outside the LGA. Assumptions are made on the proportion sourced from within and from outside the LGA.
- **Operational Phase:** On completion of development, the Precinct is expected to generate ongoing economic/operational activity through:
 - Direct turnover generated by the 14,400sqm town centre.
 - Additional household expenditure within the Camden LGA generated through delivery of new housing.

Construction Phase

For modelling purposes, construction costs (including contingency) for the Proposal Case were broken down into their respective Australia and New Zealand Standard Industrial Classification (ANZSIC) industries.

The breakdowns were developed based on the following assumptions by Atlas regarding the most appropriate ANZSIC industries for each activity.

Table S2.2: Construction Cost Allocation (including Contingency)

Item	\$M	ANZSIC
Residential	\$1,003.6	Residential Building Construction
Town Centre	\$33.1	Non-Residential Building Construction
Service Station Uses	\$12.4	Non-Residential Building Construction
Open Space	\$481.6	Heavy and Civil Engineering Construction
Roads	\$221.9	Heavy and Civil Engineering Construction
Education	\$34.9	Non-Residential Building Construction
Site Costs	\$35.8	Construction Services
Professional Fees	\$178.8	Professional, Scientific and Technical Services
Total Estimated Development Cost	\$2,002.1	-

Note: Totals may not sum due to rounding.

Source: Atlas

Of the above capital outlay, not all activity will be undertaken within the Camden LGA economy. It was assumed:

- Approximately 75% of the direct expenditure on construction-related (i.e. Non-Residential Building Construction and Construction Services) activity would be sourced from local businesses and labour. Of this:
 - Approximately 25% of purchases on goods and services (supply chain related activity) made by construction-related businesses sourced from outside the Camden LGA would be spent within the local economy (i.e., 25% of the Type I flow on activity associated with non-local construction companies is assumed to represent additional local activity in Camden LGA).
 - Approximately 5% of wages and salaries paid to construction-related workers sourced from outside the region would be spent on local goods and services, such as food and beverages (i.e. 5% of the Type II).

Only flow-on activity of locally sourced professional, scientific and technical services activity (50%) is included, as it is not anticipated professional, scientific and technical services businesses located outside of Camden LGA would purchase goods/services locally.

Operational Phase

In order to model the economic impacts, operational employment levels for the economic activity occurring in the two scenarios were categorised into the ANZSIC industries which Atlas considered most appropriate.

Employment by industry estimates were converted to a direct output value using a multiplier based on the national transaction table (ABS, 2021). The resultant estimates of output were modelled as the direct activity associated with the Proposal Case.

Table S2.3: Operational FTE Allocation of Floorspace

Work Type	Estimated GFA (sqm)	GFA (sqm) / FTE	Estimated Jobs (FTE)	ANZSIC
Service Station Uses	5,400	150	34	Split across industrial sectors.
Town Centre	14,400	75	192	Split across population serving sectors: <ul style="list-style-type: none"> Retail Trade Accommodation and Food Services Arts and Recreation Services Other Services
Education	15,200	300	51	Primary and Secondary Education Services (including Pre-Schools and Special Schools)
Residential (dispersed employment) ¹	2,596 dwellings	-	313	Split as per the current Camden resident employment profile (ABS 2017a)
Total	93,850	-	592	-

Notes: Totals may not sum due to rounding. ¹ Calculated as 2,794 dwellings less 2% vacancy rate times an average 1.5 FTE workers per dwelling times 7.5% working from home. This is potentially a conservative estimate given the rise of working from home arrangements post COVID-19.

Household Expenditure Supported

This section outlines the household expenditure that would be associated with the new dwellings proposed as part of the Proposal Case, and potential economic activity supported.

The household expenditure activity supported should not be combined with the impacts in the section above, as some of these impacts are likely to have already been captured in the assessment (e.g. some expenditure on retail and food and beverages by households is likely to be spent at the retail and food and beverage outlets locating onsite).

This section is to understand specific economic activity supported in Camden LGA through household expenditure as its own separate analysis.

The ABS Household Expenditure Survey (ABS, 2017b) was used to identify the proportion of weekly household incomes that is spent across expenditure items in the Camden LGA. The fourth quintile of NSW residents was used to best represent the expenditure patterns of residents in the Camden LGA.

The household survey only contains household expenditure data, and individual residents must be converted to an equivalent number of households. This was achieved by applying the estimated number of dwellings (2,596 by 2031) and a vacancy rate of 2% (representative of the current rental market) resulting in 2,544 equivalent households residing within the development.

This data was converted to 2021 values (ABS, 2021), annualised and allocated into their respective ANZSIC industries. The breakdown to ANZSIC industries was developed based on assumptions by Atlas regarding the most appropriate ANZSIC industries for each activity.

Table S2.4 shows the household expenditure estimates for the Camden LGA should Precinct 5 be redeveloped to accommodate 2,544 households (within the 2021-2031 forecast period).

Table S2.4: Estimated Household Expenditure Supported, Proposal Case

ANZSIC	Total Annual Spend (\$M)	% Spent in LGA	Local Spend (\$M)
Ownership of Dwellings	\$47.0	50%	\$23.5
Retail Trade	\$47.4	75%	\$35.6
Food and Beverage Services	\$24.2	75%	\$18.2
Personal Services	\$12.5	75%	\$9.4
Other Services	\$17.4	75%	\$13.0
Telecommunication Services	\$7.9	25%	\$2.0
Road Transport	\$17.6	50%	\$8.8
Rail Transport	\$10.6	50%	\$5.3
Air and Space Transport	\$7.1	0%	\$0.0
Sports and Recreation	\$20.5	75%	\$15.4
Primary and Secondary Education Services	\$2.5	75%	\$1.9
Technical, Vocational and Tertiary Education Services	\$2.0	60%	\$1.2
Arts, Sports, Adult and Other Education Services	\$0.5	60%	\$0.3
Health Care Services	\$12.4	75%	\$9.3
Heritage Creative and Performing Arts	\$8.8	75%	\$6.6
Electricity Transmission, Distribution, On Selling and Electricity Market Operation	\$2.8	25%	\$0.7
Total	\$241.1	63%	\$151.0

Note: Totals may not sum due to rounding.

Source: ABS (2017b), Atlas

Cobbitty Precinct 5 – Justification for Proposed Residential Densities (Atlas Economics, August 2022)

5 August 2022

Smita Sundarjee
BHL Group

Sent via email: smita.sundarjee@bhlgroup.com.au

Dear Smita

Re: Cobbitty Precinct 5 - Justification for Proposed Residential Densities

This Addendum is intended to accompany the *Cobbitty Housing Needs and Economic Impact Assessment* prepared by Atlas Economics (June 2022) on behalf of BHL Group (BHL). The Addendum seeks to provide further justification for the proposed housing mix adopted in the Cobbitty Precinct 5 Indicative Layout Plan (ILP).

Proposed Density Mix

The proposed Cobbitty Precinct 5 ILP envisages a 12,500sqm neighbourhood centre, a new school and approximately 3,800 new dwellings with a focus on detached housing typologies.

The ILP provides for a mix of residential densities across the precinct, including larger environmental living lots, low-density lots, medium-density typologies and apartments (within the neighbourhood centre). The majority of dwellings fall are proposed to be zoned as R2 Low Density Residential, with densities ranging from 20-25 dwellings per hectare, equivalent to lot sizes of 270sqm to 340sqm.

The adopted density mix was premised on findings from the *Cobbitty Housing Needs and Economic Impact Assessment* (Atlas Economics, 2021). Market investigations found that the persistent trend towards smaller lot sizes and denser housing product observed over the past decade is continuing amidst an enduring housing affordability issue. Buyers have been demonstrating a distinct preference for smaller lots to enable construction of detached product at more affordable price points, with many purchasers also preferring to lower maintenance requirements of smaller lots. Market investigations also found demand for denser housing (townhouses, apartments) is also maturing across the South West (SWGA) Growth Area.

Table 1 summarises the dwelling and density mix adopted in the Cobbitty Precinct 5 ILP against the dwelling densities and yield mixes recommended in the *Cobbitty Housing Needs and Economic Impact Assessment*.

Table 1: Proposed Density Mix, Cobbitty Precinct 5 ILP

Typology	Cobbitty ILP			Housing Needs and Economic Impact Assessment	
	Dwelling Density (dw/ha)	Avg. Lot Size	% of Yield	Dwelling Density (dw/ha)	% of Yield
Environmental Living	10	675	4%	10	3%-5%
Low Density 1	20	338	47%	10-20	37%-50%
Low Density 2	25	270	32%	20-25	32%-39%
Medium Density	35	193	14%	25-35	14%-16%
Local Centre	-	-	3%	35-60	2%-5%

Source: BHL

As shown in **Table 1**, the dwelling densities and yield mix adopted in the Cobbitty Precinct ILP fall within the recommended range outlined in the *Housing Needs and Economic Impact Assessment*.

Issue of Housing Affordability

Research and analysis carried out in the *Cobbitty Housing Needs and Economic Impact Assessment* was largely completed over the course of Q2 and Q3 2021. Much of the demographic analysis carried out in the Assessment was based on Census 2016, which was the most recent source of socio-economic data at the time.

Since completion of the *Assessment*, the first tranche of demographic data from Census 2021 has been released. A review of the Census 2021 demographic data suggests housing affordability has significantly deteriorated in the 5-years to 2021, with the proportion of households paying more than 30% of their household income on housing costs increasing markedly.

For instance, the proportion of homeowners paying more than 30% of their household incomes on mortgage repayments in the Camden LGA has risen from 12% in 2016 to over 18% in 2021. A much sharper increase in the rental market is observed, with the number of households spending 30% or more of weekly household incomes on rental repayments rising from 7.5% in 2016 to over 32% in 2021.

A similar trend has been observed across the broader South West Region (i.e. Campbelltown LGA, Liverpool LGA), where the proportion of households spending more than 30% of income on housing costs increasing to over 40% in some instances. This has implications for housing estates across the South West Growth Area given much of the buyer pool is from price-conscious couples and young families from these areas.

Table 2 summarises the increase in households across the South West Region spending more than 30% of household income on housing costs over the 2016-2021 period.

Table 2: Income Spent on Housing Costs (2016-2021), South West Region

Area	% of Households Spending 30% or More of Household Income on Mortgage Repayments		% of Households Spending 30% or More of Household Income on Rental Repayments	
	2016	2021	2016	2021
Camden LGA	12.1%	18.3%	7.5%	32.4%
Campbelltown LGA	10.4%	21.2%	12.8%	34.3%
Liverpool LGA	12.2%	23.0%	14.5%	41.2%
Greater Sydney	8.4%	19.8%	14.2%	35.3%

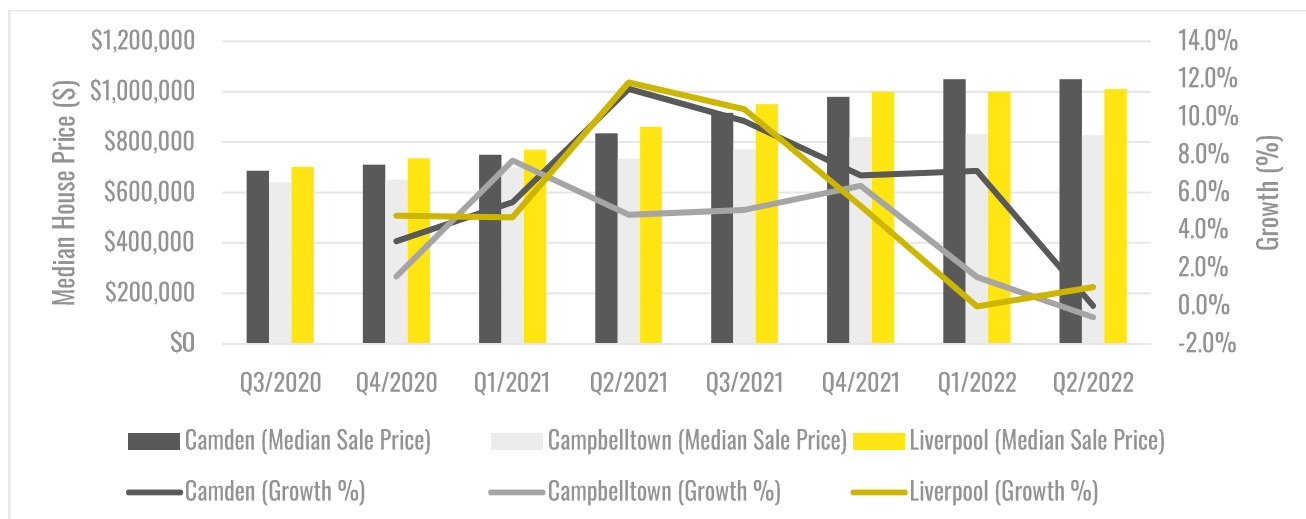
Source: ABS Quick Stats

Recent Market Movements

Since completion of the research carried out in the *Assessment* in Q3 2021, dwelling prices across the South West Region have continued to rapidly escalate. In the 12-months to March 2022, median house prices in the Camden LGA grew by 31% alone, reaching just over \$1 million. The Liverpool LGA recorded a similar rate of growth (30%), whilst Campbelltown recorded median house price growth of 19%. This rate of growth has outpaced the broader Greater Sydney housing market.

Figure 1 illustrates recent changes in median house prices across the South West Region over the 2020-2022 period.

Figure 1: Median House Price Growth (2020-2022), South West Region



Source: PriceFinder (2022)

Looking forward, the outlook for Greater Sydney's housing market remains largely tied to further interest rate escalations. Higher borrowing costs and falls in consumer confidence will expectedly drag on the market, with all major banks anticipating falls in dwelling values across Greater Sydney over 2023. Whilst on 'the face of it' this could be considered positive from the perspective of improving overall housing affordability, it is important to recognise:

- The 'expensive' end of Sydney's housing market is more price responsive in market cycles - recording the highest levels of growth during rising market periods and the largest falls during periods of market correction. The lower end of the market tends to fluctuate at lesser degree of variance.
- The driver behind falling property values – higher interest rates – increases the overall cost of borrowing. Whilst overall loan values may be lower, servicing costs can be similar (or higher) during periods of rising interest rates.
- Wages are yet to materially increase in line with rising inflation and interest rates, with real wages continuing to fall in Q2 2022.
- Greater Sydney is the second most unaffordable capital city in the developed world¹. The current ratio of median house values to incomes is 13.3, with the average number of years to save a 20% house or apartment deposit being 18 years and 11 years respectively². Significant and sustained falls in dwelling values would be needed to reverse this.

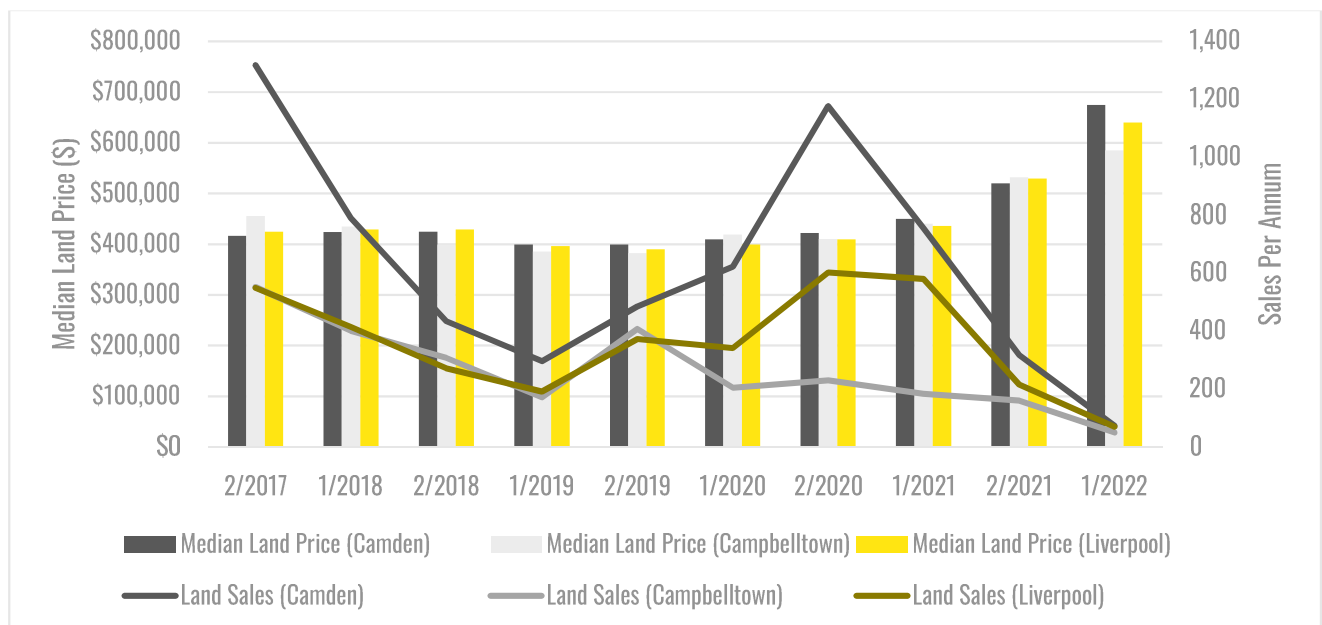
Lot Price Growth

Strong growth in residential land (lot) prices has also been observed in the past 12-18 months. The median land price in the Camden LGA was recorded at a record high of \$675,000 following growth of 65% since Q1 2020 (Pricefinder, 2022). This rate of growth was higher than that observed in both the Campbelltown and Liverpool LGAs which also recorded marked growth of 40% and 60% respectively.

Much of this growth is attributable to the boom in greenfield housing markets observed across much of NSW from Q1 2020, with record low interest rates and government stimulus measures (e.g. HomeBuilder, first home buyer grants, etc) aimed at mitigating the economic impact of the COVID-19 outbreak driving a major uptick in demand for residential land.

Figure 2 illustrates the growth in vacant land prices across the South West Region over the five years to Q1 2022.

Figure 2: Bi-Annual Median Land Price Growth (2020-2022), South West Region



Source: PriceFinder (2022)

¹ International Housing Affordability Survey, Demographia (2022)

² Housing Affordability Report May 2022, ANZ/CoreLogic (2022)

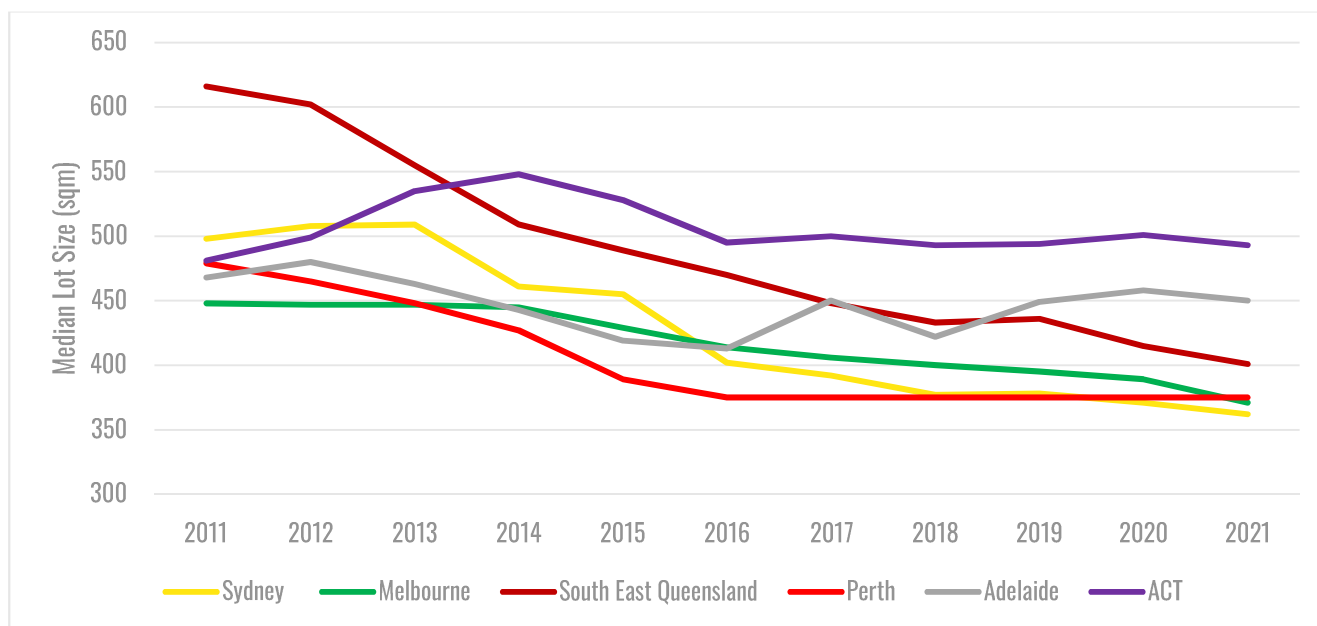
Development Response

In response to escalating land prices and steep demand for greenfield housing, the development sector is increasingly providing for smaller lot sizes in new land releases. The median lot size in new land releases across Greater Sydney in 2021 was recorded at 362sqm – the smallest in Australia. Conversely, Sydney has the highest residential property values. There is a clear inverse relationship between overall housing cost and lot size provision.

The decline in median lot sizes over the past decade has not been limited to Greater Sydney, with lot sizes declining by 10% to 15% in Melbourne and South East Queensland over the 2016-2021 period respectively. Similarly, these trends are in direct response to sharp increases in overall housing values across Australia's east coast over this period.

Figure 3 illustrates the continual decline in median lot sizes across Australia's major capital cities over the 2011-2021 period.

Figure 3: Median Lot Sizes (2011-2021), Australian Capital Cities



Source: UDIA (2022)

Development is a customer-led market; housing supply directly responding to market need. The increasing delivery of small lot housing is in response to affordability constraints and preferences for low maintenance living.

This shift in market preference is directly reflected in take-up rates, the take-up of larger lots distinctly slower compared to the take-up of smaller lots across the South West and North West Growth Areas. Smaller detached lot product is the most quickly absorbed lot typology in new releases. Developers have accordingly responded in kind and progressively increased the proportion of smaller lots in new estates to meet demand.

Matters for Consideration

The *Cobbitty Housing Needs and Economic Impact Assessment* recommended that Cobbitty Precinct 5 focus on the provision of smaller lots capable of accommodating detached housing typologies. This recommendation reflects market demand for smaller, more affordable lots across the SWGA where buyers are generally younger, price conscious couples and families.

It is understood that Camden Council have reviewed the ILP and raised a preference for larger lot sizes and have requested additional justification to support the proposed lot mix. We highlight the following factors:

- The SWGA greenfield housing market is primarily **driven by affordability**. Purchasers, particularly First Home Buyers, are more price conscious than buyers in other markets (e.g. North West Growth Area). The price difference between a 300sqm and 450sqm lot in the SWGA can be as much as \$200,000. This is beyond the borrowing capacity for many purchasers in the SWGA, particularly First Home Buyers.

Accordingly, increasing the number and proportion of larger lots at Cobbitty Precinct 5 (which invariably increases their price points) will lead to a greater number of prospective purchasers being 'priced out' of the market, particularly given deteriorating levels of housing affordability.

- Dwelling yields and mixes should directly **respond to market need**. Market investigations have indicated that across virtually all estates in the SWGA, smaller lot housing was the most popular lot size amongst purchasers. This preference was discussed in detail in the *Cobbitty Housing Needs and Economic Impact Assessment*. This shift in demand has been underway for almost a decade, as identified in earlier work carried out for the NSW Department of Planning and Environment (*Priority Growth Areas: SWGC Housing Market Needs Analysis*, AEC Group, 2015).

If market demand, reflected in both sale prices and take-up, for larger lot typologies was greater than that of smaller lots, new market entrants would move in to meet this gap. This has not occurred at scale, largely due to a market preference for smaller lot housing.

- **Different housing typologies cater to different buyer cohorts.** Larger lot subdivisions generally cater to wealthier, older families and/or retirees owing to their higher price points. For instance, recent releases at the large-lot estate 'Harrington Grove' in Harrington Park have achieved prices over \$1m for 700sqm lots. The buyer pool capable of affording these price points is limited, with purchasers generally being more affluent than typical purchasers in the South West Growth Area.

If market demand, reflected in both sale prices and take-up, for larger lot typologies was *greater* than that of smaller lots, new market entrants would move in to meet this gap. This has not occurred at scale due to:

- Lower levels of demand for larger lot product (i.e. 450sqm and larger);
- Constrained supply of developable land in the Growth Areas due to misalignment between land releases and infrastructure availability.
- **Developers are operating in a supply constrained market.** Not all rezoned precincts in Sydney's Growth Areas benefit from having immediate services infrastructure capacity or existing lot patterns that facilitate site amalgamation and development. This has resulted in a significant volume of zoned land remaining undeveloped (e.g. Austral). Accordingly, developers who have been able to secure large sites for development are seeking to deliver housing which can meet the majority of market demand.
- Larger lots **reduce the ability for land to be used efficiently and meet housing supply targets.** Given the historical challenges in converting theoretical housing supply to actual supply in the SWGA, maximising opportunities for efficient use of land is an important consideration. The *Cobbitty Housing Needs and Economic Impact Assessment* examines at length the significant housing supply shortfall likely to be observed across South West Sydney over the coming decades. Exacerbating this shortfall should be avoided where possible.

In summary, the findings and recommendations of the *Housing Needs and Economic Impact Assessment* remain relevant. Further deterioration in housing affordability across Greater Sydney over the past 12-months since completion of the *Assessment* provide further justification for the need to increase the supply of more affordable housing typologies.

As a significant site held in a majority ownership, Cobbitty Precinct 5 has the potential to play a role in meeting demand for housing in the South West Growth Area which has historically faced challenges converting zoned land into actual supply.

We trust the above is useful. Please contact the undersigned should you wish to discuss further.

Yours sincerely

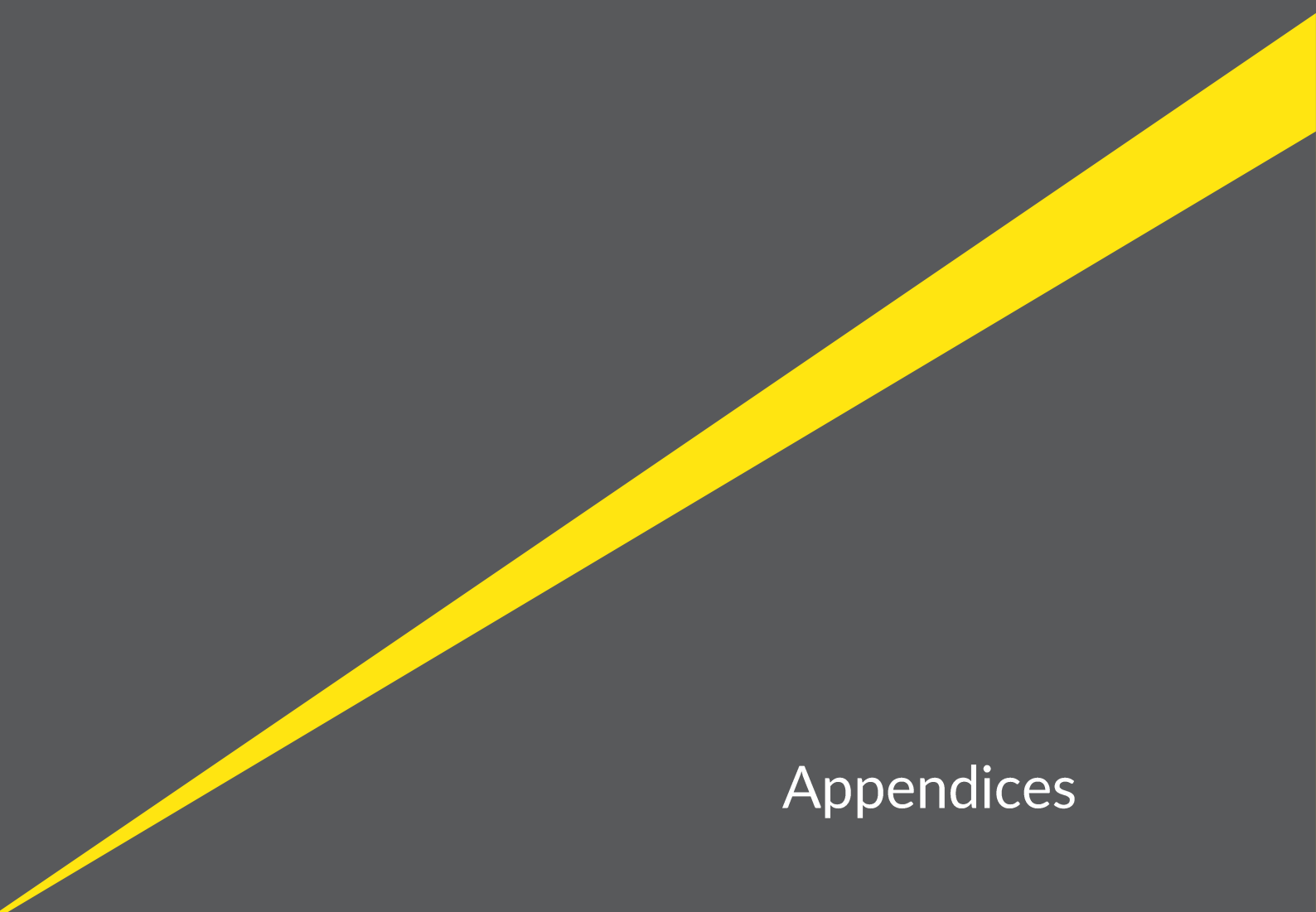


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Appendices

Drinking Water

Greater Macarthur Region

Project Stages:

- Strategic Planning
- Option Planning
- Concept Planning
- Design & Delivery

Legend:

- Adequacy existing level capacity
- Limited existing level capacity
- Growth precinct boundary
- Label group

Map Labels:

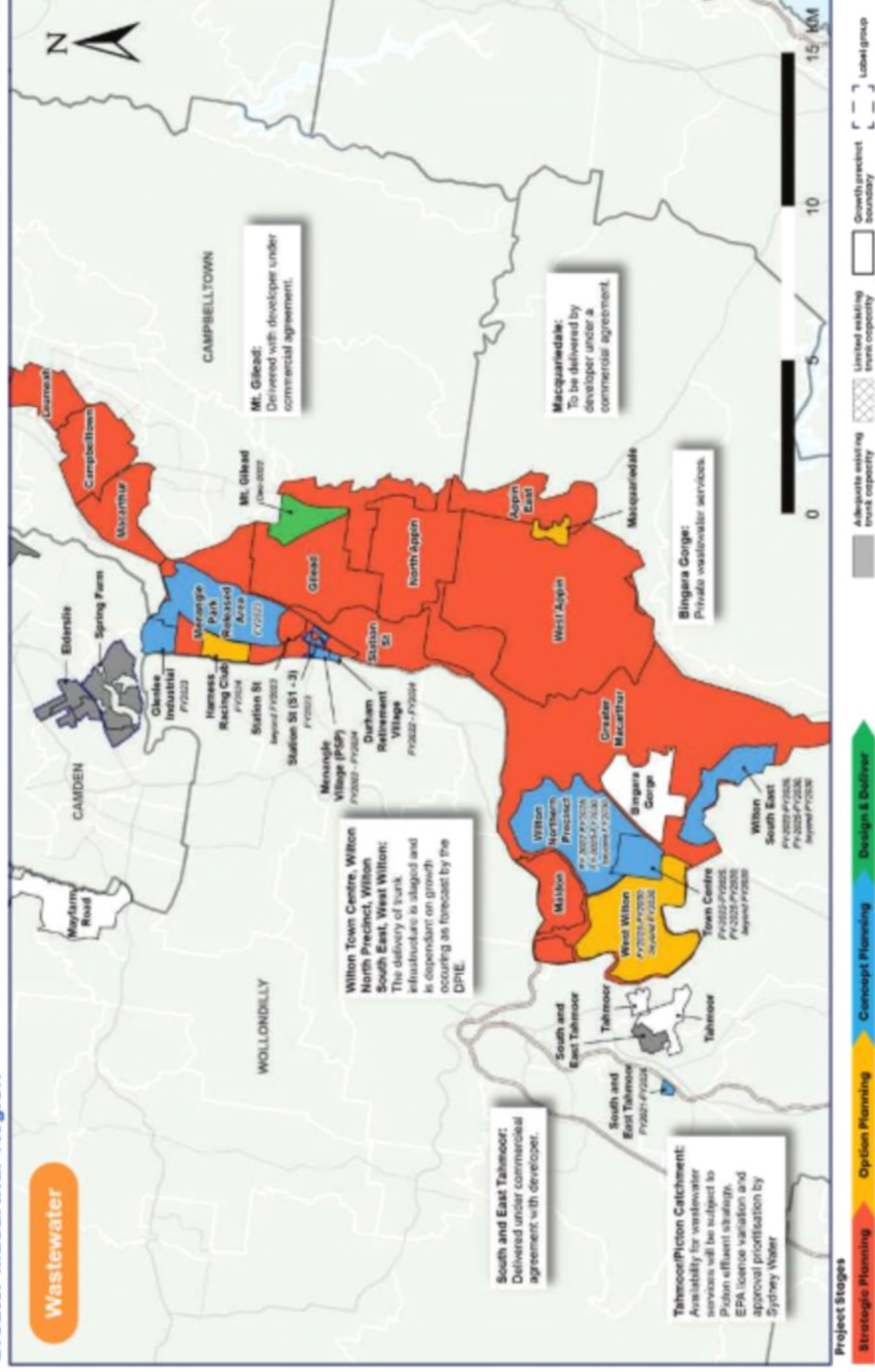
- CAMPBELLTOWN
- WOLLONDILLY
- CAMDEN
- Macarthur
- Campebeltown
- Laurens
- Elderside
- Spring Farm
- Glades Industrial Precinct
- Horseass Racing Club
- Station St
- Station St (S1 - S3)
- McQuade Village (P&P)
- Durham Retirement Village
- North Arden
- West Arden
- Arden East
- Macquarieville
- Singara Gorge
- Wilson Northern Precinct
- Wilson South East
- Town Centre
- South and East Tahmoor
- Tahmoor
- South and East Tahmoor
- Tahmoor

Scale: 0, 5, 10, 15 KM

Compass: N

Text Boxes:

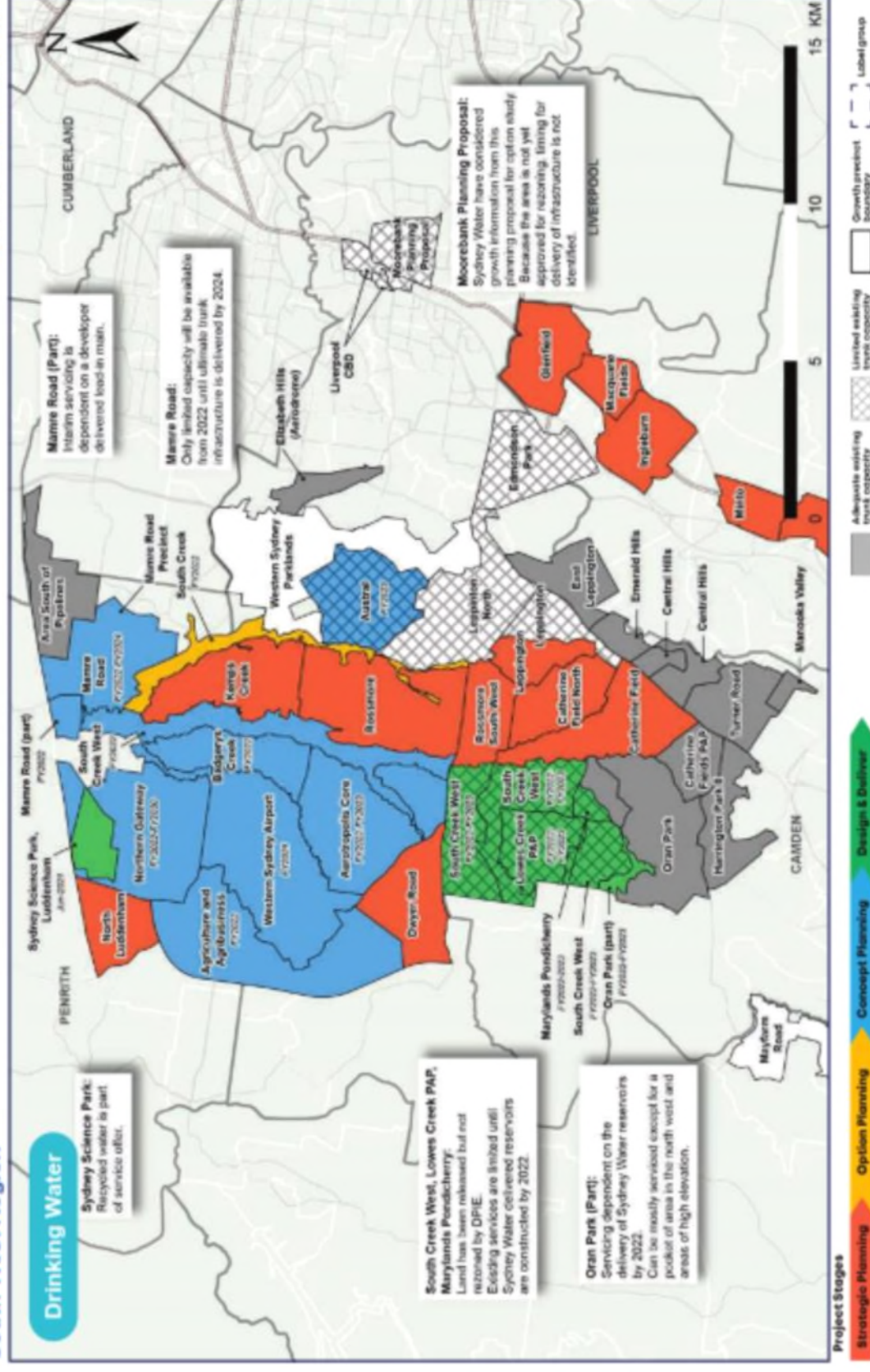
- MT Glades:** Delivered under commercial agreement. Terms of the agreement to be confirmed.
- Macquarieville:** To be delivered by developer under commercial agreement.
- Wilson Town Centre, Wilson North Precinct, Wilson South East, Singara Gorge, West Wilson:** The delivery of infrastructure is staged and is dependent on growth occurring as forecasted by the DPE.
- Tahmoor:** Delivery timescale subject to funding and business case approval.



Source: Sydney Water (2020)

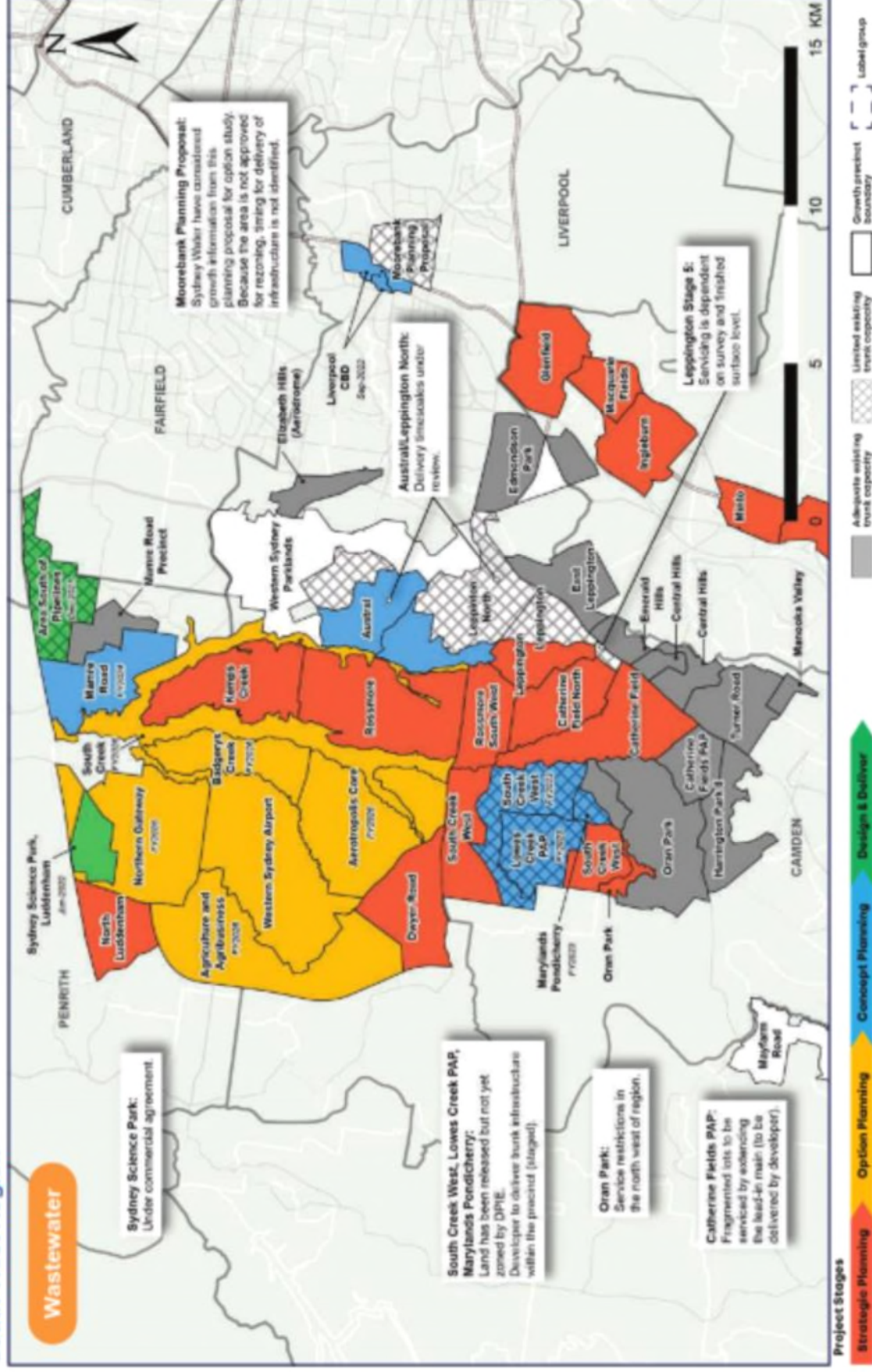
South West Region

Accurate as at 10 March 2021



South West Region

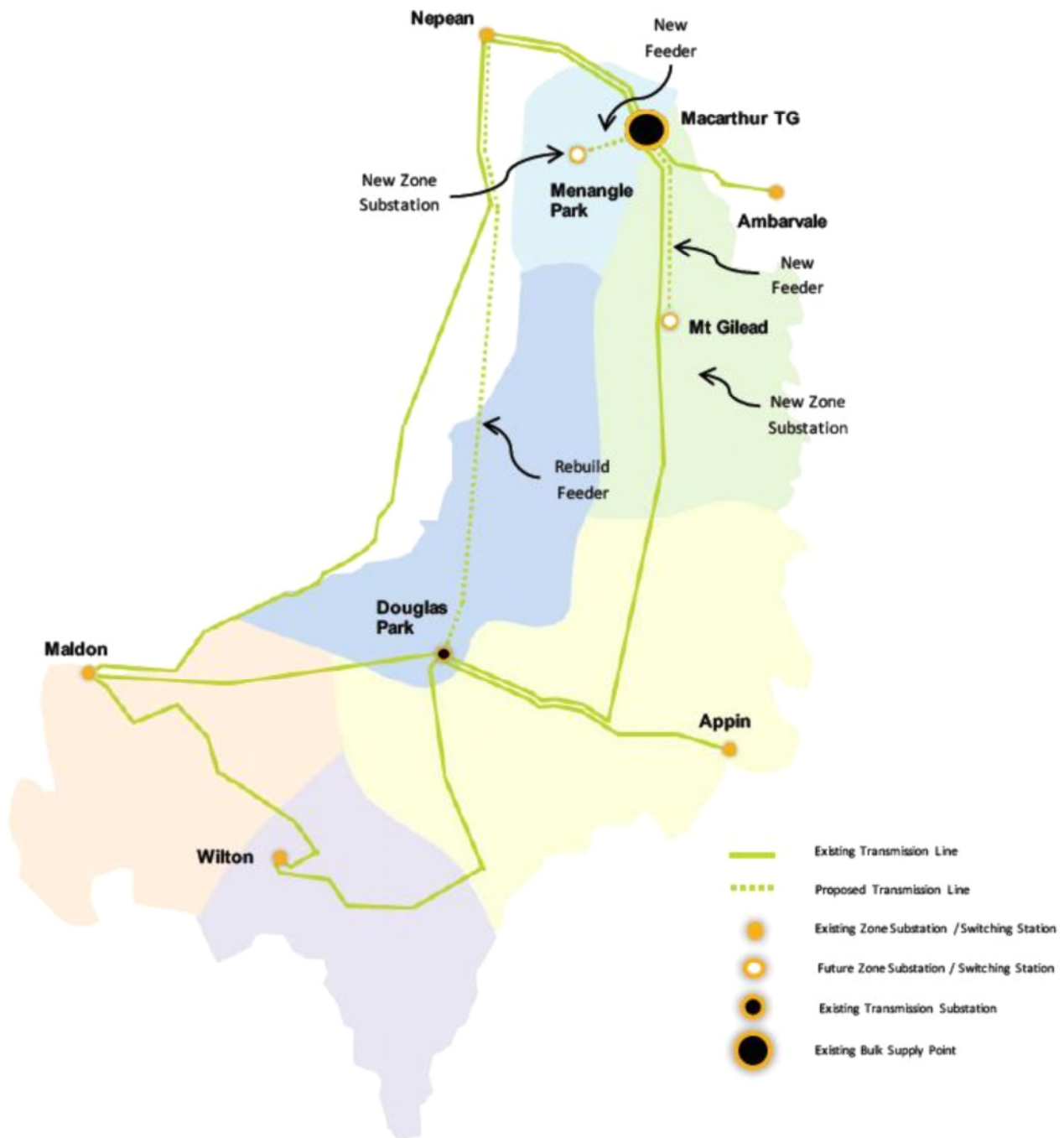
Accurate as at 10 March 2021



Source: Sydney Water (2020)

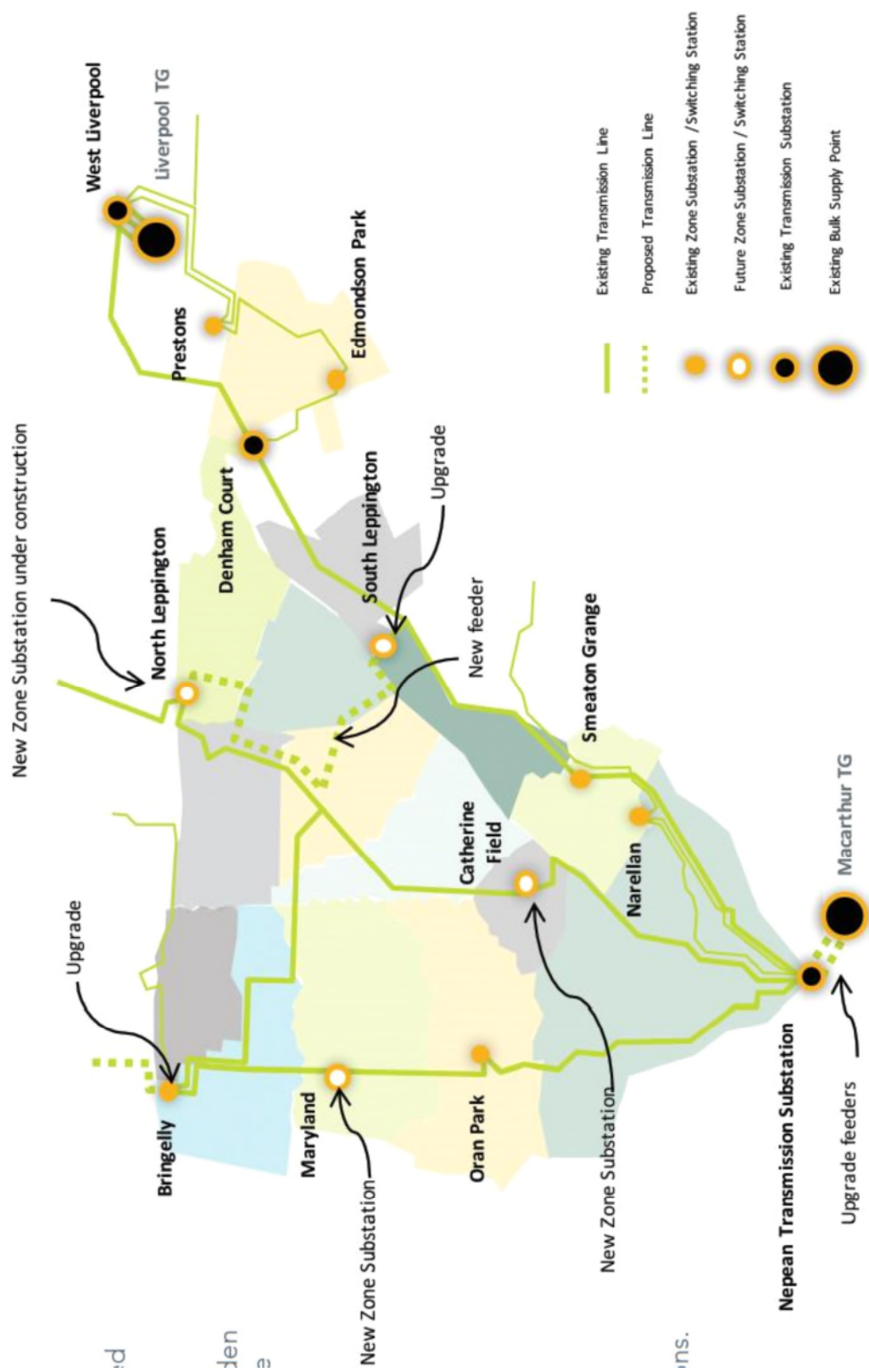
Existing and Proposed Electricity Assets

Figure A. 3: Existing and Proposed Electricity Assets, Greater Macarthur Growth Area



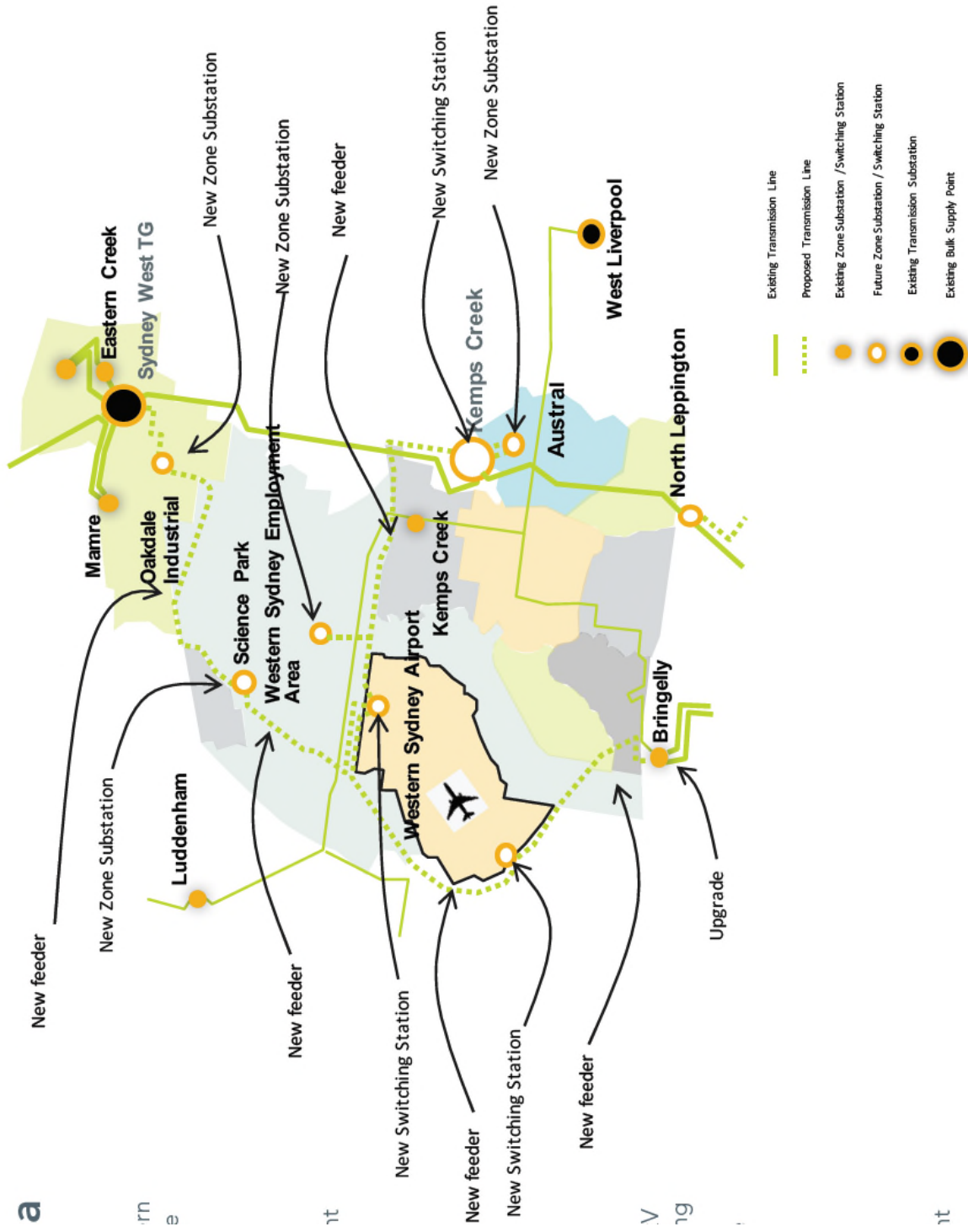
Source: Endeavour Energy (2019)

Figure A. 4: Existing and Proposed Electricity Assets, South West Growth Area



Source: Endeavour Energy (2019)

Figure A. 5: Existing and Proposed Electricity Assets, Western Sydney Aerotropolis



Source: Endeavour Energy (2019)

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